ENGINEERING ALLOYS

Names • Properties • Uses

BY

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FIRST EDITION

DEDICATED

TO

DR. WILLIAM CAMPBELL

Howe Professor of Metallurgy

Columbia University

Born: 1875

Died: 1936

PREFACE

FIRST EDITION

THIS book is the result of a growing demand for a practical and technical reference book on engineering alloys.

The authors of the book have made a careful compilation of the available data and information on practically all proprietary commercial and technical alloys manufactured in the United States of America, and on many alloys made in foreign countries, including England, France, Germany and Sweden. The book is devoted to data on the chemical composition, physical and mechanical properties, uses, and manufacturers of proprietary alloys. No attempt has been made to include alloys conforming to standard specification analyses as such; examples of the common engineering alloys produced to customers' specifications will be found among listed proprietary alloys. However, because of their widespread usage, the Society of Automotive Engineers' specification alloys, as well as a few others of general interest, have been included.

The aim has been to present as large an amount of reliable and up-to-date information on commercial alloys as was consistent with convenience in form and breadth of scope of this book. This information has been obtained by direct correspondence with the alloy manufacturers, and supplemented by data obtained from commercial literature and technical publications.

The book is divided into seven sections, as follows: Section I, which gives an alphabetical listing of all alloys and their corresponding index or serial number; Section II, which gives the trade name, composition, properties, uses, general remarks and a key number designating the manufacturer and the reference for each alloy as listed in serial order; Section III, an index of alloys classified according to typical uses or special characteristics such as corrosion-resistance; Section IV, an alphabetical listing of the manufacturers with a summary of the alloys listed that are produced by each; Section V, which lists the manufacturers, with addresses, in serial order according to the key number (M-number); Section VI, comprising the references, in serial order according to their key number (R-number); and Section VII, an appendix containing useful tables and miscellaneous information pertaining to the properties and testing of alloys.

With this arraugement, data on a particular alloy are located by using the alphabetical index (Section I) to ascertain the alloy serial number, and then turning to that number iu Section II for the desired information regarding composition, properties, and uses. The manufacturer's name and address can be located by referring to the appropriate M-number in Section V. Similarly, the source of information is ascertained in Section VI under the appropriate R-number. Where an M-number appears in the reference column of Section II, the information was supplied by the manufacturer. Section IV is intended as an index of manufacturers, and while complete so far as the alloys listed in the second section (excepting discontinued alloys) are concerned, it should not be considered as a listing of all the alloys produced by the particular manufacturer.

Some of the alloys listed are either obsolete or are not in commercial production at the present time, but they have been embodied in the text in order to make it as complete a reference as possible. Some of the blank spaces in the text appear because of the manufacturers' feeling that certain information is either confidential or of no practical interest. The latter comment applies particularly to data on physical properties of tool steels. As it is not feasible to include all the information that could be desired, should more specific data on any particular alloy be wanted by the reader, it is recommended that he refer to the reference or manufacturer cited, or else communicate directly with the authors.

Undoubtedly many important alloys are not listed, despite the authors' best efforts in search of new data. This is especially true in regard to alloys not of American manufacture.

The authors will be grateful for any additional information or suggestions for the improvement of this work that may be incorporated at a later time, and they hope that the reader will call to their attention any omissions and errors.

The nature of this compilation is such as to make a critical analysis of the data impracticable, and the authors assume no responsibility for the accuracy or reliability of the quoted values and information; in fact, they have attempted to present the data as impartially and faithfully as possible and have abstained from interjecting their personal judgment or opinion in any respect. It should be borne in mind, also, that the mechanical properties of commercial alloys vary between wide limits, and, therefore, the values assigned in a given instance usually represent the most probable values that would be obtained under the given conditions. Some values are quoted from the manufacturers that refer to a test characterizing but a single specimen. In general, however, all these values should be looked upon as being *indicative* or *suggestive* rather than *definitive*. The same is true of the applications cited. Special care must also be exercised in interpreting remarks relative to the corrosion-resistance of any alloy. Furthermore the reader is cautioned against using the data in such manner as would incur liability for infringement of any patents that may now exist or are pending.

Information was obtained from so many sources in the preparation of this book, that a complete acknowledgment, beyond that noted in the citation of sources of information in the reference column of Section II, is difficult to make. Considering the unprecedented nature of this book, the cooperation of the manufacturers listed was most gratifying and their assistance is as deeply appreciated as it was indispensable. The authors wish to make special acknowledgment to the following: the American Society for Metals, the American Society for Testing Materials, the Society of Automotive Engineers, and the National Research Council for permission to use data appearing in their publications; to *Iron Age, Chemical and Metallurgical Engineering*, and the *Metal Industry* (London) for use of information that appeared in these magazines; to the Louis Cassier Company (London) and Verlag Chemie for permission to utilize some of the data published in their respective books, *Metals and Alloys* and *Die Werkstoffe Der Chemischen Apparate* (Dr.-Ing. H. Freytag).

The authors wish to acknowledge their appreciation of the services rendered by Professor H. Bluestone of the United States Naval Academy Postgraduate School, who aided in making translations, and by Marie I. Dornblatt, who assisted in checking data and reading proof. In addition the authors are indebted to Dr. F. L. Coonan for his helpful suggestions and criticism during the preparation of the manuscript.

SECOND EDITION

DEDICATED

TO

PROFESSOR ALBERT DORNBLATT

United States Naval Academy

Postgraduate School

Co-Author of the First Edition

Born: 1905

Died: 1942

PREFACE

SECOND EDITION

IN the eight years since the publication of the first edition, many new alloys have been developed and marketed by the ferrous and non-ferrous manufacturers.

There have been several changes in the composition, properties, and even trade names of many alloys. Some have become obsolete and are no longer being manufactured. It therefore would seem wise to incorporate the new proprietary trade name alloys, and the changes in the alloys already listed, in a second edition.

The manufacturers included in the first edition were requested to supply any changes in composition and properties of their alloys, as originally published. They were also asked to furnish data and information regarding new alloys put out and marketed by them. Many additional manufacturers supplied data on their alloys for incorporation in the revised edition.

Where the proprietary trade names were changed, an attempt was made to record the old name in Section II under the "Remarks" column. Wherever the alloys have become obsolete and their manufacture has been discontinued, it has been so indicated.

All alloys have been credited to the proper manufacturer, except where this information was unobtainable.

Section VI in the original edition, comprising the references in serial order according to their key number (R-number), has been deleted. Since the alloys covered by these references were checked with the manufacturers, it did not seem necessary to show the source of the original information. Section VII, "Useful Data Appendix", of the first edition, will therefore become Section VI.

Professor Albert Dornblatt, co-author of the first edition, died in 1942. Mr. Roger J. Metzler, formerly Assistant Chief Metallurgist of the Eclipse-Pioneer Division of Bendix Aviation Corporation, and now Chief Metallurgist of the Breeze Corporation, has assumed the responsibilities of co-authorship of this second edition.

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In this section the alloys, represented by their serial numbers, are classified according to special characteristics and typical uses.

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In this section the manufacturers are listed in alphabetical order, and a summary is given of the alloys included in this book and produced by each. The manufacturer's address is given, and the alloys are listed both by name and serial number.

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In this section is found the serial listing of all the manufacturers and their agents referred to by M-number in Section Two.

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This section includes the important conversion tables, definitions of terms relating to testing, heat treating and properties of alloys, and other miscellaneous information about metals and alloys. It also includes a classification of corrosion and heat resistant alloys according to their compositions.

CHEMICAL ELEMENTS AND THEIR SYMBOLS

Name	*Symbol*
Aluminum	Al
Antimony	Sb
Argon	A
Arsenic	As
Barium	Ba
Beryllium	Be
Bismuth	Bi
Boron	B
Bromine	Br
Cadmium	Cd
Calcium	Ca
Caesium	Cs
Carbon	C
Cerium	Ce
Chlorine	Cl
Chromium	Cr
Cobalt	Co
Columbium	Cb
Copper	Cu
Dysprosium	Dy
Erbium	Er
Europium	En
Fluorine	F
Gadolinium	Gd
Gallium	Ga
Germanium	Ge
Gold	Au
Hafnium	Hf
Helium	He
Holmium	Ho
Hydrogen	H
Indium	In
Iodine	I
Iridium	Ir
Iron	Fe
Krypton	Kr
Lanthanum	La
Lead	Pb
Lithium	Li
Lutecium	Lu
Magnesium	Mg
Manganese	Mn
Mercury	Hg
Molybdenum	Mo
Neodynium	Nd
Neon	Ne
Nickel	Ni
Nitrogen	N
Osmium	Os
Oxygen	O
Palladium	Pd
Phosphorus	P
Platinum	Pt
Potassium	K
Praseodymium	Pr
Radium	Ra
Radon	Rn
Rhodium	Rh
Rubidium	Rb
Ruthenium	Ru
Samarium	Sa
Scandium	Sc
Selenium	Se
Silicon	Si
Silver	Ag
Sodium	Na
Strontium	Sr
Sulfur	S
Tantalum	Ta
Tellurium	Te
Terbium	Tb
Thalium	Tl
Thorium	Th
Thulium	Tm
Tin	Sn
Titanium	Ti
Tungsten	W
Uranium	U
Vanadium	V
Xenon	Xe
Ytterbium	Yb
Yttrium	Y
Zinc	Zn
Zirconium	Zr

INTRODUCTION

(TO FIRST EDITION)

WHEN the authors, both old students of mine, very kindly asked me to write an introduction to their book on engineering alloys, I at first declined, because I could see no reason for an introduction to a book of such high merit. However, on second thought I changed my mind, for I realized that everyone would not see the need for such a book the way I do.

I do not want to say what a monumental piece of work this is. The book speaks for itself. But I do want to emphasize this one point: Between the two covers there is collected a surprisingly large amount of information covering practically every commercial alloy, its trade name, chemical composition, its manufacturers and what they say it will do and what it is good for.

There have been lots of books on alloys —good, bad and indifferent—but not one of them covers the ground the way this book does. I once wrote a "List of Alloys"—to my sorrow. Ever since I have been getting letters, even telephone calls, saying someone I knew had recommended to the writer or speaker that he get in touch with me. He wanted to know where he could buy Siscoe Bronze or New Bedford Brass, and what were the properties and so forth. Well, I always like to oblige and as the alloy in question was not usually one of the better-known commercial alloys I would look it up in this *Abstracts* and that *Index* and elsewhere and never find it. Now all that trouble will be taken off my shoulders. I'll say "Look it up in Woldman and Dornblatt's *Engineering Alloys*."



Howe Professor of Metallurgy
Columbia University
New York City.

SECTION I

Alphabetical Listing of Alloys with Corresponding Serial Numbers

THIS Section is an alphabetical index to the identification number assigned each of the alloys listed serially in Section II. The Section has been compiled with the idea of facilitating finding the location of data on an alloy whose name is known.

If the exact name of the alloy is not known, but the name of the manufacturer or agent is known, then it will be more convenient to look up the alloy and its identification or serial number in the Section IV directory of manufacturers and their alloys. (Note that the occasional listing of alloys by company name in the alphabetical index is not intended to substitute in any measure for the complete listing of alloys according to their manufacturer given in the fourth Section).

The alloys are indexed according to the name given by the manufacturer or as noted in the references consulted except that generally such words as "steel," "alloy," "brass," etc., included in the name have been omitted for the sake of brevity where the omission could not lead to confusion. The names have been cross-indexed where this might be of assistance as in cases where the exact name was not known, or where an alloy appears with the company name as part of the complete descriptive title and the reader might not know the name of the alloy manufacturer.

In the course of compiling this book, the authors often obtained data on some alloy of unknown manufacture. Such alloys would be indexed according to the name as then known. Later it would be noted that this alloy corresponded to one designated somewhat differently and on which data was received directly from the manufacturer. Thus it might happen that the same alloy has been assigned different serial numbers. Another occasion for some duplication arises from the changes in name such as took place most notably in the nomenclature of the so-called stainless steels during the time which elapsed while the book was in process of compilation. As it would be very difficult, and an unwarranted responsibility, for the authors to decide whether slight variations in composition were attributable to a significant modification of the alloy or merely to the sort of variations that were noted when data on the same alloy were obtained from different individuals or companies operating on the same basic patent or license, it was decided to list such dubious cases as individual alloys. This also would account for a certain measure of duplication. However, the proportionate number of such duplications is quite small, and the revision of the data made after the manufacturers checked the first proofs has enabled the authors to present an approved listing in the Section IV directory.

Alloys known to be obsolete have been included, as information on such alloys may be sought without prior knowledge that the alloy is obsolete. It is well for the interested party to find notation to the effect that the alloy in question is obsolete. This notation appears in Section II in all cases where the authors have been informed to that effect. The remark "obsolete" or "discontinued" is used to indicate either that the alloy is no longer manufactured or is superseded by an improved alloy. In some instances, however, the same alloy is marketed but under a more recently adopted name or designation, which is listed in its appropriate place. No inconvenience to the manufacturers should result from inclusion of data on obsolescent alloys, since alloys known to be obsolete are not listed in the Section IV directory.

Although some standard specification alloys have been included, the listing of such alloys is complete only in the case of those specifications promulgated by the Society of Automotive Engineers.

As explained in the Preface, neither this index nor the book itself is intended to cover all alloys made by the companies whose proprietary alloys are represented. The scope of the book has necessarily been restricted, in general, to alloys known to the trade by proprietary or brand name.

ABBREVIATIONS

B.—Flux density.

BAL.—Balance or remainder.

BR.—Remanence flux in gausses.

BRIN.—Brinell Hardness Number (10 mm. ball and 3000 kg. load) (# means 500 kg. load)

C.E.L.—Elastic Limit in Compression in pounds per square inch.

CH.—Charpy Impact in foot-pounds.

COEF. EXP.—Coefficient of Expansion per °C.

COEF. RES.—Temperature Coefficient of Resistance per °C.

C.U.S.—Ultimate Strength in Compression in pounds per sqnare inch.

C.Y.P.—Yield Point in Compression in pounds per square inch.

E.L.—*Elastic Limit in pounds per square inch.*

ELONG.—Per cent Elongation in 2 inches.

EL. RES.—Electrical Resistivity in microhms per centimeter cube (20° C.).

E.L.T.—Elastic Limit in Torsion in pounds per square inch.

END. L.—Endurance Limit in pounds per square inch.

F.L.—Fatigue Limit in pounds per square inch.

H.—Magnetizing Field Strength in oersteds.

Hc.—Coercive Force in gilberts per centimeter or oersteds.

Iz.—Izod Impact in foot-pounds.

J.L.—Johnson's Limit in pounds per square inch.

M.E.—Modulus of Elasticity in pounds per square inch.

M.H.—Mohs Hardness Number.

M.P.—Melting Point in Centigrade or Fahrenheit as indicated.

M.R.—Modulus of Rupture in pounds per square inch.

M.S.—Modulus of Shear in pounds per square inch.

P.L.—Proportional Limit in pounds per square inch.

P.M.—Permanent Mold.

R.A.—Per cent Reduction of Area.

R.H.—Rockwell Hardness.

Sc.—Shore Scleroscope Hardness Number.

SP.H.—Specific Heat in calories per gram per °C.

SP. RES.—Specific Resistance in microhms per centimeter cube.

S.S.—Shear Strength in pounds per square inch.

S.T.—Ultimate Strength in Torsion in pounds per square inch.

S.Y.P.—Shear Yield Point in pounds per square inch.

TH.C.—Thermal Conductivity in calories per centimeter cube per sec. per °C.

TR.D.—Transverse Deflection in inches.

TR.S.—Transverse Strength in pounds.

T.S.—Ultimate Tensile Strength in pounds per square inch.

Y.P.—Yield Point in Tension in pounds per square inch.

SECTION I

Alphabetical Listing of Alloys with Corresponding Serial Numbers

A

8136 A-9260 Wire
6730 AA-1
6755 AAAA
5729 Aalener
8231 A-Aeral
1801 "A"-Alloy
6557 "A"-Alloy
6289 A-Metal
6955 "A" Nickel
3332 "A.B.C."
6722 ABC
6726 Abrasion Resisting
12136 Abrasion Resisting No. 235
6592 Abrasoweld
1802 Abros
1803 Abyssinian Gold
8211 A. C. — Amsco No. 217
8212 A. C. — Amsco No. 415
8213 Accolloy
8214 A. C.—Coated 18-8
1804 Accumulator Metal
8960 Ace
4652 Ace Oil Hardening
6743 Aceroid
7196 Achorn Fagersta Best
7197 Achorn Fagersta Chisel
7198 Achorn Fagersta Cold Heading
7199 Achorn Fagersta Envelope Die
7200 Achorn Fagersta Extra
7201 Achorn Fagersta Extra Cutlery
7202 Achorn Fagersta Finishing
7203 Achorn Fagersta High Production
7204 Achorn Fagersta Hot Die
7205 Achorn Fagersta Shoe Die
7206 Achorn Fagersta Silver Die
7207 Achorn Fagersta Smooth Bor Hollow
7208 Achorn Fagersta Solid Drill
7209 Achorn Fagersta Special Alloy Die
7210 Achorn Fagersta Standard
7211 Achorn Fagersta Standard Cutlery
7212 Achorn Fagersta Superior Oil
7213 Achorn Fagersta Unbreakable Chisel
7214 Achorn Fagersta White Gold
7215 Achorn Kloster Brilliant AX
7216 Achorn Kloster Brilliant WKE
7217 Achorn Kloster Prior Extra
7218 Achorn Kloster Rema
6756 Acibal
1805 Acid Bessemer Pig
1806 Acid Bronze
1807 Acid Metal
1808 Acid Resisting
2569 Acid Resisting, Fuchs
2570 Acid Resisting Gold Alloy
1525 Acidur
1 Acieral
5792 Acimet C-1
5793 Acimet C-2
5794 Acimet C-3
5795 Acimet C-4
5796 Acimet Hard Lead Alloy
8216 Acme
4174 Acme
8217 Acme Colorstrip
8215 Acmeloy
1809 Acme Nickel Steel
8218 Acme Satin Strip
6697 Acme Silcrome I2
6698 Acme Silcrome CC
6699 Acme Silcrome KA-2
6700 Acme Silcrome KA-2S
6701 Acme Silcrome L-12
6702 Acme Silcrome M-17
8219 Acme Stainless Steel Type 301X
7535 Acme 18-8 Stainless Type 302
7536 Acme Stainless Type 304
7537 Acme Stainless Type 410
7538 Acme Stainless Type 425
7539 Acme Stainless Type 430
8220 Acmonital
3816 Acorn
1270 Acorn Brand Aluminum Babbitt
4527 Acorn Extra No. 2
4528 Acorn Standard No. 3
2 Acron
8221 ACT Carbide
8222 AC-Weld
7509 A.D. 95 Alloy
8223 Adalloy No. 3
5351 Adamant A
5354 Adamant Extra
5352 Adamant G.R.
5353 Adamant H.P.
6721 Adamant Super-Genuine Babbitt
5350 Adamant T.M.
3 Adamantine
4 Adamite
8224 Adams HFA
8225 Adams HFB
12521 Admiralty Alloy—442
12522 Admiralty, Arsenical —439
5 Admiralty Brass
5442 Admiralty Brass
6 Admiralty Bronze
3333 Admiralty Bronze, Modified
8226 Admiralty CAG
7 Admiralty Gun Metal
8 Admiralty Metal
3585 Admiralty Metal
3334 Admiralty Nickel

1810 Admiralty White Metal
9 Admiro I
1424 Admiro V
10 Admos
11 Adnic
5738 A.D.R.
8227 Adriatical
12 Advance
6729 Advance
8228 A.E.B. Stainless
4302 Aegis
5450 Aeonite
2239 Aeral
8229 Aeral
8230 Aeral
8231 Aeral A
6551 Aeralloy
8234 Aeralloy
7626 Aerisweld
8233 Aero 12-3
11823 Aero Bronze B-23
13 Aerolite
11792 Aerolite
14 Aero Metal
15 Aeromin
16 Aeron
8235 Aeron
1566 Aerovalve
5728 Aeterna
8236 Aeterna
11569 Aeterna 600 Metal
1458 A.F.T. (Imphy)
—— Agathon Steels—(See UMA)
8237 Agathon Armature
4399 Agathon Bit Steel
8238 Agathon Dynamo
8239 Agathon Electric
4172 Agathon Nickel Alloy
8240 Agathon Special Electric
11570 Agile Actarc
11572 Agile Silver A.C. Electrode
10470 Agile Silver Black
11571 Agile Silver Chisel Electrode
11573 Agile Silver D.C. Electrode
11592 Agile Silver Red
8241 Agile Yellow Rod
8242 Agricola
17 Agrilite Alloy No. 5
18 Agrilite Bearing Metal
8244 A.H.
471 A.H.G. Steel (Firth)
19 Aich Metal
6751 Aidion
12195 Air Chrome
8243 Airco
8245 Airco Electrode
8247 Airco KA2S
8248 Airco KA2S Mo
8249 Airco 25-12
8246 Airco No. 1
8250 Airco No. 48
8251 Airco No. 55
8252 Airco No. 57
8253 Airco No. 58
8254 Airco No. 62
8255 Airco No. 70
8256 Airco No. 72
8257 Airco No. 76
8258 Airco No. 77
8259 Airco No. 78
8260 Airco No. 82
8261 Airco No. 83
8262 Airco No. 84
8263 Airco No. 85
8264 Airco No. 86
8265 Airco No. 87
8266 Airco Stainless Ply
1812 Aircraft
1813 Aircraft Aluminum Alloys
9677 Airdie
8285 Air Die, Bethlehem
846 Air Die, Ohio
11983 Airdi 110
11982 Airdi 150
2184 Airdi 225
8267 Airex
8268 Air Furnace Gun Iron
8269 Air-Hard
11793 Air Hardening
4185 Air Hardening (Bourne-Fuller)
7275 Air Hardening, Cast-to-Shape
7149 Air Hardening, Darwin No. 1
4548 Air Hardening (Halcomb)
2183 Air Hardening
8270 Airkool
11826 Airomat 33 Self-Hardening
8271 Airplane Babbitt
8272 Airque
9678 Air Quench
1814 Air Service Aluminum Alloy
3507 Aitch Metal
19 Aitch's (Aich's) Metal
2604 Aix Gold Leaf
20 Ajax
11791 Ajax
4470 Ajax
1815 Ajax Acid-Resisting Bronze
8273 Ajax Aluminum Bronze
8274 Ajax Anti-Acid Metal
21 Ajax Bull
2186 Ajax Drill Rod
8275 Ajax Extra Manganese Bronze
4624 Ajax Gear Bronze, Grade "M"
4614 Ajax Gear Bronze, Grade "S"
1816 Ajax Gear Bronze, Grade "X"
1817 Ajax Golden Glow Brass
22 Ajax Honest Solder
571 Ajax Hot Die
8276 Ajax Hydraulic Metal
23 Ajax Manganese Bronze
8277 Ajax Navy Tombasil
1818 Ajax Nickalloy Bronze, Grade 12
4629 Ajax Nickalloy Bronze, Grade 21
5732 Ajax Nickalloy Bronze, Grade 23
8288 Ajax Nickel Plastic Bronze
8289 Ajax No. 1
8290 Ajax No. 1 Manganese Bronze
8291 Ajax No. 2

24 Ajax Phosphor Bronze
25 Ajax Plastic Bronze, Standard
1702 Ajax Plastic Bronze, Grade "A"
1703 Ajax Plastic Bronze, Grade "B"
1704 Ajax Plastic Bronze, Grade "N"
25a Ajax Plastic Metal
1819 Ajax Pressure Bronze, Grade "M"
5953 Ajax Pressure Bronze, Grade "X"
1820 Ajax Special Valve Stem Bronze
1296 Ajax Steam Metal
3431 Ajax Structural Bronze, Grade "S"
1821 Ajax Structural Bronze, Grade "X"
8292 Ajax Super Manganese Bronze
2185 Ajax Tool Steel
26 Ajax Wiping Solder
5198 A.K. No. 1, etc.—See Poldi AK
1822 Akrit
5737 Akron
3508 Aladar
8293 Aladdin
6674 Alakron
27 Alamo
1823 Alargan
1824 Alaska White Brass
1574 Alaska White Brass
8294 Alba
8295 Alba G
8296 Alba K
8297 Alba Lot
8298 Alba O
8299 Alba P
6300 Albanoid
8300 Albanoid
28 Albany
1825 Albatra Metal
6258 Albertson Special
6257 Albertson Super C.I.
1826 Albidur-aluminum
1827 Albin
1828 Albion High Speed
2187 Albion Special
1829 Albion Tool
1470 Albondur (A14V)
1830 Albor
2188 Albor Die
6744 Albro
12411 Alchrome 6
29 Alclad-17S
6245 Alclad-24S
8301 Alclad NA17S
8302 Alclad NA22S
8303 Alclad NA24S
8304 Alclad NA26ST
12157 Alclad XB75S
1831 Alco
2189 Alco
6745 Alco
8305 Alco
30 Alcoa
62 Alcoa 2S
63 Alcoa 3S
1346 Alcoa 4S
1845 Alcoa 5S
64 Alcoa 6
1846 Alcoa 8
1847 Alcoa 8S
8060 Alcoa 11S
65 Alcoa 12
66 Alcoa 13
67 Alcoa 14
4773 Alcoa 14S
1848 Alcoa 15S
68 Alcoa 17S
69 Alcoa A17S
70 Alcoa B17S
71 Alcoa C17S
4719 Alcoa 18S
3738 Alcoa 24S
6245 Alcoa 24S-Alclad
72 Alcoa 25S
6573 Alcoa 27S
1849 Alcoa 31
4720 Alcoa 32S
73 Alcoa 43
74 Alcoa 45
75 Alcoa 47
76 Alcoa 51S
6574 Alcoa A51S
5797 Alcoa 52S
4721 Alcoa 53S
12474 Alcoa 56S
12475 Alcoa 61S
4722 Alcoa 70S
12478 Alcoa 79
6246 Alcoa 81
6582 Alcoa 82
77 Alcoa 83
3539 Alcoa 85
78 Alcoa 93
79 Alcoa 100
6575 Alcoa A108
6459 Alcoa 108
82 Alcoa 109
83 Alcoa 112
4723 Alcoa 113
6576 Alcoa B113
6577 Alcoa C113
84 Alcoa 122
6247 Alcoa 132
648 Alcoa A-132
6578 Alcoa 138
85 Alcoa 142
6579 Alcoa 144
86 Alcoa 145
12477 Alcoa 172
87 Alcoa 195
6580 Alcoa B195
6581 Alcoa D195
88 Alcoa 196
89 Alcoa 212
4726 Alcoa 214
12476 Alcoa A214
4724 Alcoa B-214
4725 Alcoa 216
8307 Alcoa 218
4727 Alcoa 220
8308 Alcoa 231
2495 Alcoa 255
7041 Alcoa 314
4728 Alcoa A-334
90 Alcoa 355
4729 Alcoa A-355
91 Alcoa 356
11898 Alcoa 360
80 Alcoa 406
4730 Alcoa 645
8309 Alcoa X765
1831 Alco Bronze
8310 Alcop Bronze
31 Alcres
11654 Alcrosil No. 3
8311 Alcrosil 5
4861 Alculoy
8312 Alculoy No. 12
8313 Alculoy No. 75
8314 Alcuman
32 Alcumite

33 Alcunic
1701 Alcunic "G"
3815 Alda
4324 Aldal
4187 Aldivan
8316 Aldrei
34 Aldrey
8317 Aldural E
35 Aldurbra
6746 Alemite
1832 Alfenide
1833 Alferium
1834 Alger's Metal
1834 Algiers Metal
8318 Alicia
11388 Alidie
8320 Aljep
8321 Alkadur 300
1835 Alkali-resisting Metal
1836 Allan No. 2 Bronze
2498 Allan No. 2 Red Metal
1837 Allan Red Bronze
36 Allan Red Metal
1469 Allautal
8322 Allegheny 12
8323 Allegheny 12EZ
8324 Allegheny 12-NH
8325 Allegheny 12-TB
8326 Allegheny 12W
8327 Allegheny 17
3328 Allegheny 18-8C
3329 Allegheny 18-8S
8347 Allegheny 18-8SM
8349 Allegheny 19-10M
8350 Allegheny 19-10SMO
5805 Allegheny 20-10
8351 Allegheny 20-10S
8354 Allegheny 20-25S
8355 Allegheny 20-25SM
8356 Allegheny 21
5748 Allegheny 22
5806 Allegheny 22
5807 Allegheny 22 SP
8357 Allegheny 25-12
8352 Allegheny 25-12S
5808 Allegheny 25-20
8353 Allegheny 25-20S
8330 Allegheny 28
8358 Allegheny 28
8359 Allegheny 28-4
8360 Allegheny 29-9
8361 Allegheny 29-9S
1708 Allegheny 33
5809 Allegheny 33 FM
5810 Allegheny 33 N.H.
5811 Allegheny 33 Turbine
5812 Allegheny 33 W
7019 Allegheny 34
1709 Allegheny 44
4431 Allegheny 46
6953 Allegheny 46 Mo
6954 Allegheny 46 W
8331 Allegheny 47-50
1710 Allegheny 55
38 Allegheny 66
1508 Allegheny 66
5813 Allegheny 66W
5814 Allegheny 67
8332 Allegheny Armature
8333 Allegheny Audio Transformer "A"
8334 Allegheny Audio Transformer "B"
8335 Allegheny Audio Transformer "C"
8336 Allegheny Dynamo
8337 Allegheny Dynamo Special
8339 Allegheny Electrical
8338 Allegheny Electric Metal
8340 Allegheny H-17
8341 Allegheny L-12
8362 Allegheny-Ludlum 88 —Also 8429
37 Allegheny Metal
5798 Allegheny Metal A
5799 Allegheny Metal A-Mo
5800 Allegheny Metal A-Ti
5801 Allegheny Metal B
7020 Allegheny Metal B Sp
5802 Allegheny Metal B-Ti
5803 Allegheny Metal C
1378 Allegheny Metalclad Steel
5815 Allegheny Metal FM
8342 Allegheny Metal 15-35
8343 Allegheny Metal 18-8
8344 Allegheny Metal 18-8EZ
8345 Allegheny Metal 18-8M
8346 Allegheny Metal 18-8S
8348 Allegheny Metal 18-11C
7021 Allegheny Metal (Type 345)
7022 Allegheny Metal (Type 346)
7023 Allegheny Metal (Type 347)
7024 Allegheny Metal (Type 348)
8363 Allegheny M-17
5804 Allegheny Ohmaloy
8364 Allegheny Radio Transformer
8365 Allegheny Super Dynamo
8366 Allegheny Transformer A
8367 Allegheny Transformer B
8368 Allegheny Transformer C
—— Allen, Edgar—See Edgar Allen Alloys
6552 Allen
6553 Allen Alumiflux
6554 Allen Extra Strong
4455 Allen High Speed No. 2
6555 Allen Non-dulling
8369 Allenoy
1838 Allen's Imperial Special
1839 Allen's Oil Hard
8370 Alliace-Acier No. 26
8371 Alliace-Acier No. 26L
8372 Alliace Cementic No. 26
8373 Alliace-Cementic No. 26L
8374 Alloy Broachite
4567 Alloy B Tool Steel
2190 Alloy "C" Tool Steel
9582 Alloy Chisel
4693 Alloy Die
2191 Alloy Finishing
4471 Alloy Finishing
7766 Alloy Gas Welding A-2317
7767 Alloy Gas Welding 2320
7768 Alloy Gas Welding A-2330

11817 Alloy Iron
4603 Alloy No. 6
8375 Alloy No. 10
8376 Alloy No. 20
2478 Alloy No. 41, Special
1840 Alloy No. 471
1841 Alloy No. 484
1349 Alloy No. 502
4173 Alloy No. 548
4928 Alloy No. 667
4509 Alloy Tool
4507 Alloy Trimmer
4692 Alloy Trimmer
4313 Almag
39 Almasilium
40 Almelec
41 Almo No. 1
42 Almo No. 1 C.H.
43 Almo No. 2
44 Almo No. 2 C.H.
45 Almo No. 3
46 Almo No. 3 C.H.
47 Alneon
11905 Alni
7280 Alnic
7281 Alnico
8377 Alnico
8210 Alnico
11904 Alnico Copper
8378 Alnico I
11903 Alnico I
12062 Alnico I
8379 Alnico II
11904 Alnico II
12063 Alnico II
8380 Alnico III
11905 Alnico III
12064 Alnico III
8381 Alnico IV
12065 Alnico IV
8382 Alnico V
12066 Alnico V
11903 Alnico Standard
1918 Alni Darwin
48 Alniloy
7493 Aloi
6556 Aloy-num
49 Alpaca (or, Alpakka)
3536 Alpacca
49 Alpakka (or, Alpaca)
50 Alpax
5816 Alpax
7445 Alpax
8383 Alpax
5817 Alpax Alpha
8384 Alpax Alpha
5818 Alpax Beta
8385 Alpax Beta
5819 Alpax Gamma
8386 Alpax Gamma
51 Alpha
6479 Alpha
6508 Alpha Babbitt
4599 Alpha Chisel
8387 Alpha Crusher
8388 Alpha No. 2
4335 Alpha Tool
8389 Alplate
3335 Alpro No. 4
3336 Alpro No. 11
6333 Alpro No. 12
3337 Alpro No. 15
3338 Alpro No. 19 AX
3339 Alpro No. 19 AZ
3340 Alpro No. 19 BX
3341 Alpro No. 19 CX
8390 Alpro No. 30A
3342 Alpro No. 31
3343 Alpro No. 34
8391 Alpro No. 35
3344 Alpro No. 39
3345 Alpro No. 40
3346 Alpro No. 41
3347 Alpro No. 42
3348 Alpro No. 44
3349 Alpro No. 46
3350 Alpro No. 50 B
3351 Alpro No. 55
6334 Alpro No. 112
3352 Alpro No. 126 A
3353 Alpro No. 126 C
3354 Alpro No. 126 D
3355 Alpro No. 139
3356 Alpro No. 140
3357 Alpro No. 143
6315 Alpro No. 146
6316 Alpro No. 157
3358 Alpro No. 158
6317 Alpro No. 159
52 Alpro No. 220
53 Alpro No. 221
54 Alpro No. 223
55 Alpro No. 224
6318 Alpro No. 300
6319 Alpro No. 301
6320 Alpro No. 302
3359 Alpro No. 304
3360 Alpro No. 306
6321 Alpro No. 307
6322 Alpro No. 308
6323 Alpro No. 309
6324 Alpro No. 310
6325 Alpro No. 311
3361 Alpro No. 312
3362 Alpro No. 314
6326 Alpro No. 315
3363 Alpro No. 316
3364 Alpro No. 317
6327 Alpro No. 320
6328 Alpro No. 330
6329 Alpro No. 331
6330 Alpro No. 332
6331 Alpro No. 333
3365 Alpro No. 335
3366 Alpro No. 338
3367 Alpro No. 351
3368 Alpro No. 352
3369 Alpro No. 360
3370 Alpro No. 361
3737 Alpro No. 362
3371 Alpro No. 363
3372 Alpro No. 364
3373 Alpro No. 365
3374 Alpro No. 370
3375 Alpro No. 371
6332 Alpro No. 380
3376 Alpro No. 385
8392 Alprolite
8393 Alray C
8394 Alray D
7449 Alsex
8395 Alsia
5018 Alsifer
4862 Alsiloy
8396 Alsiloy No. 1
8397 Alsiloy No. 3
7473 Alsiloy S-1
7474 Alsiloy S-5
6724 Alsteel
6642 Altior Aluminum Solder
6641 Altior Antifriction
8398 Altmag
6627 Alto
6525 Alual
8399 Alucable
56 Aludur
1706 Aludur No. 533D
1707 Aludur No. 570D
8400 Alufer
1299 Alufont "H"

1320 Alufont "W"
5431 Alufont II
8401 Aluger
7451 Aluma
3537 Alumac No. 13
3538 Alumac No. 83
57 Alumac No. 85
8402 Alumag
8403 Alumag Grade 1
8404 Alumag Grade 2
58 Alumalun
8405 Alumasod
1298 Aluman
4403 Alumaweld
8431 Alumaweld All Metal Solder
8432 Alumaweld Special Solder
59 Alumbro
60 Alumel
8406 Alumend
6747 Alumetal
6553 Alumiflux
8407 Aluminark
1843 Aluminite
1302 Aluminium Alloy (A.I.A.G.) Piston Alloy G-97
1242 Aluminium Alloy (A.I.A.G.) No. 119
1243 Aluminium Alloy (A.I.A.G.) No. 119M
4811 Aluminium Alloy, B.E.S.A. No. 361
4812 Aluminium Alloy, B.E.S.A. No. 362
4813 Aluminium Alloy, B.E.S.A. No. 363
99 Aluminium Alloy, British Aluminium Co. No. 40 D
1379 Aluminium Alloy, L-5
101 Aluminium Alloy, 3L5 Specification
1380 Aluminium Alloy, L8 Specification
4158 Aluminium Alloy, 3L8
2754 Aluminium Alloy, L-10
4157 Aluminium Alloy, 3L11
2753 Aluminium Alloy, 4L11 Specification
100 Aluminium Alloy, L24
2610 Aluminium Alloy, German
5820 Aluminium AW-15
61 Aluminum
11574 Aluminum
12317 Aluminum Brass
6748 Aluminum Genuine
2657 Aluminum, Hard
2653 Aluminum, Hard Sheet
2836 Aluminum, Naval
2838 Aluminum, Navy Alloy
3047 Aluminum (S.A.E.)
3261 Aluminum, Victoria
3285 Aluminum, Wagner & Guhrs
3304 Aluminum, Wilmott's
2674 Aluminum Alloy, Huron
3010–3024 Aluminum Alloys, S.A.E.—See under S.A.E.
7336 Aluminum Babbitt
102 Aluminum Brass
12057 Aluminum Brass
—— Aluminum Bronze (See also, Bronze, Aluminum)
103 Aluminum Bronze
12181 Aluminum Bronze
4771 Aluminum Bronze
667 Aluminum Bronze (Lumen)
5365 Aluminum Bronze, 5%
8408 Aluminum Bronze 135
8409 Aluminum Bronze 136
4363 Aluminum Bronze, Naval
890 Aluminum Bronze, Percy
104 Aluminum Bronze, U.S. Navy Spec. 46-B-186
5029 Aluminum-Chromium
1850 Aluminum-Copper
7553 Aluminum-Copper, 50-50 (Apex)
7554 Aluminum-Copper 60-40 (Apex)
1851 Aluminum-Copper, Strongest
1852 Aluminum-Copper, Magnesium
1853 Aluminum-Copper-Nickel
112 Aluminum Iron Bronze
3540 Aluminum Iron Bronze "H"
3541 Aluminum Iron Bronze "R"
3542 Aluminum Iron Bronze "S"
5021 Aluminum-Iron-Vanadium
1855 Aluminum Magnesium Bronze
5031 Aluminum-Manganese
1856 Aluminum Manganese Bronze
5030 Aluminum-Molybdenum
1857 Aluminum-Nickel
1858 Aluminum Nickel Bronze
12182 Aluminum Nickel Bronze
1859 Aluminum-Nickel-Titanium
1860 Aluminum-Nickel-Zinc
2049 Aluminum Piston Alloy (British)
1861 Aluminum Silver
3739 Aluminum Silver
—— Aluminum Solders—(See also Solders, Aluminum)
1862 Aluminum Solders
4238 Aluminum Solder (A)
4239 Aluminum Solder (B)
4240 Aluminum Solder (C)
4375 Aluminum Solder (D)
4376 Aluminum Solder (E)
3740 Aluminum Solder, Bates
3741 Aluminum Solder, Bourbouse
3742 Aluminum Solder, B. of Stds. SN-1
3743 Aluminum Solder, B. of Stds. SN-2

3744 Aluminum Solder, B. of Stds. SN-3
3745 Aluminum Solder, B. of Stds. SN-4
3746 Aluminum Solder, B. of Stds. ZN-1
3748 Aluminum Solder, Burgess
3747 Aluminum Solder, Cornande & Cruiys
2572 Aluminum Solder, Frismuth
4241 Aluminum Solder, Frismuth "A"
4242 Aluminum Solder, Frismuth "B"
4243 Aluminum Solder, Frismuth "C"
3748 Aluminum Solder, Geophysical Lab.
2608 Aluminum Solder, Grimm's
4244 Aluminum Solder, Grimm's "A"
4245 Aluminum Solder, Grimm's "B"
1863 Aluminum Solder, High Strength
3749 Aluminum Solder, Mourey
3750 Aluminum Solder, Richards
3801 Aluminum Solder, So-Lumin
3805 Aluminum Solder, Sterling
3751 Aluminum Solder, U.S. Pat. 1,332,899
3752 Aluminum Solder, U.S. Pat. 1,333,666
4106 Aluminum Solder, Wüst
1864 Aluminum Steel
1865 Aluminum-Tin-Bronze
3377 Aluminum-Titanium-Bronze
8410 Aluminum Union No. 3S
8411 Aluminum Union No. 14S
8412 Aluminum Union 17S
8413 Aluminum Union 22S
8414 Aluminum Union 24S
8415 Aluminum Union 27S
8416 Aluminum Union 35S
8417 Aluminum Union 51S
8418 Aluminum Union A 51S
8419 Aluminum Union 57S
8420 Aluminum Union 123
8421 Aluminum Union 125
8422 Aluminum Union 126
8423 Aluminum Union 135
8424 Aluminum Union 160
8425 Aluminum Union 162
8426 Aluminum Union 218
8427 Aluminum Union 225
8428 Aluminum Union 350
5020 Aluminum-Vanadium
6749 Aluminweld
6757 Aluneon
1866 Alunite
6513 Alunyte
2505 Alusil
8433 Aluvac
1530 Alva Duplex
1756 Alva Extra
1757 Alva Special
8434 Alzac Metal
1867 Alzen
8435 Alzin
1868 Alzinc
—— A. M. (American Magnesium Corp.) Alloys
7015 AM 2S
690 AM 3S
3486 AM 4.4
3491 AM 7.4
693 AM 8.4
3492 AM 12.4
12479 AM 52 S
10181 AM-C 52 S Mazlo
11913 AM-C 52S
3486 AM 53S
7042 AM 55S
1563 AM 57S
10182 AM-C 57S Mazlo
3487 AM 58S
11914 AM-C 58S
7016 AM 59S
695 AM 61S
3489 AM X65S
3490 AM X67S
12480 AM-C 74S
12482 AM 88S
696 AM 112
7017 AM 230
1562 AM 240
3491 AM 241
693 AM 242
12481 AM 244
3492 AM 246
10179 AM 260
10180 AM 263
3493 AM 265
7018 AM 403
8436 AM 537
3494 AM 740
697 AM 764
1869 Amaloy
1870 Amaloy
8437 Amaloy
1871 Amax Metal
113 Amberoid
114 Ambrac "A"
1705 Ambrac "B"
12511 Ambrac 815
8438 Ambrac 901
12500 Ambraloy 917
8439 Ambraloy 927
6959 Ambraloy 928
7046 Ambraloy 929
5727 Ambro
4615 AMC
4617 AMCOH Extra Special
8440 AMCOH Hollow Die
8441 AMCOH Oil Hardening
4617 AMCOH Special
7742 Amercut B-14
7743 Amercut B-17
7744 Amercut B-19
7745 Amercut B-24
7746 Amercut B-28
8442 Amercut 1020
8443 Amercut X1020
7747 Amercut C1115
7749 Amercut C-1117
7750 Amercut C-1118
7748 Amercut C-1121
7751 Amercut C-1132
7752 Amercut C-1137
7753 Amercut C-1141
12261 Amercut 4640
7755 Amerhead A-1330
7756 Amerhead A-1335
7757 Amerhead C-1137
7758 Amerhead A-2317
7759 Amerhead A-2330

7760 Amerhead A-3115
7761 Amerhead A-3120
7762 Amerhead A-3135
12262 Amerhead A-4037
7763 Amerhead A-4140
7764 Amerhead A-4615
7754 Amerhead C-1018
12263 Amerhead NE8620
12264 Amerhead NE9437
1872 American Alloy
7387 American Armature
115 American Black Heart Malleable Iron
11881 American CA-14
11882 American CA-40
11883 American CE-30
11884 American CF-7
11886 American CF-7-M
11885 American CF-20
11887 American CH-20
7389 American Dynamo
7718 American Field Sheets
6682 American Hammered Piston Ring Standard Iron
11888 American HT
11876 American Hylastic
8444 American Marine
7380 American Marine Genuine Babbitt
7717 American Motor
11877 American No. 10
11878 American No. 20
11879 American No. 22
11880 American No. 31
3699 American Phosphor Bronze
7719 American Pole Sheets
7716 American Radio Transformer 72
1873 American Silver
7714 American Transformer 60
7715 American Transformer 66
7388 American Transformer 72
7390 American U.S. Electrical
1874 Amervan
2053 A-Metal
6150 A-Metal
6289 A-Metal
116 AMF-Alloy
1568 AMF-Alloy
8445 Amola
11827 Amotun
8446 Ampco
7414 Ampco Beryllium Copper
8447 Ampco Gr. 18-13
8448 Ampco Gr. 18-22
8450 Ampco Gr. 18-33
117 Ampco Metal
5821 Ampco Metal No. 12
8449 Ampco Metal 18-23
8451 Ampco Metal 20-13
5822 Ampco No. 16
5823 Ampco No. 18
5824 Ampco No. 20
5825 Ampco No. 21
5826 Ampco No. 22
8453 Ampcoloy 30
8454 Ampcoloy 32
8455 Ampcoloy 34
8456 Ampcoloy 40
8457 Ampcoloy 42
8458 Ampcoloy 43
8459 Ampcoloy 44
11831 Ampcoloy 45
11787 Ampcoloy 45-22
8460 Ampcoloy 46
8461 Ampcoloy 50
8462 Ampcoloy 54
8463 Ampcoloy 62
8464 Ampcoloy 64
8465 Ampcoloy 65
8466 Ampcoloy 72
563 Ampcoloy 79
8467 Ampcoloy 80
8468 Ampcoloy 91
8469 Ampcoloy 97
8470 Ampcoloy 98
8471 Ampcoloy A-3
8472 Ampcoloy A-323
8473 Ampcoloy E-1
8474 Ampcoloy E-2
8475 Ampcoloy E-3
8476 Ampcoloy E-117
8477 Ampcoloy E-123
8478 Ampcoloy E-133
8452 Ampco Trode
11830 Ampco Trode 10
8480 Ampco Trode 12
8481 Ampco Trode 16
8482 Ampco Trode 18
8383 Ampco Trode 20
8384 Ampco Trode 21
8485 Ampco Trode 22
8479 Ampco Trodaloy
7524 Amplex
8486 Amsco Dieweld
458 Amsco F-1
5070 Amsco F-1H
5071 Amsco F-1HH
459 Amsco F-2
6707 Amsco F-2B
460 Amsco F-3
5072 Amsco F-3H
5073 Amsco F-3HH
461 Amsco F-4
462 Amsco F-5
6708 Amsco F-5B
5827 Amsco F-6
5074 Amsco F-7
463 Amsco F-8
9608 Amsco F-8N
5075 Amsco F-10
5076 Amsco F-10H
5077 Amsco F-10HH
5078 Amsco F-12
119 Amsco Manganese Steel
8487 Amsco Nickel Manganese Steel
4492 Amsco Ni-Mn Steel
7047 Amsco No. 217
8211 Amsco No. 217AC
8212 Amsco No. 459AC
4493 Amsco No. 459 Alloy
5601 Amutit
2989 Anaconda "67"
3163 Anaconda "85"
8489 Anaconda 271 Alloy
8490 Anaconda No. 624
8491 Anaconda No. 719
8492 Anaconda No. 997
8493 Anaconda 1026
4311 Anaconda Beryllium Copper
1875 Anaconda Bronze
8488 Anaconda Electro Sheet Copper
6565 Anaconda Leaded Copper 946
6564 Anaconda Phosphor Bronze 610
120 Anaconda Phosphor Bronze "A"—351
121 Anaconda Phosphor Bronze "B"—979

122 Anaconda Phosphor Bronze "C"—353
123 Anaconda Phosphor Bronze "D"—354
4159 Anaconda Phosphor Bronze, "E"
8494 Anaconda Special Phosphor Bronze
8495 Anaconda Super Nickel
1876 Anatomical Alloy
4457 Anchor Chaser Die
4456 Anchor Special Tap
6750 Ancho-Tite
1759 Andard
8496 Anfriloy
5828 Angel
1443 Anibal
6955 "A" Nickel
6639 Anka H
5784 Anka Steels
124 Annite
8497 Anode
1877 Anode Metal
1711 Ansaldo
8072 Antaciron
5829 Anti-acid Metal
1289 Anticorodal
1290 Anticorodal, Casting Alloy
8498 Anticorodal Special
8499 Anticorodal Wrought
1878 Antifriction Alloys
2365 Antifriction Metal, Dunnlevic and Jones
775–781 Antifriction Metals (See also Babbitts, Bearing Metals)
2994 Antifriction Metal (Salge)
8500 Antimonial Admiralty
125 Antimonial Lead
126 Antimony
4469 Anvil
1879 Anvil Brass
4526 Anvil Heading Die
8207 A020
8501 A020 Chisel and Punch
7446 A.P. 33
8502 AP 33
8503 AP 33 M
127 Apex
8504 Apex
1881 Apex Bronze
12541 Apex, Michigan
7053 Apex 12
7055 Apex 14
7054 Apex 16
7056 Apex 22
7057 Apex 24
7058 Apex 44
7059 Apex 66
7552 Apex No. 12 Aluminum, Standard Grade
1880 Apex No. 400 Aluminum Alloy
7553 Apex 50-50 Aluminum Copper
7554 Apex 60-40 Aluminum Copper
7555 Apex 95-5 Aluminum Silicon Alloy
7556 Apex Pattern Aluminum Alloy
7557 Apex Piston Alloy
7558 Apex Pressure Aluminum Alloy
7559 Apex 11-13% Silicon Aluminum Alloy
7560 Apex 25-75% Silicon Aluminum Alloy
7562 Apex No. 7 Zinc Base Alloy
7563 Apex No. 405 Zinc Base Alloy
7564 Apex No. 4100 Zinc Base Alloy
7565 Apex No. 4102 Zinc Base Alloy
7561 Apex "T" Series Zinc Base Alloys
5733 Aphit
1882 Aphtit
1760 Apollo
8505 Apollo Chromsteel
1883 Apollo Crom
7388 Apollo Special Electrical
128 Apolloy
8506 APW Silver Solder
8507 Ara
5789 A. R. Alloy
129 Arboga
1477 A.R.C.
6783 A.R.C. 1047
6782 A.R.C. 2266
6779 A.R.C. 2702A
6780 A.R.C. 2702B
6781 A.R.C. 2702S
8508 Arcast
4762 Arcet German Silver
3807 Arcet Tombac
5830 Archangel
5430 Architectural Bronze C. 94
5437 Architectural Bronze (Chase)
12518 Architectural Bronze —280
8509 Arcoloy
7337 Arctic Bronze
8510 Arc-Wel
5831 Ardoloy
8511 Ardoloy
130 Aremite
1884 Argelite
6520 Argent
1885 Argental
1886 Argentalium
131 Argentan
4748 Argentan, Berlin
1887 Argentan, Chinese
4749 Argentan, English
4747 Argentan, French
7355 Argentan, Plouff
1888 Argentan, Russian
1889 Argentan, Russian (Cast)
1890 Argentan, sheet
1891 Argentan (Vienna)
1892 Argentan Solder
1893 Argent francais
1894 Argentin
132 Argentine Metal
133 Argilite
1895 Argo High Speed
1905 Argold Metal
1896 Argozoil
6521 Argus
518 Arguzoid (See German Silver)
1898 Argyroid (Argiroide)
1899 Argyrolith
1900 Argyrophan
6522 Aristaloy
6515 Aristocrat
8513 Aristoloy 302

8514 Aristoloy 303
8515 Aristoloy 304
8516 Aristoloy 305
8517 Aristoloy 306
8518 Aristoloy 307
8519 Aristoloy 308
8520 Aristoloy 309
12120 Aristoloy 310
8521 Aristoloy 316
8522 Aristoloy 317
12121 Aristoloy 321
8523 Aristoloy 347
8524 Aristoloy 410
8525 Aristoloy 414
8526 Aristoloy 416
12122 Aristoloy 420
8527 Aristoloy 430
12123 Aristoloy 446
8528 Aristoloy 4/6 CRMO
8529 Aristoloy 7/9 CRMO
8530 Ark
1811 Ark High Speed
4571 Ark Superlative
4572 Ark Supreme
134 Arkit
1854 Arko
8531 ArMa Steel
1404 Armat
7338 Armature Babbitt
11924 Armature Electric
11789 Armco Aluminized Steel
7821 Armco Armature
11635 Armco Cold Rolled Paintgrip
7820 Armco Electric
7829 Armco Enameling Iron
7822 Armco Field Grade
12124 Armco Galvanized Paintgrip
12533 Armco Grade X
7814 Armco High Strength (50Y)
12125 Armco High Strength (55Y)
8539 Armco High Tensile
7814 Armco HT-50
7818 Armco Intermediate Transformer
135 Armco Iron
7812 Armco R.A. Type 434A
7823 Armco Radio No. 1
7824 Armco Radio No. 2
7825 Armco Radio No. 3
7826 Armco Radio No. 4
7827 Armco Radio No. 5
7828 Armco Radio No. 6
7819 Armco Special Electric
12532 Armco Trancor 52
7815 Armco Trancor 58
7816 Armco Trancor 65
7817 Armco Trancor 72
4570 Armco Zincgrip Paintgrip
8532 Armco 13
7813 Armco 15 Type 430
4097 Armco 16
7802 Armco 16-6 Type 301
7803 Armco 16-6 Type 301S
5832 Armco 17
7811 Armco 17 Type 430
8533 Armco 17-7
5833 Armco 18-8
7804 Armco 18-8 Type 302
7805 Armco 18-8 Type 304
8534 Armco 18-10 Cb
2801 Armco 18-10 Ti
8525 Armco 18-12 Mo
8536 Armco 18-20 SMO
6644 Armco 19-9
7806 Armco 19-9 Type 305
7807 Armco 19-9 Type 306
8537 Armco 19-12 Mo
5834 Armco 20-10
7808 Armco 20-10 Type 307
7809 Armco 20-10 Type 308
7810 Armco 25-12 Type 309
8535 Armco 27
8540 Armelec
136 Armide
8541 Armoarc
2323 Armor-Plate, Chrome-Nickel Steel
137 Armstrong
8542 Armstrong Metal
8543 Armstrong Metal
1897 Armstrong Patent
1761 Arrestite
4181 Arrestite
6649 Arrow (Hoyt)
4386 Arrow (Latrobe)
4468 Arrow (Soderfors)
1762 Arrow High Speed
1763 Arrow Oil Hardening
4525 Arrow Oil Hardening (Soderfors)
1764 Arrow Special
138 Arsenic
12522 Arsenical Admiralty —439
12288 Arsenical Admiralty Tubing
12126 Arsenical Copper
139 Arsenic Bronze
5133 A. R. Stainless
8544 A. R. Steel
140 Art Die
8545 Arzite Metal
1321 Arzon Metal
8546 AS No. 46 Green Label
8547 AS Tri-Mo
8548 AS White Label
7148 Asarcoloy No. 7
1765 Asco
—— Ascoloys—(See Allegheny Alloys)
141 Ascoloy No. 33
1344 Ascoloy No. 44
1345 Ascoloy No. 55
1508 Ascoloy No. 66
142 Ashberry Metal
8549 A.S.V.
5048 A.S.V., Special
483 A.T.C. 30
484 A.T.C. 50
1459 A.T.E. (Imphy)
480 Atecor
143 Aterite
1455 A.T.G. (Imphy)
144 Atha No. 2500
6539 Atha No. 2600
7110 Atha Champion
7111 Atha Chrome Roll
3817 Atha Pneu
1766 Atha Rim Roll
3378 Athos
8550 Atlan
9894 Atlan H.C.C. Die
8551 Atlan Non-Shrink Die
8552 Atlantaloy No. 10
8553 Atlantaloy No. 12
8554 Atlantaloy No. 20
8555 Atlantaloy No. 21
8556 Atlantaloy No. 22
8557 Atlantaloy No. 23
8558 Atlantaloy No. 24
8559 Atlantaloy No. 31

8560 Atlantaloy No. 42
8561 Atlantaloy No. 60
8562 Atlantic
1767 Atlantic No. 33
12127 Atlantic No. 44
11828 Atlantic "V"
1635 Atlas
8563 Atlas A
1034 Atlas AE-1
471 Atlas A.H.N.C.
8564 Atlas Alpha
5260 Atlas A.T.C. 20
483 Atlas A.T.C. 30
5261 Atlas A.T.C. 40
484 Atlas A.T.C. 50
5262 Atlas A.T.C. 55
5263 Atlas A.T.C. 75
5267 Atlas A.T.C.V.
5264 Atlas A.T.M.N.
481 Atlas A.T.N.
5265 Atlas A.T.N.X.
8565 Atlas B
5259 Atlas Ball Race Steel
733 Atlas C.C.H.
145 Atlas Chrome Die
8566 Atlas CM
5257 Atlas Die Ring Steel
7079 Atlas Double Extra
1634 Atlas Extra
7080 Atlas Extra
6501 Atlas Hollow Drill
146 Atlas Hot Die
147 Atlas Iron No. 1
148 Atlas Iron No. 2
149 Atlas Iron No. 3
482 Atlas N.C. 45
5270 Atlas N.C. 100
5271 Atlas N.C.C.H.
478 Atlas N.C.H. 3
479 Atlas N.C.H. 5
3462 Atlas No. 10
1921 Atlas No. 20
6313 Atlas No. 50
8572 Atlas No. 50 A
8573 Atlas No. 50 B
8574 Atlas No. 57
8575 Atlas No. 83-A
5835 Atlas No. 89A-2
7693 Atlas 89A-3
7692 Atlas 89A-207
7694 Atlas 89A-303
7695 Atlas 89A-318
7696 Atlas 89A-323
5836 Atlas No. 89 E-1
5837 Atlas No. 89 E-2
5838 Atlas No. 89 E-3
5839 Atlas No. 89 E-4
5840 Atlas No. 89 E-5
7697 Atlas 89E-103
7698 Atlas 89E-106
7699 Atlas 89E-108
7700 Atlas 89E-117
8576 Atlas 89E-123
7701 Atlas 89E-133
7702 Atlas 89E-135
7703 Atlas 89E-203
259 Atlas No. 90
1768 Atlas No. 93
7081 Atlas "Q"
7082 Atlas Refined
5302 Atlas Self-hardening
7083 Atlas Special Alloy
5254 Atlas S.P. Steel
7084 Atlas Triple Extra
5320 Atlas Tungsten Magnet
8570 Atlas XX-95
8571 Atlas XXX
8577 Atloy
11994 Atmodie
481 A.T.N.
5035 Atsco
12128 Atsco AR
12129 Atsco Special
11829 Atsil
6516 Atsina
7681 A.T.V.
3404 A.T.V. (Era)
548 A.T.V. (Hecla)
1453 A.T.V. (Imphy)
735 A.T.V. 1 (Midvaloy)
736 A.T.V.-3 (Midvaloy)
8578 Auburn Cast
8579 Auburn Extra
8580 Auburn Hot Die
8581 Auburn Perfection
8582 Auburn Special
8583 Auburn Standard
8584 Auburn Tool Maker
8333 Audio Transformer "A"
8334 Audio Transformer "B"
8335 Audio Transformer "C"
150 Auer Metal
8585 Aufriloy
1844 Augsburg
3308 Augsburg Wire
4314 Augsburg Statuary Bronze
8586 Aurornet
8588 Aurornet No. 11
11816 Aurornet No. 12
11815 Aurornet No. 52
8589 Aurornet No. 55
11814 Aurornet No. 56
8590 Aurornet No. 145
8591 Aurornet No. X-10
8592 Aurornet No. X-14
1901 Austrian Alloy (Spandau)
3379 Austrian (Gersdorf)
1902 Austrian Journal Box
5058 Autag Chisel
5602 Autinit NG
11555 *Auto*
8594 Autocrat
7381 Autocrat Bushing Bronze
5606 Auto Extra N.C.
5607 Auto First Quality N.C.
8595 Automotive Die
5608 Auto M.S.
7641 Auto No. 1
5609 Auto Special P.A.
1324 Auto Steel No. 478
3267 Auto Steel (Vulcan)
8596 Autothermic
4378 Auto Valve Steel
5841 Avesta 249
5842 Avesta 249 H
5843 Avesta 254
151 Avesta No. 393
4224 Avesta No. 393 S
152 Avesta No. 739
4225 Avesta No. 739 H
153 Avesta No. 831
4226 Avesta No. 831 H
154 Avesta No. 832
4227 Avesta No. 832 S
8597 Avial
155 Avialite 915
5844 Aviol
8598 Avional 411
1300 Avional D
8599 Avional M
8600 Avionplat
8601 Avional SK
1301 Avional Z

1941 Avistek
8602 Avonmouth
8603 AVS Metal
8208 A9V
1903 Awaruite
5820 A.W.-15
8604 A.W. 160
6499 A.W.-70-90 Type A
7608 A.W.-70-90 Type B
4540 A.W. Special (Firth-Sterling)
8605 Axaloy
8606 Axlo
8612 Axloy CNM
8607 Axloy 20
8608 Axloy 30CN
8609 Axloy 30CNM
8610 Axloy 30CRN
8611 Axloy 35CN
8613 Axloy 50CN
8614 Axloy 50CNM
6723 A.Z.
8615 AZ
6052 AZ-102
5423 A.Z. 855
6054 AZ-855
4222 "AZ" (Electron AZ)
1737 "AZD" (Electron)
1738 "AZF" (Electron)
1739 "AZG" (Electron)
1740 "AZM" (Electron)

B

11824 B-18
11825 B-19
11823 B-23 Aero Bronze
11822 B-36
1916 B-Alloy
4371 B.A. 21
3186 B.A. 23
4372 B.A. 24
4373 B.A. 24 MS
2337 B.A. 25
4370 B.A. 29
6481 B.A. 31
2907 B.A. 34
8616 B.A. 35
3154 B.A. 37
99 B.A./40D
8051 B.A./40J
1995 B.A. 42
6687 B.A./50 Alloy
6503 B.A./60A
1191 B.A. L.35 Spec. Y-Alloy
2537 Babbitt, Eagle "A"
2538 Babbitt, Electric Railway
2579 Babbitt, Faultless "A"
2656 Babbitt, Hard
1341 Babbitt, Hard, Tin-Base
1342 Babbitt, Lead, Tin-Base
6481 Babbitt Metal, A.S.T.M.
2613 Babbitt Metal, Gas Engine
2612 Babbitt Metal, Genuine "A"
3237 Babbitt Metal, Trojan
2887 Babbitt, Oil Engine
1906 Babbitt, Richards Plastic
3005-3009 Babbitts, S.A.E. (See S.A.E. Spec.)
1340 Babbitt, Soft, Tin-Base
3194 Babbitt, Standard No. 4
1080 Babbitt, Thermo-Electric
3290 Babbitt, Wheel Brand
3317 Babbitt, Zinc
1343 Babbitt, Zinc, Tin-Base
—— Babcock-Wilcox Alloys—(See B. & W. Alloys)
8617 Bachite
1907 Back Case Metal
7085 Badger
157 Badger Steel
7450 Bahn Aluminium
1698 Bahn Metal
1908 Baily's Metal
8085 Bain Alloy
7740 Bain Bolt Steel
7739 Bain Flange Steel
6618 Bain Steel
7738 Bain Tube Steel
5847 Bakadie
8618 Bakadie No. 2
8619 Baker No. 175L
9943 Balco
11990 Balcut 1035
8620 Bal-Cut 1115
11988 Balcut X1314
11989 Balcut X1335
8621 Balfors Ultra-Captal + 1
1770 Balfosteel
4447 Balfour's Shoe Die
4309 Ballast Nickel
1916 "B" Alloy
1771 Baltoc
7613 B & W 2
7614 B & W 5
7615 B & W 9
7616 B & W 18
7617 B & W 18-8
7618 B & W 16-3-3
7619 B & W 25-20
7620 B & W 27
5079 B & W No. 400
5080 B & W No. 401
5081 B & W No. 402
5082 B & W No. 420
5845 B & W No. 441
5083 B & W No. 450
5084 B & W No. 600
6946 B & W No. 602
7004 B & W No. 603
5085 B & W No. 610
5086 B & W No. 640
5087 B & W No. 642
5088 B & W No. 650
5089 B & W No. 661
6947 B & W No. 690
6948 B & W No. 692
5090 B & W No. 700
5091 B & W No. 701
5092 B & W No. 800
5846 B & W No. 900
5093 B & W No. 902
5094 B & W No. 910
5095 B & W No. 912
5096 B & W No. 950
1228 B & W No. 1000
1229 B & W No. 1100
5097 B & W No. 1101
5098 B & W No. 1102
5099 B & W No. 1200
6945 B & W No. 1214 Cr
5100 B & W No. 1300
5101 B & W No. 1400
5102 B & W No. 1500
1230 B & W Chromium Steel 4-6

6567 B & W Nirosta KA-2
6568 B & W Nirosta KA-2S
7583 Baral
158 Barberite
8622 Baril
1909 Bario
3753 Bario, Hard
3754 Bario, Sheet
3755 Bario, Soft
159 Barium
8623 Barium 13 Cr
8624 Barium 17 Cr
8625 Barium 18-8
7584 Barmag
1454 Baros
5410 Barr Alloy No. 00-C
5411 Barr Alloy No. 1
529 Barr Alloy No. 2
5412 Barr Alloy No. 4
5413 Barr Alloy No. 5
233 Barr Alloy No. 6
5414 Barr Alloy No. 9
5415 Barr Alloy No. 11
5416 Barr Alloy No. 14
5417 Barr Alloy No. 15
5418 Barr Alloy No. 20
5419 Barr Alloy No. 25-B
5420 Barr Alloy No. 48
160 Barronia Metal
4685 "B" Arrow 1733
7797 Barrow B.H. Brand Pig Iron
7801 Barrow B.H.R. Brand (Cupola Grade)
7798 Barrow B.H.S. Brand Bessemer Haematite Pig Iron
7800 Barrow B.H.S. Brand Foundry Haematite Pig Iron
7799 Barrow Brand Foundry Haematite Pig Iron
7796 Barrow B.X. Brand Pig Iron
7794 Barrow B.X.X. Brand Special Low Phosphorus Haematite Pig Iron
7795 Barrow B.X.X. Brand Swedish Type Pig Iron
4879 Basaloy
1372 Basch Metal
1910 Basic Bessemer Pig
1911 Basic Low Phosphorus Pig
3740 Bates Aluminum Solder
1912 Bath Metal
161 Batterium
1913 Battery Copper
1914 Battery Plates
1915 Baudrin's (Baudoin's) Alloy
5726 Baudrin's No. 1
5725 Baudrin's No. 2
1371 Baush A-5 Casting Metal
1227 Baush Duralumin, Grade "A"
1655 Baush Duralumin, Grade "B"
5848 Bazar
8627 BBB Welding Electrode
5731 B.B.D.C. Standard
4568 B.B. Hot Die
6095 B.B. 4K
3396 B-c, Commercial Castings
7233 B.C. Hot Work
—— B.C.N. (See Bedel Alloys)
1157 B.C.T. (Vickers)
1769 B.D. Tool
5046 Beacon
6481 Bearing Alloys, A.S.T.M.
3302 Bearing Alloys, White Metal
231 Bearing Bronze
6480 Bearing Bronze, A.S.T.M.
1920 Bearing, Carriage
2561 Bearing, "E.B.D."
1921 Bearing, Engine (Kaiser)
2591 Bearing, Fletcher & Emperor
2634 Bearing, Glievor
2655 Bearing, Hard
2643 Bearing, Heavy
2644 Bearing, Heavy Axle
163 Bearings, High Grade
2717 Bearing, Koehlin's
2713 Bearing, Krupp
2751 Bearing, Lafond's Axle
2750 Bearing, Lafond's Heavy Axle
2742 Bearings, Ledebur's
2737 Bearings, Light Duty
18 Bearing Metal, Agrilite
1922 Bearing Metal, Daimler
1923 Bearing Metal, Hoyt's No. 1
1924 Bearing Metal No. 600
1925 Bearing, Moore-Jones
2839 Bearing, Navy
1926 Bearing, Schmidt Locomotive
1927 Bearing, Seraing
1928 Bearings, Stephenson Locomotive
1929 Bearings (Valves)
162 Bearingoy
164 Bearite
4404 Bearium B-2
4697 Bearium B-4
4716 Bearium B-6
4717 Bearium B-10
4718 Bearium B-11
165 Beaver
7382 Beaver Babbitt
4484 Beaver (Colonial)
6634 Beaver Die
1930 Becket Alloy
6514 Beckett Metal
5551 Bedel B.C.N.
5552 Bedel B.C.N. 3.S.2
5555 Bedel B.C.N. 4 S
5547 Bedel B.K. 3 B
5553 Bedel B.N.A.V. 0
5556 Bedel B.N.A.V. 1
5554 Bedel B.N.A.V. 2
5549 Bedel B.N.A.V. 3
5585 Bedel B.N. 23
5586 Bedel B.N. 33
5545 Bedel C. 3
5546 Bedel C. 5
5519 Bedel Chrome 4
5548 Bedel C.K.N.
5539 Bedel 1 Couronne 0
5540 Bedel 1 Couronne 1
5541 Bedel 1 Couronne 2
5542 Bedel 1 Couronne 3

5543 Bedel 1 Couroune 4
5544 Bedel 1 Couronne 5
5533 Bedel 2 Couronnes 0
5534 Bedel 2 Couronnes 1
5535 Bedel 2 Couronnes 2
5536 Bedel 2 Couronnes 3
5537 Bedel 2 Couronnes 4
5538 Bedel 2 Couronnes 5
5527 Bedel 3 Couronnes 0
5528 Bedel 3 Couronnes 1
5529 Bedel 3 Couronnes 2
5530 Bedel 3 Couronnes 3
5531 Bedel 3 Couronnes 4
5532 Bedel 3 Couronnes 5
5511 Bedel "Diamant-Bedel"
5510 Bedel Double Trefle
6769 Bedel Double Trefle E
5558 Bedel I.N.O. 2
5559 Bedel I.N.O. 3
5584 Bedel I.N.O. 6
5571 Bedel I.N.O. 11
5562 Bedel I.N.O. 12
5572 Bedel I.N.O. 13
5573 Bedel I.N.O. 14
5574 Bedel I.N.O. 15
5575 Bedel I.N.O. 16
5576 Bedel I.N.O. 20
5577 Bedel I.N.O. 21
5578 Bedel I.N.O. 22
5579 Bedel I.N.O. 23
5563 Bedel I.N.O. 31
5564 Bedel I.N.O. 32
5565 Bedel I.N.O. 33
5580 Bedel I.N.O. 40
5581 Bedel I.N.O. 41
5582 Bedel I.N.O. 50
5583 Bedel I.N.O. 51
5569 Bedel M.G.B.A.
5570 Bedel M.G.B.C.
5568 Bedel M.G.B.S.
5550 Bedel No. 600 C.
5507 Bedel No. 644
5505 Bedel Quatre Trefles
6767 Bedel Quatre Trefles C
5566 Bedel R.B. 6
5567 Bedel R.B. 7
5560 Bedel S.O.C.
5561 Bedel S.O.C. 2
5523 Bedel Special 000
5521 Bedel Special F
5524 Bedel Special F.A.
5525 Bedel Special F.B.
5526 Bedel Special F.K.
5522 Bedel Special F.L.
5520 Bedel Special X
5516 Bedel Special Y. 2
5517 Bedel Special Y. 5
5518 Bedel Special Z
6770 Bedel Special Z-3
6771 Bedel Special Z-4
5557 Bedel 1 Trefle 5
5509 Bedel Triple Trefle
5506 Bedel Triple Trefle E.S.
6768 Bedel Triple Trefle ESD
5508 Bedel Triple Trefle F.R.
5513 Bedel Un Trefle 1
5514 Bedel Un Trefle 2
5515 Bedel Un Trefle 3
5512 Bedel Un Trefle Couronne
1931 Belais White Gold
8628 Belectric No. 0
8629 Belectric No. 1
8630 Belectric No. 2
8631 Belectric No. 3
8632 Belectromal
1932 Belgian Aluminum Piston Alloy
4621 Bell Brand
3380 Bell Brass
8633 Bell Bronze
166 Bell Metal
1933 Bell Metal, Damstadt
1934 Bell Metal, Herbohn
1935 Bell Metal, Japanese Kara Kane
1917 B.E. 4 Alloy (U.S. Bureau of Engineering)
8634 Belmalloy
168 Bendalloy
10512 Benedict Nickel -812
1938 Benit (Bemit)
11576 Benson
1941 Benz Aviatek
12130 Beralite
12412 Beraloy A
12413 Beraloy B
12414 Beraloy C
8635 Beraloy No. 25
170 Berdo Alloy No. 1
171 Berdo Alloy No. 2
172 Berdo Alloy No. 3
4842 Berdo Alloy No. 6
4843 Berdo Alloy No. 7
8636 Bergal
1942 Berlin No. 1
11800 Berlin No. 2
4761 Berlin German Silver
8637 Bermax
1511 Berrydur
8638 Berrydur Contracid
8639 Berrydur-Cu
8640 Berrydur-Cu
173 Bersch Metal
1943 Berthier's Alloy
1944 Beruda Alloy
8641 Berylco No. 10
8642 Berylco No. 25
8643 Berylco No. 70
8644 Berylco No. 185
174 Beryllium
1692 Beryllium Bronze 1% Be
1693 Beryllium Bronze 1.5% Be
1694 Beryllium Bronze 2.0% Be
175 Beryllium Bronze 2.5% Be
5455 Beryllium-Copper
7414 Beryllium Copper, Ampco
4311 Beryllium Copper, Anaconda
11577 Beryllium Copper -175
12508 Beryllium Copper -175
4432 Beryllium Copper, Riverside Alloy 32
5457 Beryllium-Iron
1695 Beryllium Manganese Bronze, 1.0% Be
1696 Beryllium Manganese Bronze, 1.5% Be
5456 Beryllium-Nickel
—— B.E.S.A. (Now B.S.I. Alloys q.v.)
4811 B.E.S.A. Aluminum Alloy No. 361
4812 B.E.S.A. Aluminum Alloy No. 362
4813 B.E.S.A. Aluminum Alloy No. 363
5107 Bescoloy
8645 Besplate
1945 Best Bronze
519 Best German Silver
7196 Best (Achorn)

4853 Best (Bethlehem)
4521 Best (Dannemora)
4499 Best (Disston)
5049 Best (Firth-Sterling)
1772 Best (Soderfors)
1773 Best
1774 Best
7893 Best
473 Best Cast (Firth)
4129 Best Type Metal
7572 Best Warranted
7339 Beta Crusher Babbitt
176 Bethadur No. 1
177 Bethadur No. 2
5849 Bethadur No. 2A
5850 Bethadur No. 2B
5851 Bethadur No. 2C
5852 Bethadur No. 2D
5853 Bethadur No. 2E
178 Bethadur No. 3
1367 Bethadur No. 4
5103 Bethadur No. 5
1368 Bethadur No. 6
5104 Bethadur No. 7
1369 Bethadur No. 8
179 Bethadur No. 9
8647 Bethadur 301
8648 Bethadur 301X
8649 Bethadur 302B
8650 Bethadur 309
8651 Bethadur 316
8652 Bethadur 320
8653 Bethadur 321
8654 Bethadur 345
8655 Bethadur 346
8656 Bethadur 347
8657 Bethadur 348
8278 Bethadur 403
12133 Bethadur 410
12132 Bethadur 420
8279 Bethadur 425
12134 Bethadur 431
5104 Bethadur 440
5103 Bethadur 442
8280 Bethadur 501B
8281 Bethadur 501C
8283 Bethadur 502
180 Bethalon A
5105 Bethalon B
7062 Bethalon C
7063 Bethalon D
5105 Bethalon 303
7064 Bethanized Products
7065 Bethco Machine Screw
7066 Bethco Wood Screw
5854 Beth-Cu-Loy
5855 Bethlehem 4-6% Cr
12139 Bethlehem 5% Cr
6470 Bethlehem 33, Grade A
6471 Bethlehem 33, Grade B
6472 Bethlehem 33, Grade C
8662 Bethlehem 66
5856 Bethlehem 88-80
6726 Bethlehem Abrasion Resisting Steel
12136 Bethlehem Abrasion Resisting No. 235
8285 Bethlehem Air Die
11793 Bethlehem Air Hardening
4853 Bethlehem Best Tool Steel
4854 Bethlehem Chrome Ball Race Steel
333 Bethlehem Comokut
12137 Bethlehem Cr-Mo W Hot Work
8286 Bethlehem Extra Special
1946 Bethlehem Fast Finishing
2201 Bethlehem Finishing
2477 Bethlehem Hi-Tem Iron
8658 Bethlehem HM
11634 Bethlehem Hot Work 8
8287 Bethlehem H.T.W.
7067 Bethlehem H.V.
628 Bethlehem Lehigh
6470 Bethlehem Manganese Steel
11578 Bethlehem Moco
8659 Bethlehem Mokut
8660 Bethlehem Moly
6495 Bethlehem Ni-Mo Gear Steel
4856 Bethlehem No. 1 Permanent Magnet
3307 Bethlehem No. 5 Ni-Steel
184 Bethlehem No. 6 (Tool Steel)
6488 Bethlehem No. 6 Ni-Steel
8661 Bethlehem No. 7
5988 Bethlehem Penco No. 20
185 Bethlehem No. 57 Hot Work
12138 Bethlehem No. 57 Special
186 Bethlehem No. 67 Chisel
11529 Bethlehem No. 67 Tap
187 Bethlehem No. 71
8663 Bethlehem No. 235
12136 Bethlehem No. 235
8664 Bethlehem No. 300
188 Bethlehem No. 445
4855 Bethlehem Piston Steel
12140 Bethlehem Pivot Steel
12141 Bethlehem Shank Steel
8665 Bethlehem Silico-Manganese Spring Steel
6637 Bethlehem Silvery Mayari Iron
1947 Bethlehem Special High Speed
181 Bethlehem Stainless Steel Type "A"
8666 Bethlehem Standard Bearing
182 Bethlehem Superior Hollow Drill
183 Bethlehem Superior Tool Steel
1069 Bethlehem Tantiron
4460 Bethlehem Tool Room
184 Bethlehem Tool Steel No. 6
4458 Bethlehem Tough
189 Bethlehem X
190 Bethlehem XX
191 Bethlehem XXX
2203 Bethlehem XXX Special
192 Bethlehem XCL
2908 Beugnot Metal —(See Pierrot Metal)
2204 "B-F" High Speed
2205 "B-F" Tool
7797 B.H. Brand Pig Iron
7801 B.H.R. Brand

7798 B.H.S. Brand Bessemer Pig Iron
7800 B.H.S. Brand Foundry Pig Iron
6675 B.H.T.A. Metal
8667 Bicop Oxygen Free Copper
3756 Biddery
1949 Bidery
4229 Bidery Buttons
4298 Bidery Buttons
1950 Bierman Tungsten Bronze
5857 Big "J"
1951 Bilgen-Bronze
6591 Bimetal
1948 Binding Brass
193 Birdsboro No. 26
194 Birdsboro No. 30
1654 Birmabright Alloy
8668 Birmal
8669 Birmalite
8670 Birmasil
1691 Birmasil Special
8671 B & L Spl. O.H.S.S.
195 Birmidium
1213 Birmidium Y-Alloy
4377 Birmingham
4759 Birmingham German Silver
908 Birmingham Platina
2921 Birmingham Platinum
6620 Bisco
4867 Bisco Die
196 Bismuth
1952 Bismuth Brass
1953 Bismuth Bronze
1021 Bismuth Solder
4866 Bissett Tool Steel
4399 Bit Steel
6629 Bit Steel
4600 Bit and Jar Steel
6310 B.K.L.
7571 B.K.M.
7996 BKS
7994 BKS Extra
7995 BKS Special
8672 Black Beauty
8673 Black Devil
2206 Black Diamond Drill
1769 Black Diamond Tool
2207 Black Label No. 14
2249 Black Label (Crasco)
4563 Black Label (Jessop)
2208 Black Label Cast
197 Blackor
8674 Blackor
5617 Blade Steel
1529 Blancadur
1954 Blanko-blech
1955 Blatt-Gold
1956 Blatt Silver
7100 B.L.C.
1957 Block Brass
1958 Block's Alloy
8049 Blombit
2209 Blue Anchor Drill Rod
198 Blue Chip
2381 Blue Chip, Dollar
1959 Blue Chip Superior
8675 Blue Devil 85
8676 Blue Devil 100
8677 Blue Devil Yoloy
8678 Blue Diamond
1960 Blue Gold
6342 Blue Label
4715 Blue Label (Adams & Osgood)
8679 Blue Label Extra
2210 Blue Label No. 5
5229 Blue Label, Ship Brand
4701 Blue Label (Ward's)
8680 Blue Riband Victory No. 7
10738 Blue Streak
1698 B-Metal (Bahn Metal)
7993 B.M.S.
7992 B.M.S. Extra
7991 B.M.S. Special
2211 "B.M.S."
—— B.N.A.V.—See Bedel B.N.A.V.
2212 "B.N.D."
4403 B.N.F. Lead Alloy No. 1
4407 B.N.F. Lead Alloy No. 2
5590 B.N.F. Lead Alloy No. 3
2218 "B" No. 4
94 "B" No. 6
2220 "B" No. 7
2221 "B" No. 9
1961 Bobierre Metal
1295 Bofors Non-Shrinking Steel RT-1733
8681 B. O. H.
5601 Bohler Amutit
5602 Bohler Autinit NG
5603 Bohler AS-2
5604 Bohler AS-4
5605 Bohler AS-8
5606 Bohler Auto Extra NC
5607 Bohler Auto First Quality NC
5608 Bohler Auto MS
5609 Bohler Auto Special PA
5610 Bohler Bats
5611 Bohler B-Elite
5612 Bohler B-Elite U
5613 Bohler B-Elite 18
5614 Bohler BH
5615 Bohler BH-Extra
5616 Bohler BHW
5617 Bohler Blade Steel
5618 Bohler BM
5619 Bohler Boreas
5620 Bohler Brownie
5621 Bohler Brownie Extra
5622 Bohler B-Special
5623 Bohler BW
5624 Bohler BW VII
5625 Bohler BW IX
5626 Bohler CC
5627 Bohler CC Special
5628 Bohler Celsit
5629 Bohler Chronos
5630 Bohler C O H
5631 Bohler COK
5632 Bohler C O M
563 Bohler Crucible
5634 Bohler C S
5635 Bohler E N A
5636 Bohler E S
5637 Bohler E S C
5[illegible] Bohler ES Special
[illegible] Bohler Extra H
[illegible] Bohler Extra Hard
5[illegible] Bohler Extra K
[illegible] Bohler Extra MG
5[illegible] Bohler Extra Middling Hard

5643 Bohler Extra Tough
5644 Bohler FM
5645 Bohler GA
5646 Bohler GNM
5647 Bohler GSI
5648 Bohler Hard Core
5649 Bohler Invar Steel
5650 Bohler Jar Steel
5651 Bohler K-3
5652 Bohler K-3 S
5653 Bohler K-100
5654 Bohler K-100/1
5655 Bohler K-100 S
5656 Bohler KK
1962 Bohler KL
5657 Bohler Knife Steel
5658 Bohler KP
5659 Bohler KW-10
5660 Bohler KW-60
5661 Bohler Lightning
1963 Bohler Magnet Steel
5662 Bohler Martin Steel
5663 Bohler ME
5664 Bohler ME-6
5665 Bohler ML
5666 Bohler Middling Hard
5667 Bohler Molette
5668 Bohler MST
3930 Bohler MY
3931 Bohler MY Extra
5669 Bohler NBS
5670 Bohler NBSN
5671 Bohler Needle Die Steel
5672 Bohler NI
5673 Bohler NW
5674 Bohler Panther
5675 Bohler PPA
1964 Bohler Rapid Steel
5676 Bohler Remanenceless Iron
4018 Bohler Special K
5677 Bohler Special KN
5678 Bohler Special KV
5679 Bohler Special W-43
5680 Bohler SSW
1965 Bohler Super Rapid
5681 Bohler Super Rapid Extra
5682 Bohler Super Rapid Extra 214
5683 Bohler Super Rapid Extra HV
5684 Bohler Super Rapid Extra 500
5685 Bohler Tough
5686 Bohler TW
5687 Bohler TWV
5688 Bohler TWW
5689 Bohler US
5690 Bohler WB
4560 Bohler WKZ
5691 Bohler WON
5692 Bohler WPD
5693 Bohler WPZ
5694 Bohler Z-11
5695 Bohler ZCS
5696 Bohler ZE
5698 Bohler ZM
5697 Bohler ZNM
5699 Bohler No. 2 Si
5700 Bohler No. 2 Nw
5701 Bohler No. 5 Nm
5702 Bohler No. 36 N
5703 Bohler No. 90
5704 Bohler No. 70
5705 Bohler No. 71
6417 Bohn No. 2
6418 Bohn No. 3
6419 Bohn No. 4
6420 Bohn No. 5
6421 Bohn No. 6
6422 Bohn No. 7
6399 Bohn No. 56
6400 Bohn No. 57
6401 Bohn No. 58
6377 Bohn No. 68
6382 Bohn No. 70
6383 Bohn No. 70D
6378 Bohn No. 75
6379 Bohn No. 79
6384 Bohn No. 80
6385 Bohn No. 80C
6386 Bohn No. 82
6387 Bohn No. 82D
6388 Bohn No. 84
6380 Bohn No. 85
6389 Bohn No. 86
6390 Bohn No. 86D
6391 Bohn No. 87
6392 Bohn No. 88
6393 Bohn No. 88C
6394 Bohn No. 89
6411 Bohn No. 90
6412 Bohn No. 90A
6413 Bohn No. 90S
6414 Bohn No. 90M
6415 Bohn No. 90H
6416 Bohn No. 90V
6395 Bohn No. 91
6367 Bohn No. 100
6368 Bohn No. 100C
6423 Bohn No. 10-90
6424 Bohn No. 20-80
6425 Bohn No. 25-75
6426 Bohn No. 30-70
6427 Bohn No. 35-65
6428 Bohn No. 40-60
6429 Bohn No. 50-50
6430 Bohn No. 60-40
6402 Bohn No. R-42
6403 Bohn No. R-45
6404 Bohn No. R-47
6381 Bohn No. R-53
6369 Bohn No. R-55
6396 Bohn No. R-56
6397 Bohn No. R-56C
6398 Bohn No. R-57
6370 Bohn No. R-59
6371 Bohn No. R-59B
6372 Bohn No. R-59C
6373 Bohn No. R-59T
6374 Bohn No. R-60
6375 Bohn No. R-60N
6376 Bohn No. R-61
6405 Bohn No. R-90
6406 Bohn No. R-90A
6407 Bohn No. R-90S
6408 Bohn No. R-90M
6409 Bohn No. R-90H
6410 Bohn No. R-90V
6431 Bohnalite B
6444 Bohnalite C
6432 Bohnalite E
6433 Bohnalite F
6434 Bohnalite I
6435 Bohnalite J
6445 Bohnalite L
6436 Bohnalite O
6437 Bohnalite O-2
6446 Bohnalite S
6447 Bohnalite S-3
6448 Bohnalite S-17
6449 Bohnalite S-25
6450 Bohnalite S-43
6451 Bohnalite S-51
6452 Bohnalite S-53
6438 Bohnalite U
6439 Bohnalite W
6440 Bohnalite W-3
6441 Bohnalite W-4

6234 Bohnalite X-1S
6235 Bohnalite X-2
6455 Bohnalite X-3
6236 Bohnalite X-3S
6237 Bohnalite X-4
6457 Bohnalite X-5
6458 Bohnalite X-6
6238 Bohnalite X-7
8682 Bohnalite X-10
6239 Bohnalite X-11S
6442 Bohnalite Y
6443 Bohnalite Y-2
2507 Bohnalite, Nelson
4462 Boker Power Chisel
4463 Boker Special 847
8683 Boloney
1966 Bolster Silver
7494 Bolton's Special Bearing Metal
2213 Bonded Carbide
1471 Bondur
6664 Bondurplate
2503 Bonner Special Seewasser
6688 Bonney-Floyd 4-6 Cr Mo
6689 Bonney-Floyd Hard Kote H
6690 Bonney-Floyd Hard Kote T
1427 Bonney-Floyd H.T. Low Carbon
200 Bonney-Floyd MM Steel
1426 Bonney-Floyd N.C.M.
6691 Bonney-Floyd Niresist
6692 Bonney-Floyd Stainless
6693 Bonney-Floyd Stainless
6694 Bonney-Floyd Stainless N
6695 Bonney-Floyd Stainless O
6696 Bonney-Floyd Stainless S
12449 Booth Cap Copper
12452 Booth 20S
12455 Booth 20SA
12461 Booth 76A
12459 Booth A.D.
12460 Booth A.D.A.
12462 Booth A1
12463 Booth B1
12458 Booth B2C
12466 Booth B76
5421 Booth D2
12454 Booth J5K
12464 Booth MU3
12457 Booth T2
12456 Booth YDA
12465 Booth Y.D.B.
7877 Bora
201 Borcher Alloys
6460 Borcher Alloy
6461 Borcher Alloy
6462 Borcher Alloy
6463 Borcher Alloy
6464 Borcher Alloy
5723 Borcher's "A"
5724 Borcher's "B"
5619 Boreas
2214 Borite
1225 Borium
1226 Borod
6489 Boron Carbide
4444 Boronic Alloys
1967 Boron Steel
203 Boroto B.K.
204 Boroto B.L.
202 Boroto B.N.
205 Boroto B.R.
1673 Bosch "Al-5"
1674 Bosch "Al-7"
1675 Bosch "Al-9"
1676 Bosch "Al-20"
1677 Bosch "Al-34"
1678 Bosch "Al-36"
1668 Bosch "Br-6"
1669 Bosch "Br-14"
1670 Bosch "Br-32"
1671 Bosch "Cu-11"
1672 Bosch "Cu-28"
1659 Bosch "Me-1"
1660 Bosch "Me-2"
1661 Bosch "Me-3"
1662 Bosch "Me-4"
1663 Bosch "Me-5"
1664 Bosch "Me-6"
1665 Bosch "Me-16"
1666 Bosch "Me-17"
1667 Bosch "Me-25"
1667 Bosch Metal
1664 Bosch Special Brass
1679 Bosch "Zn-4"
1968 Bourbonnes
3741 Bourbouse Aluminum Solder
4174 Bourne-Fuller "Acme"
4185 Bourne-Fuller "Air-hardening"
4181 Bourne-Fuller "Arrestite"
4183 Bourne-Fuller "Dumost"
4177 Bourne-Fuller "Extra"
4178 Bourne-Fuller "Extra Special"
4968 Bourne-Fuller "H-C"
4967 Bourne-Fuller High Speed Steel
4179 Bourne-Fuller Special Auto Steel
4417 Bourne-Fuller Special Alloy, Type "D"
4176 Bourne-Fuller "Standard"
4175 Bourne-Fuller Tool Steel
4180 Bourne-Fuller "Unique"
4184 Bourne-Fuller "Velvet"
4182 Bourne-Fuller "XX Superior"
6285 Bowco
6286 Bowco Cobalt
6360 Bowco Water Hardening
1969 Bow Wire
4865 Boyd-Wagner Chrome Magnet Steel
4864 Boyd-Wagner Tungsten Magnet Steel
7594 Boyd-Wagner No. 4 Swedish
7595 Boyd-Wagner No. 9 Swedish
7596 Boyd-Wagner No. 41 Swedish
7070 Braeburn Cobalt
4471 Braeburn Finishing
1970 Braeburn High Speed
5106 Braeburn Stainless
8944 Braecast
8684 Braemow
8685 Brake Die

5 Brass, Admiralty
5442 Brass, Admiralty (Chase)
1817 Brass, Ajax Golden Glow
1824 Brass, Alaska White
8686 Brass Alloy 624
102 Brass, Aluminum
1879 Brass, Anvil
3380 Brass, Bell
1948 Brass, Binding
1952 Brass, Bismuth
1957 Brass, Block
3381 Brass, Brazing
7055 Brass, Brazing
2048 Brass, Bristol
2145 Brass, Buckle
2146 Brass, Bullet
2152 Brass, Butt
2155 Brass, Button
206 Brass, Cartridge
3029 Brass, Cast (S.A.E.)
1972 Brass, Check
309 Brass, Clock
1661 Brass, Clock (Bosch)
5440 Brass, Clock (Chase)
1973 Brass, Collet
1974 Brass, Commercial
3039 Brass, Commercial (S.A.E.)
1975 Brass, Commercial, U.S.N. Spec. (B-c)
1976 Brass, Commercial, U.S.N. Spec. (B-r)
1977 Brass, Commercial Wire
1978 Brass, Common
207 Brass, Common High
334 Brass, Composition
1979 Brass, Cowles High Manganese
208 Brass, Deep Drawing
1980 Brass, Diaphragm
1981 Brass, Dipping
1982 Brass, Door Plate
209 Brass, Drawing
4271 Brass, Einheit's Red (Reichsbahn)
1983 Brass, Electrical
1984 Brass, Emperor
2549 Brass, English
1985 Brass, Engraver's
1986 Brass, Escutcheon Pin
1987 Brass, Eyelet
1988 Brass, Forging
5441 Brass, Forging (Chase)
1989 Brass, Free-turning Rod
5438 Brass, Free-turning (Chase)
1817 Brass, Golden Glow
1990 Brass, Grommet
1991 Brass, Hard Drawing
210 Brass, High
1992 Brass, High Manganese
1979 Brass, High Manganese (Cowles)
2010 Brass, High Manganese (Ponsards)
560 Brass, High Speed
1993 Brass, Hohenzollern
1994 Brass, Hooker
1996 Brass, Krupp Nickel
6072 Brass, Kunial
1997 Brass, Lancashire
1998 Brass, Leaded
211 Brass, Leaded High
1999 Brass, Leaded Low
2000 Brass, Leaded Screen Wire
627 Brass, Ledrite
212 Brass, Low
2066 Brass, Machinery
2001 Brass, Manganese
2002 Brass, Manganese Nickel
2003 Brass, Market
3448 Brass, Matrix
769 Brass, Naval
3042 Brass, Naval (S.A.E.)
3045 Brass, Naval (S.A.E.)
5010 Brass, Naval (Titan)
2004 Brass, Nickel
2005 Brass, Oker (Harz)
2006 Brass, One Ton
1680 Brass, Ostermann No. 4
1685 Brass, Ostermann No. 5
1683 Brass, Ostermann No. 9
1688 Brass, Ostermann No. 10
213 Brass, Percussion Cap
2007 Brass, Perking
2008 Brass, Pinkus
2009 Brass, Pin Wire
2010 Brass, Ponsard's High Manganese
943, 1621, 1680 Brass, Red
1683, 1684, 1688 Brass, Red
2011 Brass, Red (Einheit's)
944 Brass, Red, Casting
3025 Brass, Red (S.A.E.)
2012 Brass, Reed
2013 Brass, Rich Low
1663 Brass, Rivet (Bosch)
2014 Brass, Rule
—— Brass (S.A.E.). See S.A.E. Spec.
2999 Brass, Sceptre
1364 Brass, Scovill Naval
3797 Brass, Screw
1660 Brass, Screw (Bosch)
2015 Brass, Screw Wire
2017 Brass, Sheet
2018 Brass, Sheet (China)
2019 Brass, Sheet (Hegermuhl)
2020 Brass, Sheet (Iserlohn)
2021 Brass, Sheet (Jamappes)
2022 Brass, Sheet (Japan)
2023 Brass, Sheet (Oker)
2024 Brass, Sheet (Oker I)
2025 Brass, Sheet (Romilly)
2026 Brass, Sheet (Rosthorn-Wiln)
2027 Brass, Sheet (Stollberg)
2016 Brass, Shell Head
2028 Brass, Shoe Nail
2029 Brass, Silico-Manganese
1036 Brass, Spring
2030 Brass, Spring Wire
2031 Brass, Thurston
1621 Brass, Tombac Red
2032 Brass, Tungsten
2033 Brass, Turbine
2034 Brass, Turbiston's
2035 Brass, U.S. Navy

2036 Brass, Vanadium
2037 Brass, Washer
2038 Brass, Wheel
2039 Brass, White
2040 Brass, White Nickel
3027 Brass, White Nickel (S.A.E.)
7372 Brass, White No. 3
7640 Brass, White No. 5
7373 Brass, White No. 19
883 Brass, White (Parson's)
5891 Brass, White, S.A.
3758 Brass, Wire
1662 Brass, Wire (Bosch)
2041 Brass, Yellow
3026 Brass, Yellow (S.A.E.)
7541 Brass Steel
7542 Brass Tin
7543 Brassoid
214 Brastil
3381 Brazing Brass
7055 Brazing Brass
215 Brazing Metal
2042 Brazing Metal "F"
3382 Brazing Solder
2043 Brearley
6096 Brearley "A"
6097 Brearley "K"
2044 Brearley Patent
6640 Brearley "S I"
3174 Brearley S-less Steel
216 Bridge Bronze "A"
3783 Bridge Phosphor Bronze
2045 Bridgeport Bronze
12283 Bridgeport Forging Rod
12285 Bridgeport Manganese Bronze
12284 Bridgeport No. 192 Bronze
8687 Bridgeport No. 1232
12286 Bridgeport Phosphor Bronze Grade A
12287 Bridgeport Phosphor Brouze Grade C
4369 Bridgeport Plumrite
2046 Bright Cap Gilding
217 Brightray
7215 Brilliant AX
7216 Brilliant WKE
6089 Brillum
8689 Brilybdenum
8690 Brimol
8691 Bristahl
3383 Bristol
8692 Bristol
2047 Bristol Alloy Buttons
2048 Bristol Brass (Prince's Metal)
7680 Britannia Metal
6683 British Aluminium Co. No. 4
6684 British Aluminium Co. No. 6
6685 British Aluminium Co. No. 6 A
6686 British Aluminium Co. No. 12
99 British Aluminium Co. No. 40 D
6502 British Aluminium Co. No. 40 D
8051 British Aluminium Co. 40 J
6687 British Aluminium Co. No. 50 Alloy
6503 British Aluminium Co. No. 60 A
2049 British Alnminum Piston Alloy
1379 British L-5 Aluminum Alloy
1380 British L-8 Aluminum Alloy
1357 British Navy Antifriction Metals
8693 Britor
218 Brittania Metal
898 Brittania Pewter
2050 Brix
—— BRM-Alloys (see Brymill)
8694 BRM High Speed
7230 Broach (Fagersta)
12143 Broaching Steel
8369 Broachrite
11579 Brockhouse
2051 Brolunick
219 Bronzalun
8695 Bronzark
6 Bronze, Admiralty
3333 Bronze, Admiralty Modified
3477 Bronze, Admiralty Standard
23, 24, 25 Bronze, Ajax
1815 Bronze, Ajax Acid-Resisting
1816 Bronze, Ajax Gear
1818 Bronze, Ajax Nickalloy 12
4629 Bronze, Ajax Nickalloy 21
5732 Bronze, Ajax Nickalloy 23
1702 Bronze, Ajax Plastic A
1703 Bronze, Ajax Plastic B
1704 Bronze, Ajax Plastic N
25 Bronze, Ajax Plastic Standard
1819 Bronze, Ajax Pressure "M"
5953 Bronze, Ajax Pressure "S"
6156 Bronze, Ajax Pressure "X"
3431 Bronze, Ajax Structural Grade S
1821 Bronze, Ajax Structural Grade X
1831 Bronze, Alco
1836 Bronze, Allan No. 2
1837 Bronze, Allan Red
103 Bronze, Aluminum
5365 Bronze, Aluminum, 5%
2052 Bronze, Aluminum (Cowles)
667 Bronze, Aluminum (Lumen)
3037 Bronze, Aluminum (S.A.E.)
3038 Bronze, Aluminum (S.A.E.)
2054 Bronze, Aluminum (Special)
3540 Bronze, Aluminum Iron (H)
3541 Bronze, Aluminum Iron (R)
3542 Bronze, Aluminum Iron (S)

112 Bronze, Aluminum, Iron
1855 Bronze, Aluminum Magnesium
1856 Bronze, Aluminum Manganese
1858 Bronze, Aluminum Nickel
1865 Bronze, Aluminum-Tin
1087 Bronze, Aluminum-Titanium
1088 Bronze, Aluminum-Titanium
3377 Bronze, Aluminum-Titanium
104 Bronze, Aluminum, U.S.N. Spec.
890 Bronze, Aluminnm (Percy)
1875 Bronze (Anaconda)
120–123 Bronze, Anaconda Phosphor
1881 Bronze, Apex
5430 Bronze, Architectural C.94
5437 Bronze, Architectnral (Chase)
139 Bronze, Arsenic
7337 Bronze, Arctic
7381 Bronze, Autocrat
3035 Bronze, Backing (S.A.E.)
5435 Bronze, Bearing (Chase)
231 Bronze, Bearing
6480 Bronze, Bearing
4746 Bronze, Bearing Castings, U.S.N.
1945 Bronze, Best
1950 Bronze, Bierman Tungsten
1951 Bronze, Bilgen
1953 Bronze, Bismuth
216 Bronze, Bridge
2045 Bronze, Bridgeport
2144 Bronze, Buckeye
2055 Bronze, Carbon
2058 Bronze, Chain
269 Bronze, Chamet
2104 Bronze, Charpy Phosphor
2057 Bronze, Chinese
277 Bronze, Chromax
2058 Bronze, Cock
4508 Bronze, Coe
2059 Bronze, Cog & Worm
2060 Bronze, Coinage
220 Bronze, Commercial
4742 Bronze, Composition "M" U.S.N. Spec. 46B8e
4743 Bronze, Composition "P-c" U.S.N. Spec. 46B5g
4744 Bronze, Composition "P-r" U.S.N. Spec. 46B19d
2061 Bronze, Cornish
5884 Bronze, Corvic
371 Bronze, Cyprus
2062 Bronze, Damascus
5429 Bronze, Damaxine
376 Bronze, Dawson's
384 Bronze, Delta I
1347 Bronze, Delta II
1348 Bronze, Delta III
4141 Bronze, Delta IV
4781 Bronze, Delta V
6602 Bronze, Delta VI
6603 Bronze, Delta VII
6604 Bronze, Delta VIII
6605 Bronze, Delta IX
6606 Bronze, Delta IXa
386 Bronze, Demo
6613 Bronze, Diamant
2063 Bronze, Diamond
2065 Bronze, Dicks Bearing
2067 Bronze, "Double"
393 Bronze, Dudley's Phosphor
418 Bronze, Eclipse
2064 Bronze, Eisler's
2068 Bronze, Elephant
11839 Bronzend E
11838 Bronzend P
6536 Bronze, Enebra
2069 Bronze, English Penny
2070 Bronze, English Phosphor
2071 Bronze, Ferro
2072 Bronze, File
2073 Bronze, Fontainmoreau's
2074 Bronze, Free-Cutting
2075 Bronze, French Aluminum (See Brolunick)
2614 Bronze, Gear
514 Bronze, Gear
2615 Bronze, Gear
782 Bronze, Gear, Navy
3034 Bronze, Gear (S.A.E.)
1056 Bronze, Gear (Stone's English)
2076 Bronze, Gold
522 Bronze, Government
4742–4744 Bronze, Government
5744 Bronze, Government (Scovill's)
3641 Bronze, Goverument (U.S.A. Spec. "H")
3642 Bronze, Government, "Substitute"
2077 Bronze, Gun Monnt
2078 Bronze, Gurney's (Graney?)
232 Bronze, Hard
2079 Bronze, Hard Phosphor
540 Bronze, Hardware
989 Bronze, Hardware (Scovill's)
2080 Bronze, Harmonia
7497 Bronze, Hazel
4784 Bronze, Haywood's High Tensile
2081 Bronze, Helmet
2082 Bronze, Hercules
2083 Bronze, High Temperature
566 Bronze, Hitensiloy
568 Bronze, Holfos
5397 Bronze, Holfos, Chill Bar Grade
7501 Bronze, Holfos Spuncast
2084 Bronze, Hydraulic
5391 Bronze, Hydraulic (Ajax)
583 Bronze, Hyspeed Nickel
2085 Bronze, Hytenal
585 Bronze, Hy-ten-sl No. 1
1753 Bronze, Hy-ten-sl No. 3

2086 Bronze, Immadium
2087 Bronze, Injector
5715 Bronze, Inoxyda
2088 Bronze, Instrument
2089 Bronze, Iron
2090 Bronze, Ironier's
607 Bronze, Johnson
6451–6550 Bronze, Johnson
7292 Bronze, Johnson Graphited
2091 Bronze, Johnson Locomotive
2721 Bronze, Kern's Hydraulic
2092 Bronze, Kuhn's Phosphor
6075 Bronze, Kunial
2093 Bronze, Lafond's Malleable
2094 Bronze, Lafond's Pump
3443 Bronze, Laveyssiere
2105 Bronze, Law's Phosphor
2095 Bronze, Leaded
2096 Bronze, Leaded Charnet
4299 Bronze, Leaded Phosphor
7314 Bronze, Lithium
2097 Bronze, Litinum
2106 Bronze, Lowroff Phosphor
1361 Bronze, Lumen
2098 Bronze, Lynux
683 Bronze, Machine
705 Bronze, Magnolia
710 Bronze, Manganese
4321 Bronze, Manganese
23 Bronze, Manganese (Ajax)
7054 Bronze, Manganese (Apex)
3668 Bronze, Manganese (Cast)
5439 Bronze, Manganese (Chase)
3496–3499 Bronze, Manganese (Kramer)
666 Bronze, Manganese (Lumen)
882 Bronze, Manganese (Parson's)
3669 Bronze, Manganese (Rolled)
5889 Bronze, Manganese (Parson's)
3028 Bronze, Manganese (S.A.E.)
1028 Bronze, Manganese (Spare's)
718 Bronze, Marine
2099 Bronze, McKechnie's
2794 Bronze, Medal
7499 Bronze, Moonstone
2100 Bronze, Morin's Chinese
4791 Bronze, Morrison's Ductile
2101 Bronze, Mueller Blue Tip
770 Bronze, Naval
4363 Bronze, Naval Aluminum
4269 Bronze, Naval No. 4
2103 Bronze, Nickel
3454 Bronze, Nickel
5893 Bronze, Nickel
2102 Bronze, Nickel Aluminum
5443 Bronze, Nickel Aluminum (Chase)
2862 Bronze, Nickel Manganese
3413 Bronze No. 1
3414 Bronze No. 3
498 Bronze No. 5
3419 Bronze No. 10
225 Bronze No. 11
3420 Bronze No. 12
3421 Bronze No. 14
3422 Bronze No. 15
3424 Bronze No. 20
230 Bronze No. 24
5435 Bronze No. 444 (Chase)
6564 Bronze No. 610
1304 Bronze, Olympic "A"
5444 Bronze, Olympic "B"
5445 Bronze, Olympic "C"
856–858 Bronze, Omega Phosphor
1354 Bronze, Optical
860 Bronze, Oranium
1682 Bronze, Ostermann No. 8
1681 Bronze, Ostermann No. 10
1686 Bronze, Ostermann No. 10
1690 Bronze, Ostermann No. 14
1689 Bronze, Ostermann No. 20
5428 Bronze, Parson's Silver
890 Bronze, Percy Aluminum
901 Bronze, Phono
234 Bronze, Phosphor
6564 Bronze, Phosphor No. 610
3699 Bronze, Phosphor (American No. 1)
3700 Bronze, Phosphor (American No. 2)
24 Bronze, Phosphor (Ajax)
120– 123, 4159, 6564 Bronze, Phosphor, (Anaconda)
3782 Bronze, Phosphor (Bearings)
3783 Bronze, Phosphor (Bridge)
2104 Bronze, Phosphor (Charpy)
393 Bronze, Phosphor, Dudley's
6583–6590 Bronze, Phosphor (Elephant Brand)
7502–7504 Bronze, Phosphor (Elephant Brand)
3784 Bronze, Phosphor (English)
3701 Bronze, Phosphor (English No. 1)
3702 Bronze, Phosphor (English No. 2)
3785 Bronze, Phosphor (Gears)
3786 Bronze, Phosphor (Hairsprings)
4408 Bronze, Phosphor, Hard
6772 Bronze, Phosphor (Hoyt No. 1)
2105 Bronze, Phosphor (Law's)

6676 Bronze, Phosphor (Lily)
3703 Bronze, Phosphor (Locomotive Bearing)
2106 Bronze, Phosphor (Lowroff)
773 Bronze, Phosphor, Naval
856–858 Bronze, Phosphor (Omega Brand)
3787 Bronze, Phosphor (P.R.R. "B")
959 Bronze, Phosphor (Riverside)
960 Bronze, Phosphor (Riverside)
3706 Bronze, Phosphor (Riverside No. 209)
3788 Bronze, Phosphor (Rolling)
3704 Bronze, Phosphor (Russian)
3033, 3046, 3049 Bronze, Phosphor (S.A.E.)
2107 Bronze, Phosphor (Sheet)
1045 Bronze, Phosphor, Standard
2108 Bronze, Phosphor (Standard "S", Pa. R.R.)
3789 Bronze, Phosphor (Very Hard)
3790 Bronze, Phosphor (Wire)
4107 Bronze, Phosphor Grade "A"
4108 Bronze, Phosphor Grade "C"
4109 Bronze, Phosphor Grade "D"
2109 Bronze, Pinkus
235 Bronze, Plastic
4405 Bronze, Plastic
25 Bronze, Plastic (Ajax)
2110 Bronze, Plumbic
2111 Bronze, Poro
2112 Bronze Powder
6607 Bronze, Propeller
2113 Bronze, Railroad
4282–4297 Bronzes, Railroad
2114 Bronze, Red
2967 Bronze, Reich's
2115 Bronze, Richard's
959 Bronze, Riverside
960 Bronze, Riverside
2984 Bronze, Roma
2116 Bronze, Roman
964–967 Bronze, Rubel
1598–1602 Bronze, Rubel
989 Bronze, Scovill's Hardware
2117 Bronze, Screw
2118 Bronze, Screw Nut
2119 Bronze, Sea Water
994 Bronze, Semi-Plastic
3036 Bronze, Semi-Plastic (S.A.E.)
2120 Bronze, Sheathing
2121 Bronze, Sheet
1001 Bronze, Silicon
2122 Bronze, Silliman
2123 Bronze, Silver
2124 Bronze, Slide Valve
1028 Bronze, Spare's Manganese
7501 Bronze, Spuncast
3478 Bronze, Standard Nickel
2108 Bronze, Standard "S", Pa. R.R. Phosphor
4314–4320 Bronzes, Statuary
2125 Bronze, Statuary
1049 Bronze, Steam
668 Bronze, Steam (Lumen)
2126 Bronze, Steam Fitting
2127 Bronze, Steam Valve
2128 Bronze, Steel (Stahl Bronze)
3806 Bronze, Stone
1056 Bronze, Stone's Gear
4426 Bronze, Stone's Gear
5448 Bronze, Stone's "608" Superheat
1060 Bronze, Sumet
6260–6266 Bronze, Sumet
2129 Bronze, Sun
5396 Bronze, Super Holfos
670 Bronze, Super Manganese (Lumen)
5890 Bronze, Superstrength
4903 Bronze, Tantalum
1304 Bronze, Taurex
2130 Bronze, Telegraph
2131 Bronze, Tetmajor
7351 Bronze, Tiger
2132 Bronze, Tin
1089 Bronze, Titan
1090 Bronze, Titan
1093 Bronze, Tobin
4368 Bronze, Tobin No. 1875
3042 Bronze, Tobin (S.A.E.)
3045 Bronze, Tobin (S.A.E.)
2133 Bronze, Torpedo
2134 Bronze, Tungsten
1111 Bronze, Turbadium
1112 Bronze, Turbiston
2135 Bronze, Uchatius (Uchtin's?)
2136 Bronze, U.S. Navy, Valve
6543 Bronze, Universal
1363 Bronze, Valve
668 Bronze, Valve (Lumen)
774 Bronze, Valve, Naval
3804 Bronze, Valve (Steam)
1820 Bronze, Valve Stem (Ajax Special)
5436 Bronze, Valve Stem (Chase)
2137 Bronze, Vanadium
2138 Bronze, Victor
1169 Bronze, War
2139 Bronze, Weatherstrip
2140 Bronze, White
2141 Bronze, Wire
2142 Bronze, Yale
7460 Bronze, Babbitt No. 10
7461 Bronze, Babbitt No. 11
7462 Bronze, Babbitt No. 97
8696 Bronzend
8697 Bronzend E
8698 Bronzend H
8699 Bronzochrome No. 185
8700 Bronzochrome No. 186

8701 Bronzochrome No. 187
8702 Bronzstox
1849 Broo-Zinc
6200 Broternal
5784 Brown Bayley's Anka
6094 Brown Bayley's No. 33
6095 Brown Bayley's BB4K
6096 Brown Bayley's Brearley A
6097 Brown Bayley's Brearley K
6098 Brown Bayley's Hotspur
6099 Brown Bayley's Cutlery Engineering
6100 Brown Bayley's
6101 Brown Bayley's Inventor
6102 Brown Bayley's Kalloy
6103 Brown Bayley's Lowscore
6104 Brown Bayley's Pyralloy
6105 Brown Bayley's QS
6106 Brown Bayley's QSS
6107 Brown Bayley's Twoscore
6108 Brown Bayley's Weldanka
5620 Brownie
5621 Brownie Extra
2215 Brown Label
480 Brown's Atecor
1635 Brown's Atlas
1634 Brown's Atlas Extra
487 Brown's Metipac
5305 Brown's Special X Punch
8703 B.R.S.
2889 Brunswick Oriede
2143 Brush Wire
8704 Bryiron
5859 Brymill BRM-1
5860 Brymill BRM-2
5861 Brymill BRM-4
5862 Brymill BRM-5
5863 Brymill BRM-6
5864 Brymill CH-1
5865 Brymill CH-2
5866 Brymill CH-8
5867 Brymill CH-10
5868 Brymill DH-11
5869 Brymill DH-13
5870 Brymill FC-3 (Scooter)
5871 Brymill X
7968 BS-1
7969 BS-4
8705 B.S. (Best Select) Copper
8028 BSF
8029 BSH
5766 B.S.I. Alloys
8025 BSO
2503 "B.S.S." (Bonner Special Seewasser)
7850 B.S. Seewasser
5766 B.S.S. (B.S.I.) Alloys
8027 BSW
8030 BSZ
1460 B.T.E. (Imphy)
236 BTG Steel
737 BTG Steel
2144 Buckeye Bronze
2145 Buckle Brass
2220 Buflocast
5722 Bull Alloy
2146 Bullet Brass
5721 Bull's Metal
4435 Bundyweld Steel Tubing
4774 Bu-Nite
8707 Bunting
8708 Bunting No. 27
8709 Bunting No. 51
8710 Bunting No. 72
8711 Bunting No. 96
8712 Bunting No. 98
8713 Bunting No. 116
8714 Bunting No. 122
8715 Bunting No. 124
8716 Bunting No. 125
8717 Bunting No. 135
8718 Bunting No. 143
8719 Bunting No. 147
8720 Bunting No. 156
8721 Bunting No. 158
8722 Bunting No. 162
8724 Bunting No. 164
8725 Bunting No. 170
8726 Bunting No. 178
8727 Burden Best
8728 Burden Wrot
2147 Bureau of Standards Aluminum Solder
3742-3745 Bureau of Standards Aluminum Solder SN-1 to SN-4
3746 Bureau of Standards Aluminum Solder ZN-1
3777 Bureau of Standards German Silver
2148 Burgess Aluminum Solder
5858 (Burgess-Parr) No. 85 Alloy
6703 Burloy A
6704 Burloy B
6705 Burloy C
6706 Burloy C-1
8729 Burndy No. 101
8730 Burndy No. 111
8731 Burndy No. 113
8732 Burndy No. 202
8733 Burndy No. 206
8734 Burndy No. 302
8735 Burndy No. 308
8736 Burndy No. 309
8737 Burndy No. 314
8738 Burndy No. 316
8739 Burndy No. 329
2149 Burr Brass
6655 Bush Brand Bearing Metal
2216 Bush Hammer
2150 Bushings
2151 Bushing, Turbine
237 Buster
2217 Buster Brand
12514 Butt Brass—226
2152 Butt Brass—229
2153 Button
2156 Buttons, Gold
2157 Buttons, Jackson's Alloy
2159 Buttons, Thurston
2154 Button Alloy
2155 Button Brass
2158 Button Metal, Ludensheidt
BW Alloys—See Babcock and Wilcox Alloys
7597 B-W Point 5

8740 B & W 5150
238 "BW" Standardized
7796 B.X. Brand Pig Iron
8741 B-XX
7794 B.X.X. Brand Pig Iron
7795 B.X.X. Brand Swedish
1188 Byers Genuine Wrought Iron
1317 Byers Genuine Alloyed Wrought Iron
6778 B-Y 2
4497 B-Y (Hot Work)
8742 Byrwill "B"

C

8743 C-1
5039 C-4 Hot Die Steel
8744 C-55
8745 C-501
8746 C-502
8747 C-503
239 Cadmium
2352 Cadmium Amalgam
7589 Cadmium-Barium
12061 Cadmium Bronze
7590 Cadmium-Calcium
2351 Cadmium Silver
1022 Cadmium Solder
7591 Cadmium-Strontium
6232 Calal
7163 Calcium-Aluminum-Silicon
7164 Calcium-Manganese-Silicon
7162 Calcium-Silicon
1220 Calduro 13-2
1220 Calduro KM-1
240 Calido
241 Calite "A"
1350 Calite B-18
1722 Calite "B-28"
7099 Calite "-29"
8115 Calite BL
8116 Calite BL-28
1720 Calite "C"
5370 Calite "D"
1721 Calite "E"
7101 Calite "E-28"
7007 Calite "F"
1723 Calite "N"
8117 Calite N-2
5872 Calite "NCT-3"
1725 Calite Nirosta "KA2"
5108 Calite Nirosta "KA4"
5371 Calite "R"
1724 Calite "S"
5873 Calite "S-28"
8748 Calliflex
8749 Callinite
731 C-Alloy
6558 C-Alloy
6232 Calloy
7589 Calloy Cadmium-Barium
7590 Calloy Cadmium-Calcium
7591 Calloy Cadmium-Strontium
7586 Calloy Lead-Barium
7587 Calloy Lead-Calcium
7588 Calloy Lead-Strontium
7585 Calloy Strontium-Aluminum
242 Calmaloy
8752 Calmalloy
1221 Calmar KA-2
1221 Calmar 18-8
8750 Calmar 18-8Cb
6033 Calmar 18-8M
11941 Calmar 19-9
11942 Calmar 19-9S
11943 Calmar 19-9M
8751 Calmet
2223 Calo-Ferro
8753 Calo-Ferro (45)
932 Calomic
243 Calorite
7102 Calorized Steel
8118 Calorized 4/6 Cr-Mo
8119 Calorized DM Steel
8120 Calorized 1% Mo Steel
1222 Caloxo KNC-3
6034 Caloxo 8-18
6035 Caloxo 15-25
6036 Caloxo 15-25M
6037 Caloxo 15-35
1232 Caloxo 18
6038 Caloxo 18-2
8754 Caloxo 25-12
1222 Caloxo 25-20
6040 Caloxo 25-20M
6041 Caloxo 26
6042 Caloxo 26-4
11940 Caloxo 28
6043 Caloxo 28-10
6044 Caloxo 28-10M
11944 Caloxo 35-15
8755 Calsun Bronze—951
8756 Calumet Box & Pin
8757 Cambriloy I
11961 Cambriloy 2
11962 Cambriloy 3
11963 Cambriloy 4
2349 Camelia Metal
244 Camite
5874 Camloy
3384 Can-Metal (German)
245 Cannon
7147 Cannon Special
7148 Cannon Vanadium
3485 Cannonite
8759 Canzler Brass
8760 Canzler No. 1
8761 Canzler No. 4
12449 Cap Copper
2348 Cap Gilding
2347 Capsule Metal
8762 Carbium
246 Carboloy
223 Carboloy, A-44
6131 Carboloy, Grade 44A
6132 Carboloy, Grade 55A
6133 Carboloy, Grade 77A
6134 Carboloy, Grade 77B
8763 Carboloy, Grade 78
12348 Carboloy, Grade 78B
12349 Carboloy, Grade 78C
224 Carboloy, Grade 119A
222 Carboloy, Grade 715
12347 Carboloy, Grade 779
221 Carboloy, Grade 831
6135 Carboloy, Grade 831A
6136 Carboloy, Grade 883
6137 Carboloy, Grade 905
6138 Carboloy, Grade 906
6139 Carboloy, Grade 907
8764 Carboloy, Grade 999
8765 Carboloy, Grade 1078 A
247 Carbomang
2225 Carbon
2055 Carbon Bronze
2224 Carbon Chisel Steel
8766 Carbon Cold Header
2346 Carbondale Silver

4306 Carbon Ford
7720 Carbon-Mo
7721 Carbon-MO
8767 Carbon-Molybdenum Steel
11818 Carbon Moly Steel
4658 Carbon Steels
7276 Carbon Tool Cast-To-Shape
4601 Carbon Tool Double Extra
4602 Carbon Vanadium
7736 Carbon Vanadium
12102 Carbon Vanadium Drill Rod
1544 Car Box (Emetco No. 14)
2345 Carburite
7921 Cardinal Rapid
4344 Careco
11837 Carend
8768 Carilloy
8769 Cariron
6487 Carmelia Bronze
5875 Carmet
12144 Carmet Gr. CA-1
12145 Carmet Gr. CA-2
12147 Carmet Gr. CA-4
8167 Carnegie-Illinois Carbon-Manganese
8168 Carnegie-Illinois Carbon-Manganese
8169 Carnegie-Illinois Carbon-Manganese
8173 Carnegie-Illinois Carbon-Manganese
8174 Carnegie-Illinois Carbon-Manganese
8175 Carnegie-Illinois Carbon-Manganese
8176 Carnegie-Illinois Carbon-Manganese
8170 Carnegie-Illinois Carbon-Manganese Copper
8159 Carnegie-Illinois Carbon-Molybdenum
8185 Carnegie-Illinois Carbon-Molybdenum
8186 Carnegie-Illinois Carbon-Molybdenum
8187 Carnegie-Illinois Carbon-Molybdenum
8188 Carnegie-Illinois Carbon-Molybdenum
8189 Carnegie-Illinois Carbon-Molybdenum
8160 Carnegie-Illinois Carbon-Vanadium
8161 Carnegie-Illinois Carbon-Vanadium
8162 Carnegie-Illinois Carbon-Vanadium
8163 Carnegie-Illinois Carbon-Vanadium
8195 Carnegie-Illinois Carbon-Vanadium
8196 Carnegie-Illinois Carbon-Vanadium
8197 Carnegie-Illinois Carbon-Vanadium
8183 Carnegie-Illinois Chromium-Manganese-Silicon
8184 Carnegie-Illinois Chromium-Manganese-Silicon
8166 Carnegie-Illinois Chromium-Molybdenum
8198 Carnegie-Illinois Chromium-Vanadium
8199 Carnegie-Illinois High Carbon Low Chromium
8200 Carnegie-Illinois High Carbon Low Chromium
8201 Carnegie-Illinois High Chromium-Molybdenum
8153 Carnegie-Illinois High Chromium-Nickel
8140 Carnegie-Illinois High Nickel
8141 Carnegie-Illinois High Nickel
8142 Carnegie-Illinois High Nickel
8143 Carnegie-Illinois High Nickel
8144 Carnegie-Illinois High Nickel
8145 Carnegie-Illinois High Nickel
8148 Carnegie-Illinois Low Nickel-Chromium
8149 Carnegie-Illinois Low Nickel-Chromium
8150 Carnegie-Illinois Low Nickel-Chromium
8151 Carnegie-Illinois Low Nickel-Chromium
8152 Carnegie-Illinois Low Nickel-Chromium
8190 Carnegie-Illinois Manganese-Molybdenum
8191 Carnegie-Illinois Manganese-Molybdenum
8192 Carnegie-Illinois Manganese-Molybdenum
8193 Carnegie-Illinois Manganese-Molybdenum
8194 Carnegie-Illinois Manganese-Molybdenum
8165 Carnegie-Illinois Manganese-Vanadium
8146 Carnegie-Illinois Medium-Nickel
8147 Carnegie-Illinois Medium-Nickel
8155 Carnegie-Illinois Nickel-Chromium-Molybdenum
8156 Carnegie-Illinois Nickel-Chromium-Molybdenum
8157 Carnegie-Illinois Nickel-Chromium-Molybdenum
8154 Carnegie-Illinois Nickel-Chromium-Molybdenum-Vanadium
8202 Carnegie-Illinois Nickel Steel
8158 Carnegie-Illinois Nickel-Vanadium-Molybdenum
8164 Carnegie-Illinois Silicon-Vanadium

8171 Carnegie-Illinois Structural Manganese
8172 Carnegie-Illinois Structural Manganese
8177 Carnegie-Illinois Structural Nickel
8178 Carnegie-Illinois Structural Nickel
8179 Carnegie-Illinois Structural Nickel
8180 Carnegie-Illinois Structural Nickel
8181 Carnegie-Illinois Structural Nickel
8182 Carnegie-Illinois Structural Nickel
7772 Carnegie-Illinois Specification No. 2
7773 Carnegie-Illinois Specification No. 3
7774 Carnegie-Illinois Specification No. 4
7775 Carnegie-Illinois Specification No. 5
7776 Carnegie-Illinois Specification No. 6
7777 Carnegie-Illinois Specification No. 7
7778 Carnegie-Illinois Specification No. 13
7779 Carnegie-Illinois Specification No. 19
4775 Carnolia
5739 Carobronze
8770 Caro Bronze
6476 Caroga
8771 Caroph Carbon
5730 Caro Solid Drawn Tube
248 Carpaloy No. 1
1366 Carpaloy No. 2
1726 Carpaloy No. 3
8772 Carpenter Chrome Bearing Steel
249 Carpenter Chrome Magnet
2261 Carpenter Chrome Steel No. 12 S
1326 Carpenter D. D.
7105 Carpenter D.Y.O.
1327 Carpenter Extra Special No. 500
2277 Carpenter Extra Tool
4478 Carpenter Fast Finishing
250 Carpenter Flexo
11580 Carpenter Free Cut Invar 36
10027 Carpenter H-9 Extra
251 Carpenter High Nickel
8773 Carpenter Invar 36
2260 Carpenter Jason Steel No. 12-324
2258 Carpenter J.Y. Steel No. 656
3904 Carpenter "KW"
2259 Carpenter Midas Steel No. 9-961
1604 Carpenter No. 1—Samson
1605 Carpenter No. 2—Samson
5372 Carpenter No. 2-317
5373 Carpenter No. 2-408
5380 Carpenter No. 2-720
1606 Carpenter No. 3—Samson
252 Carpenter No. 3-314
1322 Carpenter No. 3-317
253 Carpenter No. 3-427
254 Carpenter No. 3-547
5379 Carpenter No. 3-720
255 Carpenter No. 4—Samson
256 Carpenter No. 4-408
257 Carpenter No. 4-317
8774 Carpenter No. 5—Samson
1323 Carpenter No. 5-317
6728 Carpenter No. 5-427
258 Carpenter No. 5-720 Type D Cr-Va
2277 Carpenter No. 11 Extra Tool
3543 Carpenter No. 11 Special
8775 Carpenter No. 30
11581 Carpenter No. 49
5374 Carpenter No. 158
5381 Carpenter No. 436
1324 Carpenter No. 478 Auto Steel
8776 Carpenter No. 484
1325 Carpenter No. 492
6486 Carpenter No. 500
1327 Carpenter No. 500 Extra Special
6727 Carpenter No. 547
5378 Carpenter No. 610 Air-hardening
11890 Carpenter No. 872
11889 Carpenter No. 874
8777 Carpenter No. 883
8778 Carpenter Permanent Magnet Type A
8779 Carpenter Permanent Magnet Type B
8780 Carpenter Permanent Magnet Type C
8781 Carpenter Permanent Magnet Type D
8782 Carpenter Permanent Magnet Type E
8783 Carpenter Permanent Magnet Type F
8784 Carpenter Permanent Magnet Type G
923 Carpenter Presto
7106 Carpenter R.D.S.
1604 Carpenter Samson No. 1
1605 Carpenter Samson No. 2
1606 Carpenter Samson No. 3
1607 Carpenter Samson No. 4A
1608 Carpenter Samson No. 4B
1609 Carpenter Samson No. 4C
3177 Carpenter S.M.
8785 Carpenter Stainless No. 1JR
1432 Carpenter Stainless No. N-1
1433 Carpenter Stainless No. 2-B
8786 Carpenter Stainless No. 2FM
8787 Carpenter Stainless No. 4A
8788 Carpenter Stainless No. 4B
8789 Carpenter Stainless No. 4C
8790 Carpenter Stainless No. 4Cb

8791 Carpenter Stainless No. 4Ti
1434 Carpenter Stainless No. 6
8792 Carpenter Stainless No. 6-20
5118 Carpenter Stainless No. 7
8793 Carpenter Stainless No. 7-Mo
1435 Carpenter Stainless No. 8
8794 Carpenter Stainless No. 321
8795 Carpenter Stainless No. 347
8796 Carpenter Stainless No. D-1
260 Carpenter Stainless Steel No. 1
261 Carpenter Stainless Steel No. 2
262 Carpenter Stainless Steel No. 3
263 Carpenter Stainless Steel No. 4
265 Carpenter Stainless Steel No. 5
11582 Carpenter Temperature Compensator 30
1328 Carpenter Type A
258 Carpenter Type D Cr-Va
5876 Carpenter V-Chrome
1920 Carriage Wheel Bearing
2267 Carter White Gold
206 Cartridge Brass
2343 Cartridge Gilding
5038 Cartun
4476 Car-Van Die
474 Cast, Firth
265 Castaloy
3544 Castaloy
2226 Cast Composite
8797 Cast Composite
8798 Castingweld
526 Cast Iron, Gray
616 Cast Iron, Lanz
115 Cast Iron, Malleable
708 Cast Iron, Malleable
709 Cast Iron, Malleable
800 Cast Iron, Nickel
1235 Cast Iron, Nickel Chrome
1173 Cast Iron, White
8799 Castolin
8800 Castolin No. 14
8801 Castolin No. 15
8802 Castolin No. 16
8803 Castolin No. 17
8804 Castolin No. 18
8805 Castolin No. 19
8806 Castolin No. 20
8807 Castolin No. 21
8808 Castolin No. 24
8809 Castolin No. 140
8810 Castolin No. 145
8811 Castolin No. 180
8812 Castolin No. 181
8813 Castolin No. 185
8814 Castolin No. 186
8815 Castolin No. 189
8816 Castolin No. 190
8817 Castolin No. 195
8818 Castolin No. 200
8819 Castolin No. 210
8820 Castolin No. 211
8821 Castolin No. 212
8822 Castolin No. 213
8823 Castolin No. 1600
8824 Castolin No. 1601
8825 Castolin No. 1800
8826 Castolin No. 1900
—— Cast-To-Shape (See F.C.C. Alloys)
8827 Cataloy
8828 Cataloy No. 1
8829 Cataloy No. 2
8830 Cataloy No. 3
8831 Cataloy No. 4
8832 Cataloy No. 5
8833 Cataloy No. 6
8834 Cataloy No. 7
8835 Cataloy No. 8S
8836 Cataloy No. 9N
266 Cataract Metal
1381 Cathermalite
4544 Causul Metal
267 Cazin
7151 C.C.
7112 C.C.A.
7642 C.C. Chisel
7008 C.C., Pireks
1479 C.C.R.
8837 CCR
4547 C.C.S.
2222 C.C.S. Die Steel
7120 C.C.V.
5316 C.D.D.
2342 Ceco
8838 Cecolloy
5790 Cecolloy A
7581 Cecolloy B
7582 Cecolloy C
2282 Cekas
12386 Celero
7667 Celfor
2341 Cello-Vanadium
2340 Celsit
5628 Celsit (Böhler)
8839 Celto
1780 "C.E.M."
2240 Cemented Tungsten Carbide
8840 Cenco
4574 Centaur
8842 Central A
8843 Central V
8841 Centralloy
12148 Central Pure Iron
5877 Centrard
12112 Centricast Loded
8844 Ceralumin
8845 Ceralumin B
5878 Ceralumin "C"
8846 Ceralumin D
8847 Ceralumin F
268 Cerium
2339 Cerium Steel
8848 Cerro Alloy
4879 Cerrobase
168 Cerrobend
7038 Cerromatrix
3707 Cerrosafe
6843 C.E.S. No. 2
4413 Cesco Diamond
7472 Cesco Diamond Special
8849 Cetal
4585 C.F.S. Die Steel
8852 CFS No. 1
6591 Chace Bimetal
11583 Chace No. 772
10051 Chace No. 3700
11985 Chace No. 4700
9100 Chace No. 6125
8860 Chace No. 6150
10483 Chace No. 6650
11465 Chace No. 6850
2056 Chain Bronze

2338 Chain Iron, A.S.T.M. Spec.
2337 Chain Steel, A.S.T.M. Spec.
269 Chamet Bronze A
12056 Chamet Bronze B
8853 Champaloy
8854 Champion
7110 Champion, Atha
8855 Champion Grey Devil No. 2
270 Champion, Rex
2276 Champion Double Special
2373 Champion Extra
2275 Champion Non-Changeable
270 Champion Steel, Rex
2273 Champion Tool
7113 Champion Tool
8856 Channeler
12210 Channeler Steel
2336 Charcoal Pig Iron
4564 Charles Leonard
271 Charpy Alloy
2104 Charpy Phosphor Bronze
5442 Chase Admiralty
12355 Chase 149 Bronze
9272 Chase Alloy No. 58
5437 Chase Architectural Bronze
5435 Chase Bearing Bronze "444"
5440 Chase Clock Brass
5879 Chase Cupro-Nickel 70-30
5880 Chase Cupro-Nickel 80-20
5441 Chase Forging Brass
5439 Chase Manganese Bronze
5443 Chase Nickel Aluminum Bronze
5446 Chase Nickel Silver, 10%
1253 Chase Nickel Silver 18%
1254 Chase Nickel Silver 18% A
1255 Chase Nickel Silver 18% B
5881 Chase Nickel Silver, 20%
1304 Chase Olympic Bronze "A"
5444 Chase Olympic Bronze "B"
5445 Chase Olympic Bronze "C"
8857 Chase Tellurium Copper Type A
8858 Chase Tellurium Copper Type B
11800 Chase Telnic Bronze
5436 Chase Valve Stem Bronze
4457 Chaser Die
272 Chateaugay Iron
4763 Chaval German Silver
1972 Check Brass
2227 Checkno
2335 Checo
273 Chemical Lead
11584 Chenite
2334 Chilled Cast Iron Wheels, A.S.T.M. Spec.
6351 Chimo
2018 China Sheet Brass
3386 Chinese
1887 Chinese Argentan
2057 Chinese Bronze
2332 Chinese German Silver
2331 Chinese Silver
2330 Chinese Speculum
1409 Chippaway
12391 Chipper Knife
7197 Chisel (Achorn)
4690 Chisel Die
7456 Chitonal
2228 Chiz Alloy
274 Choice No. 1
12090 Choice No. 2
4556 Choice Drill Rod
2329 Christofle Metal
1784 Chrogo "U-42"
6071 Chromador
1349 Chromal
5791 Chromaloid
2328 Chromal Steel
2327 Chromaluminum
1498 Chroman
1499 Chroman "Ao"
1500 Chroman "B"
1501 Chroman "Bo"
1502 Chroman "C"
1503 Chroman "Co"
1504 Chroman "D"
1505 Chroman "E"
11836 Chromang
357 Chromax (Empire)
276a Chromax (Driver-Harris)
276b Chromax (Carpenter)
277 Chromax Bronze
2901 Chrome Alloy (Parker)
5121 Chrome Alloy Products KA-2
5123 Chrome Alloy Products KA-2 Mo
5122 Chrome Alloy Products KA-2-S
5124 Chrome Alloy Products KNC-3
5125 Chrome Alloy Products Stainless No. 7
8859 4-6 Chrome
4910 Chrome "B"
2229 Chrome "B-15"
7463 Chrome Ball Steel
4854 Chrome Ball Race Steel
7644 Chrome Bearing Steel
7544 Chrome Brass
—— Chrome C-Alloys, See Q-Alloys
6645 Chrome Cast
7049 Chrome Copper
7673 Chrome Copper, Murex
8861 Chrome-Copper Nickel Steel
145 Chrome Die
4552 Chrome Die
9681 Chrome Die
8862 Chrome Hot Work
2326 Chrome Iron
6868 Chrome J
—— Chrome K-Alloys, See Q-Alloys
6304 Chrome Kuplus
4865 Chrome Magnet
249 Chrome Magnet
283 Chrome Magnet
8863 Chrome Magnet
1405 Chrome Magnet
7645 Chrome Magnet M-31
7646 Chrome Magnet No. 154

8864 Chrome Manganese Steel
7674 Chrome Moly, Murex
7647 Chrome Moly Roll
2325 Chrome Molybdenum Steel
3545 Chrome Nickel
2272 Chrome Nickel .5% C
2271 Chrome Nickel .8% C
3546 Chrome Nickel Iron
6496 Chrome Nickel Moly
7050 Chrome Nickel Silver
2324 Chrome Nickel Steel
2323 Chrome Nickel Steel Armor Plate
1067 Chrome Permalloy
8887 Chrome Roll
7111 Chrome Roll, Atha
1232 Chrome Stainless (Warman)
7051 Chrome Steel
2322 Chrome Steel (Commercial, Pearlitic)
2261 Chrome Steel No. 12S (Carpenter)
7545 Chrome Tin
2321 Chrome Tungsten Steel
2320 Chrome Uranium Steel
8888 Chrome Vanadium D
4604 Chrome Vanadium Die
8889 Chrome Vanadium Die Casting
8890 Chrome Vanadium G
8891 Chrome Vanadium H
8892 Chrome Vanadium K
2462 Chrome Vanadium (Rita)
7648 Chrome Vanadium Spring Wire
2319 Chrome Vanadium Steel
4665 Chrome Vanadium Tool
4336 Chrome Vanadium Tool
4343 Chrome Valve Steel
4344 Chrome Valve Steel
278 Chromel "A"
279 Chromel "B"
280 Chromel "C"
281 Chromel "D"
1842 Chromel No. 502
5882 Chromel No. 670
282 Chromel "P"
8865 Chromend 15/85
8866 Chromend HC
8867 Chromend HCN
8868 Chromend HN
8869 Chromend K
11835 Chromend KMO
8870 Chromend KS
8871 Chromend 2M
8872 Chromend 5M
8874 Chromend 12
8875 Chromend 13/60
8876 Chromend 15/35
8877 Chromend 16
11834 Chromend 16/7
8870 Chromend 18
8873 Chromend 8/18
8879 Chromend 18/8 Mo
8880 Chromend 19/9 Cb
8881 Chromend 25/12 Cb
8882 Chromend 28
8883 Chromend 28/3 Mo
8884 Chromend 29/9
8886 Chromend Special
8893 Chromeweld 4-6
284 Chromidium
286 Chromium
7165 Chromium (Electromet)
5033 Chromium-Boron
7166 Chromium-Copper
12525 Chromium-Copper —999
3976 Chromium Hot Work
1231 Chromium Iron (Babcock-Wilcox)
4884 Chromium Iron, 21%
12149 Chromium-Molybdenum Bearing Steel
1230 Chromium Steel (Babcock-Wilcox, 4-6%)
8124 Chromium 4/6 Steel
8125 Chromium 4/6 Steel
8126 Chromium 4/6, Mo Steel
8127 Chromium 4/6, Mo Steel
8128 Chromium 4/6, Mo-Ti Steel
8894 Chrommalloy
3387 Chromnickel
3547 Chromnickel I
3548 Chromnickel II
8043 Chro-Moly Steel
8895 Chro-Mow
8896 Chrom-Super-Service
3388 Chronin
3389 Chronin "85"
3390 Chronin "100"
5629 Chronos
287 Chrysokalk
6638 Chrysiode
2318 Chrysite
2317 Chrysorin
8897 C.H.W.
8850 CIG No. 400
8851 CIG No. 401
288 Cimet A
3391 Cimet, Cast, B
8898 Cindal
2235 Cindal Alloy "E-11A"
2236 Cindal Alloy "E-11B"
2234 Cindal Alloy "J-12"
2233 Cindal Alloy "J-51"
1775 Cindal Alloy "J-551"
2237 Cindal Alloy "L-316"
2238 Cindal Alloy "50 A"
289 Circle "C"
6364 Circle L-A
11657 Circle L-B
8568 Circle L-C
8567 Circle L-D
290 Circle "L" No. 1
291 Circle "L" No. 2
292 Circle "L" No. 3
293 Circle "L" No. 4
294 Circle "L" No. 5
1428 Circle "L" No. 6
3549 Circle "L" No. 7
1429 Circle "L" No. 8
12226 Circle "L" No. 9
1430 Circle "L" No. 10
295 Circle "L" No. 11
7421 Circle "L" No. 11 (.75 C)
296 Circle "L" No. 12
7422 Circle "L" No. 12M
297 Circle "L" No. 13
298 Circle "L" No. 14
299 Circle "L" No. 15
300 Circle "L" No. 16
7423 Circle "L" No. 18
8959 Circle L-19
12227 Circle L-19M
12228 Circle L-19XM

4913 Circle "L" No. 21
301 Circle "L" No. 22
8899 Circle L22 Ag
8900 Circle L22 AgXM
7424 Circle "L" No. 22M
7425 Circle "L" No. 22XM
302 Circle "L" No. 23
7426 Circle "L" No. 23M
7427 Circle "L" No. 23XM
303 Circle "L" No. 24
4914 Circle "L" No. 25
7428 Circle "L" No. 25M
4915 Circle "L" No. 30
7429 Circle "L" No. 30XM
304 Circle "L" No. 31
305 Circle "L" No. 32
12241 Circle "L" No. 33
7430 Circle "L" No. 34
7431 Circle "L" No. 40
7432 Circle "L" No. 41
7433 Circle "L" No. 42
7434 Circle "L" No. 43
7435 Circle "L" No. 44
7436 Circle "L" No. 45
7437 Circle "L" No. 46
7438 Circle "L" No. 47
7439 Circle "L" No. 48
12224 Circle "L" 106
12227 Circle "L" 119
9111 Circle "L" 205A
9110 Circle "L" 205B
11688 Circle "L" 205C
11534 Circle "L" 205D
12225 Circle "L" 206
12228 Circle L-219
7427 Circle L-223
12229 Circle L-230
7426 Circle L-323
12239 Circle L-430
12240 Circle L-431
12230 Circle L-446
3601 Circular Plates
11475 Cirflex
5548 C.K.N.
12160 Clad R-303
5720 Clamer's Alloy
306 Clarite
2262 Clark's Alloy
2316 Clark's Patent
8901 Class E
8902 Class H
2230 Class "P"
4778 Clarus Metal
307 Clebrium
8903 Cleremont Drill Rod
8904 Cletaloy CT-A
8905 Cletaloy CT-65
8906 Cletaloy CT-86
8907 Cletaloy L-N-14
8908 Clevite
8909 Clevite No. 8
8910 Clevite No. 10
8911 Clevite No. 25
8912 Clevite No. 35
2315 Clichier Metal
12397 Clicker Die
12388 Clicking Die
12400 Clicking Die
308 Climax
7487 Climax Ferro-Molybdenum
7145 Climax Machinery
3392 Clinching Screw Wire
12196 Clipper
309 Clock Brass—243
1661 Clock Brass (Bosch)
5440 Clock Brass (Chase)
8915 Clomo
8916 Cloverleaf
3393 Clumise
8917 C.L.W.
8918 Clyde Alloy
6632 C.M. Tap Steel
2314 C.M.A. Bearing Metal
8914 C.M.P.
7277 C.M.S.
8919 C.M.S.
2241 "C.M.X."
4461 C N Die Steel
310 CNM
5785 CNM-40, Timken
5363 C.N.S.
7894 CNK2
7900 CNS-2h
8005 CNW-3
8006 CNW-4
8008 CNWZ
11788 CO-6
311 Coanailium
8920 Coast Metal
12003 Coating Metal 560
4857 Cobaflux
12150 Cobaflux Magnet A
8926 Coballoy
312 Cobalt
7070 Cobalt (Braeburn)
8922 Cobalt Chrome
313 Cobaltcrom
8923 Cobaltcrom KXK Stainless
8924 Cobaltcrom PRK-HT
314 Cobaltcrom PRK-33
1431 Cobaltcrom Stainless
5915 Cobalt Fast Work
2461 Cobalt High Speed (Rita)
2231 Cobalt High Speed
5322 Cobalt Magnet
8925 Cobalt Magnet
374 Cobalt Magnet (Darwin)
7649 Cobalt Magnet Steel 17%
7650 Cobalt Magnet Steel 35%
11853 Cobalt Magnet 37%
229 Cobalt Major
315 Cobalt Steel
6999 Cobanic
5883 Cochrome
2058 Cock Bronze
2270 Co-Co
4508 Coe Bronze
2059 Cog and Worm Bronze
2060 Coinage Bronze
3160 Coinage Silver, U.S.A.
5745 Coin Silver, Handy & Harman
4550 Cold Header Die
7198 Cold Heading (Achorn)
316 Cold Heading Rod
6140 Cold-Hot
9852 Cold Hubbing Steel
6039 Colesco
317 Colhed
1973 Collet Brass
9800 Collet Steel
8122 Colmonoy
8928 Colmonoy No. 1
8929 Colmonoy No. 2
8930 Colmonoy No. 3
8931 Colmonoy No. 4
8932 Colmonoy No. 5
8933 Colmonoy No. 6
8934 Colmonoy No. 7
11585 Colmonoy No. 9
8935 Colmonoy No. 10
8936 Colmonoy No. 20
8927 Colmonoy Overlay

10938 Colmonoy Sweaton
11586 Colmonoy WCR 100
11587 Colmonoy WCR 200
11588 Colmonoy WCR 300
11589 Colmonoy WCR 400
4840 Colona
6629 Colonial Bit Steel
1259 Colonial C-2
1260 Colonial C-2F
4480 Colonial Gripper (Hot Work)
2268 Colonial High Service
3394 Colonial High Speed
320 Colonial High Speed
318 Colonial H-H-No. 3
6628 Colonial Jar Steel
8937 Colonial No. 3
4482 Colonial No. 4
1425 Colonial No. 6
319 Colonial No. 7
6621 Colonial No. 14
2200 Colonial No. 14 Special
4481 Colonial No. 36
8938 Colonial No. 301
1261 Colonial No. 410
1262 Colonial No. 410 F
1263 Colonial No. 430
1264 Colonial No. 610
1265 Colonial No. 610 F
1266 Colonial No. 795
5226 Colonial No. 795 F
321 Colonial Stainless Iron CNC
322 Colonial Stainless Iron 430
323 Colonial Stainless Iron 795
324 Colonial Stainless Iron F.M.S.
325 Colouial Stainless Steel Type "A"
326 Colonial Stainless Steel Type "B"
327 Colonial Stainless Steel Type "I"
328 Colonial Stainless Steel Type "N"
329 Colonial Stainless Steel Type "U"
2313 Colorado Metal
8217 Colorstrip, Acme
2232 Colosso
8939 Colt Hot
330 Columbia Double Special
2199 Columbia Extra
8940 Columbia Extra Vanadium
4005 Columbia Self Hardening
2197 Columbia Special
8941 Columbia Special Wire Drawing
331 Columbia Spring
2198 Columbia Standard
8942 Columbia Standard Vanadium
7567 Columbium
2280 Colville S. Iron
8943 Co Major
7495 Combarloy
332 Comet
4337 Comet
2274 Commell Special
1974 Commercial Brass
1977 Commercial Brass Wire
12306 Commercial Bronze
220 Commercial Bronze
3395 Commercial Bronze Rod
3396 Commercial Castings, B-c
6569 Commercial Drill Rod
1978 Common Brass
3397 Common Formula
207 Common High Brass
2312 Common Silver Solder
4132 Common Type Metal "A"
4133 Common Type Metal "B"
3309 Common Wire
4498 Como
8945 Co-Mo
333 Comokut
11190 Comol
2311 Complex English Metal
7490 Compo
12353 Compo 63-H-2
12354 Compo 66-H-2
2242 Composite
2226 Composite, Cast
2243 Composite Die
4565 Composite Die (Jessop)
334 Composition Brass
104 Composition "Al-c"
1975 Composition "B-c"
1976 Composition "B-r"
522 Composition "G"
5895 Composition "G"
7057 Compositiou "G" (Apex)
4742 Composition "M" Bronze
8946 Composition No. 1
4743 Composition "P-c" Bronze
773b Composition P-r
4744 Composition "P-r" Bronze
2841 Composition "W"
2310 Condenser Foil
335 Condor Special
7314 Conductivity Bronze
11590 Congo
8947 Conloy
9647 Conquer
8948 Conqueror
8929 Conqueror Hollow Drill
8950 Constahl
2244 Constant
336 Constantan
2375 Constantin
5715 Constructal 2
5718 Constructal 8
5719 Constructal 87
8638 Contracid
8951 Contracid
1491 Contracid B2.5 M
1492 Contracid B-4-M
1493 Contracid B-6-W
1494 Contracid B-7-M
1495 Contracid B-10-W
1496 Contracid BWMC
6981 Contraloy
2309 Cook's Alloy
4258 Cookson
2266 Cooper
8952 Cooper No. 14
8953 Cooper 17SCB
8954 Cooper No. 19A
8955 Cooper 21A

956 Cooper 21C
958 Cooper 22M
957 Cooper 22PM
308 Cooper's Gold
307 Cooper's Mirror
306 Cooper's Pen Metal
926 Cooper's Platinum Substitute
398 Cooper's Speculum
287 Cooper CA-5
130 Cooper KA-4
131 Cooper KNC-3
288 Cooper No. 18-8
280 Cooper Stainless Steel S-16
281 Cooper Stainless Steel S-17
005 Cooper Stainless Steel S-17 Mo
006 Cooper Stainless Steel S-17S
008 Cooper Stainless Steel S-17S Mo
282 Cooper Stainless Steel S-18
283 Cooper Stainless Steel S-19
284 Cooper Stainless Steel S-20
285 Cooper Stainless Steel S-21
009 Cooper Stainless Steel S-21A
7108 Cooper Stainless Steel S-21W
1286 Cooper Stainless Steel S-22
7109 Cooper Stainless Steel S-23
338 Cooperite
6517 Copaloy
339 Copel
340 Copernick (Copernik)
8960 Coppco Ace
12183 Coppco Ace A Temper
12184 Coppco Ace B Temper
11984 Coppco Ace C Temper
8961 Coppco Cro-Tring
8962 Coppco Extra
12185 Coppco Fast Finishing
8963 Coppco Hot Work No. 1
8964 Coppco Shock
8965 Coppco Special
8966 Coppco Standard
8967 Coppco Universal
8968 Coppco .75
8969 Coppco 1.10
8970 Coppco 1.20
8971 Coppco 200
341 Copper
5896 Copper Alloy
11904 Copper Alnico
5023 Copper-Aluminum-Vanadium
8972 Copper Arc
8132 Copper Bearing Steel
342 Copper, Deoxidized
341 Copper, Electrolytic
1672 Copper, Electrolytic
1537 Copper Hardened (Emetco No. 7)
7726 Copper Ingot Iron
2304 Copper-Manganese
5024 Copper-Manganese-Vanadium
3399 Copper-Nickel
4202 Copper-Nickel (10%)
4203 Copper-Nickel (15%)
4204 Copper-Nickel (20%)
4205 Copper-Nickel (25%)
4206 Copper-Nickel (30%)
4207 Copper-Nickel (40%)
4208 Copper-Nickel (67%)
5447 Copper-Nickel (94%)
5022 Copper-Nickel-Vanadium
5391 Copper, OFHC
902 Copper, Phosphor
1671 Copper, Refined
3040 Copper (S.A.E.)
3044 Copper (S.A.E.)
3051 Copper (S.A.E.)
8973 Copper-Silicon Steel
343 Copper Steel
7546 Copper Steel
7723 Copper Steel
7724 Copper Steel
7725 Copper Steel
7704 Copper Steel, Keystone
7722 Copper Steel, U.S.S.
7547 Copper Tin
7488 Copperior
7548 Copperoid
2279 Copperoid
7397 Copperoid Steel
9380 Copperweld Wire
344 Cop-R-Loy
2265 Corbin
8974 Corinth
3747 Cornande & Cruiys Aluminum Solder
2061 Cornish Bronze
8975 Coroga
345 Coronel
11591 Corosoloy
3313 Corrix Metal
6658 Corrofestal
346 Corronil
347 Corronium
2303 Corrosion Resisting Alloy
348 Corrosiron
349 Corsonite A
11807 Corsonite B
11808 Corsonite C
11809 Corsonite D
11810 Corsonite E
11811 Corsonite F
5769 Cor-Ten
8081 Cor-Ten
8129 Cor-Ten
8205 Cor-Ten
5884 Corvic Bronze
350 Cosmos
5736 Cothias Alloy
2263 Cowles
2052 Cowles Aluminum Bronze
3551 Cowles "A-1"
3552 Cowles "A-2"
3553 Cowles "B"
3554 Cowles "C-1"
3555 Cowles "C-2"
3556 Cowles "C-3"
3557 Cowles "D"
3558 Cowles "E"
1979 Cowles High Manganese Brass
3550 Cowles Special "A"
4636 "CR 2"
2302 Craig Gold
8976 Cralclad
5885 Cramp Alloy No. 5

5886 Cramp Alloy No. 7
5887 Cramp Alloy No. 12
5888 Cramp Alloy No. 13
5889 Cramp Alloy No. 45 (Parsons' Mn Bronze)
5890 Cramp Alloy No. 49 (Superstrength Bronze)
5891 Cramp Alloy No. 54 (Parsons' White Brass SA)
5892 Cramp Alloy No. 69 (Hydraulic Metal)
5893 Cramp Alloy No. 71
5894 Cramp Alloy No. 78
5895 Cramp Alloy No. 91
5896 Cramp Alloy No. 97
8977 Cramp Alloy No. 99
5897 Cramp Alloy No. 100 (P.M.G. Metal)
5898 Cramp Alloy No. 101 (Parsons' Turbadium)
5896 Cramp's Copper Alloy
4442 Cramp's Elfur Iron No. 1
5800 Cramp's Elfur Iron No. 2
4443 Cramp's Elfur Iron No. 3
5901 Cramp's Elfur Iron No. 4
5902 Cramp's Elfur Iron No. 5
5903 Cramp's Elfur Iron No. 6
5904 Cramp's Elfur Iron No. 7
5905 Cramp's Elfur Iron No. 8
5906 Cramp's Elfur Iron No. 9
5907 Cramp's Elfur Iron No. 11
5893 Cramp's Nickel Bronze
4438 Cramp's Superstrength Bronze, Grade A
4439 Cramp's Superstrength Bronze, Grade B
4440 Cramp's Superstrength Bronze, Grade C
4441 Cramp's Superstrength Bronze, Grade D
8978 Cramp Superstrength 49A
8979 Cramp Superstrength 50
8980 Cramp Superstrength 50A
2245 Crane
8981 Crane 5 Cr-Mo
8982 Crane 18-8 Mo
2301 Crankcase Alloy
1923 Crasco Alloy Chisel
2249 Crasco Black Label
3831 Crasco Broach Steel
2246 Crasco Green Label
8983 Crasco No. 7
2248 Crasco Red Label
2250 Crasco Special Vanadium
2247 Crasco White Label
8984 Crasfloy
7340 Crescent Babbitt
7114 Crescent Double Special
7115 Crescent Extra
2253 Crescent Hot Work No. 2
7116 Crescent Rim Roll
2254 Crescent Special Alloy
351 Crescent Steel
7118 Crescent Tool
8985 Crestaloy
8986 Creston
8987 Creston No. 5
8988 Creston No. 6
8989 Creston No. 7
352 Crilley Metals
353 Cristitie
2241 C.R.M.
7880 CRM
8990 Crobalt
6991 Crobalt Stainless
354 Crocar
8991 Crodi
2300 Crodon
8992 Croloy 1-1/4
8993 Croloy 2
8994 Croloy 2-1/4
8995 Croloy 3M
8996 Croloy 5
8997 Croloy 5M
8998 Croloy 5Si
8999 Croloy 5Ti
9000 Croloy 7
12351 Croloy 9
9001 Croloy 12
12352 Croloy 16-13-3
9002 Croloy 16-13-8
9003 Croloy 18
9004 Croloy 18-8
9006 Croloy 18-8S
9005 Croloy 18-8 Stabilized
9007 Croloy 25-20
9008 Croloy 27
7157 Croloy Die Steel
9648 Croma
355 Cromal
4779 Cromaloy IV
2516 Cromaloy
5405 Cromaloy
6633 Croman
356 Cromansil
8101 Cromansil
8056 Cromansil Grade A
8057 Cromansil Grade B
7675 Cromansil, Murex
357 Cromax
6985 Cromic A
6986 Cromic C
6987 Cromic D
1480 Cromimphy No. 1
2192 Cromimphy No. 2
6784 Cromimphy No. 4
6785 Cromimphy No. 6
285 Cromin D
2251 Cromo
9009 Cromoco
358 Cromol C-9
9011 Cro-Mol C-10
9010 Cro-Mo-Loy
7121 Cromonic, LaBelle
5399 Cromonite
359 Cromovan
359 Cromovan Triple Die
2252 Cromva
3400 Cronit
360 Cronite
2281 Cronite
4841 Cronite W.X.2
9012 Cronitung
6940 Cro-Sil No. 10
6941 Cro-Sil No. 14
5424 Croterite IV
5425 Croterite V

361 Crotorite
4882 Crotung
5177 Crotung
8961 Cro-tung
500 Crouse's Alloy
362 Crow
4587 Crown
6626 Crown
9013 Crown
9014 Crownmax
4467 Crown W
4524 Crown W
7896 CRS
4670 CRU (SKF)
4680 Cru Composite
4681 Cru Excelsior
4682 Cru Excelsior Extra
4683 Cru Excelsior Extra XII
4684 Cru Excelsior XXII
4304 Crucia
4305 Crucia Steel
3819 Crucible Copperbond
7137 Crucible Double Special
4300 Crucible Free Machining Stainless Iron No. 2
9015 Crucible Nitrard No. 1
2278 Crucible Stainless Iron
3559 Crucible Stainless Iron No. 12
3560 Crucible Stainless Iron No. 18
3561 Crucible Stainless Iron No. 24
2195 Crucible Stainless Steel
3562 Crucible Stainless Steel Grade "A"
3563 Crucible Stainless Steel Grade "B"
3564 Crucible Stainless Steel No. 12
3565 Crucible Stainless Steel No. 18
3566 Crucible Stainless Steel No. 24
2299 Crucible Steel
9016 Crucible Weld A P
9017 Crucible Weld DH
9018 Crucible Weld FP
3567 Crucin
2255 Crusca New Process Hollow Drill
7119 Crusca Solid Drill
2257 Crusca "V.J." Extra
2256 Crusca "V.J." Special
363 Crusco Steel
9019 Crusher Bearing Bronze
7910 CRW
7876 CRZ
7885 C.S.
7122 C.S.D., LaBelle
7651 C.S.M.
11135 C. S. M. No. 2
1248 C.S.M. Steel
1461 C.T.E. (Imphy)
9020 C. T. V. Hot Work
364 Cuienium
9021 Cuferco
9022 Cuivrelect
2298 Cuivre Poli
5908 Cu-Lead-Ite No. 1
5909 Cu-Lead-Ite No. 2
5910 Cu-Lead-Ite No. 3
5911 Cu-Lead-Ite No. 4
5912 Cu-Lead-Ite No. 5
5913 Cu-Lead-Ite No. 6
6294–6298 Cumloy
7356 Cunic
12069 Cunico
12070 Cunife
2297 Cuniloy
365 Cupal
9023 Cupal
5774 Cupaloy
2296 Cupola Malleable Iron
9024 Cupralium
9025 Cupralium 12
9026 Cupralumin 8
9027 Cupralumin 12
4780 Cupranium
2295 Cupro-Aluminum
9028 CUPro DIE
2294 Cupro-Magnesium
2293 Cupro-Manganese
2292 Cupro-Manganese Tubes
366 Cupron
—— Cupro-Nickel (See also Copper-Nickel)
12439 Cupro Nickel
2291 Cupro-Nickel Bullet Jackets
2290 Cupro-Nickel, Commercial
2289 Cupro-Nickel, Driving Bands
2288 Cupro-Nickel, Loco. Tubes
2287 Cupro-Nickel, No. 300 Alloy
2286 Cupro-Nickel, Sheet
12504 Cupro-Nickel-20%-712
5879 Cupro-Nickel "70-30"
5880 Cupro-Nickel "80-20"
2285 Cupror
2284 Cupro-Silicon
5393 Cupro-Titanium
2264 Curtiss
742 Cutanit
3603 Cutlery
6098 Cutlery
367 Cutter Alloy
368 Cuyo
9029 Cuzinal
7152 C.V.
4638 C. V. Special
1476 C.V.C.
7982 CVFS
9030 C.V.S.
9031 C.V.S.S.
9032 C. W. Chisel
7999 CWH
7998 CWM
12223 CW-Oil Hardening
9033 C.Y.
9034 C.Y.C.
9035 Cyclo
1339 Cycloid Gear Steel
4470 Cyclops Ajax
4569 Cyclops "B-4"
94 Cyclops "B-6"
95 Cyclops "B-7"
92 Cyclops "B-8"
3894 Cyclops K
9585 Cyclops KL
4582 Cyclops K-L Die Steel
9586 Cyclops KM
4591 Cyclops K-M Die Steel
93 Cyclops "K-R"

93 Cyclops K-Rustless
9607 Cyclops KS
5390 Cyclops M-T
9039 Cyclops No. 9
369 Cyclops No. 17
96 Cyclops No. 17A
97 Cyclops No. 17B
9041 Cyclops No. 67
877 Cyclops Para Steel
9042 Cyclops R. B. C.
987 Cyclops Saturn
9043 Cyclops Special Carbon
4255 Cyclops Stainless Grade A
4256 Cyclops Stainless Grade B
4496 Cyclops Standard
1119 Cyclops Ultradie
1168 Cyclops Wanda
370 Cylinder Iron
2283 Cymbal Metal
371 Cyprus Bronze
4537 C.Y.W. Choice Die Steel

D

6559 D Alloy
9044 D-1 Disston
12402 D-2 Disston
5421 D-2
9045 D-2
6504 D-2 Alloy
9046 D2-SA Tool
9047 D6-Co
12398 D9-Mo
9048 D9-VA
6897 D-12
6898 D-18
8031 D-22S
9049 D29
7158 D-29 Chisel Steel
12392 D-29 Knife
7510 D-52 Extrusion Die Steel
7573 D-93
6956 "D" Nickel
9050 Dacar
1922 Daimler Bearing Metal
372 Dairy Metal
501 Dalton's Alloy
6534 Dalzell Steel
2353 Damar
11783 Damascite
9051 Damascus
9052 Damascus
9053 Damascus
2062 Damascus Bronze
5429 Damaxine Bronze
1933 Damstadt Bell Metal
2354 Dandelion Metal
2384 Danish Mint
9054 Dannemora
4521 Dannemora Best
9055 Dannemora DB59
4445 Dannemora Extra Best
4450 Dannemora No. 0
4449 Dannemora Self-Hardening
4520 Dannemora Standard
4522 Dannemora Very Best
502 Darcet's Alloy
2355 Dark Red Gold
5914 Darwin
9059 Darwin ACD
1918 Darwin "Alni"
7572 Darwin's Best Warranted
7571 Darwin's BKM
3568 Darwin Brand "H"
9060 Darwin Brand L-35
7151 Darwin C-C
9061 Darwin C.L. No. 1
5915 Darwin's Cobalt Fast Work
374 Darwin's Cobalt Magnet Steel
7152 Darwin CV
7573 Darwin's D-93
7574 Darwin's D.C.I.
7575 Darwin's Durex
5916 Darwin's Duror
9062 Darwin EE
5917 Darwin's Extra
7576 Darwin's Extra Qnality
7577 Darwin's Extra Special
7153 Darwin I.W.I.
4881 Darwin's N-1932
7149 Darwin No. 1 Air-hardening
9056 Darwin 19
9057 Darwin 93
373 Darwin No. 505
7150 Darwin No. 505 Special
1352 Darwin No. 1366
9058 Darwin 3581
7578 Darwin's O.H.T.
9063 Darwin PRK-33 Uncoated
5918 Darwin's Triple Life
7579 Darwin's T.T.S.
5919 Darwin's Vanadia
7154 Darwin "W" Brand
7580 Darwin's Warranted
2387 Davignon
375 Davis Metal
376 Dawsons Bronze
9064 D & D Special O.H.
9124 D & M-7-G
9123 D & M-7-O
9125 D & M-92
9126 D & M 305
9127 D & M-LT
9128 D & M-U2
9065 DBL
7574 D.C.I.
8019 DCN-2W
8020 DCN-3W
8021 DCN-3
8022 DCN-4
7956 DCN-60
7955 DCN-80
8033 DCNA
8023 DCN Extra
8024 DCN Spezial
8036 DCNO
7902 DCNR
8034 DCR
8035 DCRV
1326 D.D. Axle Steel
1752 "D.D."
5287 D.D.Q.
2385 Decobra
208 Deep Drawing Brass
9066 Defender
380 Defiheat
377 Defirust
4883 Defirust, Machining
9067 Defirust N
9068 Defirust No. 410
9069 Defirust No. 416
378 Defirust, Special

5920 Defirust, Turbine
379 Defistain
5921 Defistain, Machining
5922 Defistain, Special
2356 Degussa Alloy
381 Delavaud Metal
5043 Delaware Extra
5044 Delaware Standard
382 Deletots Alloy
4489 Delhi Grade A
1728 Delhi Hard
383 Delhi Iron
1727 Delhi Iron Grade "S"
4490 Delhi Special
2357 Delhi Tough Iron
9070 Delloy No. 4
9071 Delloy No. 6
9072 Delloy No. 7
9073 Delloy No. 9
12408 Delloy G-P
12409 Delloy DC-7
12410 Delloy DS-8
9074 Delloyd
2377 Deloro No. 4
5042 Delsteel Alloy
5398 Delta Antifriction Metal
384 Delta Bronze I
1347 Delta Bronze II
1348 Delta Bronze III
4141 Delta Bronze IV
4781 Delta Bronze V
6602 Delta Bronze VI
6603 Delta Bronze VII
6604 Delta Bronze VIII
6605 Delta Bronze IX
6606 Delta Bronze IXa
2371 Delta, Krupp
9075 Deltal
6607 Delta Propeller Bronze
4150 Deltoid
9076 Deltumin
7234 Demmler "D"
386 Demo Bronze
9077 Denavis
9078 Denavis
12467 Denine
9079 Denscast
3569 Dense Steel
9080 Denso Iron
4312 Dentalloy
3570 Deo
12492 Deoxidized Arsenical Copper—108
342 Deoxidized Copper
12491 Deoxidized Copper 939
3401 Deoxoloy
9081 Depal
2392 Deurance Metal
9082 Deutsche Legierung
387 Deward
5788 D.G. Alloy
—— D-H Alloys. See Driver-Harris
4921 D-H Alloy—R63
9083 D-H Lolm
9084 D-H Nickel A
9085 D-H Nickel D
9086 D-H Nickel E
9087 D-H Nickel Z
9088 D-H No. 11 Alloy
9089 D-H 30 Ohm Alloy
9090 D-H 90 Ohm Alloy
9091 D-H-S Bronze No. 1
9092 D-H-S Bronze No. 2
9093 D-H-S Bronze No. 3
9094 D-H-S Bronze No. 4
2369 Dialoy
5511 Diamant Bedel
6613 Diamant Bronze
7668 Diamant Bronze
7872 Diamant 3
7875 Diamant 5
7871 Diamant Extra
1224 Diamite
9095 Diamond A
9096 Diamond Alloy
2380 Diamond Brand
2063 Diamond Bronze
976 Diamond "B" (Ryolite)
9097 Diamond G Bronze
7235 Diamond M
3987 Diamond "S"
5203 Diamond "S-1"
7472 Diamond Special, Cesco
5204 Diamond "T"
2376 Diamonite
1980 Diaphragm Brass
9098 Dica B
9099 Dical
2065 Dicks Bearing Bronze
6338 Dicks Bearing Bronze
4607 Die Blanking (Midvale)
4487 Die Block
4597 Die Block A
4598 Die Block B
4608 Die Block C
4609 Die Block E
6356 Die Cast
7598 Die Cast
9101 Die Casting
2358 Die Casting Alloys
3571 Die Casting Alloy "A"
3572 Die Casting Alloy "B"
3573 Die Casting Alloy "C"
3574 Die Casting Alloy "D"
3575 Die Casting Alloy "E"
3576 Die Casting Alloy "F"
3577 Die Casting Alloy "G"
3578 Die Casting Alloy "H"
4322 Die Casting Alloy "I"
4323 Die Casting Alloy "J"
12509 Die Casting Alloy—624
12510 Die Casting Alloy—1026
2378 Die Casting Aluminum Alloy
922 Diecastings, Pressure
475 Diehard (Firth)
7040 Die L
9649 Die-L-Temper
9650 Die-S-Temper
2359 Dienett's German Silver
2360 Diesel Bearings
847 Die Steel, Ohio
4660 Die Steel (Simonds)
9102 Die Steel No. 13200
7400 Dieweld
8486 Dieweld
4584 Die, Wortle
9103 Digby's Cupritic Alloy
383 Dilver
9104 Di-Mol
389 Dimondite
6152 D.I.N. Alloys
9105 Dip Metal

1981 Dipping Brass
2388 Dippit
2361 Dirigold
9107 Dirilyte Metal
12382 Dissteel 812
9047 Disston 6 Co
9108 Disston 6-N-6
9109 Disston 66
9112 Disston No. 819
9113 Disston No. 825
9114 Disston No. 827
9115 Disston No. 841
9116 Disston No. 842
9117 Disston No. 5170
9118 Disston No. 5190
9119 Disston No. 5390
8120 Disston No. 51110
6893 Disston Stainless Iron
6894 Disston Stainless Steel A
6895 Disston Stainless Steel B
12395 Disston Stainless D
9121 Dixie Brand
3579 Dixi No. 3
9122 Dixoilbronz
4148 Dixtampo
4149 Dixtrudo
11195 DM-2
5777 DM-15
5778 DM-45
8119 DM-Calorized
8014 DMH
7906 DMN
8026 DMOC
7901 DMS
7707 DMW
8032 DMZ
8015 DN1
8016 DN2
8017 DN3
8018 DN5
7950 DN15
7951 DN25
7954 DN33
7953 DN36
7952 DN42
6956 "D"-Nickel
1451 Doblinsche Alloy
2362 Doctor Metal
7159 Do-Di
9129 Dodge Alloy D-1
7398 Do-It
9131 Doler Alumin No. 99
9132 Doler Alumin No. 133
9133 Doler Alumin No. 308
7160 Doler-Brass
9134 Doler Brass No. 1
9135 Doler Brass No. 4
9136 Doler Brass No. 5
9137 Doler-Mag
9138 Doler-Mag No. 2
9139 Doler-Mag No. 6
9140 Doler-Mag No. 10
9141 Doler No. 112
390 Doler-Zink
9142 Doler-Zink No. 2
9143 Doler-Zink No. 3
9144 Doler-Zink No. 5
2381 Dollar Blue Chip
4573 Domestic
9145 Domestic
9146 Domite
9147 Donal
1982 Door Plate Brass
5923 Dopploy
9130 Doquat
9148 Dorium "D"
2067 Double Bronze
9149 Double Chrome Vanadium
4466 Double Crane
7079 Double Extra
9150 Double Extra
3581 Double Seven
9151 Double Seven
3518 Double Shear Steel
3515 Double Shear Temper
9152 Double Six
9273 Double Six
9153 Double Six Alloy
3580 Double Six Die
5740 Double Six Super Die
391 Double Special
9154 Double Special
330 Double Special (Columbia)
7114 Double Special (Crescent)
4491 Double Special (Crucible)
4539 Double Special (Firth-Sterling)
7137 Double Special, Sanderson
691 Double Strength, Grade 1
692 Double Strength, Grade 1A
392 Dowmetals
698 Dowmetal A
5454 Dowmetal B
9155 Dowmetal "C"
699 Dowmetal D
700 Dowmetal E
9156 Dowmetal EX
701 Dowmetal F
9157 Dowmetal FS
10259 Dowmetal FS-1
868 Dowmetal G
5924 Dowmetal H
5925 Dowmetal J
7161 Dowmetal K
9158 Dowmetal L
702 Dowmetal M
9159 Dowmetal O
9160 Dowmetal P
9161 Dowmetal R
703 Dowmetal T
9162 Dowmetal X
3582 Draco
9163 Dragon
9164 Drawalloy 240
11946 Drawalloy 340
209 Drawing Brass
3604 Drawing Die Steel
2382 Dreadnought
9165 Dreadnought
4113 Drift Steel
1402 Dril-It
9166 Drill
5045 Drillalloy
2370 Drill Rod
3855 Drill Rod
4622 Drill Rod
2499 Drill Rod, Red Anchor
4118 Drill Steel
4465 Drill Steel
5899 Drittel Silver
4922 Driver-Harris Nirosta
4919 Driver-Harris No. 42
4920 Driver-Harris No. 52
4918 Driver-Harris No. 525 Alloy

4921 Driver-Harris R-63
4510 Driver-Harris Special Alloy Tool Steel
4509 Driver-Harris Tool Steel
9381 D.T.D. 49b
3583 Dualoy
7285 Du Brand
6533 Ducol Steel
4791 Ductile Bronze
7391 Ductillite
9167 Ductiloy
2363 Dudley's Bearing Metals
4121 Dudley's Bronze "B"
4120 Dudley's Bronze "K"
393 Dudley's Phosphor Bronze
2389 Dufour White Gold
3820 Dukand Cold Drawn
3821 Dukand Drill Rod
9168 Dukane
4512 Duke-Kidd
2364 Duke's Metal
6274 Duke's Metal
3586 Dukex
394 Dullray
395 Dumet
12243 Dumore
4183 Dumost
3587 Dumost
9169 Dundie
5004 DuNic
2365 Dunnlevic & Jones Antifriction Metal
2390 Dunnlevic & Jones, Russian
4115 Dunter Pick Steel
441 Duozinc
1530 Duplex Alva
7144 Duplex, Alva, Forging
6482 Duplex No. 1 Case Hardening
396 Duplex No. 1 Gear Steel
6483 Duplex No. 2 Case Hardening
397 Duplex No. 2 Gear Steel
6484 Duplex No. 3 Case Hardening
398 Dnplex No. 3 Gear Steel
2383 Dupont Metal
5400 Duquesne Special
3588 Durabil
2495 Duracast No. 7
4015 Duracast No. 7A
4327 Duracast No. 8
6259 Durachrome
1526 Duracid
2379 Dural
7610 Dural A
7611 Dural B
7612 Dural C
9170 Duralinox
9171 Duralinox
9173 Duralinox 5
9172 Duralinox P
9174 Duralit
7860 Duralite
6080 Duralloy
399 Duralloy "A"
400 Duraloy "B"
1533 Duraloy "C"
1534 Duraloy "H"
1531 Duraloy "N"
9175 Duraloy NSMO
1532 Duraloy No. 15-35
401 Duraloy No. "18-8"
9176 Duraloy 18-8S
9177 Duraloy 18-8SMo
9178 Duraloy 25-20Mo
1535 Duraloy "X"
2487 Duralplat
4782 Duralum
402 Duralumin
1227 Duralumin Grade "A" (Bausch)
1655 Duralumin Grade "B" (Bausch)
5188 Duralumin Grade "B" (Booth)
5421 Duralumin "D-2"
9185 Duralumin DM 31
3318 Duralumin "E"
9186 Duralumin E
9179 Duralumin E
5034 Duralumin "G"
2485 Duralumin, German (Group K)
2486 Duralumin, German (Group 681)
5422 Duralumin, H
12471 Duralumin HX
3402 Duralumin, Imitation
6659 Duralumin K
4424 Duralumin 3L1
4425 Duralumin 3L3
12472 Duralumin M
9180 Duralumin 681 A
9181 Duralumin 681 B
9182 Duralumin 681 H
9183 Duralumin 681 K
9184 Duralumiu 681ZB
12469 Duralumin S
3589 Duralumin, Special ("Y" Alloy)
9187 Duralumin Super
12470 Duralumin T
2194 Duralumin (Vicker's)
9188 Duralumin Z
3318 Duralumin, Zinc (E Alloy)
406 Durana
9189 Duranal
5383 Duranalium
9190 Duranalium 3.5
9191 Duranalium 7
1714 Durance Bearing
2366 Durand's Alloy
5735 Duranic
3590 Duranmium
6663 Duraplate
5268 Duratlas
9192 Duraweld No. 1
9194 Duraweld No. 2
9193 Duraweld No. 3
9195 Duraweld No. 4
7886 Durax H
7889 Durax Spezial
7887 Durax W2
7888 Durax W3
407 Durbar
408 Durbar Hard
409 Durbar Standard
410 Durbin
9196 Durcilium
5926 Durco
9197 Durco D-6
9198 Durco D-7
9199 Durco D-10
6897 Durco D-12
6898 Durco D-18
5142 Durco KA-2
5143 Durco KA-2 Mo
1252 Durco KA-2 S
5364 Durco KA2 S-Mo
6896 Durco 181

5144 Durco 26-10
5927 Durco 26-12
7005 Durco 28-12
5928 Durco 30-15
3591 Duredge
4188 Durehete
411 Durex
11538 Durex Bronze
11813 Durex Bronze
7575 Durex, Darwin's
10271 Durex Iron
11593 Durface
4434 Durichlor
9200 Durimet
403 Durimet "Ap"
404 Durimet "B"
405 Durimet "Dp"
5367 Durimet "K"
5368 Durimet "L"
9201 Durimet T
9202 Durinval
9203 Durinval
412 Duriron
413 Durite (V-40)
9204 Durite
3592 Duro
9450 Duro
4566 Duro (Jessop)
11594 Duro Antifriction Metal
4381 Durocyl
7496 Durode
414 Durodi
9205 Durodie
415 Duro Gloss "C-1"
1729 Duro Gloss "C-2"
1731 Duro Gloss "C-3"
1730 Duro Gloss "C-4"
6973 Duro Gloss C-12
5930 Duro Gloss, Free Machining
6974 Duro Gloss S
6672 Durolith
416 Duronze I
5772 Duronze II
5773 Duronze III
9206 Duronze IV
9207 Duronze V
9208 Duroplat
5916 Duror
9209 Dursilium
9210 Dutch Boy
417 Dutch Metal
4286 Dutch Railroad Bronze
3666 Dutch Silver
2391 Dutch White Metal
4365 Dutch White Metal
9211 Dutrax
3594 Duvan
11852 Dycast
9212 Dycast No. 1
5317 Dylasta
9213 Dymal AH
9214 Dymal OH
9215 Dymonhard No. 90
9216 Dymonhard No. 92
9218 Dymonhard No. 93
9219 Dymonhard No. 94
9220 Dymonhard No. 95
9221 Dymonhard No. 96
5401 Dynamic Steel C-2
5402 Dynamic Steel C-3
9222 Dynamic Steel C-3A
9223 Dynamic Steel C-4
9224 Dynamic Steel C-5
5403 Dynamic Steel C-6
9225 Dynamic Steel C-7
9226 Dynamic Steel C-8
9227 Dynamic Steel C-10
12278 Dynamo
2350 Dynamo
4334 Dynamo
7389 Dynamo
8336 Dynamo
1016 Dynamo (Smithcq)
2367 Dynamo Sheets
2386 Dynamo Steel
8337 Dynamo Special
9228 Dyn-El
9229 Dynelec
7105 D.Y.O.
2368 Dysoid
7990 DZ

E

6678 E-8 Alloy
7540 E-16 Alloy
6681 E-17 Alloy
8012 E-21S
8013 E-22S
9230 E-No. 25
6709 E-450 Alloy
7903 E-612
8007 E-724Z
6710 E-821 Alloy
6711 E-822 Alloy
6712 E-831 Alloy
6713 E-832 Alloy
7904 E-975
8135 E-52100 Wire
3906 Eagle, La Belle
2537 Eagle "A" Babbitt Metal
9231 Eagle Music Wire
2562 "E" Alloy
3310 "E" Alloy, Zinc Duralumin
9232 Earlumin
9233 Eastern G-35
9234 Eastern G-40
9235 Eastern H-55
9236 Eastern H-60
9237 Eastern H-65
9238 Eastern Hy-Tenso
9239 Eastern N
9240 Eastern N-1
9241 Eastern N-2
9242 Eastern N-3
9243 Eastern N-4
9244 Eastern N-5
9245 Eastern N-6
9246 Eastern "Z" Metal
6301 Easy-Flo
7086 E.B. Alloy
9247 E. B. Alloy
2561 E.B.D. Bearing
9248 E.C. 124
2527 Eccentric Ring
11857 Eclipsaloy No. 1
11858 Eclipsaloy No. 2
11859 Eclipsaloy No. 4
11860 Eclipsaloy No. 5
11861 Eclipsaloy No. 6
11862 Eclipsaloy No. 12
11863 Eclipsaloy No. 13
11864 Eclipsaloy No. 15
11865 Eclipsaloy No. 35
11866 Eclipsaloy No. 38
11867 Eclipsaloy No. 56
11868 Eclipsaloy No. 57
11869 Eclipsaloy No. 68
11870 Eclipsaloy No. 320
11871 Eclipsaloy No. 322
11872 Eclipsaloy No. 323
418 Eclipse Bronze
9249 Eclipse 75
1257 E.C.N. Alloy
11595 Econoloy
5159 Economet

6853 Economet No. 4
419 Economo No. 20
1783 Economo No. 50
9250 Economy Bronze
9251 Economy Hardface
9252 Edal
2560 Edelmessing
2559 Edelstahl
3509 Edgar Allen Carbon Tool Steel Class "C"
3510 Edgar Allen Carbon Tool Steel Class "E"
3511 Edgar Allen Carbon Tool Steel Class "F"
3512 Edgar Allen Carbon Tool Steel Class "H"
3513 Edgar Allen Carbon Tool Steel Class "P"
3514 Edgar Allen Carbon Tool Steel Class "V"
3580 Edgar Allen Double Six
3581 Edgar Allen Double Seven
3515 Edgar Allen Double Shear Temper
4113 Edgar Allen Drift
4118 Edgar Allen Drill
4115 Edgar Allen Dunter-Pick
4116 Edgar Allen Feather
3516 Edgar Allen Five Ply Steel
3518 Edgar Allen Genuine Double Shear Steel
4114 Edgar Allen Granite-Chisel
3519 Edgar Allen Imperial C.S.
3520 Edgar Allen Iron-Fibred
4112 Edgar Allen Jumper
3521 Edgar Allen K.9
3522 Edgar Allen Maxchip No. 1
3523 Edgar Allen Maxchip No. 2
4119 Edgar Allen Maxinium
3524 Edgar Allen Maxnap
3525 Edgar Allen Maxtack
4110 Edgar Allen Miners Drill
3526 Edgar Allen Minerva
3527 Edgar Allen No. 4 Hot Die
3528 Edgar Allen No. 5 Hot Die
3529 Edgar Allen Red Label
3530 Edgar Allen Safe-Plate
3531 Edgar Allen Shear Temper
4111 Edgar Allen Silver Steel
3532 Edgar Allen Special Chrome
3533 Edgar Allen Stagpick
3534 Edgar Allen "Turners Safe Plate Steel"
3535 Edgar Allen Welding Steel
2558 Edward's Speculum
1904 Eel Brand Antifriction Metal
5741 Egalite
2557 Ehrhardt's Metal
2526 Ehrhardt's Type
1776 "E.H.W." Steel
9253 E.H.W. No. 1
9254 E.H.W. No. 2
9255 E.H.W. No. 3
2532 Eighteen Per Cent
866 Eighty-Five Three Fives Alloy (Ounce Metal)
2556 Einheitsmetall
2011 Einheit's Red Brass
9256 E.I.S. 14
9257 E.I.S. 15
492 E.I.S. 31 (Heppenstall) (Hot Kut)
9258 E.I.S. 41
493 E.I.S. 42 (Heppenstall) (Kleen Kut)
9259 E.I.S. 43
549 E.I.S. 45 (Heppenstall)
3879 E.I.S. 51 (Heppenstall)
9260 E.I.S. 57
9261 E.I.S. 73
9262 E.I.S. 76
9263 E.I.S. 79
9264 E.I.S. 97
9265 E.I.S. 717
2555 Eisenbronze
2064 Eislers Bronze
240 Elalco Calido
2683 Elalco Ideal
704 Elalco Magno
4303 Elastique Spring
9268 Elastuf C.H.
8043 Elastuf Chro-Moly
9266 Elastuf Chro-Moly (modified)
8046 Elastuf JJ
2181 Elastuf Media Precision Finish
2180 Elastuf Media Steel
9269 Elastuf 44
2182 Elastuf Penn Steel
11647 Elastuf Penn Strain-free
8045 Elastuf S.A.E. 2335
8044 Elastuf S.A.E. 3140
9267 Elastuf Type A
420 Elastuf Type A No. 9
8062 Elastuf Type A No. 14
9268 Elastuf CN
4650 Elastuf Type K
1732 Elcomet "F"
421 Elcomet "K"
1733 Elcomet "L"
1734 Elcomet "M"
9270 Elcon
422 Electrex
1983 Electrical Brass
2528 Electrical Gold Alloy
1540 Electric (Emetco No. 10)
8338 Electric Metal
2538 Electric Railway Babbitt Metal
2460 Electric Tool (Rita)
11788 Electrite CO-6
1735 Electrite Cobalt
3763 Electrite Cobalt "Super"
3764 Electrite Cobalt "Ultra"
9273 Electrite Double Six
9274 Electrite HV-6

9275 Electrite Lacoma
425 Electrite No. 1
426 Electrite No. 2
9271 Electrite No. 19
423 Electrite Steel
3763 Electrite Super Cobalt
9276 Electrite Super Como
9278 Electrite T.N.W.
3764 Electrite Ultra Cobalt
424 Electrite Uranium
9279 Electrite UB
3595 Electrite Vanadium
4519 Electro
2539 Electro High Speed
7669 Electrobronze
9280 Electroloy
9287 Electroloy Grade A
9288 Electroloy Grade B
9289 Electroloy Grade BX
9290 Electroloy Grade C
9291 Electroloy Grade D
9292 Electroloy Grade XX
9281 Electroloy No. 11
9282 Electroloy No. 14
9283 Electroloy No. 15
9284 Electroloy No. 26
9285 Electroloy No. 55
9286 Electroloy No. 154
9293 Electroloy Match Plate Aluminum
9294 Electroloy Pattern Aluminum
341 Electrolytic Copper
427 Electrolytic Iron
428 Electromet
7162 Electromet Calcium-Silicon
7163 Electromet Calcium-Aluminum-Silicon
7164 Electromet Calcium-Manganese-Silicon
7165 Electromet Chromium
7166 Electromet Chromium-Copper
7167 Electromet Ferro-Boron
7168 Electromet Ferrochrome (Low Carbon)
7169 Electromet Ferrochrome (High Carbon)
7170 Electromet Ferrochrome (High Nitrogen)
7171 Electromet Ferrochrome (Special Foundry Grade)
7172 Electromet Ferro-Columbium
7173 Electromet Ferromanganese (Standard)
7174 Electromet Ferromanganese (Low Carbon)
7175 Electromet Ferromanganese (Medium Carbon)
7176 Electromet Ferromanganese (Low Phosphorus)
7177 Electromet Ferromanganese (Low Iron)
7178 Electromet Ferromanganese-Silicon
7179 Electromet Ferrosilicon (15%)
7180 Electromet Ferrosilicon (50%)
7181 Electromet Ferrosilicon (75%)
7182 Electromet Ferrosilicon (80-90%)
7183 Electromet Ferrosilicon (90-95%)
7184 Electromet Ferro-Tungsten
7185 Electromet Ferro-Vanadium
7186 Electromet Manganese
7187 Electromet Manganese-Boron
7188 Electromet Manganese-Copper
7189 Electromet Nickel-Zirconium
7190 Electromet Silico-Manganese
7191 Electromet Refined Silicon
7192 Electromet Silico-Spiegel
7193 Electromet Spiegeleisen
7194 Electromet Zirconium (12-15%)
7195 Electromet Zirconium (35-40%)
4252 Electrometall
429 Electron (Elektron Metals)
9295 Electron A-5
6051 Electron "A-8"
9297 Electron A-8
3765 Electron "AM-503"
4222 Electron "AZ"
3766 Electron "AZ-31"
9302 Electron AZ-91
11598 Electron AZ-91
6052 Electron "AZ-102"
9303 Electron AZ-551
5423 Electron AZ-855
6054 Electron "AZ-855"
1737 Electron "AZD"
1738 Electron "AZF"
1739 Electron "AZG"
1740 Electron "AZM"
3767 Electron "AZMQ"
3768 Electron "CMSi"
1741 Electron No. 23
1742 Electron "V-1"
3769 Electron "Z-lb"
1743 Electron "Z-3"
6055 Electron "ZS-32"
12436 Electronic Bronze
2554 Electroplate
2553 Electrotype, Standard
2552 Electrum
6276 Electrum
4436 Electrunite Boiler Tubing
9304 Electrunite Enduro
9305 Electrunite Steel Tubes
—— Elektron (See Electron)
9296 Elektron A7
12218 Elektron A8
9298 Elektron A8HT
11596 Elektron A9
9299 Elektron A9V
11597 Elektron A10
9300 Elektron A11V
12220 Elektron AM 503
12223 Elektron AM 537
9389 Elektron AZ31

9302 Elektron AZ 91
12217 Elektron AZ 91
11598 Elektron AZ 91
12222 Elektron AZ 855
9388 Elektron AZG
12219 Elektron AZG
12221 Elektron AZM
2068 Elephant Bronze
6609 Elephant Brand Hardening No. 1
6610 Elephant Braud Hardening No. 2
9309 Elephant Brand No. 13D
9307 Elephant Brand No. 28D
9306 Elephant Brand No. 28 Metal
9308 Elephant Brand No. 113
6583 Elephant Brand Phosphor Bronze, Grade A
6684 Elephant Brand Phosphor Bronze, Grade B
7502 Elephant Brand Phosphor Bronze Grade B-1
6585 Elephant Brand Phosphor Bronze, Grade C
6586 Elephant Brand Phosphor Bronze, Grade D
6587 Elephant Brand Phosphor Bronze, Grade E
6588 Elephant Brand Phosphor Bronze, Grade F 2
6589 Elephant Brand Phosphor Bronze, Grade G
7503 Elephant Brand Phosphor Bronze, Grade H
6590 Elephant Brand Phosphor Bronze, Grade S
7504 Elephant Brand Phosphor Bronze, Grade V
6611 Elephant Brand Phosphor Copper
6612 Elephant Brand Phosphorized Antifriction Metal
9310 Elesco No. 600
9311 Elesco No. 600 H.T.
—— Elfur Irou—See Cramp's Elfur Iron
4442 Elfur Grade No. 1
4443 Elfur Grade No. 3
3822 Elhanco
430 Elianite I
431 Elianite II
432 Elinvar
6614 Elkaloy
6738 Elkaloy A
9312 Elkaloy D
9313 Elkaloy DX
6731 Elkonite, Grade O-W 3
6733 Elkonite, Grade 1-W
6740 Elkonite, Grade 1-W3
6734 Elkonite, Grade 5-W3
433 Elkonite, Grade 10-W-3
6735 Elkonite, Grade 20-S
6736 Elkonite, Grade 20W3
6732 Elkonite, Grade 30W3
6737 Elkonite, Grade 100W
12015 Elkonite G-12
7316 Elkonite G-13
12016 Elkonite G-14
7317 Elkonite G-17
12019 Elkonite G-18
12017 Elkonite 35S
12018 Elkonite 50S
12020 Elkonite 5-W-53
12021 Elkouite 10-W-53
12022 Elkonite 100M
12023 Elkonite TC-5
12024 Elkonite TC-10
12025 Elkonite TC-20
12026 Elkonite TC-53
7318 Elkonium No. 1
7319 Elkonium No. 13
12027 Elkonium No. 17
12028 Elkonium No. 23
9314 Elkonium No. 25
12033 Elkonium No. 33
12034 Elkonium No. 37
12031 Elkonium No. 40
12032 Elkonium No. 45
9315 Elkonium No. 57
12035 Elkonium No. 70
12036 Elkonium No. 71
12029 Elkonium No. 117
12030 Elkonium No. 217
12037 Elkonium No. 301
12384 Elkro
434 Elmarid
9316 Elmet C
9317 Elmet Cu
9318 Elmet H-1
9319 Elmet H-2
9320 Elmet H-3
9321 Elmet U
2551 Elners German Silver
2330 Elsner's Chinese Speculum
9322 Eloxal
4504 Eltun Die Steel
6623 Elvandi
435 Elverite "A"
5742 Elverite "B"
9323 Elverite "C"
12366 EM 3
12367 EM 3A
12368 EM 4
12369 EM 4A
12370 EM 4B
12371 EM 5
12372 EM 5A
12373 EM 5B
12374 EM 6
12375 EM 7
12376 EM 7A
12377 EM 8
12378 EM 85
12379 EM 9
12380 EM 9A
9324 Embeebush Metal
437 Emco (Emetco No. 2)
436 Emetco No. 1 (Silver Bronze)
437 Emetco No. 2 (Emco)
438 Emetco No. 3 (Premier)
439 Emetco No. 4 (Genuine)
440 Emetco No. 5 (Hard Genuine)
1536 Emetco No. 6 (Imperial)
1537 Emetco No. 7 (Copper Hardened)

1538 Emetco No. 8 (Extra)
1539 Emetco No. 9 (Triumph)
1540 Emetco No. 10 (Electric)
1541 Emetco No. 11 (Rock Crusher)
1542 Emetco No. 12 (Matchless)
1543 Emetco No. 13 (Rolling Mill)
1544 Emetco No. 14 (Car Box)
1545 Emetco No. 15 (Standard)
1546 Emetco No. 16 (Special)
1547 Emetco No. 17 (Alaska White Brass)
8010 EMOC
8011 EMOCh
8009 EMOCw
2533 Emperor
6485 Emperor Bearing
1984 Emperor Brass
5743 Emperor Chrome-Nickel
1314 Empire "D"
6506 Empire Machinery Steel
9325 Empire No. 1
9326 Empire No. 2
9327 Empire No. 3
9328 Empire No. 4
6875 Empire No. 5
9329 Empire No. 6
9330 Empire No. 7
9331 Empire No. 8
9332 Empire No. 9
9333 Empire No. 10
9334 Empire No. 11
6876 Empire No. 12
6877 Empire No. 12A
6878 Empire No. 12B
6879 Empire No. 12C
6880 Empire No. 12D
9335 Empire No. 13
9336 Empire No. 14
9337 Empire No. 15
9338 Empire No. 16
9339 Empire No. 16A
9340 Empire No. 16B
9341 Empire No. 17
9342 Empire No. 17A
1307 Empire No. 18
6881 Empire No. 18A
6882 Empire No. 18B
6883 Empire No. 18C
6884 Empire No. 18 Cu
1308 Empire No. 18-8
6885 Empire No. 18-8 Mo
6961 Empire No. 18-8 Mo Se
6962 Empire No. 18-8 Se
6886 Empire No. 18-8 Si
9343 Empire No. 19
9344 Empire No. 20
9345 Empire No. 21
9346 Empire No. 22
7219 Empire No. 22C
9347 Empire No. 23
1309 Empire No. 24-12
6887 Empire No. 24-12B
1310 Empire No. 25-5
6888 Empire No. 25-12
6889 Empire No. 25-12 W
1311 Empire No. 30
6890 Empire No. 30A
7220 Empire No. 30H
6891 Empire No. 30-20
1312 Empire No. 35-15
7221 Empire No. 46
1313 Empire No. 60-20
6892 Empire No. 60-20A
6893 Empire No. 75-20
7222 Empire No. 1214
1307 Empire No. 1618
7223 Empire No. 2010
7224 Empire No. 2511
7225 Empire No. 2810
7226 Empire No. 2815
7227 Empire Resista
7228 Empire SHA
4380 Empire Steel
7512 E.N. 97 Alloy
7829 Enameling Iron
7104 Endur
9348 Endurance AA
9349 Endurance BB
9350 Endurance CC
9351 Endurance DD
9352 Endurance EE
9353 Enduria
442 Enduro "A"
1554 Enduro "AA"
8066 Enduro AA High Carbon
1561 Enduro "FC"
4382 Enduro Free Cutting
1555 Enduro "HC"
1556 Enduro "HCN"
443 Enduro KA2 Steel
4738 Enduro KA-2 FM
4735 Enduro KA-2 Mo
1559 Enduro KA2-S
4736 Enduro KA-2-S Mo
4740 Enduro KA-2-S Ti
4741 Enduro KA-2-Ti
4734 Enduro KA-28
444 Enduro KM-1
1557 Enduro "KNC-3"
4385 Enduro NC-3
1560 Enduro NCT-3
4384 Enduro 4-6 Chrome
4731 Enduro 4-6 Cr Mo
4732 Enduro 4-6 Cr-W
4388 Enduro 18-8
4389 Enduro 18-8 B
4737 Enduro 18-8 FM
9354 Enduro 18-8 F.S.
4390 Enduro 18-8 Mo
4393 Enduro 18-8 S
9355 Enduro 18-8 SCb
4387 Enduro 18-8 S-Mo
4386 Enduro 18-8 S-Ti
4739 Enduro 18-8 Ti
8067 Enduro 19-9
6943 Enduro 19-9 S
6944 Enduro 19-9 S Ti
5931 Enduro 20-10
5932 Enduro 20-10 S
6076 Enduro 20-23
8068 Enduro 20-25
445 Enduro "S"
8070 Enduro S High Carbon
4733 Enduro S-1
11812 Enduro S-15
1558 Enduro "S-FC"
8069 Enduro S—Turbine
12111 Enduron
9356 Endweldur
9357 Endweldur 85
9358 Endweldur 125
6536 Enebra Bronze
7833 Enebra Edelbronze NI
7832 Enebra Edelbronze TO

7830 Enebra Edelbronze TU-I
7831 Enebra Edelbronze TU-II
7839 Enebra Lagerbronze B-33
7841 Enebra Lagerbronze BZ-20
7840 Enebra Lagerbronze BZ-25
7842 Enebra Sondermessinge SI-M
7843 Enebra Sondermessinge SII-M
7835 Enebra Spezialbronze EH-I
7836 Enebra Spezialbronze EH-II
7837 Enebra Spezialbronze EH-III
6099 Engineering
2546 English
2550 English Alloy
2549 English Brass
2548 English German Silver
2529 English Linotype
2069 English Penny Bronze
2530 English Pewter
2070 English Phosphor Bronze
3784 English Phosphor Bronze
2546 English Speculum
—— English Steel Corp. Alloys, See E.S.C. Alloys
2525 English Stereotype
4249 English Type Metal "A"
4250 English Type Metal "B"
4251 English Type Metal (Old) "C"
4138 English Type Metal "D"
4139 English Type Metal "E"
1985 Engraver's Brass
12310 Engraver's Brass
7231 Engraver's Plate
7289 E-Nickel
4852 Enormous
7199 Envelope Die
9359 Epco-Oil Hard
9360 Epco-Water Hard
7681 Era A.T.V.
3404 Era "A.T.V."
532 Era C.R.
533 Era H.R. (Hadfields)
6797 Era HR-1 (Imphy)
6798 Era HR-2 (Imphy)
446 Era Manganese Steel
447 Eraydo
9361 Erges 4
9362 Ergonit
6155 Erhard Bronze
448 Ermal
449 Ermalite
6456 Ermann Metal
3823 E.S.A.
—— E.S.C. (English Steel Corporation) Alloys
2437 E.S.C. "A"
2438 E.S.C. "A-31"
2410 E.S.C. "B.C.T.B."
2447 E.S.C. "CH-2N"
2446 E.S.C. "CH-3N"
2445 E.S.C. "CH-SN"
2448 E.S.C. "C.H.M.S."
2444 E.S.C. "CHNC"
2442 E.S.C. "C.H.N.M."
2422 E.S.C. "C.O.M.O."
2440 E.S.C. "H.T.C."
2439 E.S.C. "H.T.C.N."
2424 E.S.C. Immaculate No. 1
2425 E.S.C. Immaculate No. 2
2426 E.S.C. Immaculate No. 3
2427 E.S.C. Immaculate No. 4
6288 E.S.C. Immaculate No. 4W
2428 E.S.C. Immaculate No. 5
2429 E.S.C. Immaculate No. 6
2430 E.S.C. Immaculate No. 7
2431 E.S.C. Immaculate No. 9
2441 E.S.C. Med. C
2418 E.S.C. "N.C."
2409 E.S.C. Nilex
2420 E.S.C. No. 3NS
2419 E.S.C. No. 3½ NS
1699 E.S.C. Pyrista
2413 E.S.C. "S.H.N.C."
2423 E.S.C. "Si-Cr"
2408 E.S.C. "Si-Mn"
2443 E.S.C. Super "CHNC"
2412 E.S.C. Super "S.H.N.C."
2432 E.S.C. Supertough "A"
2433 E.S.C. Supertough "B"
2434 E.S.C. Supertough "C"
2435 E.S.C. Supertough "C-20"
2416 E.S.C. Super "V.N.C.A."
2415 E.S.C. "V.A. 65"
2421 E.S.C. "V.C.M."
2436 E.S.C. "V.H.R.D."
1155 E.S.C. Vibrac "V-30"
1156 E.S.C. Vibrac "V-45"
1159 E.S.C. Vikro
2417 E.S.C. "V.N.C.A."
2414 E.S.C. "V.N.C.G."
5147 Esco Nirosta KNC-3
6977 Esco No. 33
6978 Esco No. 34
6979 Esco No. 35
7475 Esco No. 36
5145 Esco No. 40
7476 Esco No. 43
5146 Esco No. 45
7477 Esco No. 46
6980 Esco No. 49
1986 Escutcheon Pin Brass
7868 ES Extra
2531 Esthonia, 5 Mark
1478 Etiral
2535 Eugene Vaders
450 Eureka
11948 Eureka
6510 Eureka Babbitt
2545 European "Reamur"
5716 Eutectal
2544 Eutectic Alloys
9363 Evalloy
9364 Evans Peerless
451 Evansteel, Grade 1
6282 Evansteel, Grade II

6283 Evansteel, Grade III
3405 Evansteel "O"
6754 Everard
2372 Everbrite
3596 Everbrite
1553 Everbrite No. 82
452 Everbrite No. 90
453 Everbrite No. 92
3597 Everdur No. 50
9385 Everdur—1000
454 Everdur—1010
6566 Everdur—1012
12503 Everdur—1014
5933 Everdur—1015
6046 Everdur No. 1026
9365 Evershyne
9366 E.V.H.I.
6631 E. V. M.
7997 EW
2543 Ex. B-Metall
4338 Excelo
2542 Ex. K Metall
3824 Excel Hollow Drill
11599 Excelite
9683 Excell
455 Excello
6252 Excelloy
2541 Excelsior
3406 Expanded Metal
2540 Expanding Alloy
456 Expansive Metal
9367 Exl-Die
3825 Extra
3826 Extra
3828 Extra
3829 Extra
3830 Extra
3842 Extra
4052 Extra
4147 Extra
4177 Extra
9383 Extra
9384 Extra
7200 Extra (Achorn)
2277 Extra (Carpenter)
11995 Extra (Columbia)
5917 Extra (Darwin)
4500 Extra (Disston)
4535 Extra (Firth-Sterling)
1777 Extra (Latrobe)
3831 Extra (Vulcan)
7113 Extra, Champion
7115 Extra, Crescent
1538 Extra, Emetco No. 8
7123 Extra, La Belle 2½
7124 Extra, La Belle 3A
7125 Extra, La Belle 3½
7513 Extra, Pure-Ore
7138 Extra, Sanderson
7139 Extra, Sanderson 3½
7140 Extra, Sanderson 4½
7077 Extra, Viking
4445 Extra Best
3832 Extra Best
4705 Extra Best Cast
9369 Extra Carbon
9370 Extra Carbon
9371 Extra Carbon Vanadium
476 Extra Cast
3267 Extra Chrome
3833 Extra Chrome
7341 Extra Copper Hardened Babbitt
7201 Extra Cutlery
9372 Extra Draco
1164 Extra Drill
9373 Extra G
9374 Extra Grade Carbon
2806 Extra High Speed
9375 Extra L
4479 Extra "L"
3834 Extra "M.G."
9368 Extra No. 5
3835 Extra Punch
3836 Extra Quality
7576 Extra Quality
2534 Extra Special
4331 Extra Special
4332 Extra Special
4333 Extra Special
4178 Extra Special
4486 Extra Special
7577 Extra Special
4641 Extra Special
2459 Extra Special
9376 Extra Special Alloy
4459 Extra Special High Speed
7404 Extra Special, Iridium
1327 Extra Special Nickel Steel
11930 Extra Special Power Transformer 52-58
6554 Extra Strong
9377 Extra Superduralumin
2458 Extra Tool
3837 Extra Tool
9387 Extra Tool
9378 Extra Tough No. 4
9379 Extra Vanadium
3838 Extra Warranted
4905 Extrude Die
5057 Extrusion Die
1987 Eyelet Brass
3839 E.Z. No. 14W
457 "E-Z" Stainless Steel

F

6678 F-8
7540 F-16
6681 F-17
11922 F-23
11840 F-37
9390 Faceweld No. 1
9391 Faceweld No. 12
5409 "F" Alloy
7981 "F" Extra
7980 "F" Special
5934 "F" Steel
3598 Fagersta "30" Hollow Drill
9392 Fagersta AD 95
9393 Fagersta Alloy "30" Drill
3599 Fagersta Alloy Chisel
7229 Fagersta Alloy Shoe Die
7196 Fagersta Best
9395 Fagersta Brilliant H.H.
9396 Fagersta Brilliant WKE Extra
9397 Fagersta Brilliant WW
7230 Fagersta Broach
9398 Fagersta Broach
3600 Fagersta Carbon
7197 Fagersta Chisel
3601 Fagersta Circular Plates
3602 Fagersta Cold Header

7198 Fagersta Cold Heading
3603 Fagersta Cutlery Steel
9399 Fagersta Die Casting
3604 Fagerstra Drawing Die Steel
7231 Fagersta Engravers Plate
9400 Fagersta Engravers Plate
7199 Fagersta Envelope Die
7200 Fagersta Extra
7201 Fagersta Extra Cutlery
3605 Fagersta Fast Finishing
7202 Fagersta Finishing
3606 Fagersta Hack Saw
3607 Fagersta High Production
7203 Fagersta High Production
3608 Fagersta Hollow Drill
9401 Fagersta Hollow Drill
3609 Fagersta Hot Die
7204 Fagersta Hot Die
9402 Fagersta Non-Deforming
3610 Fagersta Oil Hardening
3611 Fagersta Overcoat Axe
9403 Fagersta Overcoat Axe
3612 Fagersta Pavement Breaker
9404 Fagersta Pavement Breaker
3613 Fagersta "Polhem" Wire
9405 Fagersta Polhem Wire Drawing
9406 Fagersta Regular
9407 Fagersta Rolled Auger
3614 Fagersta Shoe Die
7205 Fagersta Shoe Die
7206 Fagersta Silver Die
7207 Fagersta Smooth Bor Hollow
7208 Fagersta Solid Drill
3615 Fagersta Solid Drill
9408 Fagersta Special
7209 Fagersta Special Alloy Die
7210 Fagersta Standard
7211 Fagersta Standard Cutlery
7212 Fagersta Superior Oil Hardening
3616 Fagersta Twisted Auger
7213 Fagersta Unbreakable Chisel
7214 Fagersta White Gold
2600 Fahlun Brilliants
6595 Fahr
2576 Fahrenwald Resisting Gold Alloy
2599 Fahring Antifriction
9409 Fahrite C-7
9410 Fahrite C7M
9411 Fahrite C8
9412 Fahrite C8A
9413 Fahrite C8AM
9414 Fahrite C12
12077 Fahrite C28
9415 Fahrite C-73
1747 Fahrite "C.S."
12078 Fahrite HC-28
464 Fahrite "N-1"
5935 Fahrite "N-IA"
1744 Fahrite "N-2"
1745 Fahrite "N-3"
1746 Fahrite "N-4"
5394 Fahrite "N-5"
5936 Fahrite N-6
5937 Fahrite N-6 Mo
5395 Fahrite N-7
5938 Fahrite N-7A
5939 Fahrite N-7B
5940 Fahrite N-8
5941 Fahrite N-9
5942 Fahrite N-9A
5943 Fahrite N-10
5944 Fahrite N-11
9416 Fahrite N-17
12073 Fahrite N-31
12072 Fahrite N-51
9417 Fahrite N-61
12074 Fahrite N-63
12071 Fahrite N-71
12075 Fahrite N-73
5945 Fairley's
7087 Falcon
465 Falcon Extra
9418 Falcon 4
9419 Falcon 6
9420 Falls No. 11
9421 Falls No. 14
9422 Falls No. 15
9423 Falls No. 21
9424 Falls No. 26
9425 Falls No. 55
2600 Faluner Diamenten
9426 Famex
9428 F&G1
9429 F&G3
9430 F&G4
9431 F&G5
9432 F&G8
2565 Fan Blades
9433 Fanite
12301 Farmface
466 Farrell's 85 Alloy
9427 Farrell's Hard Edge
5290 F.A.S.
7568 Fasaloy
11601 Fasaloy No. 1
11602 Fasaloy No. 2
11603 Fasaloy No. 3
11604 Fasaloy No. 4
11605 Fasaloy No. 5
11403 Fasaloy No. 6
11606 Fasaloy No. 7
11607 Fasaloy No. 10
11608 Fasaloy No. 11
11609 Fasaloy No. 12
11610 Fasaloy No. 14
11611 Fasaloy No. 24
11616 Fasaloy No. 31
11602 Fasaloy No. 35
11601 Fasaloy No. 41
11617 Fasaloy No. 42
11607 Fasaloy No. 51
11608 Fasaloy No. 72
11612 Fasaloy No. 106
11619 Fasaloy No. 130
11613 Fasaloy No. 136
11614 Fasaloy No. 138

11615 Fasaloy No. 139
11618 Fasaloy No. 142
11616 Fasaloy No. 928
11617 Fasaloy No. 1090
11618 Fasaloy No. 2647
11619 Fasaloy No. 3653
11620 Fastell E
11623 Fastell NL
11621 Fastell UM
11622 Fastell UP
11623 Fastell X
3605 Fast Finishing
4558 Fast Finishing
9434 Fast Finishing
4478 Fast Finishing (Carpenter)
4503 Fast Finishing (Diston)
2579 Faultless "A" Babbitt Metal
7979 FC Spezial
9437 F.C.C. Nitricastiron
1715 F.C.C. No. 1
7248 F.C.C. No. 2
1716 F.C.C. No. 3½
7249 F.C.C. No. 4
7250 F.C.C. No. 5
9435 F.C.C. 5X1
7251 F.C.C. No. 6
7252 F.C.C. No. 7
7253 F.C.C. No. 10
7254 F.C.C. No. 11
1717 F.C.C. No. 14
7255 F.C.C. No. 17 Cast-to-Shape
7256 F.C.C. No. 18
1718 F.C.C. No. 19
7257 F.C.C. No. 20
7258 F.C.C. No. 21
1719 F.C.C. No. 22
7259 F.C.C. No. 23
7260 F.C.C. No. 25
7261 F.C.C. No. 26
7262 F.C.C. No. 27
7263 F.C.C. No. 34M
7264 F.C.C. No. 38M
7265 F.C.C. No. 39
7266 F.C.C. No. 41M
7267 F.C.C. No. 44
7268 F.C.C. No. 46M
7269 F.C.C. No. 47M
7606 F.C.C. No. 48M
7270 F.C.C. No. 49
7271 F.C.C. No. 53
9436 F.C.C. No. 55
7272 F.C.C. No. 66
7273 F.C.C. No. 66 Cast-to-Shape
7274 F.C.C. No. 5XI
4155 "F.C.C." Air Hardening
7606 F.C.C. Air Hardening No. 48M
7275 F.C.C. Air Hardening Cast-to-Shape
7276 F.C.C. Carbon Tool Steel Cast-to-Shape
7277 F.C.C. C.M.S.
7278 F.C.C. PRK-33 Cast-to-Shape
5754 F.C.C. Oil Hardening
7607 F.C.C. Oil Hardening Cast-to-Shape
7279 F.C.C. TMS Cast-to-Shape
7978 FCF Spezial
7977 FCW Spezial
4116 Feather Steel
5946 Fecraloy
4533 Federal High Speed
9438 Federal-Mogul B-100
9439 Federal-Mogul B-101
9440 Federal-Mogul B-103
9441 Federal-Mogul B-104
9442 Federal-Mogul B-109
9443 Federal-Mogul B-10025
9444 Federal-Mogul B-10125
9445 Federal-Mogul B-10325
9446 Federal-Mogul B-10425
9447 Federal-Mogul B-10925
9448 Federal-Mogul B-11125
9449 Federal-Mogul CS50
9450 Federal-Mogul Duro
9451 Federal-Mogul F-1
9452 Federal-Mogul F-2
9453 Federal-Mogul F-3
9454 Federal-Mogul F-5
9455 Federal-Mogul F-6
9456 Federal-Mogul F-8
9457 Federal-Mogul F-11
9458 Federal-Mogul F-13
9459 Federal-Mogul F-15
9460 Federal-Mogul F-16
9461 Federal-Mogul F-18
9462 Federal-Mogul F-19
9463 Federal-Mogul F-20
9464 Federal-Mogul F-22
9465 Federal-Mogul F-23
9466 Federal-Mogul F-26
9467 Federal-Mogul F-27
9468 Federal-Mogul F-28
9469 Federal-Mogul F-32
9470 Federal-Mogul F-33
9471 Federal-Mogul F-34
9472 Federal-Mogul L-10
9473 Federal-Mogul No. 407
9474 Federal-Mogul No. 408
9475 Federal-Mogul Special "B"
3840 Fedol
2598 Fenton's Alloy
4616 Fer
6299 Feralloy
4161 Feralun
11131 Feralsi
467 Feran
9476 Feran
9477 Ferchromit
2597 Fermet
9478 Fermo Special
5947 Fernico
7282 Fernichrome
5150 Fernite No. 1
5151 Fernite No. 2
5152 Fernite No. 3
5153 Fernite No. 4
5154 Fernite No. 5
5155 Fernite No. 6
5156 Fernite No. 7
5157 Fernite No. 8
5158 Fernite No. 9
9479 Ferno
9480 Ferno Extra
7167 Ferro-Boron
2071 Ferro Bronze
3617 Ferrocal
7469 Ferro Carbon Titanium Medium Carbon (TAM)
4310 Ferro-Carbon-Titanium Original
7466 Ferrochrome, Niagara Brand

7169 Ferrochrome, High Carbon
7170 Ferrochrome, High Nitrogen
7168 Ferrochrome, Low Carbon
7789 Ferrochrome, Philo Brand
7171 Ferrochrome, Special Foundry Grade
5017 Ferro-Chromium
9481 Ferrocite
9482 Ferrodur Iron
7172 Ferrocolumbium
7174 Ferromanganese, Low Carbon
7177 Ferromanganese, Low Iron
7176 Ferromanganese, Low Phosphorus
7175 Ferromanganese, Medium Carbon
7790 Ferromanganese, Philo Brand
7173 Ferromanganese, Standard
7178 Ferromanganese-Silicon
7487 Ferromolybdenum, Climax
8111 Ferromolybdenum (Low Carbon)
8110 Ferromolybdenum (Standard)
1510 Ferron
5016 Ferro-Silicon
7179 Ferrosilicon, 15%
7180 Ferrosilicon, 50%
7785 Ferrosilicon, 50%
7181 Ferrosilicon, 75%
7786 Ferrosilicon, 75%
7182 Ferrosilicon, 80-90%
7787 Ferrosilicon, 80-90%
7183 Ferrosilicon, 90-95%
7788 Ferrosilicon, 90-95%
9483 Ferro-Silicon No. 8
7467 Ferrosilicon, Niagara
1522 Ferrotherm F.F. (Krupp)
5707 Ferrotherm FF-6
5708 Ferrotherm FF-18
5709 Ferrotherm FF-30
5710 Ferrotherm FF-112
5711 Ferrotherm FF-118
5712 Ferrotherm FF-128
5713 Ferrotherm FF-228
4907 Ferro-Titanium, Low Carbon 25% Grade
4906 Ferro-Titanium, Foundry Grade
7470 Ferrotitanium, Low Carbon (TAM)
7690 Ferrotitanium, Low Carbon
7689 Ferrotitanium, Regular Grade
9484 Ferrotite
7184 Ferrotungsten
8112 Ferrotungsten (A.S.T.M.)
8114 Ferrotungsten (Low Melting)
8113 Ferrotungsten (Standard)
7185 Ferro-vanadium
5015 Ferro-Vanadium
9485 Ferroweld
2596 Ferrozoid
6314 Ferrul
468 Ferry
6336 Ferry
2595 Festel Metal
1611 Festel Stellite
1522 F.F. (See Ferrotherms)
2577 Fibrite
9486 Fibro
6141 Fi-Carbo
2578 Field
7718 Field Sheets, American
3618 Field, Rolled
2566 Fifteen Per Cent
9487 Fifty-Five
2072 File Metal (File Bronze)
3407 File Metal (Genfer)
3408 File Metal (Vogel)
2760 Filipoff Lead-Calcium
1319 Fine Silver
9488 Filnic F
12038 Filnic H
12039 Filnic I
12040 Filnic J
12041 Filnic K
12043 Filnic M
12042 Filnic T
7377 Fingal
5948 Finis
2808 Finishing
7202 Finishing (Achorn)
9489 Finishing Special
6142 Finkl Grade "F"
9490 Finkl Type R
469 Firearmor "A"
1748 Firearmor "B"
9491 Firedie
470 Firex
9492 Firex-Special
3409 Firinit
3841 First Quality
3410 Firth
5310 Firth 5 C.S.
471 Firth A.H.G. Steel
2574 Firth "A.W."
473 Firth "Best Cast" Steel
9493 Firth Best Tool
5269 Firth Bolt Steel
5315 Firth B.R.B.
474 Firth "Cast" Steel
5313 Firth C.C.W.
5316 Firth C.D.D.
5311 Firth C.Y.W.
475 Firth "Diehard"
476 Firth "Extra Cast"
5312 Firth Extra Hard
5307 Firth Extra Superior
5305 Firth Extra W C.S.
477 Firth F. 65
5290 Firth F.A.S.
478 Firth F.C.N. 3
479 Firth F.C.N. 5
480 Firth F.C.N.C.
5283 Firth F.G. Stainless
5284 Firth F.H. Stainless
5282 Firth F.I. Stainless
481 Firth F.N. 3
5265 Firth F.N. 3.5
5266 Firth F.N. 5
482 Firth F.N.C.
483 Firth F.T. 30
484 Firth F.T. 40
5262 Firth F.T. 50
5306 Firth Hacksaw Steel
5308 Firth M.C.T.
5318 Firth N.M.C.

486 Firth "Nonvar" Cast Steel
487 Firth "Pnusnap"
488 Firth "RBD"
5257 Firth Roll Steel
2575 Firth "R.T."
5259 Firth S.H.B.
5258 Firth Shoe Die
4379 Firth Sixleda
5291 Firth SLV
5296 Firth "T" Brand
5305 Firth T.D.C..
5298 Firth Textile Spindle
5299 Firth T.M.S.
5297 Firth "U" Brand
5304 Firth W C.S.
5242 Firth-Brown A-1
5243 Firth-Brown A-2
5244 Firth-Brown A-3
5245 Firth-Brown A-4
5246 Firth-Brown A-5
5247 Firth-Brown A-6
5248 Firth-Brown A-7
5249 Firth-Brown B-20
5250 Firth-Brown B-21
5251 Firth-Brown B-22
5252 Firth-Brown B-23
5253 Firth-Brown B-24
5254 Firth-Brown B-25
5255 Firth-Brown B-26
5256 Firth-Brown B-27
5257 Firth-Brown B-28
5258 Firth-Brown B-29
5259 Firth-Brown B-30
5260 Firth-Brown C-40
483 Firth-Brown C-41
5261 Firth-Brown C-42
484 Firth-Brown C-43
5262 Firth-Brown C-44
5263 Firth-Brown C-45
5264 Firth-Brown D-60
481 Firth-Brown D-61
5265 Firth-Brown D-62
5266 Firth-Brown D-63
482 Firth-Brown D-64
5267 Firth-Brown D-65
5268 Firth-Brown E-80
477 Firth-Brown E-81
5269 Firth-Brown E-82
5270 Firth-Brown E-83
471 Firth-Brown E-84
733 Firth-Brown F-100
478 Firth-Brown F-101
479 Firth-Brown F-102
5271 Firth-Brown F-103
480 Firth-Brown F-104
5272 Firth-Brown G-120
5273 Firth-Brown G-121
5274 Firth-Brown G-122
5275 Firth-Brown G-123
5276 Firth-Brown H-140
5277 Firth-Brown H-141
5278 Firth-Brown H-142
5279 Firth-Brown H-143
5280 Firth-Brown H-144
5281 Firth-Brown H-145
5282 Firth-Brown I-160
5283 Firth-Brown I-161
5284 Firth-Brown I-162
5285 Firth-Brown I-163
5286 Firth-Brown I-164
5287 Firth-Brown I-165
5288 Firth-Brown I-166
5289 Firth-Brown I-167
5290 Firth-Brown J-180
5291 Firth-Brown J-181
5292 Firth-Brown J-182
5293 Firth-Brown J-183
5294 Firth-Brown J-184
5295 Firth-Brown J-185
1635 Firth-Brown K-200
1634 Firth-Brown K-201
1035 Firth-Brown K-202
1034 Firth-Brown K-203
4379 Firth-Brown K-204
476 Firth-Brown L-220
473 Firth-Brown L-221
474 Firth-Brown L-222
5296 Firth-Brown L-223
5297 Firth-Brown L-224
5298 Firth-Brown L-225
486 Firth-Brown M-240
5299 Firth-Brown M-241
5300 Firth-Brown M-242
5301 Firth-Brown M-243
5302 Firth-Brown M-244
5303 Firth-Brown M-245
5304 Firth-Brown M-246
5305 Firth-Brown M-247
5306 Firth-Brown M-248
5307 Firth-Brown M-249
5308 Firth-Brown M-250
5309 Firth-Brown M-251
5310 Firth-Brown M-252
5311 Firth-Brown M-253
475 Firth-Brown M-254
5312 Firth-Brown M-255
5313 Firth-Brown M-256
487 Firth-Brown M-257
5314 Firth-Brown M-258
5315 Firth-Brown M-259
5316 Firth-Brown M-260
488 Firth-Brown M-261
5317 Firth-Brown M-262
894 Firth-Brown N-270
5318 Firth-Brown O-275
5319 Firth-Brown P-280
5320 Firth-Brown P-281
5321 Firth-Brown P-282
5322 Firth-Brown P-283
5323 Firth-Brown Q-300
5324 Firth-Brown Q-301
5325 Firth-Brown Q-302
5326 Firth-Brown Q-303
5327 Firth-Brown Q-304
5328 Firth-Brown Q-305
5329 Firth-Brown Q-306
5330 Firth-Brown Q-307
5331 Firth-Brown Q-308
5332 Firth-Brown R-320
5333 Firth-Brown R-321
5334 Firth-Brown R-322
5335 Firth-Brown R-323
5336 Firth-Brown S-340
5337 Firth-Brown S-341
5338 Firth-Brown S-342
5339 Firth-Brown S-343
5340 Firth-Brown S-344
5341 Firth-Brown S-345
5342 Firth-Brown T-360
5343 Firth-Brown T-361
5344 Firth-Brown T-362
5345 Firth-Brown T-363
5346 Firth-Brown T-364
5347 Firth-Brown T-365
5348 Firth-Brown T-366
5349 Firth-Brown T-367
5350 Firth-Brown T-368
5351 Firth-Brown T-369
5352 Firth-Brown T-370
5353 Firth-Brown T-371
5354 Firth-Brown T-372
5355 Firth-Brown T-373
5356 Firth-Brown T-374
489 Firth-Sterling "J-S" Steel
6343 Firth-Sterling Meteor
6353 Firth-Sterling Nirosta 19-9

6365 Firth-Sterling Nirosta F.C.
490 Firth-Sterling Nirosta K-2 A
2202 Firth-Sterling Nirosta KA-2
6352 Firth-Sterling Nirosta KA-2 S
3720 Firth-Sterling Stainless "A"
3721 Firth-Sterling Stainless "B"
3724 Firth-Sterling Stainless "BH"
5148 Firth-Sterling Stainless "BHH"
4394 Firth-Sterling Stainless "F.C."
3725 Firth-Sterling Stainless "H"
5149 Firth-Sterling Stainless "M"
3727 Firth-Sterling Stainless "MG"
3723 Firth-Sterling Stainless "SB"
3722 Firth-Sterling Stainless "T"
6354 Firth-Sterling Stainless "TX"
5290 Firth-Vickers FAS
5294 Firth-Vickers HR Crown Max.
6287 Firth-Vickers HR-2610
6288 Firth-Vickers Immaculate No. 4W
2428 Firth-Vickers Immaculate No. 5
2429 Firth-Vickers Immaculate No. 6
2431 Firth-Vickers Immaculate No. 9
1699 Firth-Vickers Pyrista
5285 Firth-Vickers S.80
6284 Firth-Vickers S.80
5291 Firth-Vickers SLV
5282 Firth-Vickers Stainless Iron
5283 Firth-Vickers Stainless Steel Type FG
5284 Firth-Vickers Stainless Steel Type FH
5286 Firth-Vickers Staybrite FST
5287 Firth-Vickers Staybrite DDQ
5288 Firth-Vickers Staybrite FMB
5289 Firth-Vickers Staybrite FDP
5292 Firth-Vickers Vesuvius
1159 Firth-Vickers Vikro
472 Firthaloy
485 Firthite
6350 Firthite, Grade AAV
6344 Firthite, Grade H
6346 Firthite, Grade H-13
6349 Firthite, Grade ND
6347 Firthite, Grade T-41
6348 Firthite, Grade XDL
6345 Firthite, Grade XS
9494 Firthite HA
9495 Firthite HB
9496 Firthite HC
9497 Firthite HD
9498 Firthite HD3
9499 Firthite HF
9671 Firthite ND20
9672 Firthite TA
9673 Firthite T-04
9674 Firthite T89
9675 Firthite T89M
9676 Firthite T90
9677 Fisco Airdie
9678 Fisco Airquench
9679 Fisco Carbon
9681 Fisco Chromdie
9680 Fisco Cobalt
9682 Fisco Duplex
9683 Fisco Excell
9684 Fisco High Speed
9685 Fisco Hot Work
9686 Fisco Moly
9693 Fisco No. 1
7480 Fisco No. 2
9694 Fisco No. 3
7592 Fisco No. 4 Pre-heat-treated
9695 Fisco Oildie
9687 Fisco Oilhard
9688 Fisco Pneumatic
9689 Fisco Precision
9696 Fisco Seven
9690 Fisco Special
9691 Fisco Star Tung
9699 Fisco Superior
9697 Fisco Tiger
9692 Fisco Vanadium
9698 Fisco 66
7481 Fisco-Mo No. 1
7482 Fisco-Mo No. 3
3516 Five Ply Steel
9700 Five Point Deep Hard
9701 Five Star
1442 Fixinvar
3842 F.J.A.B. Extra
3843 F.J.A.B. Hollow Drill
3844 F.J.A.B. Regular
3845 F.J.A.B. Rolled Auger
3846 F.J.A.B. Solid Drill
3847 F.J.A.B. Special
9702 Flamaloy
2594 Flame Resisting Alloy
2593 Flange Metal (French)
2592 Flange Metal (German)
494 Flecto Iron
6619 Fleetweld
9710 Fleetweld Grade 18
9703 Fleetweld No. 5
9704 Fleetweld No. 7
9705 Fleetweld No. 8
9706 Fleetweld No. 9
9707 Fleetweld No. 9HT
9708 Fleetweld No. 10
9709 Fleetweld No. 11
2590 Fletcher's Alloy
6654 Fletcher Bearing Metal
2591 Fletcher & Emperor Bearing
12383 Flexible Hack Saw
250 Flexo, Carpenter
495 Flexo Steel
9711 Flinso
2589 Flint Alloy
496 Flintcast
9712 Flintuff
2564 Flush Plate
12001 Fluxrite
5288 F.M.B.
481 F.N. 3
482 F.N.C.
7290 F-Nickel
7088 F NS

2563 Fob Metal
2588 Folder Die Steel
9713 Follansbee Armature Electric No. 1
9714 Follansbee Extra Special Power Transformer No. 7
9715 Follansbee Improved Electric No. 2
9716 Follansbee Radio A-1 No. 13
9717 Follansbee Radio A-2 No. 12
9718 Follansbee Radio A-3 No. 11
9719 Follansbee Radio B No. 10
9720 Follansbee Radio C No. 9
9721 Follansbee Radio D No. 8
9722 Follansbee Regular Power Transformer No. 5
9723 Follansbee Special Dynamo No. 4
9724 Follansbee Special Motor No. 3
9725 Follansbee Special Power Transformer No. 6
2073 Fontainmoreau's Bronze
9726 Fonte R.A.
3848 Fool-Proof
2587 Forbes Metal
12517 Forging Brass—250
1988 Forging Brass
12308 Forging Brass (Scovill)
5441 Forging Brass (Chase)
2568 Forgings
2567 Forgings, Russian
413 Formite
9727 Fortal
7408 Fortissimus
1165 Fort Pitt
9728 Fort Pitt Vanadium
5336 Foundry A
5319 Foundry Aa
5342 Foundry A.Mn
5349 Foundry A.Mn. Mo
5347 Foundry A. Mo
5338 Foundry B
5337 Foundry B, Mild
5348 Foundry B, Mo
5339 Foundry C
5346 Foundry C, Cr
5343 Foundry C, Mn
5340 Foundry D
5341 Foundry E
5356 Foundry Mn-12
5349 Foundry N.C.
5345 Foundry N.C.Mo
2586 Foundry Pig Iron
5355 Foundry Pilger Roll
2585 Fourdrinier Wire
9729 Four Star
2571 Fourteen Per Cent
4984 Fox No. 001 Casehardening Steel
4985 Fox No. 002 Mancase Casehardening
4986 Fox No. 012 Nickel Casehardening
4987 Fox No. 013 Nickel Casehardening
4988 Fox No. 015 Nickel Casehardening
4973 Fox No. 030 Casehardening Steel
4989 Fox No. 031 Hicore "75" Gear Steel
4990 Fox No. 040 Hicore "90" Gear Steel
4991 Fox No. 120 Tormanc Steel
4992 Fox No. 130 Tormanc Major Steel
4993 Fox No. 140 Oil Hardening Steel
5004 Fox No. 143 (Du Nic Staybolt Steel)
4994 Fox No. 144 Oil Hardening
4995 Fox No. 145 Oil Hardening
4996 Fox No. 160 Oil Hardening
4997 Fox No. 171 Oil Hardening
4998 Fox No. 172 Oil Hardening
4999 Fox No. 174 Air Hardening
5000 Fox No. 190 Oil Hardening
5001 Fox No. 200 Oil Hardening
5002 Fox No. 211 Oil Hardening
5003 Fox No. 213 Air Hardening
4969 Fox No. 221 Nitralloy
4970 Fox No. 223 Nitralloy
4971 Fox No. 225 Nitralloy
4972 Fox No. 227 Nitralloy
4974 Fox No. 501
9730 FPC Non-Tempering Chisel
5949 Franco
9731 Frankite E-212
6709 Frankite E-450
9732 Frankite E-604
6710 Frankite E-821
6711 Frankite E-822
9733 Frankite E-830 N
6712 Frankite E-831
6713 Frankite E-832
497 Frary Metal
4543 Frasse 4 Best
9734 Frasse Grade A
9735 Frasse Grade B
9736 Frasse Grade C
9737 Frasse Grade H
3850 Frasse Temper "A"
3851 Frasse Temper "B"
3852 Frasse Temper "C"
6078 Free-Cut Bessemer
12309 Free-cutting Brass
2074 Free-cutting Bronze
5105 Free Machining 18-8
5930 Free Machining Durogloss
5164 Free Machining FM-2
9738 Freemachineweld
5438 Free Turning Brass
1989 Free Turning Rod Brass
3411 French
2075 French Aluminum Bronze (See Brolunick)
2584 French Alloy
2573 French Auto
2890 French Gold Oreide
1358 French Navy Antifriction Metal

4282 French Railroad Bronze
4283 French Railroad Bronze
2583 French Type Metal "A"
4131 French Type Metal "B"
2582 Freund Steel
2581 Frick's Alloys
3619 Frick's Alloys
3620 Frick's Bluish Yellow, Hard
3621 Frick's Pale Yellow, Ductile
3622 Fricke's Harder
3623 Fricke's Silvery
2580 Friction Alloy (Standard)
3412 Frigidal
2572 Frismuth Aluminum Solders
4241 Frismuth Aluminum Solder
4242 Frismuth Aluminum Solder
4243 Frismuth Aluminum Solder
3413 Frontier Alloy No. 1
3414 Frontier Alloy No. 3
498 Frontier Alloy No. 5
3415 Frontier Alloy No. 6
3416 Frontier Alloy No. 7
3417 Frontier Alloy No. 8
3418 Frontier Alloy No. 9
3419 Frontier Alloy No. 10
225 Frontier Alloy No. 11
3420 Frontier Alloy No. 12
3421 Frontier Alloy No. 14
3422 Frontier Alloy No. 15
3423 Frontier Alloy No. 18
3424 Frontier Alloy No. 20
230 Frontier Alloy No. 24
3425 Frontier Alloy No. 28
3426 Frontier Alloy No. 29
3427 Frontier Alloy No. 30
3428 Frontier Alloy No. 32
3429 Frontier Alloy No. 33
3430 Frontier Alloy No. 37
9739 Frontier No. 38
9740 Frontier No. 39
9742 Frontier No. 40
9741 Frontier Aluminum No. 40 E
9743 Frontier No. 88
3988 Frontier (Simonds)
3989 Frontier Special
4633 F.S. Extra Best
5286 F.S.T.
483 F.T. 30
484 F.T. 40
2569 Fuchs Acid Resisting
2570 Fuchs Acid Resisting Gold Alloy
9744 Fuller Alloy
9745 Fultalloy
499 Furbaloi
6109 Furodit No. 8
6110 Furodit S
6111 Furodit SS
6112 Furodit Z
6113 Furodit Z Special
9746 Fuse-Well No. 28
3431 Fusible Alloys
4211 Fusible Alloy
4212 Fusible Alloy
4213 Fusible Alloy
4214 Fusible Alloy
500 Fusible Alloy, Crouse's
501 Fusible Alloy, Dalton's
502 Fusible Alloy, Darcet's
503 Fusible Alloy, Fusible Metal
504 Fusible Alloy, Lichtenberg's
505 Fusible Alloys, Lipowitz
506 Fusible Alloy, Melotte's
507 Fusible Alloy, Molyneaux
508 Fusible Alloy, Newton's
509 Fusible Alloy, Onion's
510 Fusible Alloy, Rose's
511 Fusible Alloy, Wood's
503 Fusible Metal
512 Fusible Tea Spoons
4259 Fyfe Paktong

G

1315 G-60, LaBour
9765 G-97
5950 Galahad Brand
4776 Galicar
4783 Gallimore Metal
98 Gallium
513 G-Alloy
9764 G-Alloy
11512 Galvacote
9766 Galvalloy
9767 Galvanatt
12124 Galvanized Paint grip Armco
7396 Galvannealed (Youngstown)
2613 Gas Engine Babbitt Metal
5951 Gasid No. 12
5952 Gasid No. 15
9768 G Babbitt
9769 GBZ 10 Bronze
9770 GBZ 14 Bronze
9771 GBZ 20
12119 G.D.H. No. 33
12117 G.D.H. No. 212
12118 G.D.H. No. 280
12116 G.D.H. No. 350
9772 G.D.H. Blue Label
9773 G.D.H. Bronze Label
9774 G.D.H. Red Label
9775 G.D.H. Silver Label
9776 G.E. 33
4817 G-Bronze
514 Gear Bronze
1816 Gear Bronze (Ajax)
4426 Gear Bronze (Stone)
2615 Gears (Bronze)
2614 Gearing Bronze
3785 Gear Phosphor Bronze
2639 Gear Steel
2638 Gear Steel (High Duty)
11624 G.E.C. Heavy Alloy
515 Gedges Metal
4201 G.E. Electrode Type W-85
1023 G.E. No. 1 Solder
1024 G.E. No. 2 Solder
1025 G.E. No. 3 Solder
1377 Genalloy A
6854 Genalloy B

516 Genelite
11796 Genelite
6056 Genesee KA-2
6057 Genesee Ni-Hard
6058 Genesee Ni-Resist
11855 Genesee Nickel Ni-Resist
11919 Genessee 110
11920 Genessee 130
11917 Genessee 190
11918 Genessee 191
6059 Genesee 212
6060 Genesee 255
6061 Genesee 280
6062 Genesee 303
9777 Genesee 304
9778 Genesee 305
6063 Genesee 315
6064 Genesee 405
6065 Genesee 412
6066 Genesee 460
11856 Genesee 500
3407 Genfer File Metal
2612 Genuine "A" Babbitt Metal
439 Genuine (Emetco No. 4)
7342 Genuine Babbitt (More-Jones)
3518 Genuine Double Shear
7343 Genuine Original Babbitt
9779 Genuine Silverine
7682 Genuine Sovereign Babbitt
1188 Genuine Wrought Iron, Byers
1317 Genuine Wrought Iron, Alloyed
1318 Genuine Wrought Iron, Reading
2610 German Aluminum Alloy
2485 German Duralumin (Group K)
2486 German Duralumin (Group 681)
1359 German Navy Anti-friction Metal
4290 German Railroad Bronze
517 German Silver
518 German Silver, *Arguzoid*
4758 German Silver, Austrian
519 German Silver, Best
3770 German Silver, Best "A-1" (First)
3772 German Silver, Thirds
3774 German Silver, Thirds (Special)
3775 German Silver, Fourths
3776 German Silver, Fifths
4761 German Silver, Berlin
4759 German Silver, Birmingham
3777 German Silver, Bureau of Standards
2332 German Silver, Chinese
4760 German Silver, Common Formula
2359 German Silver, Dienettes
2551 German Silver, Elner's
2548 German Silver, English
3778 German Silver, Foundry Alloy
4762 German Silver, French (Arcat)
4763 German Silver, French (Chaval)
2911 German Silver, Pirsch's
4764 German Silver, Russian
4765 German Silver, Sheffield
3771 German Silver, Special "A" (First)
3774 German Silver, Special Thirds
3779 German Silver, White
3780 German Silver, Extra White
2609 German Silver Solder
4134 German Type Metal (A)
4135 German Type Metal (B)
4136 German Type Metal (C)
4137 German Type Metal (D)
3379 Gersdorf Austrian
1023–1025 G.E. Silver Solders
3853 Gibraltar
9780 Gibsiloy
9781 Gibsaloy Grade A
9782 Gibsaloy Grade C
9784 Gibsaloy Grade M
9785 Gibsaloy Grade NC
9786 Gibsaloy Grade ND
9787 Gibsaloy Grade NM
9788 Gibsaloy Grade NW
9789 Gibsaloy Grade NW-54
9790 Gibsaloy Grade NW-55
9791 Gibsaloy Grade W
11625 Giesche Z13
11626 Giesche Z14
9792 Giesche ZL2
9793 Giesche ZL3
11627 Giesche ZL7
11628 Giesche Z04
7412 Gigant
4309 Gilby Ballast Wire
2637 Gilding
2348 Gilding, Cap
2343 Gilding, Cartridge
3432 Gilding Foil
2636 Gilding Metal
12307 Gilding Metal
9794 Gilmore Nickel Alloy
9795 Glacier Precision Finished Lead Bronze
2635 Glass Mold Alloy
11629 Glass Sealing "42"
2634 Glievor Bearing
9796 Glixey No. 1
9797 Glixey No. 2
9798 Glixey No. 2A
9799 Glixey No. 3
7236 Globe Drill Steel
520 Glowray
2633 Glyco
2632 Glyco Metal
2631 Glyco Turbo
4817 G-Metal
9806 GMS 58
9807 GMS 63
9808 GMS 67
521 Gohi Iron
2630 Gold
3624 *Gold, Eight Carat*

3625 Gold, Ten Carat
4347 Gold, Fourteen Carat
3626 Gold, Fourteen Carat (Dental)
3627 Gold, Fifteen Carat
3628 Gold, Sixteen Carat
3629 Gold, Eighteen Carat
3630 Gold, Twenty Carat
3631 Gold, Twenty-Two Carat
3632 Gold, Twenty-Two Carat (Dental)
1931 Gold, Belais White
1955 Gold, Blatt
2267 Gold, Carter, White
2308 Gold, Cooper's
2302 Gold, Craig
2389 Gold, Dufour White
2623 Gold, Gray
2624 Gold, Green
2616 Gold, Guinea
2685 Gold, Imita
2701 Gold, Koch White
2757 Gold, Liebknecht White
716 Gold, Mannheim
2818 Gold, Mock
2826 Gold, Mosaic
2827 Gold, Mourey White
837 Gold, Nuremberg
2883 *Gold, Nurenberger*
2899 Gold, Pale Yellow
2902 Gold, Pechko White
2982 Gold, Purple (Roberts-Austen)
2961 Gold, Red
2981 Gold, Rich Low
3296 Gold, White
4349-4352 Gold, White
1192 Gold, Yellow
2629 Goldal
3854 Gold Anchor
3855 Gold Anchor Drill Rod
2076 Gold Bronze
2156 Gold Buttons
4694 Gold Chisel
2628 Gold Imitation
2269 Gold Label Peerless Special
4559 Gold Label (Houghton & Richards)
4707 Gold Label (Ward's)
2602 Gold Leaf
2604 Gold Leaf, Aix
2603 Gold Leaf, Jemmapes
2601 Gold Leaf Metal
2627 Gold Metal Leaf
2626 Gold Solder
3633 Gold Solder, Eight Carat
3634 Gold Solder, Ten Carat
4348 Gold Solder, Twelve Carat
3635 Gold Solder, Fourteen Carat
3636 Gold Solder, Sixteen Carat
3637 Gold Solder, Eighteen Carat
3638 Gold Solder, Best
3639 Gold Solder, Easy Melt
3640 Gold Solder, Very Easy Melt
3856 Gold Star
9809 Gold Tip
1817 Golden Glow Brass
3809 Golden Tombac
7874 Goliath
7873 Goliath Spezial
7905 *Goliath Spezial M*
2605 Gong Metal
9810 Gordon
9811 Gordon Die Steel
9812 Gorham Imperial
9813 Gorham Imperial 9
9814 Gorham Molybdenum
9815 Gormet
522 Government Bronze
5744 Government Bronze, Scovill's
3642 Government Bronze Substitute
3641 Government Bronze, U.S.A. Spec. "H"
7386 Government Genuine Babbitt (Syracuse)
9816 Grac
9817 Grade A
9818 Grade "A" Phosphor Bronze 51 Alloy
3858 Grade "H"
9819 Grade S
12360 Grainal No. 1
12361 Grainal No. 6
12362 Grainal No. 79
3857 Gralur
523 Gramix
9820 Granada Tool Steel
9823 Granalec
9821 Granator
9822 Granature
2078 Graney (Gurney's Bronze)
2625 Granfin Cast Iron
9824 Granformer
9825 Granimo
4114 Granite Chisel Steel
7491 Granite City Hi-Yield No. 1
7492 Granite City Hi-Yield No. 2
9826 Gransisil
9827 Graph-Al
524a Graphalloy Babbitt
524d Graphalloy Cadmium
524b Graphalloy Copper
9828 Graphalloy Grade A
9829 Graphalloy Grade N
9830 Graphalloy Grade O
9831 Graphalloy Grade S
524c Graphalloy Silver
9832 Graphex
12363 *Graphidox No. 4*
525 Graphite Metal
9833 Graph M.N.S.
9834 Graph-Mo
3643 Grapho Babbitt Metal No. 1
4428 Grapho Babbitt Metal No. 2
4429 Grapho Babbitt Metal No. 3
4430 Grapho Babbitt Metal No. 4
9835 Graph-Sil
9836 Graph-Tung
526 Gray Cast Iron
3859 Gray Cut Cobalt
9837 Gray Devil
8855 Gray Devil No. 2
2623 Gray Gold
3860 Gray Label
9838 Gray Label Stayput
2611 Gray Label Styrian
2624 *Green Gold*

11562 Green Label
11563 Green Label
11564 Green Label
2246 Green Label (Crasco)
5055 Green Label (Heller's)
4702 Green Label (Ward's)
3861 Green Label Cast (Special)
9839 Green Label Drill Rod
4896 Green Label Extra
10742 Green Streak
9840 Gridnic A
9841 Gridnic B
9842 Gridnic C
9843 Gridnic D
9844 Gridnic E
9845 Gridnic F
12044 Gridnic T
3434 Griesheim "Rauchlos"
3435 Griesheim "Sini"
3862 Griffin
3863 Grilmore
11630 Grillo 2105
11631 Grillo 31010
2608 Grimm's Aluminum Solder
4244 Grimm's Aluminum Solder
4245 Grimm's Aluminum Solder
9846 Gripmore Tool
4480 Gripper
1990 Grommet Brass
6758 Grossman
7949 GS
7948 GSC
7947 GSE
3864 "G.S.N."
3865 "G.S.N." Special
3866 "G.S.N." Tool Steel
9847 GT 2A Metal
9848 GT 4A Metal
2606 Guettiers Button
2622 Guillaume's Metal
2616 Guinea Gold
2621 Guishibuichi (See Shibuichi)
527 Gunite
528 Gun Metal
7 Gun Metal, Admiralty
4751 Gun Metal, Chinese
4750 Gun Metal, Cochin China
4756 Gun Metal, English
4753 Gun Metal, French
2748 Gun Metal, Leaded
3032 Gun Metal, Leaded (SAE)
529 Gun Metal, Modified
4817 Gun Metal, Navy
4754 Gun Metal, Prussian
4757 Gun Metal, Russian
2617 Gun Metal, Sheet
2620 Gun Metal, Soft
4755 Gun Metal, Swiss
4752 Gun Metal, Turkish
2077 Gun Mount Bronze
2619 Gurley's Metal
2078 Gurney's Bronze
6253 Guronite
6671 Guss Pantal
2618 Guthrie's Alloy
9849 G.W. 32
4473 Gyro

H

3867 "H"
10027 H-9 Extra
7320 HA
9850 Hackett K—Copper
1338 Hacksaw
4446 Hacksaw, Reg. C. (Adams & Osgood)
4448 Hacksaw (Adams & Osgood)
4495 Hacksaw (Crucible)
3606 Hacksaw (Fagersta)
3869 Hacksaw "A" (Jessop)
3868 Hacksaw "B" (Jessop)
4661 Hacksaw (Simonds)
530 Hadfield
11820 Hadfield Cr-Mn Steel
531 Hadfield Manganese Steel
11819 Hadfield Manganese Steel
8100 Hadfield Manganese Steel
532 Hadfields Era C.R.
533 Hadfields Era H.R.
534 Hadfield Silicon Steel
2668 Hairsprings
3786 Hairspring Phosphor Bronze
2661 Halberland Alloy
3870 Halco
9851 Halcomb
5054 Halcomb 999
4547 Halcomb C.C.S.
9852 Halcomb Cold Hubbing Steel
9853 Halcomb CSM No. 2
2673 Halcomb Double Special
2382 Halcomb Dreadnought
9854 Halcomb First Quality
5164 Halcomb FM-2 Free-Machining Stainless
3871 Halcomb Halcut
2672 Halcomb High Speed
7652 Halcomb Hot Works
3915 Halcomb L.C.T.
7653 Halcomb L.C.T. No. 2
3917 Halcomb L.L.C.T.
5168 Halcomb Lo-Chro W Stud
7654 Halcomb Mix 218
9855 Halcomb Nu-Die
3975 Halcomb Pyro
2671 Halcomb Special
2670 Halcomb "S.R.B."
5160 Halcomb Stainless, Grade A
5161 Halcomb Stainless, Grade B
5162 Halcomb Stainless, Grade B, High Carbon
5163 Halcomb Stainless, Iron No. 12
5165 Halcomb Stainless No. 16
5166 Halcomb Stainless No. 18
5167 Halcomb Stainless No. 24
4029 Halcomb Super Dreadnought
7655 Halcomb Super Van Dreadnought
4045 Halcomb Thermo Die

3871 Halcut
3872 Haldi
7656 Haldi No. 2
3180 Half & Half Solder
2660 "H.A.L.H." Steel
9856 Hallside
7320 HA Metal
2659 Hamilton Metal
11951 Hammond Alloy 1
11959 Hammond Alloy 2
11952 Hammond Alloy 3
11953 Hammond Alloy 4
11954 Hammond Alloy 5
11955 Hammond Alloy 6
11956 Hammond Alloy 7
11964 Hammond Alloy 8
11960 Hammond Alloy 9
11965 Hammond Alloy 10
11957 Hammond Alloy 11
11966 Hammond Alloy 12
11958 Hammond Alloy 13
11967 Hammond Alloy 14
11968 Hammond Alloy 15
11969 Hammond Alloy M-16
11970 Hammond Alloy M-17
11971 Hammond Alloy M-18
11972 Hammond Alloy M-19
11973 Hammond Alloy M-20
11974 Hammond Alloy A-21
11975 Hammond Alloy A-22
11976 Hammond Alloy A-23
11977 Hammond Alloy A-24
11978 Hammond Alloy A-25
11979 Hammond Alloy A-26
11980 Hammond Alloy A-27
2658 Hammonia Metal
535 Hampden
9857 Hancodur
5745 Handy & Harman Coin Silver
4199 Handy Silver Solder "ATT"
4190 Handy Silver Solder "BT"
4194 Handy Silver Solder "DE"
4195 Handy Silver Solder "DT"
9859 Handy Silver Solder Easy
4193 Handy Silver Solder "ET"
5746 Handy Silver Solder "ETC"
4192 Handy Silver Solder "ETX"
9860 Handy Silver Solder Hard
9861 Handy Silver Solder Hard No. 1
4189 Handy Silver Solder "IT"
9862 Handy Silver Solder Medium
4198 Handy Silver Solder "NE"
4197 Handy Silver Solder "NT"
4191 Handy Silver Solder "RT"
4196 Handy Silver Solder "SS"
4200 Handy Silver Solder "TL"
2666 Hanover White Metal
4364 Hanover White Metal
10768 Harcast
9863 Harchrome
10769 Harcote
4513 Hard (Electro Steel Co.)
2657 Hard Aluminum
2656 Hard Babbitt
1341 Hard Babbitt, Tin Base
2655 Hard Bearing
232 Hard Bronze
5648 Hard Core
9864 Hard Devil
1991 Hard Drawing Brass
9865 Hardentough No. 1
9866 Hardentough No. 2
9867 Hardentough No. 4
9868 Hardentough No. 5
9869 Hardentongh No. 6
9870 Hard Facing Rod No. 217
9871 Hard Facing Welding Rod 459
440 Hard Genuine (Emetco No. 5)
2654 Hard Head
5796 Hard Lead Alloy
624 Hard Lead No. 1
625 Hard Lead No. 2
2079 Hard Phosphor Bronze
9873 Hardrock 33
2653 Hard Sheet Aluminum
2652 Hard Silver Solder
2651 Hard Solder
7769 Hard Surface Welding 6120
7769 Hard Surface Welding A-6120
9874 Hardwell 50
9875 Hardwell 100
2650 Hard Yellow Solder
2649 Hard Zinc (Hartzink)
6609 Hardening No. 1
6610 Hardening No. 2
5954 Hardenite
536 Hardite "A"
537 Hardite "B"
8234 Harcote, P & H
541 Harcus
1370 Hardite "C"
538 Hardite "S"
1420 Hardite "X"
1436 Hardite "Z"
6689 Hard-Kote H
6690 Hard-Kote T
9872 Hardnair
2428 Hardot
3269 Hardrite
11677 Hardsteel No. 2
539 Hardtem
540 Hardware Bronze
6804 Hardweld
9858 Hardy Nickel Iron
10485 Hargus
2648 Harlington (Harrington?) Bronze
10770 Harmang
9876 Harmomang A
9877 Harmomang B
2080 Harmonia Bronze
10771 Harni
9878 Harnimoly
9879 Harstain
6759 Hartalumin
10772 Har-Ten
6594 Hartmetalle
2649 Hartzink
9880 Harvill No. 1
9881 Harvill No. 2
9882 Harvill No. 3
9883 Harvill No. 4

2005 Harz Oker Brass
3436 Harz Refined Lead
5955 Has-All
542 Hascrome
2678 Hass
543 Hastelloy "A"
9884 Hastelloy "B"
545 Hastelloy "C"
544 Hastelloy "D"
9885 Hathol A
9886 Hathol B
3874 Hawk Brand
2665 Hawk Brand White Metal
9887 Hawk Cold Header Die
3875 Hawk "H"
9888 Hawk Impacto
9889 Hawk 777
9890 Hawk 977
9891 Hawk Prefak
3876 Hawk Special
3877 Hawk Vanadium
2647 Hayles Metal
2646 Haynes Metal
3644 Haynes Metal, Hard
3645 Haynes Metal, Soft
2677 Haynes Patent
1612 Haynes Stellite No. 1
1616 Haynes Stellite No. 6
1618 Haynes Stellite No. 12
9892 Haynes Stellite 93
10867 Haynes Stellite 98M2
10490 Haynes Stellite No. 2400
1611–1619 Haynes-Stellite Alloys
10862 Haynes Stellite Star J-Metal
546 Haystellite
4784 Haywoods High Tensile Bronze No. 8
7497 Hazel Bronze
9893 HB5
5294 H.B. Crown, Maximum
7321 H.B. Metal
1337 HC Steel
4968 "H-C"
9894 H.C.C. Die
9895 H.C. Fire Refined Copper
5040 HC-HC
7463 HC-HC
9896 H.C. Pick Steel
9897 H.C. Poker Steel
3878 Headmore
3437 Heat Resisting Acid Metal
1251 Heat Resisting Steel (Jessop)
5361 Heat Resisting No. 5
2645 Heat-Resistant Steel U.S. Patent No. 1,357,549
9898 Heavy Alloy
2644 Heavy Axle Bearing
2643 Heavy Bearing
9898 Heavy Metal
4247 Heavy Pressure (National Lead)
9804 Heavy Pressure Mill Glyco
5747 Hebonite
548 Hecla A.T.V.
9899 Hecla Bronze
547 Hecla Free Cut Bronze
9900 Hecla Special
3270 Hecla Steel (Vulcan)
9901 Heddal
9902 Heddronal 3.5
9903 Heddronal 5
9904 Heddronal 7
6666 Heddur
2019 Hegermuhl Sheet Brass
3756 Heinies Biddery
1438 Helbimphy
1437 Helbimphy Special
9905 Helco H-40
9907 Helco HD-50
9908 Helco HD-60
9906 Helco N-140
9909 Helios D
9910 Helios G
9911 Helios H
9912 Helios K
7256 Heller's 70-20M
7393 Heller's 70-20V
4551 Heller's Alloy Die
4552 Heller's Chrome Die
4165 Heller's Electric Tool
2269 Heller's Extra Tool
4553 Heller's Hollow Drill
2269 Heller's Peerless Gold Label
4328 Heller's Peerless Red Label
2210 Heller's Tool Steel, Blue Label
2081 Helmet Bronze
2662 Helmet Bronze
2662 Helmet Metal
6760 Helumin
942 Helve
9914 Hennequin Metal
549 Heppenstall E.I.S.-45
3879 Heppenstall E.I.S.-51
3646 Heppenstall Grade "C"
492 Heppenstall Hotkut (E.I.S.-31)
493 Heppenstall Kleenkut (E.I.S.-42)
9920 Heppenstall C45
9921 Heppenstall C55
550 Heppenstall X-60
740 Heppenstall 2-C-30
9915 Heppenstall 2V90
9916 Heppenstall 3N24
9917 Heppenstall 3N25
9918 Heppenstall 3R40
9919 Heppenstall 5H50
1934 Herbohn Bell Metal
9922 Hercalloy
9923 Hercules
2082 Hercules Bronze
9924 Herculite
551 Herculoy
9925 Herculoy 418
9926 Herculoy 419
9927 Herculoy 420
9928 Herculoy 421
552 Heusler Alloys
11682 Hewitt Copper Hard
11683 Hewitt Genuine
9558 Hewitt Mill
9584 Hewmet
9929 HIA
553 Hibbo No. 100
554 Hibbo No. 125
555 Hibbo No. 150
556 Hibbo No. 175
557 Hibbo No. 225
12277 Hi Carbon
4170 Hi-Carbon Nitralloy
4989 Hicore "75"
4990 Hicore "90"
3880 Hidalgo
7407 Hidalgo
9930 Hidalgo No. 48 Alloy

9931 Hidalgo RL
7285 Hiduminium DuBrand
7284 Hiduminium 72
559 Hiduminium "R.R. 50"
1749 Hiduminium "R.R. 53"
9932 Hiduminium R.R. 53B
9933 Hiduminium R.R. 53C
1750 Hiduminium "R.R. 56"
1751 Hiduminium "R.R. 59"
7415 Hiduminium "R.R. 60"
6608 Hiduminium "R.R. 66"
9934 Hiduminium RR 75
9935 Hiduminium RR 77
9936 Hiduminium RR 82
9937 Hiduminium S 12
7416 Hiduminium S.R.
7417 Hiduminium "Y"-Alloy
207 High Brass
210 High Brass
9938 High Carbon Alloy
5162 High Carbon Stainless "B"
1017 High Chrome Nickel
4452 High Chromium Cast Iron
4613 High Double Extra
9939 High Dynamic
7525 Highflex
7526 Highflex 45
163 High Grade Bearings
253 High Grade Bearings
9940 High Graphite Iron
7527 Highheat
7528 Highheat 47
233 High Lead Bronze
12054 High Leaded Brass
12051 High Leaded Tube Brass
1992 High Manganese Brass
2642 High Manganese Nickel
7170 High Nitrogen Ferrochrome
11632 High Permeability "49"
9942 High Production
7203 High Production (Achorn)
607 High Production (Fagersta)
3135 High Silicon
4631 High Speed
2672 High Speed (Halcomb)
4662 High Speed (Simonds)
4053 High Speed (Toledo)
9945 High Speed Babbitt
560 High Speed Brass
4611 High Speed Extra Drill (Midvale)
4612 High Speed Mo. Extra (Midvale)
4455 High Speed No. 2 (Edgar Allen)
2457 High Speed Rita
561 High Speed Steel
320 High Speed Steel (Colonial)
2788 High Speed Steel (McInnes Standard)
2676 High Speed Tool
2675 High Speed Wissler
3438 High Strength
1863 High Strength Aluminum Solder
12125 High Strength (55Y) Armco
2083 High Temperature Bronze
5768 High Tensile
8539 High Tensile
9946 High Tensile Alloy
2667 High Tensile Bronze
4784 High Tensile Bronze
9947 High Tensile Bronze No. 1
9948 High Tensile Bronze No. 2
9949 High Tensile Bronze No. 3
6303 High Tensile Kuplus
7491 High Tensile No. 1
7492 High Tensile No. 2
9950 High Test
7691 Highway Metal
562 Hi-Gloss "C"
1752 Hi-Gloss "D.D."
5956 Hi-Gloss Free Machining
4816 Hills-McCanna No. 1
4817 Hills-McCanna No. 2
4818 Hills-McCanna No. 10
4819 Hills-McCanna No. 11
4820 Hills-McCanna No. 20
10009 Hills-McCanna No. 20P
4821 Hills-McCanna No. 21
10010 Hills-McCanna No. 22
4822 Hills-McCanna No. 25
4823 Hills-McCanna No. 30
10011 Hills-McCanna No. 30A
10012 Hills-McCanna No. 30B
10013 Hills-McCanna No. 30C
4824 Hills-McCanna No. 35
10014 Hills-McCanna No. 39
4825 Hills-McCanna No. 40
4826 Hills-McCanna No. 41
4827 Hills-McCanna No. 42
10015 Hills-McCanna No. 43
4828 Hills-McCanna No. 45
4829 Hills-McCanna No. 46
4830 Hills-McCanna No. 47
10016 Hills-McCanna No. 48
10017 Hills-McCanna No. 49
4831 Hills-McCanna No. 50
4832 Hills-McCanna No. 50-A
4833 Hills-McCanna No. 52
4834 Hills-McCanna No. 53
4835 Hills-McCanna No. 54
4836 Hills-McCanna No. 55
10018 Hills-McCanna No. 102
10019 Hills-McCanna No. 102P
10020 Hills-McCanna No. 105
10021 Hills-McCanna No. 110
10022 Hills-McCanna No. 111
7000 Hilo, Modified
12450 Hinge
10023 Hi-Nickel Alloy
564 Hioloy Cu
3322 Hioloy 0-2
6081 Hioloy 0-3 (S.W.)
3323 Hioloy 0-4
3647 Hioloy 0-6 (W)
3324 Hioloy 0-7
6081 Hioloy S W
3647 Hioloy W
1351 Hipernick
565 Hipernik
10024 Hipersil

3271 Hi-Pro
12200 Hi-Run
7420 Hi-Steel
2477 Hi-Tem Iron No. 5
11801 Hi-Tem Iron No. 7
10535 Hi-Tensile C
10536 Hi-Tensile F
566 Hitensiloy Bronze
567 Hi-Tenso "BB"—961
12502 Hitenso C—965
4112 Hi-Van No. 28
7491 Hi-Yield No. 1
7492 Hi-Yield No. 2
7982 HM
10025 HM-Blue Chip
10026 H-Monel
8042 HMS Steels
10028 Hob-A-Die
7155 Hobalite
10029 Hobalite
10030 Hobalite
7657 Hoballoy
7483 Hobb Die Steel
7232 Hobbing Die, Rema
2669 Hobson's Choice
4556 Hobson's Choice Drill Rods
4330 Hobson's Choice XX
4558 Hobson's Fast Finishing
3882 Hobson's Non Shrink
4557 Hobson's Oil Hardening
4555 Hobson's Special Tap Rods
3883 Hobson's Warranted Best
10031 Hockleisteungstahl
10032 Hofors—1
10033 Hofors—3
10034 Hofors—7
10035 Hofors—9
10036 Hofors—13
10037 Hofors—22
10038 Hofors—46
10039 Hofors—100
10040 Hofors—711
1295 Hofors RT-1733
1993 Hohenzollern Brass
568 Holfos Bronze
5397 Holfos Bronze, Chill Bar Grade
7501 Holfos Spuncast Bronze
3884 Hollo
4623 Hollobar
3885 Hollow Bar
10042 Hollow Blue Brand
6501 Hollow Drill, Atlas
3608 Hollow Drill
3843 Hollow Drill
3899 Hollow Drill
4553 Hollow Drill
4593 Hollow Drill
10041 Hollow Drill
4643 Hollow Drill (Pott's)
4712 Hollow Drill (Ziv)
10043 Hollup Grade CI-3
10044 Hollup Grade CI-8
10045 Hollup Grade CI-9
10046 Hollup Grade CI-10
10047 Hollup Grade 1
10048 Hollup Grade 3
10049 Hollup Grade 3R
10050 Hollup Grade 5
10052 Hollup Grade 6
10053 Hollup Grade 7
10054 Hollup Grade 9
10055 Hollup Grade 10
10056 Hollup Grade 10X
10057 Hollup Grade 11
10058 Hollup Grade 15
10059 Hollup Grade 20
10060 Hollup Grade 20B
10061 Hollup Grade 22
10062 Hollup Grade 30
10063 Hollup Grade 30A
8319 Hollup Grade 30S
81 Hollup Grade 30X
10736 Hollup Grade 70
9952 Hollup Grade 55
11011 Hollup Grade 90
10064 Hollup Grade 170E
10065 Hollup Grade 250
10066 Hollup Grade 1217
10067 Hollup Grade 2320
10068 Hollup Grade 2512
10069 Hollup Grade 6723
10070 Hollup HSV
10071 Hollup I.H.S.
10072 Hollup MCM
10073 Hollup N.C.
10074 Hollup Phosphor Copper
10075 Hollup R.D.S.
10076 Hollup Red Band
10077 Hollup Yellow Band
569 Hombergs Alloy
11633 Honda New
22 Honest Solder
7344 Hoo-Hoo Babbitt
1994 Hooker Brass
570 Hopkinson's Alloy
11993 Hoskins 10
1840 Hoskins No. 471
1841 Hoskins No. 484
1842 Hoskins No. 502
6233 Hoskin's No. 651
4928 Hoskins No. 667
5882 Hoskins No. 670
3527 Hot Die No. 4
3528 Hot Die No. 5
3609 Hot Die
4088 Hot Die
4664 Hot Die
7089 Hot Die
7204 Hot Die (Achorn)
4451 Hot Die (Adams & Osgood)
146 Hot Die, Atlas
2215 Hot Die, Brown Label
5039 Hot Die "C4"
571 Hot Die, Chrome (Latrobe)
7793 Hot Die, Tropic
572 Hot Die, Tungsten (Latrobe)
2455 Hot Forging Die No. 1
2456 Hot Forging Die No. 2
4078 Hotform No. 1
12091 Hotform No. 2
12092 Hotform No. 3
4494 Hot Header
3887 Hot Header No. 3
492 Hotkut (E.I.S.-42)
6100 Hot Spur
4576 Hot Stamping Alloy Die
10643 Hot Stamping Alloy Die
11634 Hot Work No. 8
5989 Hot Work No. 22
6958 Hot Work No. 23
7652 Hot Work (Halcomb)
7508 Hot Work (Kloster)
8963 Hot Work No. 1
5749 Houghtons Shaving Packing

10078 Howe Brown Extra
10079 Howe Brown Special
2664 Hoyles Metal
10080 Hoyt
573 Hoyt Metal
3648 Hoyt Metal
6650 Hoyt No. 1
6772 Hoyt No. 1 Phos. Bronze
6652 Hoyt No. 3M
6653 Hoyt No. 4A
4785 Hoyt No. 11
12004 Hoyt 11
6773 Hoyt No. 175
6649 Hoyt Arrow
6648 Hoyt I.C.E.
6646 Hoyt Marine A
6647 Hoyt Marine B
6651 Hoyt Star Brand
10081 H.P.S.
—— HR (See Standard HR)
10082 H & R No. 1
10083 H & R No. 2
12345 H & R No. 7
12165 H & R No. 15
12179 H & R No. 19
12171 H & R No. 60
12175 H & R Carbon
10084 H & R Cobalt High Speed Steel
4559 H & R Gold Label
10085 H & R Gray Label
12174 H & R Heading Die Steel
10086 H & R Hot Work
12166 H & R Hot Work No. 2
12167 H & R Hot Work No. 4
12176 H & R Hot Work No. 5
12177 H & R Hot Work No. 6
12164 H & R No. 57
10090 H & R No. 80
12170 H & R No. 225
10087 H & R—K
10088 H & R K2 High Carbon High Chrome
10089 H & R—MY-A
10091 H & R Oil Hardening
12178 H & R Special Carbon
12350 H & R Super Cobalt
12172 H & R Tungsten Oil Hardening
10092 H & R Vanadium
1250 HR-5 M
6287 HR-2610
5294 H.R. Crown Max.
10093 H.R.S.
4505 H R W (Die Steel)
7869 H.S. Prima
12237 HSC No. 33
12234 HSC No. 265 Hi Carbon Hi Chrome
12238 HSC No. 280
12235 HSC No. 422
12231 HSC-SS
7814 H.T.-50
7529 H.T. Constant
7530 H.T. Special
10094 H.T.M. Steel
10095 H.T.S.
10096 H.T.S. 33
574 Hubbard Special
575 Hughes Alloy
11676 Hurbenium B
576 Huron
2674 Huron Aluminum Alloy
3649 Huron Aluminum Alloy, Castings "A-5"
3650 Huron Aluminum Alloy, Rolled "A"
3651 Huron Aluminum Alloy, Rolled "B"
3652 Huron Aluminum Alloy, Rolled "D"
3653 Huron Metal, Cast
3654 Huron Metal, Rolled
2641 Husmann Metal
7067 H.V.
10098 H.V. Blue Chip
11848 H.V. 6
7078 H.W.
10099 H.W.D.
5384 Hy (Hydronalium Alloys)
577 Hyb-Lum
10100 Hyb-Lum Grade A
10101 Hyb-Lum Grade B
578 Hybnickel "A"
10102 Hybnickel A-1
579 Hybnickel "B"
580 Hybnickel "C"
7006 Hybnickel "D"
4898 Hybnickel "R"
581 Hybnickel "S"
337 Hy-cast
4142 "H.Y.C.C."
10103 Hyco
10104 Hyco
2084 Hydraulic Bronze
2721 Hydraulic Bronze
5391 Hydraulic Bronze (Ajax)
5892 Hydraulic Metal
8276 Hydraulic Metal, Ajax
5406 Hydril Bearing Metal
10105 Hydronalium D.B.A.
10106 Hydronalium 51
10107 Hydronalium 71
8569 Hydronalium Hy-5
5384a Hydronalium Hy-7
5384b Hydronalium Hy-9
5384c Hydronalium Hy-10
2640 Hydrone
10641 Hydrone
582 Hy-Glo
5787 Hylastic
11985 Hylastic, American
6358 Hylo
7599 Hy-Lo
2663 Hyman
10642 Hyman Alloy
2166 Hymax 3% Cobalt Magnet Steel
2167 Hymax 6% Cobalt Magnet Steel
2168 Hymax 9% Cobalt Magnet Steel
2169 Hymax 15% Cobalt Magnet Steel
2170 Hymax 35% Cobalt Magnet Steel
5788 Hymo 30-40 Carbon
4814 Hymo Steel
10108 Hypar
6600 Hyperm 4
6597 Hyperm 6
6599 Hyperm 36
6598 Hyperm 50 Y
10109 Hypersilid
5957 Hypocrode
3888 Hypro
10952 Hy-pro
10953 Hy-pro Die Steel

3889 Hypro No. 62
10110 HySpeed
583 Hyspeed Nickel Bronze
4925 Hytemco
4786 Hytempite Commercial No. 1
2085 Hytenal Bronze
10111 Hy-Ten Alloy Chisel Steel
1548 Hy-Ten "A" No. 1
7392 Hy-Ten "A" No. 1X
6119 Hy-Ten "A" No. 15
1549 Hy-Ten "B" No. 2
584 Hy-Ten "B" No. 3
1781 Hy-Ten "B" No. 3X
1550 Hy-Ten "B" No. 4
1551 Hy-Ten "B" No. 5
10112 Hy-Ten "B"—43
1552 Hy-Ten "M"
6120 Hy-Ten S.A.E. 2315
6121 Hy-Ten S.A.E. 3140
6122 Hy-Ten S.A.E. 4150
6123 Hy-Ten S.A.E. 4615
6124 Hy-Ten S.A.E. 6145
10640 Hy-Ten-Sl Bronze Gr. 1
7117 Hy-Ten-Sl Bronze Gr. 2
8232 Hy-Ten-Sl Bronze Gr. 3
8430 Hy-Ten-Sl Bronze Gr. 4
585 Hy-Ten-Sl Gr. 1A
10113 Hytensil Aluminum No. 375
10114 Hytensilite
8284 Hy-Ten-Sl No. 2
8646 Hy-Ten-Sl No. 3

I

2684 Ia-Ia
6648 I.C.E. (Hoyt)
6622 Ideal
3655 Ideal
2683 Ideal (Elalco)
9501 Idealoy
586 Ideor
9502 Idiart
9503 Idronal
9504 Idronal
6667 Igedur
2682 Ignition Pin Alloy
9505 IK
6496 Illinois Cr-Ni-Mo
3302 Illinois Nickel Steel Plate
587 Illium "G"
9506 Illium R
—— Immaculate Alloys — See E.S.C. Immaculate Alloys
588 Immadium—I
589 Immadium—II
5426 Immadium—III
7844 Immadium—IV
590 Immadium—V
2086 Immadium—VI
5427 Immadium BB
2685 Imita Gold
9507 Impacto
2681 Imperial
12213 Imperial
1536 Imperial (Emetco No. 6)
2179 Imperial Air Hardening
9508 Imperial All-Metal Solder
3519 Imperial C.S.
2177 Imperial Extra Special
2176 Imperial Major
9509 Imperial Major
3890 Imperial Major
2175 Imperial Malleable Stainless Steel
1506 Imperial Manganese Steel
2171 Imperial Permanent Magnet Steel
2174 Imperial Stainless Iron
2173 Imperial Stainless Steel
4342 Imperial Steel
4329 Imperial Tool
9510 Imperium
1514 Imphram
6803 Imphy 1640
6799 Imphy 1691
1458 Imphy A.F.T.
116 Imphy A.M.F.
6783 Imphy ARC 1047
6782 Imphy ARC 2266
6779 Imphy ARC 2702 A
6780 Imphy ARC 2702 B
6781 Imphy ARC 2702 S
1459 Imphy A.T.E.
1455 Imphy A.T.G.
1453 Imphy A.T.V.
1460 Imphy B.T.E.
1452 Imphy B.Y.-1
6778 Imphy BY-2
1461 Imphy C.T.E.
1487 Imphy "D"
1488 Imphy "DD"
1489 Imphy "DDD"
1485 Imphy "DT"
6797 Imphy ERA HR-1
6798 Imphy ERA HR-2
1490 Imphy "FF"
6790 Imphy MCT-1
6791 Imphy MCT-2
6792 Imphy MCT-3
1486 Imphy "MD"
1484 Imphy "MT"
6800 Imphy MWS
1448 Imphy N.A.
1450 Imphy NC-3 H
1462 Imphy NC-4
1444 Imphy N.C.M.
6786 Imphy N5-CM
1446 Imphy N-7-C-M
6787 Imphy NB
6789 Imphy NC-3H2
1449 Imphy N.D.
1445 Imphy N.F.
1447 Imphy N.F.C.
3656 Imphy NFC-2
3657 Imphy NFC-3
6788 Imphy NY
6801 Imphy RES
6802 Imphy RWS
1481 Imphy "T"
1482 Imphy "TT"
1483 Imphy "TTT"
1513 Imphychrome
1516 Imphycorroye
1518 Imphynaturel
1515 Imphynusable
1519 Imphyrapide
1517 Imphyrapide Ultra
1440 Imphysta
1520 Imphytungstene
6357 Impress
7600 Impress
7345 Improved Babbitt
11925 Improved Electric

5750 Improvite
7455 Inalium
9511 Inco "B" Monel
2488 Inco Chrome Nickel
9512 Inco MM
2861 Inco Nickel, Malleable
2488 Inconel
8055 Inconel-Clad Steel
9513 Induco
9521 Indefatigable
4647 Indura Drawing Die
5959 Indus
9514 Indus N.C.C.H. No. 1
9515 Indus N.C.H. No. 2
9516 Indus N.C.H. No. 3
9517 Indus N.C.H. No. 4
9518 Indus N.C.C.H. No. 5
9519 Indus Nickel Molybdenum
9520 Indus "ONC"
5177 Industrial Cro-tung
5170 Industrial No. 12
6844 Industrial No. 18
5174 Industrial No. 35
5175 Industrial No. 65
5176 Industrial No. 100
5172 Industrial No. 188
6088 Industrial No. 188 M
5173 Industrial No. 188-U
5171 Industrial No. 512 Free Machining
6988 Industrial No. 530
2688 Ing-A-Clad Stainless Steel
9522 Ingaclad Type 304
9523 Ingaclad Type 309
9524 Ingaclad Type 316
9525 Ingaclad Type 317
9526 Ingaclad Type 347
9527 Ingersall
9528 Ingersoll
9529 Ingersolls DBL
591 Ingot Iron
7726 Ingot Iron, Copper
2087 Injector Bronze
1212 Inland Copper Alloy Steel
9530 Inland Ledloy
7286 Inland Zinc Alloy Steel
—— I.N.O. Steels—See Bedel I.N.O.
9531 Innosein
9532 Inoxalium
5715 Inoxyda Bronze
2088 Instrument Bronze
592 Insuluminum
7731 Intermediate Manganese Abrasive Steel
7729 Intermediate Manganese Medium Carbon Steel
7730 Intermediate Manganese Rail Steel
3891 Intra
9533 Inuso
593 Invar
8773 Invar 36
5649 Invar Steel (Böhler)
2687 Invariant
4541 Invaro
3439 Invarstahl
6101 Inventor
3892 Invincible Drill Rod
1240 Iralite
2686 Iridium
7404 Iridium Extra Special
2680 Iridosmine (See Osmiridium)
9534 I. R. Metal
2089 Iron Bronze
1231 Iron, Chromium
594 Ironac
3520 Iron-Fibered Steel
2090 Ironier's Bronze
595 Ironite
9535 Iron-Oilite
9536 Iroquois Special
9537 Ironweld
9538 Isabellin
2679 Iserlohn
3440 Iserlohn, Cast
2020 Iserlohn, Sheet Brass
3728 Iso-Elastic
9539 Isorod
5782 Isteg Steel
9540 Italsie
7153 I.W.I.
596 Izett Steel No. 1
597 Izett Steel No. 2
598 Izett Steel No. 3
599 Izett Steel No. 4

J

1775 "J-551"
12454 J-5K
2691 Jacana
2690 Jacoby Metal
5960 Jackmanized Steel
5961 Jacksberg
2167 Jackson's Alloy Buttons
600 Jalcase Steel No. 1
601 Jalcase Steel No. 2
602 Jalcase Steel No. 3
603 Jalcase Steel No. 4
604 Jalcase Steel No. 5
9541 Jalcold
8059 Jal-Ten
9542 Jalweld
2021 Jamappes Sheet Brass
9543 Janney Alloy No. 20
9544 Jano
4912 Janus
2022 Japan Sheet Brass
6628 Jar Steel
2260 Jason Steel No. 12-324
9546 JBR Alloy
3893 "J.C./C."
9547 J.C.D. Dairy Metal
9548 Jefaloy A
11992 Jefaloy 55M
9549 Jelenko No. 7
6560 Jelliff Alloy 45
6561 Jelliff Alloy 70
6557 Jelliff Alloy A
6558 Jelliff Alloy C
6559 Jelliff Alloy D
2603 Jemmapes Gold Leaf
1395 Jessco
9550 Jessco A
9551 Jessco B
5962 Jessop Alloy 104
1404 Jessop Armat
1405 Jessop Chrome Magnet
1403 Jessop Coal and Mine Bit Steel
1407 Jessop Cobalt Magnet
5178 Jessop Corrosion Resistant "R-1"
5179 Jessop Corrosion Resistant "R-2"
4180 Jessop Corrosion Resistant "R-3"
5181 Jessop Corrosion Resistant "R-4"

9098 Jessop Dica—B
1402 Jessop Dril-It Drill Steel
9553 Jessop E-25 CV
9554 Jessop E-83
1251 Jessop Heat-resisting Steel No. 4
5361 Jessop Heat-resisting Steel No. 5
1398 Jessop "JJ" Hot Work Steel
1400 Jessop "MD" Drill Steel
9556 Jessop Non-Magnetic Steel
1397 Jessop No. 2 B Hot Die Steel
1396 Jessop No. 3 C Die Steel
5357 Jessop No. 27 V
5358 Jessop No. 29 V
5359 Jessop No. 96 KC
5962 Jessop No. 104
5360 Jessop No. 139B
1399 Jessop No. 157 Die Steel
5362 Jessop No. 181 Nickel Steel
9555 Jessop No. 773
1401 Jessop Oil Bit Drill Steel
9557 Jessop RT
2696 Jessop Sheet Spring
2472 Jessop SM-30
2473 Jessop SM-40
2474 Jessop SM-50
2475 Jessop SM-60
2476 Jessop SM-80
2471 Jessop Steel "A 2"
2472 Jessop Steel "A 4"
2473 Jessop Steel "A 5"
2474 Jessop Steel "B"
5360 Jessop No. 139 B
2475 Jessop Steel "C-1"
2476 Jessop Steel "C-2"
2470 Jessop Steel "E"
2469 Jessop Steel "E-1"
2468 Jessop Steel "F"
2467 Jessop Steel "G"
2466 Jessop Steel "G-1"
2464 Jessop Steel "H-2"
2465 Jessop Steel "H-3"
1391 Jessop Steel "H-4"
1392 Jessop Steel "H-9"
1393 Jessop Steel "K-2"
1394 Jessop Steel "K-6"
5359 Jessop Steel KC-96
605 Jessop Steel No. 5
1382 Jessop Steel No. 5
1383 Jessop Steel No. 7
1384 Jessop Steel No. 8
1385 Jessop Steel No. 9
1386 Jessop Steel No. 10
1387 Jessop Steel No. 11
1388 Jessop Steel No. 12
1389 Jessop Steel No. 14
1390 Jessop Steel No. 18
5962 Jessop Steel No. 104
3476 Jessop Superior Oil Hardening
2695 Jessop Tool
1406 Jessop Tungsten Magnet
2693 Jessops "J-4" Steel
2694 Jessops Superior Oil Hardening
4415 Jewel Cast Iron
2689 Jeweler's Metal
606 Jewell Alloy
7457 Jewell Alloy 42
7458 Jewell Alloy S
7459 Jewell Alloy V
11935 Jewell Steel
11934 Jewell Super Strength Malleable
9559 J. Hot Working Die
8046 J.J. Steel
7447 J.L.
9545 J&L Correct Balance
1408 "J" Metal
3441 Johnson
607 Johnson Bronze
7460 Johnson Bronze Babbitt No. 10
7461 Johnson Bronze Babbitt No. 11
7462 Johnson Bronze Babbitt No. 97
7292 Johnson Bronze Graphited Bearings
9561 Johnson Bronze No. 12
6541 Johnson Bronze No. 19
6542 Johnson Bronze No. 25
6543 Johnson Bronze No. 27
6544 Johnson Bronze No. 29
6545 Johnson Bronze No. 51
6546 Johnson Bronze No. 53
6547 Johnson Bronze No. 55
6548 Johnson Bronze No. 66
6549 Johnson Bronze No. 71
6550 Johnson Bronze No. 72
9560 Johnson Bronze No. LX
2091 Johnson Locomotive Bronze
7293 Johnson No. 9, Babbitt
6543 Johnson Universal Bronze
2692 Jones & Colver
9563 J. P. S. Steel
9562 J. S. B.
489 J-S Steel
2258 J.Y. Steel No. 656

K

3894 "K"
6951 "K-4"
6952 "K-5 Tungsten"
4437 "K-6" Metal
9587 K-9 Special Oil Hardening
3521 K. 9 Steel (Edgar Allen)
9564 K-42-B
—— KA-2 See Nos. 443, 490, 739, 955, 1221, 1274, 1559, 1569, 1570, 1571, 1576, 1577, 1592, 1593, 1594, 1725, 2202, 3442, 3849, 3881, 3927, 3952, 5111, 5121, 5138, 5142, 5145, 5206, 5929, 6056, 6567, 6869, 6930, 6931, 7134
6930 KA-2 19-9
6931 KA-2 20-10
6845 KA-2B

3873 KA2-EZ
—— KA2-H See Nos. 1593, 5112, 5208, 5211, 6870
3881 KA2-M
1594 KA2-M
—— KA2-Mo See Nos. 1274, 1571, 4735, 5123, 5143, 5146, 5202, 5209, 6871
7011 KA-2 Mo T
—— KA-2S See Nos. 1252, 1570, 1577, 1592, 3927, 5110, 5122, 5209, 6352, 6568, 6872
—— KA-2S-Mo See Nos. 4736, 5210, 5364, 5929, 6934
7012 KA-2S Mo T
—— KA-2ST See Nos. 4740, 5138, 6935, 7013
6932 KA-2S 19-9
6933 KA-2S 20-10
—— KA-2T See Nos. 3952, 4741, 7014
—— KA-4 See Nos. 818, 1624, 5108, 5109, 5130, 6873
7294 KaHoLoy
2705 "K" Alloy
2727 Kalchoids
608 Kalif
6102 Kalloy
9565 Kaloy
2726 Kamarach Bearing Alloys
609 Kanthal "A"
1754 Kanthal "A-1"
1755 Kanthal "D"
5458 Kant Skore Piston Alloy
12201 Kapo
1935 Karakane Bell Metal
610 Karma (Nichrome IV)
9566 Katadyn Silver
7627 Kathode
6714 Kay-Brunner Ni-Resist
2716 Kaultchoug Aluminum
3895 "K.D. No. 6"
3896 "K.D. No. 10"
9567 K.D. 16
6659 K Duralumin
2725 Keene's Alloy
7090 Keewatin
4261 Keferstein Paktong
2724 Keinmayer's Amalgam
9569 Kelcaloy
2723 Kelmet
2703 Kemler
2722 Kemlet
9570 Kennametal
9571 Kennametal Grade KH
9572 Kennametal Grade K3H
9573 Kennametal Grade K4
9574 Kennametal Grade K4H
9575 Kennametal Grade KM
9576 Kennametal Grade KS
9577 Kennametal Grade KWH
9578 Kentucky
9579 Kerch Steel
6340 K.E. No. 241
6339 K.E. No. 954
3662 K.E. No. 965
2721 Kern's Hydraulic Bronze
9592 Kerrofestal
7441 Kerus
2708 Ketos
9580 Ketos
6341 K.E. No. 2258
2720 Key Alloy
2719 Key Stock
9581 Keystone
9582 Keystone Alloy Chisel
3898 Keystone "B"
7704 Keystone Copper Steel
2699 Kick Plate Brass
2698 Kinghorn Metal
611 Kinite
6518 Kinnaloy
7297 Kinnite
9583 Kirksite A
612 Kiski
11821 Kissock Steel
2702 Kiu-Shibu-ichi
9568 KK
9585 KL
4582 K.L. Die Steel
493 Kleenkut
7215 Kloster Brilliant AX
2216 Kloster Brilliant WKE
8319 Kloster CNM
3899 Kloster Hollow Drill
7508 Kloster Hot Work
7217 Kloster Prior Extra
7218 Kloster Rema
7519 Kloster Solid Drill
4580 K-L-S 19 (Hot Work)
9586 K.M
444 KM-1
4591 K.M. Die Steel
6468 K-Monel
—— KNC-3 See Nos. 1222, 1557, 1578, 5124, 5131, 5147, 5212, 6874
2718 Kneiss Metal
2697 Knife Bolsters
7911 Kobalt Spezial
7912 Kobalt I
7913 Kobalt II
7914 Kobalt III
7959 Kobalt 125
7960 Kobalt 160
7961 Kobalt 200
7962 Kobalt 300
9588 Kobitalium
2701 Koch White Gold
2717 Kochlin's Bearing
9589 K.O.H.
9610 Kolbenleg K.S. 1275
1275 Kolbenley
2716 Koltchak (Koultchoog) Aluminum
2704 Koltchougaluminium
9590 Koltschug
9591 Konal
613 Konel
7489 Konik
2707 Konstantan
2715 Kosmos
3658 Kovar
9593 Kovar
2706 K.P. Styrian
3272 "K.R."
3900 "K.R." Alloy
9594 Kraffts Alloy
3500 Kramer Alloy No. 22
3488 Kramer Alloy No. 33

3501 Kramer Alloy No. 44
3502 Kramer Alloy No. 66
3503 Kramer Alloy No. 77
3504 Kramer Alloy No. 88
3496 Kramer Grade "A" Manganese Bronze
9595 Kramer Grade AX Manganese Bronze
3497 Kramer "D" Manganese Bronze
12151 Kramer Grade I
12152 Kramer Grade L
12153 Kramer Grade M
12154 Kramer Grade N
12155 Kramer Grade O
3498 Kramer Grade "X" Manganese Bronze
3499 Kramer Grade "XX" Manganese Bronze
3505 Kramer 12% Nickel Silver
3506 Kramer 20% Nickel Silver
3329 Kreidler's Brass—Ms-58
3330 Kreidler's Brass—Ms-63
9601 K. R. Monel
11636 K. R. Monel
5758 Krokoloy
226 Kromal
9596 Kromal
9597 Kromal No. 2
9598 Kromal No. 3
9599 Kromal No. 4
614 Krom-Aloy
3659 Kromax
681 Kromax, Macco
2714 Kromore
3901 Kronos
7658 Krosil
9602 Krosit Chisel Steel
3902 Krovan
9603 Krovan
1697 Krupp Analysis
2713 Krupp Bearing
5062 Krupp Carbon
2371 Krupp Delta
1522 Krupp Ferrotherm FF Alloys
5064 Krupp High-speed
3442 Krupp KA-2
1996 Krupp Nickel Brass
1521 Krupp Nichrotherm NCT Alloys
—— Krupp Nirosta—(See Nirosta Alloys)
7298 Krupp Nirostaguss 1
7299 Krupp Nirostaguss 2
7300 Krupp Nirostaguss 3
9604 Krupp Nitroplat
5065 Krupp Non-deforming
5063 Krupp Special
1078 Krupp Thermisilid
1524 Krupp Thermisilid Extra
2711 Krupp Type Metal
1656 Krupp VM Steel
1512 Krupp VIM
955 Krupp V-2-A
5714 Krupp V-2-A Extra
4362 Krupp V-2-A Nirosta
7301 Krupp V2A Spezial
2709 Krupp V-2-A Steel
7302 Krupp V2A Supra
4215 Krupp V-3-M Cutlery
9605 Krupp V-3-M Extra
1594 Krupp V-4-A
1657 Krupp V-4-A
7303 Krupp V4A Extra
7304 Krupp V4A Supra
1497 Krupp V-6-A
7305 Krupp V12A Supra
7306 Krupp V13F
7307 Krupp V14A Supra
9606 Krupp V-16 Supra
7308 Krupp V16A Supra
7309 Krupp V17F
2712 Kruppin
9610 KS
7881 KS
9607 KS
2505 K.S. Alusil
2710 K.S. Magnet Steel
2504 K.S. No. 245
2506 K.S. No. 280
9610 K.S. 1275 Kolbenleg
991 K.S. Seewasser
9612 K.S. Seewasser JuB
2508 K.S. Special Piston Alloy
2509 K.S. "Y" Alloy
7890 KSN
2092 Kuhnes Phosphor Bronze
9614 Kulgrid "C"
615 Kunheim Metal
5771 Kunial Alloys
6072 Kunial Brass
6075 Kunial Bronze
6073 Kunial Copper
6074 Kunial Nickel Silver
5433 Kupfer-Silumin
6068 Kuplus
6304 Kuplus Chrome
6303 Kuplus High Tensile
9615 Kuprodur
2700 Kuromi
9616 Kut Kost
9617 Kut Kost Grade V
9618 Kut Kost Grade X
9619 Kut Kost Grade XV
9620 Kut Kost Grade XX
3903 Kutkwik
3904 "K.W."

L

5596 L-IV Original Light Casting Alloy
10486 L5
1379 L-5 Alloy
101 3L-5 Alloy
10487 L8
1380 L-8 Alloy
4158 3L-8 Alloy
2754 L-10 Alloy
10488 L11
2753 L-11 Alloy
2753 4L-11 Alloy
6670 L-15 Alloy
100 L-24 Alloy
9749 L-35
6668 L-189 Bronze
3905 La Belle "C" & H"
7120 La Belle CCV
7121 La Belle Cromonic
7122 La Belle CSD
3906 La Belle Eagle
7123 La Belle Extra 2½
7124 La Belle Extra 3A
7125 La Belle Extra 3½
4494 La Belle Hot Header
3916 La Belle Liberty
3907 La Belle No. 2-70
3908 La Belle No. 24 Die
3909 La Belle No. 89 Die
3938 La Belle No. 183
4153 La Belle No. 211 Die

3910 La Belle Semi-Hot
3911 La Belle Silicon Punch No. 1
3912 La Belle Silicon No. 2
7604 La Belle Type 3
3913 La Belle Special Hot Die
1315 LaBour G-60
1233 LaBour R-50
2755 LaBour R-55
11637 LAC 10
11638 LAC 112
11639 LAC 113A
9275 Lacomo
9622 Lactovac
2752 Laderig's Speculum
2751 Lafond's Axle Bearing
2750 Lafond's Heavy Axle Bearing
2093 Lafond's Malleable Bronze
2094 Lafond's Pump Bronze
4284 Lafond's Railroad Bronze
3291 Lafond's Whistle
621 Laiton (Latten)
5981 Lake's Metal
9623 Lamite Gr. 1
9624 Lamite Gr. 3
9625 Lamite Gr. 6
9626 Lanark
12311 Lancashire Brass
1997 Lancashire Brass
616 Lanz Cast Iron
9627 LaSalle 1020-9
5309 Lascut
—— Latrobe Alloys—See also, Lesco
3914 Latrobe
9628 Latrobe CC
1777 Latrobe "Extra"
11640 Latrobe LPD
617 Latrobe No. 9 T
618 Latrobe No. 10 T
619 Latrobe No. 11 T
620 Latrobe No. 12 T
4590 Latrobe No. 426
9629 Latrobe O.K.V.
12346 Latrobe Red Arrow
1778 Latrobe Special
1779 Latrobe Standard
621 Latten
622 Lautal
3443 Laveyssiere Bronze
9630 Lavin No. 230
9631 Lavin No. 300
9632 Lavin No. 310
9633 Lavin No. 320
9634 Lavin No. 384
9635 Lavin No. 420
9636 Lavin No. 483
9637 Lavin No. 598
9638 Lavin No. 599
9639 Lavin No. 685
2105 Law's Phosphor Bronze
12389 Lawn Mower
11849 L. C.
4578 L.C.H.S. Chisel
9640 LCT
3915 L.C.T. Alloy
7653 L.C.T. No. 2
9641 LCT No. 2
11846 L.C.X.
623 Lead
125 Lead, Antimonial
273 Lead, Chemical
624 Lead, Hard No. 1
625 Lead, Hard No. 2
3436 Lead, Harz Refined
2749 Lead Alloy
1342 Lead Babbitt, Tin Base
7586 Lead-Barium
2761 Lead-Calcium
2760 Lead-Calcium, Filipoff
7587 Lead-Calcium
7588 Lead-Strontium
1998 Leaded Brass
2095 Leaded Bronze
2096 Leaded Chamet Bronze
12049 Leaded Commercial Bronze
6565 Leaded Copper 946
12493 Leaded Copper 946
2748 Leaded Gun Metal
211 Leaded High Brass
1999 Leaded Low Brass
2747 Leaded Monel Metal
12515 Leaded Muntz Metal —274
12055 Leaded Naval Brass
12524 Leaded Naval Brass —612
121 Leaded Phosphor Bronze Gr. B—979
4299 Leaded Phosphor Bronze
2000 Leaded Screen Wire Brass
2746 Lead Foil
3660 Lead Foil (Calin)
2745 Lead Shot
2744 Lead Tape
3162 Leaf Silver
626 Leantin
2743 Lechesne
9642 Leco
9643 Leco Extra
9646 Ledaloyl
2759 Leddel Alloy
2758 Leddel Bearing
2742 Ledebur's Bearing Alloys
9644 Ledloy C-1045
9645 Ledloy C-1120
627 Ledrite Brass
6661 Legal
9647 Lehigh Conqueror
9648 Lehigh Croma
9649 Lehigh Die-L Temper
9650 Lehigh Die S Temper
628 Lehigh Die & Tool Steel
9651 Lehigh H Temper
9652 Lehigh Special No. 3
9653 Lehigh Special No. 5
9654 Lehigh SS
9655 Lehigh XXX High Speed
1468 Leichtmetalle V.L.W.
2741 Lemarquand's Alloy
2740 LeMat's Lucetin
2729 LeMat's Paris Metal
6090 Le Provinox
—— Lesco Alloys-Latrobe Electric Steel Co. Alloys. See, also, Latrobe
629 Lesco C.E.M.
6991 Lesco Crobalt Stainless
630 Lesco E.H.W.
631 Lesco E.S.A.

632 Lesco E.V.S.
633 Lesco Extra
634 Lesco "H"
635 Lesco "H.H."
636 Lesco "L"
637 Lesco "L.M."
638 Lesco "LMS"
639 Lesco "L.S."
640 Lesco "M"
644 Lesco No. "12-1½"
645 Lesco No. "18-8"
6989 Lesco No. "18-8" Mo
1236 Lesco No. "18-8-S"
6990 Lesco No. "18-8" Se
646 Lesco No. "21-12"
5964 Lesco No. "25-12"
647 Lesco No. "25-20"
5963 Lesco Reg. Stainless
641 Lesco Special
642 Lesco Standard
643 Lesco "W.W.S.H."
6255 Lewis Iron
6256 Lewis Special Iron
6715 L.F.M. Co. 4-6 Cr-Mo
3916 Liberty
9656 Liberty
2739 Liberty Pistons
504 Lichtenberg's Metal
9657 Lico
2738 Liddel's Alloy
2757 Liebknecht White Gold
2737 Light Duty Bearings
12052 Light Leaded Brass
5661 Lightning
7628 Lightweld
6676 Lily Phosphor Bronze
2736 Linotype
2529 Linotype, English
1410 Lion
9659 Lion
4787 Lion Brand Antifriction Metal
4788 Lion Brand Plastic White Metal
9660 Lion Extra
505 Lipowitz Alloy
9661 Lisco
10774 Litecote
7313 Lithium-Calcium
7315 Lithium-Copper
7314 Lithium Conductivity Bronze
2097 Litinum Bronze
2735 Little's Speculum
5596 L-IV
3917 "L.L.C.T."
9662 LLCT
4675 "LLL 44"
4676 "LLL 82"
4677 "LLL 83"
4672 "LLL" Extra
4671 "LLL" Standard
7448 L.M.
3444 L.M.-O
2734 L.M. Steel
9666 Loaded Iron
11694 L-Nickel
9663 Lockport Special
3703 Locomotive Bearing Phosphor Bronze
2756 Locomotive Tubes
5135 Lo-Cro No. 46
5137 Lo-Cro No. 46 Mo
5136 Lo-Cro No. 46 W
9664 Lo-Cro Type 501
9665 Lo-Cro Type 502
5168 Lo-Cro W Stud
12112 Loded Centricast
648 Lo-Ex
9667 Lo-Ex Alloy
9668 Logan
649 Logan Forging Brass
6526 Lohete
4926 Lohm
650 Lohmanit
2733 Lo-Luminum
3661 Lominium Steel
3918 Lophs
9669 Lotung
651 Lotus
12046 Low Brass
212 Low Brass
12305 Low Brass
1249 Low Chrome (Warman)
1018 Low Chrome Nickel
5459 Low Expansion
12050 Low Leaded Tube Brass
9670 Lowmoor Iron
2106 Lowroff Phosphor Bronze
6103 Lowscore
9747 L.P.D.
7069 L.P. Iron
7966 L.S.
9748 LSC
6475 L.S.D.
5051 L.T. Steel
652 Lubaloy
12440 Lubaloy X
653 Lubico
654 Lubrico No. 1
3325 Lubrico No. 2
3326 Lubrico No. 3
9750 Lubrik
9751 Lucas Nifal
4775 Lucern
2732 Lucerno
655 Lucero
2740 Lucetin (Le Mat's)
2158 Ludenscheidt Button Metal
3810 Ludenscheidt Tombac
9752 Ludlite
2731 Ludlum
6474 Ludlum 602
6569 Ludlum Commercial Drill Rod
9753 Ludlum DBL
9754 Ludlum LMW
9755 Ludlum ML
9756 Ludlum No. 545
9757 Ludlum S.S.V.
8058 Lukens Carbon-Molybdenum Steel
8053 Lukens Chrome-Nickel Steel
8056 Lukens Cromansil Grade A
8057 Lukens Cromansil Grade B
8055 Lukens Inconel-Clad Steel
8054 Lukens Manganese-Vanadium Steel
9758 Lukens 2% Nickel
1237 Lukens Nickel Clad Steel
8052 Lukens Nickel Steel
674 Lumdie
656 Lumen Alloy OO-A
657 Lumen Alloy No. OO-C
658 Lumen Alloy No. 1
659 Lumen Alloy No. 2
660 Lumen Alloy No. 3
661 Lumen Alloy No. 4

662 Lumen Alloy No. 4A
663 Lumen Alloy No. 5
664 Lumen Alloy No. 6
665 Lumen Alloy No. 7
666 Lumen Alloy No. 9
667 Lumen Alloy No. 11C
668 Lumen Alloy No. 14
669 Lumen Alloy No. 15
4844 Lumen Alloy No. 15A
670 Lumen Alloy No. 20
671 Lumen Alloy No. 27
4845 Lumen Alloy No. 31
4846 Lumen Alloy No. 33
5385 Lumen Alloy No. 42
9760 Lumen Alloy No. 43
672 Lumen Alloy No. 48
673 Lumen Alloy No. 54
9761 Lumen Alloy No. 96
1361 Lumen Bronze
1360 Lumen Metal
9762 Luminarc 2S
6240 Lumite No. 5
6241 Lumite No. 10
6242 Lumite No. 12
9759 Lundie B
2973 Lunge Resistance
11780 Lunorium
6491 Lunz Iron
2730 Lurgimetall
9763 Luster
675 Lusterite
2729 Lutecin
676 LXX
7091 LXX
3433 Lyncast
677 Lynite
4395 Lynite
12473 Lynite
4392 Lynite No. 43
678 Lynite No. 109
4391 Lynite No. 112
679 Lynite No. 122
1373 Lynite No. 145
1374 Lynite No. 146
5769 Lynore, U.S.S.
2098 Lynux Bronze
680 Lyonore
2728 Lyons Gold (See Tombac)

M

7662 M-5
7663 M-6
7645 M-31
6657 M-115
1375 Macadamite
6082 Macalloy
10161 Macalloy No. 1
10115 Macalloy No. 2
4850 Macco Alloy Razor Blade
4851 Macco Belt Knife Steel
4594 Macco Brand Swedish
3919 Macco Certified
4852 Macco Enormous
12089 Macco Fool-Proof
4593 Macco Hollow Drill
681 Macco Kromax
12088 Macco Kromax Special
10116 Maccomax
10117 Macco Radio
682 Macco Royal Crown
12087 Macco Special
12086 Macco Superior High Speed
4595 Macco Superior Swedish
4596 Macco Swedish Chrome Tungsten
4849 Macco Swedish Magnetic Iron
1271a MacHempite Grade A
1271b MacHempite Grade B
1271c MacHempite Grade C
6045 MacHempite, Wear Proof
10118 Machinable Cast Iron
1688 Machine Bronze
683 Machine Bronze
7065 Machine Screw
2066 Machinery Brass
7145 Machinery Steel, Climax
2762 Mach's Alloy
2763 Mach's Speculum
684 Macht's Metal
2764 Macht's Yellow Metal
685 Mackenite Metal
2765 Mackenzie Metal
10119 Magalloy PX-4
10120 Magalloy RX-3
10121 Magalloy RX-9
10122 Magalloy X-5
10123 Magalloy X-6
10124 Magalloy X-7
10125 Magalloy X-8
10126 Magalloy X-10
10127 Magalloy X-11
10128 Magalloy Z-104
10129 Magalloy Z-107
10130 Magalloy Z-110
10131 Magdal
7452 Magaluma
3920 Magic Steel
10132 MagMetal
686 Magnalite
687 Magnalium
5751 Magnalium Alloy No. 1
5752 Magnalium Alloy No. 2
2766 Magna Metal
688 Magnel
689 Magnesium
11332 Magnesium FS
11333 Magnesium M
11334 Magnesium O
7957 Magnet C
1963 Magnet Steel (Böhler)
6477 Magnet Steel (Ludlum)
9783 Magnetoflex
7958 Magnet W
10133 Magneswin
704 Magno
3679 Magno
7593 Magno
706 Magnolia Antifriction Metal
7479 Magnolia Antifriction Metal
705 Magnolia Bearing Bronze
10134 Magnolia Cadmium Nickel
10135 Magnolia Isotropic Bronze
707 Magno-Nickel
10136 Magnuminium 133
7311 Magnuminium 166
6538 Magnuminium 177
7418 Magnuminium 199
7312 Magnuminium 220
7419 Magnuminium 266
10137 Magnuminium 299

2767 Maillechort
3663 Maillechort, German
3664 Maillechort, Paris
3665 Maillechort, Vienna
2768 Major Metal
10138 Malachite
10139 Mal-Arc
10140 Malax
10141 Malax AA
10142 Malax AAA
10143 Malcrome
10144 Malga
10145 Malgaloy
2769 Malleable Casting Pig
708 Malleable Cast Iron, Black Heart
3666 Malleable Cast Iron, European "Reamur"
709 Malleable Cast Iron, White Heart
115 Malleable Iron, Black Heart American
2861 Malleable Nickel
1619 Malleable Stellite
2770 Mallet Alloy
10146 Mallix
10147 Mallory Elkron Bronze
7320 Mallory HA Metal
7321 Mallory HB Metal
6739 Mallory 3
10148 Mallory 22
10149 Mallory 53
10150 Mallory 53B
10151 Mallory 73
10152 Mallory 84
10153 Mallory 100
10154 Mallory 333
10155 Mallory 1000
12014 Mallory D-50
12013 Mallory D-52
12012 Mallory D-53
12011 Mallory D-54
10156 Mallory K-Metal
10157 Mallory MK-Metal
7498 M-Alloy
2771 Malloydium
2772 Maluminium
4985 Mancase
10158 Mandur
10159 Maneler
2773 Mangaloy
6656 Mangal
6083 Manganal
11833 Manganend 2M
10160 Manganend 13
3667 Manganese
7186 Manganese
7721 Manganese Abrasion Steel, Intermediate
7383 Manganese Antifriction
5032 Manganese-Boron
7187 Manganese-Boron
2001 Manganese Brass
—— Manganese Bronze — See also Bronze, Manganese
4321 Manganese Bronze
710 Manganese Bronze—937
23 Manganese Bronze
7054 Manganese Bronze (Apex)
3668 Manganese Bronze, Cast
5439 Manganese Bronze (Chase)
3496–3499 Manganese Bronze (Kramer)
666 Manganese Bronze (Lumen)
5889 Manganese Bronze (Parsons)
3669 Manganese Bronze, Rolled
5012 Manganese Bronze, Welding Rod
10162 Manganese Carbon Alloy
711 Manganese Casting Brass
2774 Manganese-Copper
7188 Manganese-Copper
3670 Manganese-Copper "A"
3671 Manganese-Copper "B"
3672 Manganese-Copper "C"
3673 Manganese-Copper "D"
3674 Manganese-Copper "E"
3675 Manganese-Copper "F"
3676 Manganese-Copper "G"
3677 Manganese-Copper "H"
10163 Manganese Molybdenum Steel
712 Manganese-Nickel
3678 Manganese-Nickel
3679 Manganese-Nickel No. 473 Alloy
3680 Manganese-Nickel No. 484 Alloy
2002 Manganese-Nickel Brass
2775 Manganese-Nickel Silver
10164 Manganese Screw Stock
446 Manganese Steel, Era
531 Manganese Steel (Hadfields)
7676 Manganese Steel, Murex
3681 Manganese Steel, Pearlitic
5487 Manganese Steel (Tisco)
8100 Manganese Steel
5025 Manganese-Vanadium
714 Manganin
12415 Manganin
2776 Mangan-Neusilber
4221 Mangannickel
715 Mangano
3403 Manganoid
10165 Mangano Special
10166 Manganweld A
10167 Manganweld B
713 Mangonic
12416 Mangrid. D
12417 Mangrid E
2777 Manhardt's Alloy
10168 Manmo—6 Temper
10169 Manmo—7 Special
716 Mannheim Gold
10170 Mansfalium
3921 Mansil
5770 Man-Ten
8032 Man-Ten
8130 Man-Ten
8204 Man-Ten
10171 Maple Leaf
6761 Maradamit
3922 Marathon

6646 Marine A (Hoyt)
717 Marine Alloy
6647 Marine B (Hoyt)
2778 Marine Babbitt
718 Marine Bronze
5965 Marine Bronze No. 8
7380 Marine Genuine Babbitt
6509 Marine Nickel
3445 Markana Metal
2003 Market Brass
3446 Markus Alloy
2780 Marlies
4483 Marog
10172 Marsh
2779 Marsh's Patent
3447 Marties Alloy
2780 Marties Non-Oxidizable Alloy
719 Martin
4248 Martin Steel
5662 Martin Steel (Böhler)
720 Martinel
721 Marvel
10173 Marwin
10174 Marwin Supastuff
10175 Massalloy
10176 Massillon
3923 Master
7384 Master Metal
1542 Matchless, Emetco No. 12
5451 Mather and Platt No. 7 Alloy
2781 Mathesius Metal
722 Matrix
3448 Matrix Brass
3522 Maxchip No. 1
3523 Maxchip No. 2
723 Maxel 1
7126 Maxel 1B
11795 Maxel 2
7127 Maxel 2B
11794 Maxel 3
7128 Maxel 3½
11335 Maxel No. 4 Collet
9613 Maxel 7
11336 Maxel Shank Steel
724 Maxhete
3682 Maxhete No. 1A
2172 Maxilvry
6114 Maxilvry A.D.S.
6115 Maxilvry A.M.
6116 Maxilvry A.T.
6117 Maxilvry A.W.
6118 Maxilvry A.W.P.
10177 Maximold
3683 Maximum Steel
4119 Maximum Steel
725 Maxite
3524 Maxnap Steel
3525 Maxtack
10639 Maxtack
726 Maxtensile
4859 Mayari Engine Bolt Steel
727 Mayari Iron
2782 Mayari Pig
10178 Mayari R
6637 Mayari, Silvery
4858 Mayari Staybolt Steel
728 Mayari Steel "A"
729 Mayari Steel "B"
7068 Mayari Superheater Bolt Steel
10179 Mazlo AM260
10180 Mazlo AM263
10181 Mazlo AM-C52S
10182 Mazlo AM-C57S
4772 Mazak
8038 MC 30
8039 MC 40
8040 MC 70
8041 MC 100
4406 McAdamite
2783 McAdams Alloys
3684 McAdams Alloy "A"
3685 McAdams Alloy "B"
3686 McAdams Alloy "C"
3687 McAdams Alloy "D"
3688 McAdams Alloy "E"
—— McCallum-Hatch Alloys (See M-H Alloys)
10183 M-Chrome
2792 McClure Alloy
2784 McFarland & Harder Alloys
3689 McFarland & Harder Alloy "A"
3690 McFarland & Harder Alloy "B"
3691 McFarland & Harder Alloy "C"
3692 McFarland & Harder Alloy "D"
10184 McGill Brass Pressure Casting Alloy
730 McGill Metal
11689 McGill No. 1
9621 McGill No. 2
11690 McGill No. 3
12216 McGill No. 4
7463 McInnes HC-HC
2785 McInnes Record "A"
2786 McInnes Special Chrome Nickel Steel
2787 McInnes Special Tool Steel
2788 McInnes Standard Vanadium High Speed Steel
2789 McInnes "V"
2790 McInnes Vanadium Crucible
10185 McK. No. 15
10186 McK. No. 16
10187 McK. No. 17
10188 McK. No. 18
2099 McKechnie's Bronze
10189 McKenna K4
2791 McKinney Alloys
6077 McQuaid-Ehn, Union
6790 MCT-1
6791 MCT-2
6792 MCT-3
7241 M-Drill Steel
2793 Meco
2794 Medal Bronze
2795 Medal Metal
4514 Medium Hard (Electro)
12053 Medium Leaded Brass
2796 Medium Silver Solder
732 Meehanite
10190 Meehanite A
10191 Meehanite B
10192 Meehanite C
10193 Meehanite CB
10194 Meehanite CB3
10195 Meehanite CC
10196 Meehanite D
10197 Meehanite E
10198 Meehanite GA
10199 Meehanite GAH
10200 Meehanite GB
10201 Meehanite GC
10202 Meehanite GD

10203 Meehanite GE
10204 Meehanite GM
10205 Meehanite HA
10206 Meehanite HB
10207 Meehanite HC
10208 Meehanite HD
10209 Meehanite HE
10210 Meehanite HR
10211 Meehanite KC
10212 Meehanite SC
10213 Meehanite WA
10214 Meehanite WAH
10215 Meehanite WB
10216 Meehanite WBC
6454 Megapyr
2797 Melchoir Wire
3693 Melchoir Wire
6596 Melloid
506 Melotte's Alloy
10217 Meral
4848 Mercoloy
10219 Mercury
10218 Me Ritingots
733 Mesmeric
10220 Mesta Special
2082 Metal File
10644 Metaline
10221 Metaljoiner
2798 Metallic Packing
2799 Metalline
10222 Metamold
10223 Metco Aluminum
10224 Metco Copper
10225 Metco Electrolytic Zinc
10226 Metco Lead A
10227 Metcoloy No. 1
10228 Metcoloy No. 2
10229 Metco Monel Metal
10230 Metco Nickel
6343 Meteor
2800 Meteor Steel
487 Metipsa
734 Metite
3449 Metorite
10231 Mezzo Steel
—— M.G. Alloys, See Bedel M.G. Alloys
1473 M.G.N.
12468 M.G.-5
6053 M.G.-5
4789 M.G. No. 7
11845 M.G.R.
5410 M-H Alloy No. 00-L
5411 M-H Alloy No. 1
529 M-H Alloy No. 2
5412 M-H Alloy No. 4
5413 M-H Alloy No. 5
233 M-H Alloy No. 6
5414 M-H Alloy No. 9
5415 M-H Alloy No. 11
5416 M-H Alloy No. 14
5417 M-H Alloy No. 15
5418 M-H Alloy No. 20
5419 M-H Alloy No. 25B
5420 M-H Alloy No. 48
10232 M-H Composite
10233 M-H Special Alloy Steel
10234 Miarmi Iron
819 Michiana Nirosta 18-8
820 Michiana Nirosta 19-9-4
821 Michiana Nirosta 25-20
1305 Michiana No. 48
5966 Michiana No. 49
2804 Michiana No. 55
2805 Michiana No. 63
1306 Michiana No. 100
6982 Michiana No. 100S
5967 Michiana No. 111
12163 Michiana No. 119
6337 Michiana No. 122
12162 Michiana No. 233
12161 Michiana No. 241
12541 Michigan Apex
12535 Michigan Gr. A
12536 Michigan Gr. AX
12534 Michigan Gr. C
12537 Michigan Gr. X
12538 Michigan Gr. XX
12539 Michigan Gr. XXX
11933 Michigan Metal
12540 Michigan No. 90
12544 Michigan No. 90H
12543 Michigan No. 90M
12542 Michigan No. 90S
12545 Michigan No. 90V
2259 Midas Steel No. 9-961
3327 Midcyl
5666 Middling
10236 Midflex
11476 Midflex 46
763 Midland Pearlitic Manganese Steel
4924 Midohm
6150 Midvale A
1568 Midvale AMF
735 Midvale ATV-1
736 Midvale ATV-3
6151 Midvale B
3591 Midvale Duredge
2607 Midvale Extra Tool
7323 Midvale N.D.
2496 Midvale Regular
4143 Midvale Special
2478 Midvale Stainless Steel No. 7
6150 Midvaloy A
1566 Midvaloy Aero-Valve
6151 Midvaloy B
737 Midvaloy B.T.G.
2806 Midvaloy Extra High Speed
6965 Midvaloy F.C. Stainless
2808 Midvaloy Finishing
1337 Midvaloy HC
10244 Midvaloy HR-1
1565 Midvaloy HY-X
1569 Midvaloy KA2
1571 Midvaloy KA2Mo
1570 Midvaloy KA2S
1567 Midvaloy N-Metal
2807 Midvaloy Nut Piercer
2478 Midvaloy 7
2913 Midvaloy 11
12244 Midvaloy 11 Mo
10239 Midvaloy 13
2914 Midvaloy 26
3924 Midvaloy 77F
6966 Midvaloy 334
5190 Midvaloy 976
10238 Midvaloy 0500
1215 Midvaloy 1225
1214 Midvaloy 1300
7322 Midvaloy 1300A
6967 Midvaloy 1700
6968 Midvaloy 1735
10243 Midvaloy 1808
738 Midvaloy 1808C
10240 Midvaloy 1808M
6969 Midvaloy 1808Se
6970 Midvaloy 2060
6971 Midvaloy 2100

6972 Midvaloy 2100Cu
10241 Midvaloy 2512-7
1216 Midvaloy 2512-10
10242 Midvaloy 2512-16
1564 Midvaloy 2512B
1217 Midvaloy 2520
1218 Midvaloy 2602
743 Midvaloy 2700
10245 Midvaloy 2802
1219 Midvaloy 3030
2809 Midvaloy Special Finishing
6965 Midvaloy Stainless FC
2196 Midvaloy Stainless Iron
1333 Midvaloy Stainless Iron C-1
1334 Midvaloy Stainless Iron C-2
1335 Midvaloy Stainless Iron C-3
1336 Midvaloy Stainless Iron C-4
1331 Midvaloy Stainless Steel "A"
1332 Midvaloy Stainless Steel "B"
2478 Midvaloy Stainless Steel 7
739 Midvaloy V-2-A
4416 Migra Iron (Migraeisen) No. 1
5594 Migraeisen No. 2
5595 Migraeisen No. 3
10237 Milco 9
10246 Millaloy
744 Millard
10247 Mill Brass Mix
2810 Milling
2811 Milling Silver
10248 Millinite
10249 Milne Hollow Die Steel
3925 Milo
10463 Milo No. 38
12002 Milrite
10250 Milvan
5968 Milwaloy 7
5969 Milwaloy 13
5970 Milwaloy 18
5971 Milwaloy 26
5972 Milwaloy 38
5973 Milwaloy 50
12268 Milwaloy CC
12276 Milwaloy Commercial
12269 Milwaloy Cr Ni
12274 Milwaloy Cr Ni Mo
12278 Milwaloy Dynamo
12277 Milwaloy Hi Carbon
12272 Milwaloy KA2SMo
12266 Milwaloy Mn Bo
12267 Milwaloy Mn Mo Bo
12275 Milwaloy Nit
12279 Milwaloy 1¼ Mn
12270 Milwaloy 18-8
12271 Milwaloy 29-9
12273 Milwaloy 35-15
745 Minargent
4110 Miners Drill Rod
10251 Minerva Chisel
3926 Minerva Special
3526 Minerva Steel
10252 Miniwax No. 178
2812 Minofor
746 Min-ox, Grade A
747 Min-ox, Grade D-V
7440 Min-ox, Grade JR-3
748 Min-ox, Grade 51C
749 Miraculoy
4790 Miralite
750 Mira Metal
751 Miramint
8885 Mir-O-Col
5066 Mi Ry Cal Chisel
2813 Misch Metal
10253 Misco Grade A
1267 Misco (Standard)
2814 Misco "A" Tool Steel
4890 Misco "B"
2815 Misco "B" Tool Steel
4891 Misco "B-1"
6366 Misco "C"
4892 Misco "C-1"
2510 Misco "HN"
10254 Misco HN-1
4894 Misco "HN-2"
10255 Misco Metal
4893 Misco "N"
4895 Misco "N-5"
6774 Misco 16
6775 Misco 28
4889 Misco 18-8
10256 Misco 18-8 Mo
5974 Misco 30-30
4885 Miscrome No. 1
4887 Miscrome No. 2
4888 Miscrome No. 3
10257 Miscrome No. 4
4886 Miscrome CR
6992 Miscrome KR
10258 Mishima Steel
7325 Mitchalloy A
7326 Mitchalloy B
7327 Mitchalloy C
6493 Mitchalloy D
2816 Mitifine
2817 Mitis Iron
7654 Mix 218
10260 Mixend
1376 MK-Steel
10261 M-K-9
10262 MK9-AS
6473 ML-Steel
200 MM Steel (Bonney-Floyd)
10263 MM-1
5780 MM-9
753 M.M.M.
2820 M.M.M.
6742 Mobeco
11695 Mocar
10264 Mocasco
10265 Mocasco 30
11839 Mocasco 40
10266 Mocasco 50
10267 Mocasco 60
10268 MoChip
10269 MoChip Superior
2818 Mock Gold
2819 Mock Silver
6143 Mo-Cro-Ni
7071 Mo-Cut
7405 Modern
7080 Modified Hilo
2820 Modified Monel Metal (M.M.M.)
3450 Modified "Ounce" Metal
227 Mogul
11696 Mogul Alloy Babbitt
754 Mohawk Hot Die
10270 Mohican
8659 Mokut
6359 Mol-Die
7601 Moldie
10273 Molel Alloy
5667 Molette
10274 Molite

10275 Moltrop
5404 Molybdenite
755 Molybdenum
10276 Molybdenum Chisel
7687 Molybdenum Metal
1141 Molybdenum Permalloy
12297 Molybdenum Permalloy 2-81
10277 Molybdenum Self Hardening
7566 Molybdenum Silicon
2821 Molybdenum Steel
756 Molybdie
6144 Molybdie Grade FG
6145 Molybdie Grade FM
6146 Molybdie Grade FS
6147 Molybdie Grade FX
6149 Molybdie Grade WG
6148 Molybdie Ni-Mo
10278 Molybdie Type C
10279 Molybdie Type R
10280 Moly Iron
10281 Molyite
5975 Molymet
507 Molyneaux Metal
10282 Moly-Nickel
11173 Moly Telastic
11697 Mo-Mang
6498 Mo-Max
4628 Monaca
10645 Monaca
3929 Monaca Cold Drawn
3928 Monaca Drill Rod
4627 Monaca Special Cold Drawn
1753 Monarch
6625 Monarch
10284 Monarch Metal
7092 Monark
10285 Monark 1
10286 Monark 2
757 Mond Nickel
2822 Mond "70"
758 Monel Metal
7287 Monel Metal, Cast
1971 Monel Metal, 2.5% Silicon
10287 Monel Metal—H
6468 Monel Metal, "K"
2747 Monel Metal, Leaded
2820 Monel Metal, Modified
7834 Monel Metal, Original
1919 Monel Metal "S"
10462 Monel No. 35
2823 Monotype, Standard
7357 Monox
2824 Montainum
2825 Montegal
7499 Moonstone Bronze
11668 Mo-Perminvar
11675 Mo-Permalloy 4-79
10288 Moraine
7330 More-Jones No. 1 Standard Babbitt
7331 More-Jones No. 2 Standard
7332 More-Jones No. 3 Standard
7333 More-Jones No. 4 Standard
7334 More-Jones No. 36 Bronze
7335 More-Jones "A" Grade
6508 More-Jones Alpha Crusher Babbitt
7336 More-Jones Aluminum Babbitt
7337 More-Jones Arctic Bronze
7338 More-Jones Armature Babbitt
1925 More-Jones Bearing
7339 More-Jones Beta Crusher Babbitt
7340 More-Jones Crescent Babbitt
7341 More-Jones Extra Copper Hardened Babbitt
7342 More-Jones Genuine Babbitt
7343 More-Jones Genuine Original
7344 More-Jones Hoo Hoo
7345 More-Jones Improved Babbitt
7346 More-Jones Nickel Babbitt
7347 More-Jones Phosphor Bronze Babbitt
7348 More-Jones Regent Babbitt
7349 More-Jones Rex Babbitt
7350 More-Jones Special Motor Babbitt
7351 More-Jones Special No. 1
7352 More-Jones Tiger Bronze
7353 More-Jones Universal Babbitt
12385 Morex
2100 Morin's Chinese Bronze
4791 Morrison's Ductile Bronze
1472 M.O.S.
2826 Mosaic Gold
12093 Mosil
759 Mo Steel No. 1
760 Mo Steel No. 2
761 Mo Steel No. 3
3451 Motal
4795 Mota Metal
10289 Mo-Technickill
10290 Motelec
10291 Mo-Tiger
7717 Motor Sheets
762 Mo-Tung
11518 Mo-Tung 6-6
2981 Moulimphy
3749 Mourey Aluminum Solder
2827 Mourey White Gold
2828 Mousset's Silver 8004
10292 Mo-Van
763 M.P.M. 3 C Steel
10294 M.S.M.
10293 M.S.M. Alloy
2829 M.S. Steel
2830 Mudge's Speculum
2101 Mueller Blue Tip Bronze
1316 Mueller 600 Metal
10295 Mu-Hole Punch
11316 Multicut
5060 Multole Punch
764 Mu Metal
11698 Mumetal

5976 Mungoose
765 Muntz Metal
12048 Muntz Metal
12497 Muntz Metal 66
12515 Muntz Metal, Leaded —274
12516 Muntz Metal—293
2831 Muntz Patents
3584 Muntz (Scovill)
6527 Muraloy
7672 Murex 4-6 Chrome
10296 Murex Alternex
7671 Murex Carbon Moly
7673 Murex Chrome Copper
7674 Murex Chrome Moly
10297 Murex Cresta
7675 Murex Cromansil
10298 Murex Fillex
10299 Murex Genex
7676 Murex Manganese Steel
10300 Murex Molex
6335 Murex Nickel Steel
10306 Murex No. 5 Chrome
10307 Murex No. 14 Chrome
10301 Murex Rolex
7677 Murex Special A
10302 Murex Stainless
7678 Murex Stainless 7
7679 Murex Stainless 15
10303 Murex Surfacing
10304 Murex Type F
10305 Murex Vertex
2832 Murman's Alloy
766 Mushet Steel
8073 Mushet Self-hardening Steel
1936 Musical Bell Metal
3694 Music Spring
731 M.V."C" Alloy
2833 "M.W." Metal
6800 "M.W.S."
3930 "M.Y."
3931 "M.Y." Extra
2834 Mystic Metal

N

—— N-1 etc. See Fahrite N-1 etc.
6786 N-5 CM
4881 N-1932
767 NA
1448 NA
5191 NA-1
5005 NA-2
10308 NA 2 S
10309 NA 3 S
5006 NA-4
5192 NA-4-M
10310 NA-4-S
11915 NA-6
10311 NA 10 S
10312 NA 11 S
10313 NA 13 S
10314 NA 15 S
10315 NA 17 S
5977 NA-18
5007 NA-19
10316 NA 22 S
10317 NA 24 S
10318 NA 25 S
10319 NA 26 S
10321 NA 31 S
10320 NA 33 S
11916 NA 34
10322 NA 38 S
10323 NA 50 S
10324 NA 51 S
10325 NA 55 S
10326 NA 57 S
5008 NA-65
10327 NA 80 S
10328 NA 111
10329 NA 115
10330 NA 123
10331 NA 124
10332 NA 125
10333 NA 126
10334 NA 127
10335 NA 135
10336 NA 140
10337 NA 150
10338 NA 155
10339 NA 156
10340 NA 160
10341 NA 162
10342 NA 165
10343 NA 172
10344 NA 211
10345 NA 218
10346 NA 222
10347 NA 224
10348 NA 225
10349 NA 226
10350 NA 232
10351 NA 234
10352 NA 235
10353 NA 236
10354 NA 238
10355 NA 240
10356 NA 242
10357 NA 244
10358 NA 250
10359 NA 260
10360 NA 305
10361 NA 307
10362 NA 320
10363 NA 322
10364 NA 330
10365 NA 350
10366 NA 450
10367 NA 465
10368 NA 510
768 Naco Steel
10369 Nada C
11873 Nada NT
11874 Nada NT-2
11875 Nada NT-3
783 "N" Alloy (Navy)
11337 Nail Die Steel
10370 Naloy
11678 Napraloy
5036 National
10371 National No. 2
10372 National No. 3
10373 National No. 4
10374 National No. 5
10375 National No. 6
10376 National No. 7
10377 National No. 9A
10378 National No. 9B
10379 National No. 9C
10380 National No. 9D
10381 National No. 9E
10382 National No. 9F
10383 National No. 9G
10384 National No. 9H
10385 National No. 10A
10386 National No. 10B
10387 National No. 11
10388 National No. 12
10389 National No. 13
9600 National Graphite Steel
5978 Nationalloy 1
5979 Nationalloy 2
5980 Nationalloy 3
2835 Naubuc

12451 Naval
2836 Naval Aluminum
4363 Naval Aluminum Bronze
12523 Naval Brass—452
769 Naval Brass
12524 Naval Brass, Leaded 612
1364 Naval Brass (Scovill)
3042 Naval Brass (S.A.E.)
3045 Naval Brass (S.A.E.)
5013 Naval Brass Welding Rod
770 Naval Bronze
4269 Naval Bronze No. 4
2837 Naval Gun Metal "G"
772 Naval Jonrnal Bearing
773 Naval Phosphor Bronze
774 Naval Valve Bronze
771 Navalium
6528 Navaloy
2838 Navy Aluminum Alloy
2053 Navy Aluminum Bronze
775 Navy Antifriction Metal, Grade 1
776 Navy Antifriction Metal, Grade 2
777 Navy Antifriction Metal, Grade 3
778 Navy Antifriction Metal, Grade 4
779 Navy Antifriction Metal, Grade 5
780 Navy Antifriction Metal, Grade 6
781 Navy Antifriction Metal, Grade 7
2839 Navy Bearing
2840 Navy Bearing, Hard
1364 Navy Brass (Scovill Naval Brass)
2841 Navy Composition "W"
782 Navy Gear Bronze
784 Navy No. 4 Alloy
10390 N-A-X High Tensile
11931 N-A-X 9100
11932 N-A-X X9100
6787 N.B.
6789 N.C.-3H2
10391 N.C. 4
482 N.C. 45
5134 N.C. Heat Resisting
4792 N.C.A. (Non corrodible Aluminum)
7288 NCC Pig
1426 N.C.M. (Bonney-Floyd)
1444 N.C.M. (Imphy)
5762 N.C.M.
12000 N.C.M.
10392 N.C.O.H.
10393 N.C.R. 238
1521 N.C.T. Alloys (Nichrotherm Alloys)
5597 N.C.T.-1
5598 N.C.T.-3
1597 N.C.T.-3 (Rezistal No. 7)
5599 N.C.T.-6
5600 NCT-6A
5706 NCT-8
7323 ND
7237 ND Forging Steel
11699 N.D. HTC—Oilite
11841 N.D.S.
11732 NE 1330
11733 NE 1335
11734 NE 1340
11735 NE 1345
11736 NE 1350
11737 NE 8020
11738 NE 8022
11716 NE 8024
11717 NE 8124
11718 NE 8233
11719 NE 8245
11720 NE 8339
11721 NE 8442
11722 NE 8447
11723 NE 8547
11724 NE 8620
11725 NE 8630
11726 NE 8724
11727 NE 8739
11728 NE 8744
11729 NE 8749
11730 NE 8817
11731 NE 8849
11739 NE 8613
11740 NE 8615
11741 NE 8617
11742 NE 8715
11743 NE 8722
11744 NE 8735
11745 NE 8740
11746 NE 8949
11747 NE 9255
11748 NE 9260
11774 NE 9261
11749 NE 9262
11750 NE 9415
11751 NE 9420
11752 NE 9422
11775 NE 9425
11753 NE 9430
11754 NE 9435
11755 NE 9437
11756 NE 9440
11757 NE 9442
11758 NE 9445
11759 NE 9450
11760 NE 9537
11761 NE 9540
11762 NE 9542
11776 NE 9545
11763 NE 9550
11764 NE 9630
11765 NE 9635
11766 NE 9637
11767 NE 9640
11768 NE 9642
11769 NE 9645
11770 NE 9650
11771 NE 52100A
11772 NE 52100B
11773 NE 52100C
10394 Neatro
10395 Necomicle
785 Necroni Steel
5671 Needle Die Steel
2842 Needle Metal
7659 Needle Wire
786 Neloy
10396 Neloy Molybdenum
10397 Neloy Molybdenum No. 2A
10398 Neloy Molybdenum No. 3A
10399 Neloy Molybdenum No. 5A
10400 Neloy Molybdenum No. 6A
10401 Neloy No. 1

10402 Neloy No. 2
10403 Neloy No. 3
10404 Neloy No. 4
10405 Neloy No. 5
10406 Neloy No. 6
2507 Nelson-Bohnalite
10407 Nemicle
10408 Nemicle C
10409 Nemicle F
1456 Neo-Baros
10410 Neochrân
2843 Neogen
787 Neonalium
788 Neor
789 Nergandin
10411 Nesaloy
3781 Neusilber
4237 Neusilber, IIA
131 Neusilber (Argentan)
4228 Neusilber, Enamel Quality
4229 Neusilber, Excelsior Quality
4230 Neusilber, Nickelin Quality
4231 Neusilber, Prima-Prima Quality
4232 Neusilber, Prima Quality
4233 Neusilber, Sekunda Quality
4234 Neusilber, Tertia Quality
4235 Neusilber, Quarta Quality
4236 Neusilber, Tubes
4248 Neustadt
10412 Neutralloy
10413 Neutralloy
2844 Nevada Silver
790 Nevastain, Grade "A"
791 Nevastain, Grade "B"
1574 Nevastain "CA"
1575 Nevastain "CB"
1579 Nevastain "D"
1573 Nevastain "EZ"
1580 Nevastain "H"
1576 Nevastain "KA 2"
1577 Nevastain "KA 2 S"
5183 Nevastain KM-1
1578 Nevastain "KNC-3"
792 Neva-Stain R.A. (Super-alloy)
5126 Nevastain R.A. (Cincinnati)
1572 Nevastain "S"
5182 Nevastain 25-10
2845 Nevyanskite
2846 New Capital Steel
2847 New Tool Steel Cast
5193 Newco
10414 New Kathode
10415 Newport Armature
10416 Newport Electrical "A"
10417 Newport Electrical B
10418 Newport Electrical C
10419 Newport Transformer
10420 Newport Transformer Special
10421 Newport Transformer Extra Special
3932 New Rapid
3299 New Rapid White Label
793 Newloy
508 Newton's Alloy
4929 Neydium No. 8
4930 Neydium No. 9
2398 Ney Oro "A"
2399 Ney Oro "A-1"
2400 Ney Oro "AW"
2407 Ney Oro "B"
2406 Ney Oro "B-2"
2405 Ney Oro "BW"
2402 Ney Oro "E"
2404 Ney Oro "G"
2403 Ney Oro "G-3"
2401 Ney Oro "GW"
2396 Ney Oro Elastic No. 1
2395 Ney Oro Elastic No. 2
2394 Ney Oro Elastic No. 3
2393 Ney Oro Elastic No. 4
10422 Neys No. 125
1445 N. F. (Imphy)
1447 N.F.C. (Imphy)
794 N.G.F. Alloy
11936 NH Pig
2849 Niag
10423 Niagra
7466 Niagara Brand Ferrochrome
7467 Niagara Brand Ferrosilicon
7468 Niagara Brand Silicomanganese
7639 Ni-Bar
10647 Nicaloi
2850 Nicaloy
4160 Nicalun
10424 Ni Chillite
10425 Ni Chillite
795 Nichroloy I
6466 Nichroloy II
6467 Nichroloy III
796 Nichrome I
4793 Nichrome II
11806 Nichrome II
6465 Nichrome III
6540 Nichrome IV
4418 Nichrome V
10426 Nichrome Type A
10427 Nichrome Type B
4210 Nichrome Cast
4209 Nichrome Wrought
5141 Nichrome "S"
1521 Nichrotherm N.C.T.
5597 Nichrotherm NCT-1
5598 Nichrotherm NCT-3
5599 Nichrotherm NCT-6
5600 Nichrotherm NCT-6A
5706 Nichrotherm NCT-8
10428 Nichrothermsteel
797 Nichro-Zink
4270 Ni-chro-Zink
3452 Nickahl Iron
1411 Nickahl Steel
1818 Nickalloy Bronze
798 Nickel
6955 Nickel, Grade A
6956 Nickel, Grade D
7289 Nickel, Grade E
7290 Nickel, Grade F
7291 Nickel, Grade T
2861 Nickel, Malleable
2102 Nickel Aluminum Bronze
5443 Nickel Aluminum Bronze (Chase)
799 Nickel Alloy, Grade A
7346 Nickel Babbitt
2851 Nickel Bearing
3453 Nickel-Boron Steel
2004 Nickel Brass
7549 Nickel Brass
2103 Nickel Bronze
3454 Nickel Bronze
12180 Nickel Bronze
3695 Nickel "C"
800 Nickel Cast Iron No. 1

6280 Nickel Cast Iron No. 2
6281 Nickel Cast Iron No. 4
2852 Nickel-Cerium Steel
2853 Nickel-Chrome-Aluminum
1235 Nickel Chrome Cast Iron (I.N.Co.)
10429 Nickelchromeight
2854 Nickel-Chrome Peerless
2855 Nickel-Chrome Premier
2856 Nickel-Chrome Superior
10430 Nickelchromweld
801 Nickel-Chromium-Copper
10431 Nickelchromtwelve
2857 Nickel Coinage, U.S.A.
7550 Nickel Copper
2858 Nickel-Copper Steel
1237 Nickel-Clad Steel
6956 Nickel "D"
5929 Nickeldur
7289 Nickel "E"
10432 Nickelend
802 Nickelene
7290 Nickel "F"
1527 Nickelin
4122 Nickelin "A"
4123 Nickelin "B"
4124 Nickelin "C"
4166 Nickelin I
4419 Nickelin IA
4167 Nickelin II
4420 Nickelin IIA
4168 Nickelin III
4421 Nickelin IIIA
4169 Nickelin IV
4422 Nickelin V
2859 Nickelin-German Silver
2860 Nickelin Resistance
4268 Nickeline
6511 Nickeline
10433 Nickelmang
2862 Nickel-Manganese Bronze
6495 Nickel-Molybdenum Gear
2863 Nickel-Molybdenum Steel
11855 Nickel Ni-Resist
803 Nickeloid
6529 Nickeloid
6752 Nickeloid
7060 Nickeloid
2864 Nickel Oreide
804 Nickeloy
6070 Nickel-Silic-On
2865 Nickel-Silicon Steel
—— Nickel Silver. (See also German Silver, Nickelin, etc.)
5187 Nickel Silver, 7% (Scovill)
5185 Nickel Silver, 10% Scovill)
12505 Nickel Silver, 10%—752
3455 Nickel Silver, 10%
5446 Nickel Silver, 10% (Chase)
5186 Nickel Silver, 12%, Leaded (Scovill)
3456 Nickel Silver, 14%
3457 Nickel Silver, 15%
3458 Nickel Silver, 18%
12506 Nickel Silver, 18%—719
5184 Nickel Silver, 18% (Scovill)
12507 Nickel Silver, 18%—724
1253 Nickel Silver 18% (Chase)
1254 Nickel Silver, 18% A, Chase
1255 Nickel Silver, 18% B, Chase
854 Nickel Silver, 18% A, Omega Brand
855 Nickel Silver, 18% B, Omega Brand
3459 Nickel Silver, 20%
3506 Nickel Silver, 20%
5881 Nickel Silver, 20% (Chase)
3460 Nickel Silver, 25%
3461 Nickel Silver, 30%
2866 Nickel Silver, Casting
2547 Nickel Silver, English
805 Nickel Silver, Grade "A"
11804 Nickel Silver, Grade "B"
4838 Nickel Silver (International)
3505 Nickel Silver (Kramer) 12%
3506 Nickel Silver (Kramer)
6074 Nickel Silver, Kunial
990 Nickel Silver, Leaded (Scovill)
854 Nickel Silver, Riverside, Grade "A"
855 Nickel Silver, Riverside, Grade "B"
854 Nickel Silver (Riverside) No. 3
956 Nickel Silver (Riverside) No. 6
855 Nickel Silver (Riverside) No. 7
957 Nickel Silver (Riverside) No. 7
958 Nickel Silver (Riverside) No. 18
2867 Nickel Silver, Rolling
990 Nickel Silver, Scovill's Leaded
5186 Nickel Silver (Scovill's) 12% Leaded
5184 Nickel Silver (Scovill's) 18%
3138 Nickel Silver (Sheffield)
2868 Nickel Silver, Turning
7052 Nickel Steel
8087 Nickel Steels
5362 Nickel Steel "181"
7551 Nickel Tin
2869 Nickel-Tungsten
806 Nickel-Uranium Steel
5026 Nickel-Vanadium
2870 Nickel-Vanadium Steel
2871 Nickel-Zirconium
7189 Nickel-Zirconium
2872 Nickel-Zirconium Steel
6271 Nickolite
6530 Nickonomy
6531 Nic-Motal

6512 Nico
10646 Nico
807 Nico No. 1
808 Nico No. 2
6532 Ni-Copper
1466 Nicorros
1441 Nicral "A" (Imphy)
809 Nicral "A"
10434 Nicral AD
12006 Nicral AD018
12005 Nicral AD2012
10435 Nicral AD8412
12010 Nicral AO
810 Nicral "B"
6794 Nicral "B" (Imphy)
12009 Nicral BO
811 Nicral "C"
6795 Nicral "D" (Imphy)
6796 Nicral "E" (Imphy)
2873 Nicral "FM"
12008 Nicral FM09
812 Nicral "X"
12007 Nicral XD018
10436 Nicroman
12113 Nicrosilal
4154 Nicrosilal
2874 Nicu Steel
10437 Nicuite
1238 Ni-Hard
5757 Ni-Hard
12114 Ni-Hard
6057 Ni-Hard (Genesee)
11911 Ni-Hard (Robins)
813 Nika
4839 Nikro
10438 Nikro M
814 Nikrome
10439 Nikrome M
2409 Nilex (E.S.C.)
12422 Nilstain X
10440 Nilstain 302
12423 Nilstain 304
12424 Nilstain 308
12425 Nilstain 309
12426 Nilstain 309 Cb
12427 Nilstain 310
12428 Nilstain 316
12429 Nilstain 317
12430 Nilstain 321
12431 Nilstain 325
12432 Nilstain 330
12433 Nilstain 347
12434 Nilstain 430
12435 Nilstain 416
4923 Nilvar
6148 Ni-Mo
7156 Nimo
815 Nimol
10441 Nipermag
7093 Nipigon
10442 Nippon Evershining Steel
11781 Niranium
5905 Ni-Resist
1229 Ni-Resist, Copper-free
6058 Ni-Resist
6691 Ni-Resist
6714 Ni-Resist
12115 Ni-Resist
816 Ni-Resist
1239 Ni-Resist
11937 Ni-Resist Low Expansion
11855 Ni-Resist, Nickel
6993 Niresult
10443 Nirex
6505 Nironite
10444 Nironite
10445 Nironite C
10446 Nironite D
817 Nirosta (See, also, KA-Alloys)
4922 Nirosta
1252 Nirosta-Durco
1220 Nirosta Calduro KM-1
1221 Nirosta Calmar KA-2
1222 Nirosta Caloxo KNC-3
6365 Nirosta F.C.
490 Nirosta K-2A (Sterling)
2202 Nirosta KA-2
5145 Nirosta KA-2
5206 Nirosta KA-2
6567 Nirosta KA-2
5208 Nirosta KA-2H
5211 Nirosta KA-2H-Mo
5146 Nirosta KA-2Mo
5202 Nirosta KA-2-Mo
5209 Nirosta KA-2-Mo
5207 Nirosta KA-2S
6352 Nirosta KA-2S
6568 Nirosta KA-2S
818 Nirosta KA4
490 Nirosta K2A
5147 Nirosta KNC-3 (see also "KNC-3")
819 Nirosta No. 18-8
5971 Nirosta No. 18-8
2801 Nirosta No. 18-8
6353 Nirosta No. 19-9
820 Nirosta No. 19-9-4
2802 Nirosta No. 19-9-4
821 Nirosta No. 25-20
2803 Nirosta No. 25-20
5499 Nirosta No. 28-11
5972 Nirosta No. 29-9
4362 Nirosta V-2 A
5714 Nirosta V-2A Extra
7298 Nirostaguss 1
7299 Nirostaguss 2
7300 Nirostaguss 3
822 "NI" Stainless Steel
10447 Ni-Tensyle
823 Ni-Tensyliron
5272 Nitralloy Grade 1
5273 Nitralloy Grade 3
5274 Nitralloy Grade 5
5275 Nitralloy Grade 7
10448 Nitralloy EZ
10449 Nitralloy EZ505
824 Nitralloy "G"
12208 Nitralloy "G"
8063 Nitralloy "G"
10450 Nitralloy "G" Grade 69
825 Nitralloy "H"
12207 Nitralloy "H"
8064 Nitralloy "H"
10451 Nitralloy H-70
4170 Nitralloy, Hi-Carbon
4171 Nitralloy "I"
5755 Nitralloy "L"
7464 Nitralloy N
10453 Nitralloy N
1581 Nitralloy No. 115
1582 Nitralloy No. 125
12207 Nitralloy No. 125
12208 Nitralloy No. 135
1583 Nitralloy No. 135
10452 Nitralloy No. 135 Modified
4969 Nitralloy No. 221
4970 Nitralloy No. 223
1584 Nitralloy No. 225

4971 Nitralloy No. 225
4972 Nitralloy No. 227
7464 Nitralloy No. 230
4433 Nitralloy No. 630
7465 Nitralloy No. 640
8065 Nitralloy Special Sulfur
1415 Nitrard No. 1
9015 Nitrard No. 1
3933 Nitricastiron
2547 Nitro
3696 Nitrosa Steel
10454 Nittany
826 Nittany Free Turning Brass Rod
12381 Nivan
10455 Nivarox
4794 N.K.L. Metal
10456 N. M. C.
1567 "N" Metal, Midvaloy
1474 N.M.H.G.
827 "NM" Steel
7096 NN
3934 No. 000
3935 No. 000 Donble Extra Carbon
6650 No. 1 (Hoyt)
3936 No. 2 B
10460 No. 2 Bronze
3937 No. 3 C
6652 No. 3M (Hoyt)
6653 No. 4A (Hoyt)
4543 No. 4 Best (Frasse)
6688 No. 4-6 Cr-Mo
6715 No. 4-6 Cr-Mo
4632 No. "5" Best
5451 No. 7 Alloy
10461 No. 8 Bronze
7514 No. 10 Alloy Steel
11522 No. 11 Titan
65 No. 12 Alloy
6497 No. 12 Alloy
7552 No. 12 Aluminum Alloy
11524 No. 35
10462 No. 35 Monel
10463 No. 38 Milo
99 No. 40D
6502 No. 40D
4919 No. 42 Alloy
6560 No. 45 Alloy
1305 No. 48 Alloy (Michiana)
7523 No. 50 Alloy, Wilco
11527 No. 50 Bronze
4920 No. 52 Alloy
2804 No. 55 Alloy (Michiana)
6503 No. 60 D Alloy
2805 No. 63 Alloy (Michiana)
11528 No. 67
11529 No. 67 Tap
6561 No. 70 Alloy
11530 No. 70W
7256 No. 70-20 M
7393 No. 70-20 V
6499 No. 70-90 Type A
7608 No. 70-90 Type B
11531 No. 71M
11532 No. 72 Hot Work
5858 No. 85 Alloy
3697 No. 93 Chrome-Molybdenum
12395 No. 98 Stainless
10464 No. 122 Alloy
10578 No. 130 Alloy
12355 No. 149 Bronze
6773 No. 175 (Hoyt)
11534 No. 175L
3938 No. 183 Mix
332 No. 193 Alloy (Comet)
2287 No. 300 Alloy, Cupronickel
11535 No. 332 Heat Resisting
11536 No. 400P
12068 No. 426 Alloy
10466 No. 444 Alloy
4918 No. 525 Alloy
4173 No. 548
1924 No. 600 Bearing Metal
6474 No. 602
5448 No. 608 Bronze
4863 No. 610 Air-hardening
6233 No. 651 Alloy
4968 No. 667 Alloy
10467 No. 712 Alloy
4506 No. 712 Die Steel
11688 No. 772
10484 No. 812
3939 No. 812
3940 No. 821
3941 No. 826
3942 No. 999
10468 No. 1015-65
9627 No. 1020-90
11539 No. 1215 Air Hardening
4308 No. 1020-90 Steel
10469 No. 1040 Alloy
11550 No. 3074 Hot Work
11544 No. 5545
11545 No. 8510 Water Harden
11546 No. 9500-1
8136 No. 9260 Wire
8135 No. 52100 Wire
2454 Nochange Oil Hardening
12192 No-Co-Ro
828 Nogroth
7486 Nogroth
10471 N.O.H.
829 Noheet
820 Noil
5116 No-Kor-O 12
7094 No-Kor-O 12F
5117 No-Kor-O 14
5115 No-Kor-O 18
5114 No-Kor-O 18-2
5111 No-Kor-O 18-8
10458 No-Kor-O 18-8F
5109 No-Kor-O 18-8M
5110 No-Kor-O 18-8S
10459 No-Kor-O 18-H-60
7095 No-Kor-O 25-20
5115 No-Kor-O "A"
5117 No-Kor-O Cutlery
10457 No-Kor-O-H
5113 No-Kor-O "HR"
5111 No-Kor-O "KA-2"
5112 No-Kor-O "KA-2 HS"
5110 No-Kor-O "KA-2 S"
5109 No-Kor-O "KA-4"
5114 No-Kor-O "RA"
5116 No-Kor-O "S"
831 Nomag
2415 Non-Brit
4792 Non-Corrodible Aluminium (N.C.A.)
832 Non-Corrodite
6555 Non-Dulling
833 Nongram
4699 Non Hardening
2875 Non-Oxidizable

834 Non-Pareil
10482 Non-Pa-Reil
10977 Non-Pa-Reil
2876 Non-Scaling
3882 Non-Shrink
3943 Non Shrink
8551 Non-Shrink Die
4145 Non-Shrinkable
4146 Non-Shrinkable
12103 Non-Shrinkable Drill Rod
3274 Non-Shrinkable Steel
4666 Non-Shrinkable Steel
2877 Non-Shrinkable (Patent)
10472 Non-Shrink Die
3990 Non-Shrinking
10473 Non-Stretch Steel
6562 Nonsulite
2878 Non-Tarnishable
12193 Non-Tempering Tool
486 Nonvar (Firth)
10474 Non-Warp Steel
6489 Norbide
10475 Nordic
5591 Normalloy
7737 Normalloy
10476 Normanna
3944 Normar
3945 North Star
6489 Norton Boron Carbide
10477 Notem
10478 Novalite
10479 Novite
2879 Novo High Speed
3946 Novo Special
835 Novo Steel
2880 Novo Superior
10480 No-Wear
1801 N.P.L. "A" Alloy
2562 N.P.L. "E" Alloy
5409 N.P.L. "F" Alloy
513 N.P.L. "G" Alloy
836 N.P.L. "Y" Alloy
7891 NPU
5982 N.S.-5
2881 Nu-Bronze
2882 Nu-Gold
2053 Nuloy
10481 Nuloy
—— Number (See listed alphabetically under No.)
7025 Nūral
7026 Nūral 30
7027 Nūral 43
7028 Nūral 77
7029 Nūral 85
7030 Nūral 85S
7031 Nūral 93
7032 Nūral 122
6537 Nūral 132
7033 Nūral 132A
7034 Nūral 132B
7035 Nūral 142
7036 Nūral 195
7037 Nūral 200
837 Nuremberg Gold
2883 Nürenberger Gold
11700 Nurex
2807 Nut-Piercer
8000 NW-1
8001 NW-2
8002 NW-3
8003 NW-5
9609 N.W.S.
6593 NY
6788 NY (Imphy)
1439 Nymphe

O

9951 O-Alloy
838 O.B. Alloy 1-A
839 O.B. Alloy No. 3
840 O.B. Alloy 4 B
841 O.B. Alloy 5
842 O.B. Alloy 5 A
1356 O.B. Alloy No. 11
843 O.B. Alloy No. 16
844 O.B. Alloy No. 17
845 O.B. Alloy No. 25
12110 O.B. Alloy No. 26
4897 O.B. Alloy U-5
2844 Odessa
7963 Oerstit 500
7964 Oerstit 700
5391 OFHC Copper
9953 O. H. 38
10744 O. H. D.
846 Ohio Air Die
847 Ohio Die
12076 Ohio O-1
12079 Ohio O-2
12080 Ohio O-4
12081 Ohio O-5
12082 Ohio O-6
12083 Ohio O-11
12084 Ohio O-12
12085 Ohio O-15
9954 Ohioloy
2885 Ohmal
848 Ohmaloy
4916 Ohmax
7578 OHT
2886 Oil Cups
849 Oil Die
9695 Oil Die
2887 Oil Engine Babbitt Metal
4477 Oil Hardening
3610 Oil Hardening
4557 Oil Hardening
7296 Oil Hardening
7607 Oil Hardening Cast-to-Shape
850 Oil Hardening Steel
851 Oilite
2888 Oil Pump
852 Oker
2005 Oker Brass
2023 Oker Sheet Brass
2024 Oker I, Sheet Brass
3811 Oker Tombac
4847 Old Genuine Babbitt
9956 Olds Bearing Bronze
1304 Olympic Bronze "A"
5444 Olympic Bronze "B"
5445 Olympic Bronze "C"
9957 Olympic Bronze Type D
9958 Olympic Bronze Type G
5983 Olympic Tool Steel
9959 Oman
9960 Oman Metal
7670 Omanitbronze
853 Omega
4432 Omega Brand Beryllium Copper Alloy No. 32
854 Omega Brand Nickel Silver Alloy No. 3
956 Omega Brand Nickel Silver Alloy No. 6
957 Omega Brand Nickel Silver Alloy No. 7
958 Omega Brand Nickel Silver No. 18
854 Omega Brand Nickel Silver, 18% A

855 Omega Brand Nickel Silver, 18% B
856 Omega Brand Phosphor Bronze No. 30
959 Omega Brand Phosphor Bronze No. 30
1603 Omega Brand Phosphor Bronze No. 41
857 Omega Brand Phosphor Bronze No. 47
858 Omega Brand Phosphor Bronze No. 209
3706 Omega Brand Phosphor Bronze Alloy No. 209
9961 Ommet "A" Alloy
9962 Ommet Iron
9963 Ommet-Sivar 48
9964 Ommet-Sivar 60
9965 Ommet-Sivar 90
4618 ON
3947 One Star High Speed
2006 One Ton Brass
509 Onion's Metal
4625 On-Plus
3948 Onplus
859 Ontario
4619 Ontop
3934 OOO
3935 OOO Double Extra Carbon
7919 OOO Extra
7918 OOO Spezial 31
1354 Optical Bronze
1355 Optical Wire
9966 Oralloy
3949 Orange Label
9967 Orange Label
9968 Orange Label Special Alloy Tool Steel
1353 Oranium Bronze
4266 Oranium Bronze "HH"
4267 Oranium Bronze "HX"
860 Oranium Bronze "M"
861 Oranium Bronze "M.H."
862 Oranium Bronze "S"
5486 Orbit Steel H.A.A.
5485 Orbit Steel H.W.A.
12313 Oreide
863 Oreide A
11803 Oreide B
12519 Oreide—420
2889 Oreide, Brunswick
2890 Oreide, French Gold
2864 Oreide, Nickel
7834 Original Monel Metal
3950 Orion
864 Ormulu
9969 Oscillumin
9970 Osmagal
2680 Osmiridium
2891 Osmiridium (Natural) Nevyanskite
11802 Osmiridium Siserskite
4639 "O" Special
9971 Ossilumin
1686 Ostermann Cast Bronze No. 10
1690 Ostermann Cast Bronze No. 14
1689 Ostermann Cast Bronze No. 20
1681 Ostermann Lead Bronze No. 10
1682 Ostermann Lead Tin Bronze No. 8
1680 Ostermann Red Brass No. 4
1685 Ostermann Red Brass No. 5
1684 Ostermann Red Brass No. 8
1683 Ostermann Red Brass No. 9
1688 Ostermann Red Brass No. 10
1687 Ostermann Wrought Bronze No. 6
9972 Otiscoloy
2892 Otisel No. 1
5194 Otisel No. 2
5195 Otisel No. 3
5196 Otisel No. 4
5197 Otisel No. 5
9973 Otisel K2
9974 Otisel K3
6951 Otisel K-4
6952 Otisel K-5 Tungsten
9975 Otisel K7
9976 Otisel K8
9977 Otisel K9
9978 Otisel O-2
9979 Otisel O-3
9980 Otisel O-4
9981 Otisel O-5
9982 Otisel O-6
9983 Otisel O-7
9984 Otisel O-8
9985 Otisel O-9
9986 Otisel O-10
10004 Otisel O-12
10005 Otisel O-16
10006 Otisel O-18
10007 Otisel O-24
10008 Otisel O-30
9987 Otisel O-D
9988 Otisel O-M
9990 Otisel O-S
865 Otto's Speculum
866 Ounce Metal
4820 Ounce Metal
7053 Ounce Metal
3450 "Ounce" Metal, Modified
3611 Overcoat Axe
9991 Oxweld No. 1
9992 Oxweld No. 2
9993 Oxweld No. 7
9994 Oxweld No. 9
9995 Oxweld No. 19 Cupro
9996 Oxweld No. 21 H. S.
9997 Oxweld No. 23
9998 Oxweld No. 25M
9999 Oxweld No. 26
10000 Oxweld No. 28
10001 Oxweld No. 31T
10002 Oxweld No. 32CMS
10003 Oxweld No. 38
12194 Oxygen Free Copper

P

10491 P 2 Alloy
2894 Packing
2894 Packing Metal
867 Packing (Piston)
4257 Packing (Valve)
2895 Packing Rings, French
2896 Packing, Russian
869 Packing (Valve Rod)
10494 Page-Allegheny 15-35
10495 Page-Allegheny 17-7
10496 Page-Allegheny 18-8
10497 Page-Allegheny 19-9
10498 Page-Allegheny 22 Special
10499 Page-Allegheny 25-12

10500 Page-Allegheny 25-20
10501 Page-Allegheny 33NH
10502 Page-Allegheny 33TQ
10506 Page-Allegheny 4-6 Chromium
10507 Page-Allegheny 12% Cr
10508 Page-Allegheny 16% Cr
10509 Page-Allegheny 18% Cr
10510 Page-Allegheny 23% Cr
10511 Page-Allegheny 22
10512 Page-Allegheny 33 Gr. A
10513 Page-Allegheny 33 Gr. C1
10514 Page-Allegheny 34
10515 Page-Allegheny 44
10503 Page-Allegheny 46
10516 Page-Allegheny 55
10517 Page-Allegheny 66 Gr. B
10518 Page-Allegheny 66 Gr. C2
10504 Page-Allegheny 66W
10505 Page-Allegheny 67
10519 Page-Allegheny AMO
10520 Page-Allegheny A-Ti
10521 Page-Allegheny B—Special
10522 Page-Allegheny Metal A
10523 Page-Allegheny Metal B
10524 Page-Allegheny Metal C
10525 Page-Allegheny Metal CB
10526 Page-Allegheny Metal FM
10527 Page-Allegheny Metal Ohmaloy
2897 Page, Dental Alloy
10528 Page-Armco
10529 Page-Auto
10530 Page B
10531 Page CE
10532 Page E
10533 Page Hard Facing
10534 Page HC
10535 Page Hi-Tensile C
10536 Page Hi-Tensile F
10537 Page Hi-Tensile G
10538 Page Hi-Tensile Shielded Arc
10539 Page HT
10540 Page MC
12124 Paintgrip Galvanized Armco
2898 Paintung White Copper
870 Pakfong
870 Paktong
4258 Paktong, Cookson
4259 Paktong, Fyfe
4260 Paktong, Keferstein
4261 Paktong, Peat
4262 Paktong, Thurston
4263 Paktong, Tutenag
871 Palau
872 Palau
2899 Pale Yellow Gold
11701 Paliney No. 6
11702 Paliney No. 7
10541 Palladent
873 Palladium
2900 Palladium Alloy
3463 Palladium Gold
874 P Alloy
1465 Pantal
7609 Pantal
6671 Pantalguss
7965 Pantanax
5674 Panther
10542 Panther Extra
875 Panther Special
876 Panther Super
10543 Panther XX
7409 Panzer
4868 Par 1
4869 Par 2
10544 Par 2C
4870 Par 3
4871 Par 4
4872 Par 5
4873 Par 6
4874 Par 7
4875 Par 8
4876 Par 9
10545 Par 9A
4877 Par 10
10546 Par 10A
4878 Par 11
10547 Par 11A
877 Para Steel
7129 Paragon A
3951 Paragon Oil Hardening
10548 Paralloy
10549 Paraloy No. 2
10550 Parasteel
878 Par-Exc
879 Parision Alloy
2729 Paris Metal (Lutecin)
3812 Paris Tombac
10551 Parkaloy
2901 Parker's Chrome Alloy
5984 Park Gate
3953 Park Silver
10552 Park Special
880 Parr
881 Parsons Alloy
882 Parson's Manganese Bronze
5889 Parson's Manganese Bronze
4795 Parson's Mota Metal
7845 Parson's 2SA
5428 Parson's Silver Bronze
7846 Parson's Star
5898 Parson's Turbadium
883 Parson's White Brass
5891 Parson's White Brass SA
884 Partinium
885 Patent Cobalt Chrome Steel
3698 Patina Steel
7854 Patina Steel Beizerei
7855 Patina Steel Rauchgas
886 Pattern Alloy
7556 Pattern Alloy (Apex)
5473 Pattern Alloy, Permite
4264 Pattern Metal
10553 Paulite
3612 Pavement Breaker
10492 P & A Enameling
3954 P & B
8234 P & H Harcote
10493 P & H Smootharc
10554 PDCP
5037 P-D Tungsten
10555 PE 8
2902 Pechko White Gold

10556 Peckrite
2903 Peerless
887 Peerless "A"
7130 Peerless B
7131 Peerless C
7132 Peerless D
4550 Peerless Cold Header Die
3956 Peerless Extra
2269 Peerless Gold Label
9641 Peerless LCT No. 2
9662 Peerless LLCT
2854 Peerless Nickel Chrome
4328 Peerless Red Label
2269 Peerless Special
4554 Peerless Special
3613 Pelhem Wire
11938 Penco
6960 Penco No. 3
3955 Penco No. 4
5988 Penco No. 20
10557 Pencoyd
888 Pen Metal
6084 Pennaloy A
6268 Pennaloy B
6269 Pennaloy C
6270 Pennaloy D
10558 Pennaloy Heat Resistant
10559 Pennaloy Heat Resistant
5041 Pennant
5014 Penn Bronze Welding Rod
4374 Pen-Van No. 12
5432 Peraluman
10560 Peraluman 5
7861 Peraluman 7
2904 Percit
889 Perceit
213 Percussion Cap Brass
890 Percy Aluminum Bronze
10561 Perduro
8581 Perfection
10562 Perfection Antifriction
10563 Perfection Steel
2007 Perking Brass
891 Perlit
2905 Perlit Nickel Cast Iron
5990 Permabrite
10564 Permal
11514 Permalloy
11672 Permalloy
892 Permalloy
7683 Permalloy—45
11674 Permalloy 45
12156 Permalloy 68
11673 Permalloy 78.5
7684 Permalloy—78.5
1067 Permalloy, Chromium
1141 Permalloy, Molybdenum
12297 Permalloy Molybdenum 2-81
11805 Permalloy Standard
2171 Permanent Magnet Steel
4856 Permanent Magnet Steel No. 1
894 Permanent Steel
893 Permanite
6635 Permax
1880 Perm-Brite (Apex 400 Alloy)
11671 Permendur
11515 Permendur
11670 Permendur 22
7505 Permendur, 50-50
7506 Permendur, Vanadium
7507 Perminvar 7.5-70
895 Perminvar 25-45
11669 Perminvar 45-25
10565 Permite
5458 Permite No. 2001
896 Permite No. 1002
7043 Permite No. 1002 (2002)
5459 Permite No. 1003
5460 Permite No. 1004 (2004)
5461 Permite No. 2005
5462 Permite No. 1006 (2006)
5463 Permite No. 1007 (2007)
5464 Permite No. 1008 (2008)
5465 Permite No. 1009 (2009)
10566 Permite No. 1010
5466 Permite No. 2010
5467 Permite No. 1011 (2011)
5468 Permite No. 2012
5469 Permite No. 2013
5470 Permite No. 1014 (2014)
5471 Permite No. 1015 (2015)
5472 Permite No. 1016
5473 Permite No. 2017
7044 Permite No. 1018
5474 Permite No. 2018
5475 Permite No. 1019 (2019)
5476 Permite No. 2020
5477 Permite No. 2021
5478 Permite No. 2022
5479 Permite No. 2023
7045 Permite No. A2023 Special
5473 Permite Pattern Alloy
896 Permite Piston Alloy
10567 Permium No. 205
10568 Permo
10569 Permold
10570 Permometal
897 Petite Iron
898 Pewter
2530 Pewter, English
899 Phenix
7785 Philo Brand Ferrosilicon, 50%
7786 Philo Brand Ferrosilicon, 75%
7787 Philo Brand Ferrosilicon, 85%
7788 Philo Brand Ferrosilicon, 90%
7789 Philo Brand Ferrochrome
7790 Philo Brand Ferromanganese
10648 Phoenix
900 Phoenix
10571 Phoenix A
10572 Phoenix A Special
10573 Phoenix K
10574 Phoenix Molybdenum Chill
10575 Phoenix Nickel Chill
10576 Phoenix Piroco
3757 Phoenix Rapid Machining

4151 Phoenixloy
4246 Phoenix Metal
4815 Phoenix Metal
7410 Phönix Hansa
901 Phono Bronze
12292 Phono Cadmium No. 955
12280 Phono Electric Bronze No. 840
12291 Phono Electric No. 865
2906 Phono Electric Wire
12281 Phono Hi-Conductivity
12293 Phono Hi-Conductivity No. 985
10577 Phono-Hi-Strength
12289 Phono-Hi-Strength No. 715
12290 Phono Telephone No. 830
7478 Phos-Copper
—— Phosphor Bronze — See also, Bronze, Phosphor
234 Phosphor Bronze
24 Phosphor Bronze (Ajax)
3699 Phosphor Bronze, American No. 1
3700 Phosphor Bronze, American No. 2
12498 Phosphor Bronze—314
12499 Phosphor Bronze—316
120 Phosphor Bronze Gr. A-351
12496 Phosphor Bronze Gr. A-4%-903
121 Phosphor Bronze Gr. B-979
122 Phosphor Bronze Gr. C-353
123 Phosphor Bronze Gr. D-354
4159 Phosphor Bronze (Anaconda)
6564 Phosphor Bronze (Anaconda 610)
3782 Phosphor Bronze, (Bearings)
3783 Phosphor Bronze, Bridge
6583–6590 Phosphor Bronze, Elephant Brand
7502–7504 Phosphor Bronze, Elephant Brand
3784 Phosphor Bronze, English
3701 Phosphor Bronze, English No. 1
3702 Phosphor Bronze, English No. 2
3785 Phosphor Bronze, Gears
4107 Phosphor Bronze, Grade A
12058 Phosphor Bronze, Grade A
12286 Phosphor Bronze, Grade A
12315 Phosphor Bronze, Grade A
4108 Phosphor Bronze, Grade C
12059 Phosphor Bronze, Grade C
12287 Phosphor Bronze, Grade C
12316 Phosphor Bronze, Grade C
4109 Phosphor Bronze, Grade D
12060 Phosphor Bronze, Grade E-1
3786 Phosphor Bronze, Hairsprings
4408 Phosphor Bronze, Hard
6772 Phosphor Bronze, Hoyt No. 1
6676 Phosphor Bronze, Lily Brand
3703 Phosphor Bronze, Locomotive Bearing
10578 Phosphor Bronze No. 130
3706 Phosphor Bronze No. 209
3787 Phosphor Bronze (P. R.R.) "B"
3788 Phosphor Bronze, Rolling
3704 Phosphor Bronze, Russian
2107 Phosphor Bronze, Sheet
4745 Phosphor Bronze, Spring Wire
3789 Phosphor Bronze, Very Hard
3790 Phosphor Bronze, Wire
7347 Phosphor Bronze Babbitt
902 Phosphor Copper
6611 Phosphor Copper
2907 Phosphor Tin
12312 Phosphorized Admiralty Metal
6612 Phosphorized Antifriction Metal
2908 Pierrot Metal, *Beughnot*
5355 Pilger Roll
2909 Pinchbeck
2008 Pinkus Brass
2109 Pinkus Bronze
10579 Pinsbac
2009 Pin Wire Brass
2910 Pioneer Acid Resisting Metal
4904 Pioneer Heat Resisting Metal
10580 Pioneer Metal
7008 Pireks-CC
4796 Pireks Metal
7009 Pireks-RCC
5140 Pireks-Reactal
10567 Piroco
2911 Pirsch's German Silver
10581 Piston
3464 Pistons
7557 Piston Alloy, Apex
1932 Piston Alloy, Belgian
2049 Piston Alloy, British
1302 Piston Alloy G-97
2504 Piston Alloy K.S. No. 245
2506 Piston Alloy K.S. 280
2508 Piston Alloy, K.S. Special
2509 Piston Alloy K.S. "Y"
867 Piston Packing
868 Piston Packing
6682 Piston Rings (American)

903 Piston Rings (Seraing)
1585 Piston Rings (Stephenson)
4855 Piston Steel
904 Pitaloy No. 90
905 Pitaloy No. 100
10583 Pitho
10582 Pittsburgh
12140 Pivot Steel
906 Placet
7399 Plancher
4653 Planet Choice
3957 Planet Cold Rolled
3958 Planet Drill Rod
4654 Planet Extra
3959 Planet High Speed
4657 Planet Non-Shrinking
4657 Planet Sheffoil Oil Hardening
4655 Planet Regular
3960 Planet Special
10584 Planeweld No. 1
10585 Planeweld No. 2
10636 Plastalloy
25 Plastic Bronze
235 Plastic Bronze
4405 Plastic Bronze
11135 Plastic C.S.M. No. 2
907 Plastic Metal
4410 Plastic Metal
4788 Plastic White Metal
12394 Plastiron
2912 Platalargan
6523 Plata Metal No. 5
11704 Plate-Loy
12314 Platers Metal
908 Platina, Birmingham
909 Platina, Plating
910 Platine
2915 Platine-au-titre
909 Plating Platina
2916 Platiniridium
1523 Platinit
911 Platinite
4265 Platinoid
912 Platinoid "A"
913 Platinoid "B"
2917 Platinor
914 Platinum
2918 Platinum Alloy
2919 Platinum Gold
2920 Platinum-Iridium
2921 Platinum Lead (Birmingham Platinum)
2922 Platinum Rhodium
2923 Platinum Silver
2924 Platinum Solder
2925 Platinum Substitute
2926 Platinum Substitute, Cooper's
2927 Platinum Substitute, Electrical
2928 Platnam
2929 Platnik
2930 Plow Steel
4117 Plug Steel
2931 Plumber's Solder
2932 Plumber's White
2110 Plumbic Bronze
2933 Plumbite
2305 Plumrite 67
2411 Plumrite 85
12282 Plumrite Copper
4369 Plumrite Standard
7411 Pluto
915 Plykrome
916 Plymite
6630a Ply Steel, Hard
6630b Ply Steel, Soft
10586 PM-20
917 P.M.G. Alloy
10587 P.M.G. No. 3
6570 P.M.G. Grade 8
10588 P.M.G. No. 10
6571 P.M.G. Grade 30
6572 P.M.G. Grade 77
10589 P.M.G. No. 95
10590 P.M.G. No. 96
5897 P.M.G. Metal (Cramp)
3817 Pneu
12396 Pneu-Die
487 Pnusnap, Firth
10591 Pobedit
10592 Pobedit-Alpha
7597 Point 5
10593 Polaris
4254 Poldi
5198 Poldi AK-1
5199 Poldi AK-2
5200 Poldi AK-5
5201 Poldi AK-H
3961 Poldi Brand No. 4
3962 Poldi Brand No. 2002-ES
3963 Poldi "C.R."
918 Poldi "EZH"
3964 Poldi "H.P.S."
2483 Poldimaximum
2482 Poldimaximum Special
2481 Poldimaximum Special No. 30
2480 Poldimaximum Special No. 55
2479 Poldi "M.K."
3965 Poldi No. 212
919 Poldi No. 2002
2484 Poldi 000 Extra
10594 Poldi Radeco D
3966 Poldi "S.S.T."
920 Poldi Stabil
921 Poldi Tenax "N"
2333 Pole
7719 Pole Sheets
3613 Polhem Wire (Fagersta)
6662 Polital
10595 Polivit
10596 Pomet 111
10597 Pomet 300
10598 Pomet 389
10599 Pomet 560
10600 Pomoloy C-2
10601 Pomoloy C-3
2934 Pompton
10602 Pompton Extra
2935 Pompton Special
2010 Ponsard's High Manganese Brass
2936 Popes Island Metal
10603 Porex
2111 Poro Bronze
10604 Portsmouth III
10605 Portsmouth IV
10606 Portsmouth V
10607 Portsmouth VI
10608 Portsmouth VII
10609 Portsmouth VIII
10610 Portsmouth IX
2937 Potassium Amalgam
2938 Poterie d'etain
2939 Potingris
2940 Potinjaune
2941 Pot Metal
2942 Potosi Silver
8046 Potts JJ Steel
4649 Potts PRK

4644 Potts Special Drill Rod
4651 Potts Superior
10611 Powder Braze
10612 Powder Nickel Genuine Babbitt
9658 Powdiron 51-1
11705 Powdiron 55P
11706 Powdiron 59 -IC
11707 Powdiron 61 -IC
10613 Power
4462 Power Chisel
10614 Precision
10615 Precision A-12
10616 Precision A-50
10617 Precision A-54
11708 Precision A-74
11891 Precision A-94
11896 Precision A-218
11897 Precision A-360
11893 Precision BR-1
11894 Precision BR-2
11895 Precision BR-3
11892 Precision M-13
11709 Precision ZN-4
10618 Precision ZN-5
10619 Precision ZN-6
10620 Precision ZN-7
10621 Premag
7310 Premet
10622 Premier
10623 Premier C
3465 Premier No. 1
6275 Premier No. 6
438 Premier (Emetco No. 3)
7765 Premier HS
2855 Premier Nickel Chrome
1223 Premier Nickel Chrome
6636 Prescoloy
10624 Press EZ
7558 Pressure Aluminum Alloy
1819 Pressure Bronze
922 Pressure Die Castings
7072 Pressurdie No. 1
10625 Pressuredie No. 2
7073 Pressurdie No. 3
10626 Pressure Tite Iron
923 Presto
3466 Presto Steel No. 9-266
2943 Preuss' Alloy
2944 Primer Gilding
3967 Prince
2945 Prince's Metal
12204 Prior
7217 Prior Extra
4581 Prior Extra
11710 Prize Ribbon
4339 P.R.K.
10638 PRK-33
314 PRK-33
4649 P R K (Potts)
10627 PRK-SH
3495 Proferall
924 Projectile Steel
10637 Promal
925 Promal
11679 Promet
10628 Prometal
10629 Prometal Chrome Inoxydable R.F.
10630 Prometal Inoxydable RF-3
2946 Promethium
2947 Propellor Bushing
926 Proplatinum
2915 Proplatinum
2948 Protective Deck Plate
2949 Protective Netting
7895 PSP
2950 Pump Cocks
4656 Purco Chisel
5968 Pure-Ore
7509 Pure-Ore AD-95
12195 Pure Ore Air-Chrome
2228 Pure-Ore Chiz Alloy
12196 Pure Ore Clipper
3969 Pure-Ore Cobalt High Speed
3970 Pure-Ore Cold Heading Die Steel
12197 Pure Ore D-C-33
12198 Pure Ore D-C-66
7510 Pure-Ore D-52 Extrusion Die
7511 Pure-Ore Die Casting
3971 Pure-Ore Drill Rod
7512 Pure-Ore EN-97
7513 Pure-Ore Extra
12199 Pure Ore Finishing
12200 Pure Ore Hi-Run
3972 Pure-Ore High Speed
12201 Pure Ore Kapo
12202 Pure Ore Moly 6-6
7514 Pure-Ore No. 10
12203 Pure Ore No. 14
3974 Pure-Ore No. 25 Special Alloy
12204 Pure Ore Prior
4581 Pure-Ore Prior Extra High Speed
5056 Pure-Ore Production Hi-Cr Hi-C
7521 Pure-Ore Quarry Tool Steel
12205 Pure Ore Rolmo
12206 Pure Ore Solid Drill
3973 Pure-Ore Special
3974 Pure-Ore No. 25 Special Alloy
7515 Pure-Ore Standard
7516 Pure-Ore Super Alloy
7517 Pure-Ore V-995 Alloy
7518 Pure-Ore Z-457 Die Cast Steel
2951 Pure Silver Solder
927 Purple Cut Steel
2982 Purple Gold
3467 Purple Label
7394 Purple Label
228 Purple Label Extra
1412 Purple Label High Speed Steel
3705 "PXD"
6104 Pyralloy
10631 Pyramid
5047 Pyramid Special
928 Pyrasteel
10632 Pyrasteel
5120 Pyrasteel No. 14
5119 Pyrasteel No. 20
10633 Pyrasteel Special
1699 Pyrista
929 Pyrocast
10634 Pyrodie
7605 Pyro Die
10635 Pyrodur
931 Pyromic
930 Pyromic No. 1
931 Pyromic No. 2
932 Pyromic No. 3
933 Pyrophoric Alloy
1457 Pyros
3975 Pyro Tool
934 Python

Q

7081 "Q"
6855 Q-Alloy "A"
5759 Q-Alloy "A-plus"
1586 Q-Alloy "B"
6975 Q-Alloy "B-Si"
1589 Q-Alloy "C-1"
1590 Q-Alloy "C-2"
1591 Q-Alloy "C-3"
10940 Q-Alloy Chrome C-1
6856 Q-Alloy Chrome C-1A
10941 Q-Alloy Chrome C-2
5857 Q-Alloy Chrome C-2A
10942 Q-Alloy Chrome C-3
6858 Q-Alloy Chrome C-2B
6859 Q-Alloy Chrome C-2C
6860 Q-Alloy Chrome C-2D
6861 Q-Alloy Chrome C-2E
6862 Q-Alloy Chrome C-3A
6863 Q-Alloy Chrome CN-1A
6864 Q-Alloy Chrome CN-1B
6865 Q-Alloy Chrome CN-1H
6866 Q-Alloy Chrome CN-1S
6867 Q-Alloy Chrome CN-2A
6868 Q-Alloy Chrome J
6869 Q-Alloy Chrome KA-2
6870 Q-Alloy Chrome KA-2H
6871 Q-Alloy Chrome KA-2Mo
6872 Q-Alloy Chrome KA-2S
6873 Q-Alloy Chrome KA-4
6874 Q-Alloy Chrome KNC-3
1587 Q-Alloy "CN-1" (X-7)
6976 Q-Alloy "CN-1H Mo"
5761 Q-Alloy "CN-1 Mo"
1588 Q-Alloy "CN-2"
10943 Q-Alloy CN2-Mo
935 Q-Alloy K-1
1189 Q-Alloy X-ite
5760 Q-Alloy X-7
6105 "QS"
6106 "QSS"
936 Quality Steel
7521 Quarry Tool Steel
10944 Quarzal
937 Queen's Metal
4125 Queen's Metal
4126 Queen's Metal
4127 Queen's Metal
4128 Queen's Metal
2952 Quick Silver Solder

R

1233 R-50, La Bour
2755 R-55, La Bour
4471 R-301
12159 R-303
12160 R-303 Clad
9552 Raco HD5
11653 Raco HD6
11658 Raco HD8
11645 Raco HD11
9601 Raco HD30
11691 Raco Type D
10992 Radiametal
938 Radianite
4917 Radiohm
939 Radio Metal
3468 Radio Alloy, No. 30
3469 Radio Alloy, No. 60
3470 Radio Alloy, No. 90
3471 Radio Alloy, No. 180
7823 Radio No. 1, Armco
7824 Radio No. 2, Armco
7825 Radio No. 3, Armco
7826 Radio No. 4, Armco
7827 Radio No. 5, Armco
7828 Radio No. 6, Armco
8364 Radio Transformer
12487 Radio Transformer 52
12488 Radio Transformer 58
12490 Radio Transformer 65
7716 Radio Transformer 72
11711 Radium A
10993 Rail End
2113 Railroad Bronze
4289 Railroad Bronze
4292 Railroad Bronze
4293 Railroad Bronze
4294 Railroad Bronze
4295 Railroad Bronze
4296 Railroad Bronze
4297 Railroad Bronze
4291 Railroad Bronze, Durable
4286 Railroad Bronze, Dutch
4282 Railroad Bronze, French
4283 Railroad Bronze, French
4288 Railroad Bronze, Gearing
4290 Railroad Bronze, German
4285 Railroad Bronze, Hard
4284 Railroad Bronze, Lafond
4287 Railroad Bronze, Lafond
2953 Rail Steel
10994 Railway Axle Box
10995 Railwear
10996 Rajah
2954 Rakel's Metal
7520 Ram Brand Swedish Iron
—— Ramet (See Vascoloy Ramet)
11712 Ranalloy Type A
11713 Ranalloy Type B
11714 Ranalloy Type C
2955 Randolf Metal
4575 Rapid Finishing (Jessop)
7920 Rapid Spezial
6851 RA Stainless
2956 Rauchberg
3434 Rauchlos, Griesheim
2957 Raymur
2958 Rayo
4472 R. B. Chisel
488 R.B.D. Steel (Firth)
10997 R.B. Special
7009 RCC, Pireks
941 R. C. F.
7106 R.D.S.
691 R.D.S., Grade 1
692 R.D.S., Grade 1A
11999 R.D.X.

2959 Reactal
3472 Readily Fusible Solder
1318 Reading Genuine Wrought Iron
10998 Readyweld
2545 Reamur
2785 Record "A" (McInnes)
694 Record Eminent
7602 Record Eminent
2493 Record Extra
199 Record Select
7603 Record Select
2492 Record Superior
10999 Redalloy
2500 Red Anchor
2499 Red Anchor Drill Rod
12346 Red Arrow
12045 Red Brass
943 Red Brass
1680 Red Brass
1683 Red Brass
1684 Red Brass
1685 Red Brass
1688 Red Brass
2011 Red Brass (Einheits)
3025 Red Brass (S.A.E.)
1621 Red Brass, Tombac
2114 Red Bronze
944 Red Casting Brass
11000 Red Circle
4820 Red Composition
945 Red-Cut Cobalt
9913 Red Cut Cobalt B
946 Red-Cut Superior
3791 Red Cut Superior, Temper "J"
3792 Red Cut Superior, Temper "M"
3793 Red Cut Superior, Temper "O"
3794 Red Cut Superior, Temper "P"
11001 Red Devil
11002 Red Devil 75
11003 Red Devil 85
11004 Red Fox 10
11005 Red Fox 11
11006 Red Fox 12
11007 Red Fox 21
11008 Red Fox 31
2961 Red Gold
11009 Red Label
11010 Red Label
2248 Red Label (Crasco)
4328 Red Label (Peerless)
5230 Red Label, Ship Brand
4700 Red Label (Wards)
3529 Red Label Steel (Edgar Allen)
36 Red Metal (Allan)
3473 Red Metal
2498 Red Metal No. 2 (Allan)
2962 Red Ray
7238 Red Seal Die Steel
2494 Red Shadow
12214 Red Shadow
947 Red Star Die
2963 Red Star Tap
2964 Red Star Tool
2193 Red Star Tungsten 9 Temper
948 Red Star Tungsten 10 Temper
949 Red Star Tungsten 12 Temper
12104 Red Star Tungsten Drill Rod
6624 Red Star Vanadium
10745 Red Streak
11012 Red Tiger
11945 Red-X-5
11171 Red-X-6
11013 Red-X-8
11014 Red-X-8-5
11015 Red-X-10
11016 Red-X-13
11011 Red Streak
2012 Reed Brass
11017 Reformand
2965 Refractory Solder
3815 Regal No. 2, Vulcan
2966 Regel-metall
11018 Regelmetall WM 80
7348 Regent Babbitt
7378 Regin
11019 Regin 711
950 Regular
4714 Regular
2497 Regular Bolt Die
11020 Regular Carbon
4687 Regular Die
11928 Regular Power Transformer No. 72
11021 Regular Straight Carbon
2496 Regular Tool
3844 Regular Tool
4488 Regular Tool (Crucible)
4691 Regular Trimmer
951 Regulus
4216 Regulus Metal "A"
4217 Regulus Metal "B"
4218 Regulus Metal "C"
4219 Regulus Metal "D"
2967 Regulus of Venus
2968 Reichsbahn Alloys
4271 Reichsbahn, Einheit's Red Brass "A"
4272 Reichsbahn "B"
4273 Reichsbahn "C"
4274 Reichsbahn "D"
4275 Reichsbahn "E"
4276 Reichsbahn "F"
4277 Reichsbahn "G"
4278 Reichsbahn "H"
4279 Reichsbahn "I"
4280 Reichsbahn "J"
4281 Reichsbahn "K"
2969 Reich's Bronze
1464 Reinaluminium
1467 Reinnickel
2970 Reith's Alloy
2491 Reliance
11022 Reliance
11023 Relit
11024 Relleum
4798 Rely C.M.-1
4799 Rely C.M.-2
4800 Rely C.M.-3
4801 Rely C.M.-4
4802 Rely C.M.-5
4803 Rely C.M.-6
5756 Rely "YZ"
7218 Rema
11025 Rema
7232 Rema Hobbing Die
11026 Remalloy
11027 Remalloy
5676 Remanenceless Iron
7940 Remanit 0327
7922 Remanit 1510
7924 Remanit 1520
7925 Remanit 1530
7926 Remanit 1530F

7928 Remanit 1540
7923 Remanit 1610
7927 Remanit 1620
7929 Remanit 1710
7930 Remanit 1710A
7931 Remanit 1710S
7932 Remanit 1740
7933 Remanit 1790
7934 Remanit 1790C
7935 Remanit 1800M
7936 Remanit 1880
7937 Remanit 1880S
7938 Remanit 1880SS
7939 Remanit 2810
5734 Renault Alloy
4485 Rennite
11028 Rennite
2490 Renown
952 Renyx
2971 Reostene
691 Republic Double Strength, Grade 1
692 Republic Double Strength, Grade 1A
12142 Republic Silicon, Armature Grade
12131 Republic Silicon, Electric Grade
12245 Republic Silicon, Field Grade
12246 Republic Silicon, Special Dynamo Grade
12247 Republic Silicon, Special Motor Grade
12248 Republic Silicon, Transformer Grade
6801 R.E.S.
4860 Resilia
7227 Resista
3733 Resista
953 Resistac
11029 Resistac No. 1
11030 Resistac No. 2
11031 Resistac No. 3
2972 Resistal
8121 Resistaloy Bronze
2973 Resistance
4357 Resistance, High Magnetic
4358 Resistance, No. 1
4359 Resistance, No. 2
4360 Resistance, No. 3
4361 Resistance, No. 4
2974 Resistin
5934 Resistoloy
7727 Resulphurized Stock
11032 Revalon
11033 Revere
9944 Revere Magnesium J-1
11692 Revere Magnesium FS-1
9955 Revere Magnesium M
11035 Rex 1059
11036 Rex 1092
954 Rex "A"
2501 Rex "AA"
2502 Rex "AAA"
11037 Rexalloy
7349 Rex Babbitt
11038 Rex Bronze
11039 Rex Cast Aluminum
11040 Rex Cast Iron
270 Rex Champion
11041 Rex Cobalt
11042 Rex Composition
2803 Rex MM
11790 Rex MMM
2489 Rex No. 95
7133 Rex Supervan
7782 Rex TMO
11043 Rex VM
11044 Rex VM Dreadnaught
6500 Rex "Z"
12209 Rexite Grade CR-6
12404 Rexite Grade CR-7
12405 Rexite Grade CR-8
12406 Rexite Grade UC-16
12407 Rexite Grade UC-14
2975 Rextox
11045 Reynolds Metal
6929 Rezistal FM 18-8 (KA-2)
955 Rezistal "KA2"
7134 Rezistal KA-2
6930 Rezistal "KA-2 19-9"
6931 Rezistal "KA-2 20-10"
1593 Rezistal "KA2H"
1594 Rezistal "KA2M"
1274 Rezistal "KA2Mo"
7011 Rezistal "KA-2 Mo T"
1592 Rezistal "KA2S"
12186 Rezistal KA2SCb
7012 Rezistal "KA-2SMo T"
6932 Rezistal "KA-2S 19-9"
6933 Rezistal "KA-2S 20-10"
6934 Rezistal "KA-2S Mo"
5138 Rezistal "KA2ST"
7013 Rezistal "KA-2ST"
6935 Rezistal "KA-2S T Special 19-9"
5169 Rezistal NCR-238
1597 Rezistal "NCT-3"
1595 Rezistal 2 C
7010 Rezistal 2C W
1272 Rezistal, No. 3
6928 Rezistal, No. 3 C
1596 Rezistal, No. 4
1597 Rezistal, No. 7
11046 Rezistal No. 329
11461 Rezistal No. 405
1273 Rezistal, No. 2600
5139 Rezistal, No. 2600-S
11047 Rezistal Safweld
7013 Rezistal Safweld KA-2S T
7014 Rezistal Safweld KA-2T
12187 Rezistal Stainless 122
12189 Rezistal Stainless 162
12188 Rezistal Stainless B-80
6936 Rezistal Stainless B-100
3559 Rezistal Stainless Iron 12
6937 Rezistal Stainless Iron 17
3560 Rezistal Stainless Iron 18
6938 Rezistal Stainless Iron 20
3561 Rezistal Stainless Iron 24
6939 Rezistal Stainless Iron 27
1269 Rezistal Stainless Iron FM-2
3564 Rezistal Stainless Steel 12
3565 Rezistal Stainless Steel 18
3566 Rezistal Stainless Steel 24
3562 Rezistal Stainless Steel A
3563 Rezistal Stainless Steel B

7135 Rezistal Stainless Steel BM
7136 Rezistal Stainless Steel B-100
12190 Rezistal Turbine
11048 Rg5
2976 Rhenium
2977 Rheotan
4797 Rho-Metal
2978 Rhotanium
3795 Richards
2979 Richards' Alloy
3750 Richards' Aluminum Solder
2115 Richards' Bronze
1906 Richards' Plastic Babbitt
2980 Richardson's Speculum
3474 Rich Gold Metal
11049 Richloy Hi-Tensile Solder No. 3
11050 Richloy Hi-Tensile Solder No. 4
11051 Richloy Hi-Tensile Solder No. 5
11052 Richloy Hi-Tensile Solder No. 6
11053 Richloy Hi-Tensile Solder No. 7
2013 Rich Low Brass
1766 Rim-Roll, Atha
7116 Rim-Roll, Crescent
7354 Rim-Roll No. 9
7103 Rita Alloys
11054 Rita Alloy No. 2
11055 Rita Alloy No. 4
11056 Rita Alloy No. 5
2363 Rita Alloy No. 7
4476 Rita Car-Van Die
2462 Rita Chrome Vanadium
2461 Rita Cobalt High Speed
2460 Rita Electric Tool
7104 Rita Endur
2459 Rita Extra Special
2458 Rita Extra Tool
2457 Rita High Speed
2455 Rita Hot Forging Die, No. 1
2456 Rita Hot Forging Die, No. 2
2454 Rita No-Change Oil Hardening
4477 Rita Oil Hardening Drill Rod
4474 Rita Special Drill Rod
2452 Rita Standard Drill Rod
2453 Rita Special Tool
2451 Rita Standard Tool
4475 Rita T.C.V. Alloy
2450 Rita Three Point
2449 Rita Vanadium Drill Rod
11057 Rivaloy No. 24
4432 Riverside Beryllium Copper
854 Riverside Nickel Silver, Grade A
855 Riverside Nickel Silver, Grade B
956 Riverside Nickel Silver, No. 6
957 Riverside Nickel Silver, No. 7
958 Riverside Nickel Silver, No. 18
11058 Riverside No. 1
11059 Riverside No. 2
11060 Riverside No. 3
11061 Riverside No. 4
11062 Riverside No. 5
11063 Riverside No. 6
11064 Riverside No. 7
11065 Riverside No. 8
11066 Riverside No. 9
11067 Riverside No. 10
11068 Riverside No. 11
11069 Riverside No. 12
11070 Riverside No. 13
11071 Riverside No. 14
11072 Riverside No. 15
11073 Riverside No. 16
11074 Riverside No. 17
11075 Riverside No. 18
11076 Riverside No. 20
11077 Riverside No. 21
11078 Riverside No. 23
11079 Riverside No. 30 Gr. A
11080 Riverside No. 31
12135 Riverside No. 32
11081 Riverside No. 33
11082 Riverside No. 47 Gr. C
11083 Riverside No. 80
11084 Riverside No. 101
11085 Riverside No. 102
11086 Riverside No. 105
11087 Riverside No. 205
11088 Riverside No. 209
11089 Riverside No. 209 Gr. D
11090 Riverside No. 330
12294 Riverside No. 400
8593 Riverside No. 401
11091 Riverside No. 402
11092 Riverside No. 403
11093 Riverside No. 404
11094 Riverside No. 405
11095 Riverside No. 72-28
11096 Riverside No. 74-26
11097 Riverside No. 78-22
11098 Riverside No. 80-20
11099 Riverside No. 80-20 Hard
959 Riverside Phosphor Bronze, No. 30
1603 Riverside Phosphor Bronze, No. 41
960 Riverside Phosphor Bronze, No. 47
3706 Riverside Phosphor Bronze, No. 209
1663 Rivet Brass
11100 R-Monel
1475 R.N.C.-1
6776 R.N.C.-2
6777 R.N.C.-3
11101 R.N.C.-44
2982 Roberts-Austen (purple gold)
11102 Robins CI25
11103 Robins CI35G
11104 Robins CI35SG
11105 Robins CI50
11106 Robins Copper Free Ni-Resist
11912 Robins E-5
11107 Robins High Chrome Ni-Resist
11911 Robins Ni-Hard
11108 Robins Standard Ni-Resist
7413 Robust
11109 Rocan
11110 Rockaloy Gr. A
11111 Rockaloy No. 110

11112 Rockaloy No. 111
11113 Rockaloy No. 112
1541 Rock Crusher (Emetco, No. 11)
11680 Rockrite
2983 Roesch
11114 Roger Metal
6762 Rohmium
3475 Rohn
6205 Rokbore
4713 Rolled Auger
3845 Rolled Auger
1543 Rolling Mill (Emetco, No. 13)
961 Rol-Man
12205 Rolmo
2984 Roma-Bronze
2116 Roman Bronze
962 Romanium
2025 Romilly Sheet Brass
11115 Roncan
11116 Ronensil
11117 Ronensil
2985 Ronia Metal
11921 Roofloy
510 Rose's Alloy
2986 Rosein
2987 Rose Label
510 Rose Metal
2988 Rosenhain-Archbutt Alloy
963 Rosin
4427 Ross' Alloy
11118 Ross Meehan
2026 Rosthorn-Wiln Sheet Brass
5985 Rotas
2990 Rotguss
1528 Rotoxit
2991 Roulz
11119 Roxo
682 Royal Crown, Macco
11120 R-P
—— "R.R." Alloys - See Hiduminium.
7370 RR-11
7970 RS-1 Spezial
7971 RS-2 Spezial
7972 RS-3
7973 RS-4
4538 R.T. Steel
1602 Rubel Bronze "DW"
964 Rubel Bronze "H-1"
965 Rubel Bronze "H-2"
1599 Rubel Bronze "H2W"
1600 Rubel Bronze "L"
1601 Rubel Bronze "LW"
966 Rubel Bronze "W-1"
967 Rubel Bronze "W-2"
1598 Rubel Bronze "W-3"
968 Rubelit
969 Rubel Metal
11477 Ruflex
11121 Ruinella
2014 Rnle Brass—238
1893 Ruolz Alloys (Ruolz Silver) (See - Argent francais)
2992 Rupee
3476 Rupee, Silver
2945 Rupert's Metal
4777 Ruscar
970 Ruselite
6277 Ruselite No. 500
2993 Russian
1888 Russian Argentan
1889 Russian Argentan, Cast
3704 Russian Phosphor Bronze
12338 Rustless 5
12325 Rustless 8-20
12329 Rustless 12
12328 Rustless 12 Al
12327 Rustless 12 T
12330 Rustless 12-2
12331 Rustless 12 FM
12332 Rustless 13C35
11122 Rustless 13HC
11123 Rustless 13HC-35
7369 Rustless 15
12333 Rustless 16-2
11124 Rustless 16-6
11125 Rustless 17
12334 Rustless 17C60
12335 Rustless 17C80
12336 Rustless 17C100
11126 Rustless 17FM
11127 Rustless 17HC60
11128 Rustless 17HC90
11129 Rustless 17-7
12318 Rustless 18-8
12326 Rustless 18-8Cb
12319 Rustless 18-8FM (Sulphur)
12320 Rustless 18-8FM (Selenium)
12324 Rustless 18-8Ti
12322 Rustless 18-12-3Mo
12323 Rustless 18-12-4Mo
11130 Rustless 20-10
4884 Rustless 21
5986 Rustless 25-12
12321 Rustless 25-20
12337 Rustless 27
11132 Rustless 29-9
5950 Rnstless—HS
377– 380 Rustless Irons
5991 Rustless Iron (Saville)
7370 Rustless RR-11
1782 Rustless Steel, Zurco
6802 R.W.S.
11998 Ryalloy
5763 Ryanite
11133 Ryanite No. 2
971 Ry-Arm
972 Ry-Ax
741 Rycase
973 Ryco
11134 Rycrome
6254 Ryerson "Shock Tool" Steel
974 Ryerson B.F.D.
974 Ryolite B.F.D.
3976 Ryolite Chromium Hot Work
975 Ryolite 4-Point
976 Ryolite Diamond "D"
5067 Ryolite Special High Speed Tool Steel
3977 Ryolite Tungsten Hot Work
977 Ryolite X
978 Ryolite XX
979 Ryolite XXX
275 Rytense A A

S

4041 S-No. 2
4042 S-No. 4
6284 S-80
7967 SA
10945 SA 50
7917 SA-200
7916 SA-300
7915 SA-500
7984 SA/O

7985 SA/W
4804 S.A.B. Alloy
10947 S.A. Brilliant
10948 S.A.-CN
980 Sabeco Metal
1291 Sabeco No. 5
1292 Sabeco No. 9
1293 Sabeco No. 11
1294 Sabeco No. 11 H.G.
10946 Sabeco No. 16
11641 Sabeco No. 16
3978 Sa-Best Extra Standard
7442 Sabus
3001 S.A.E. No. 1 Solder
3002 S.A.E. No. 2 Solder
3003 S.A.E. No. 3 Solder
3004 S.A.E. No. 4 Solder
3005 S.A.E No. 10 Babbitt
3006 S.A.E No. 11 Babbitt
3007 S.A.E. No. 110 Babbitt
3008 S.A.E. No. 13 Babbitt
3009 S.A.E. No 14 Babbitt
6211 S.A.E. No 20 Wrought Al. Alloy
6212 S.A.E. No. 24 Wrought Al. Alloy
6213 S.A.E. No. 25 Wrought Al. Alloy
3010 S.A.E. Spec. No. 26 Al. Alloy
3011 S.A.E. Spec. No. 27 Al. Alloy
3012 S.A.E. Spec. No. 28 Al. Alloy
3013 S.A.E. Spec. No. 29 Al. Alloy
3014 S.A.E. Spec. No. 30 Al. Alloy
3015 S.A.E. Spec. No. 31 Al. Alloy
3016 S.A.E. Spec. No. 31A Al. Alloy
3017 S.A.E. Spec. No. 32 Al. Alloy
3018 S.A.E. Spec. No. 33 Al. Alloy
3019 S.A.E. Spec. No. 34 Al. Alloy
3020 S.A.E. Spec. No. 35 Al. Alloy
3021 S.A.E. Spec. No. 36 Al. Alloy
3022 S.A.E. Spec. No. 37 Al. Alloy
3023 S.A.E. Spec. No. 38 Al. Alloy
3024 S.A.E. Spec. No. 39 Al. Alloy
3025 S.A.E. Spec. No. 40 Red Brass
3026 S.A.E. Spec. No. 41 Yellow Brass
3027 S.A.E. Spec. No. 42 White Nickel Brass
3028 S.A.E. Spec. No. 43 Manganese Bronze
3029 S.A.E. Spec. No. 44 Cast Brass
3030 S.A.E. Spec. No. 45 Brazing Solder
3031 S.A.E. Spec. No. 62 Bronze
3032 S.A.E. Spec. No. 63 Leaded Gun Metal
3033 S.A.E. Spec. No. 64, Phosphor Bronze
3034 S.A.E. Spec. No. 65, Gear Bronze
3035 S.A.E. Spec. No. 66, Bronze Backing
3036 S.A.E. Spec. No. 67, Semi-plastic Bronze
3037 S.A.E. Spec. No. 68, Cast Aluminum Bronze
3038 S.A.E. Spec. No. 69, Wrt. Aluminum Bronze
3039 S.A.E. Spec. No. 70, Commercial Brass Sheet
3040 S.A.E. Spec. No. 71, Copper Sheet
3041 S.A.E. Spec. No. 72, Brass Rod
3042 S.A.E. Spec. No. 73, Naval Brass Rod (Tobin Bronze)
3043 S.A.E. Spec. No. 74, Seamless Brass Tubing
3044 S.A.E. Spec. No. 75, Copper Tubing
3045 S.A.E. Spec. No. 76, Naval Brass (Tobin Bronze) Tubing
3046 S.A.E. Spec. No. 77, Phosphor Bronze Strip
3047 S.A.E. Spec. No. 78, Aluminum Sheet
6216 S.A.E. Spec. No. 79, Red Brass Sheet
3048 S.A.E. Spec. No. 80, Brass Wire
3049 S.A.E. Spec. No. 81, Phosphor Bronze Wire
3050 S.A.E. Spec. No. 82, Brass Wire
3051 S.A.E. Spec. No. 83, Annealed Copper Wire
3052 S.A.E. Spec. No. 88, Brass Rod
6221 S.A.E. Spec. No. 110 Gray Iron
6222 S.A.E. Spec. No. 111 Gray Iron
6223 S.A.E. Spec. No. 112 Gray Iron
6224 S.A.E. Spec. No. 120 Alloy C. I.
6225 S.A.E. Spec. No. 121 Alloy C. I.
6226 S.A.E. Spec. No. 122 Alloy C. I.
6227 S.A.E. Spec. No. 123 Alloy C. I.
6228 S.A.E. Spec. No. 124 Alloy C. I.
6229 S.A.E. Spec. No. 125 Alloy C. I.
6230 S.A.E. Spec. No. 126 Alloy C. I.
6231 S.A.E. Spec. No. 127 Alloy C. I.
6206 S.A.E. Spec. No. 304 Al. Die Castings
6207 S.A.E. Spec. No. 305 Al. Die Castings
6208 S.A.E. Spec. No. 307 Al. Die Castings
6209 S.A.E. Spec. No. 309 Al. Die Castings

6210 S.A.E. Spec. No. 312 Al. Die Castings
6202 S.A.E. Spec. No. 320 Al. Alloy Castings
6203 S.A.E. Spec. No. 321 Al. Alloy Castings
6201 S.A.E. Spec. No. 322 Al. Alloy Castings
6204 S.A.E. Spec. No. 323 Al. Alloy Castings
6205 S.A.E. Spec. No. 324 Al. Alloy Castings
6214 S.A.E. Spec. No. 640 Nickel Phos. Bronze
6215 S.A.E. Spec. No. 701 Wrt. Al. Bronze
6218 S.A.E. Spec. No. 903 Zinc Die Castings
6217 S.A.E. Spec. No. 921 Zinc Die Castings
10949 S.A.E. 925
3053 S.A.E. Steel No. 1010
3054 S.A.E. Steel No. 1015
6157 S.A.E. Steel No. X-1015
3055 S.A.E. Steel No. 1020
6158 S.A.E. Steel No. X-1020
3056 S.A.E. Steel No. 1025
6159 S.A.E. Steel No. X-1025
3057 S.A.E. Steel No. 1030
3058 S.A.E. Steel No. 1035
3059 S.A.E. Steel No. 1040
6160 S.A.E. Steel No. X-1040
3060 S.A.E. Steel No. 1045
6161 S.A.E. Steel No. X-1045
3061 S.A.E. Steel No. 1050
6162 S.A.E. Steel No. X-1050
6163 S.A.E. Steel No. X-1055
6164 S.A.E. Steel No. 1060
6165 S.A.E. Steel No. 1065
6166 S.A.E. Steel No. X-1065
6167 S.A.E. Steel No. 1070
6168 S.A.E. Steel No. 1075
6169 S.A.E. Steel No. 1080
6170 S.A.E. Steel No. 1085
6171 S.A.E. Steel No. 1090
3062 S.A.E. Steel No. 1095
3063 S.A.E. Steel No. 1112
6172 S.A.E. Steel No. X-1112
6173 S.A.E. Steel No. 1115
3064 S.A.E. Steel No. 1120
3065 S.A.E. Steel No. 1235
6174 S.A.E. Steel No. X-1314
3066 S.A.E. Steel No. X-1315
6175 S.A.E. Steel No. X-1330
6176 S.A.E. Steel No. X-1335
6177 S.A.E. Steel No. X-1340
6178 S.A.E. Steel No. T-1330
6179 S.A.E. Steel No. T-1335
6180 S.A.E. Steel No. T-1340
6181 S.A.E. Steel No. T-1345
3067 S.A.E. Steel No. 1350
6182 S.A.E. Steel No. T-1350
3068 S.A.E. Steel No. 1360
3069 S.A.E. Steel No. 2015
3070 S.A.E. Steel No. 2115
3071 S.A.E. Steel No. 2315
3072 S.A.E. Steel No. 2320
3073 S.A.E. Steel No. 2330
3074 S.A.E. Steel No. 2335
3075 S.A.E. Steel No. 2340
3076 S.A.E. Steel No. 2345
3077 S.A.E. Steel No. 2350
3078 S.A.E. Steel No. 2515
3079 S.A.E. Steel No. 3115
3080 S.A.E. Steel No. 3120
3081 S.A.E. Steel No. 3125
3082 S.A.E. Steel No. 3130
3083 S.A.E. Steel No. 3135
3084 S.A.E. Steel No. 3140
6183 S.A.E. Steel No. X-3140
3085 S.A.E. Steel No. 3145
3086 S.A.E. Steel No. 3150
3087 S.A.E. Steel No. 3215
3088 S.A.E. Steel No. 3220
3089 S.A.E. Steel No. 3230
3090 S.A.E. Steel No. 3240
3091 S.A.E. Steel No. 3245
3092 S.A.E. Steel No. 3250
3093 S.A.E. Steel No. 3312
3094 S.A.E. Steel No. 3325
3095 S.A.E. Steel No. 3335
3096 S.A.E. Steel No. 3340
3097 S.A.E. Steel No. 3415
3098 S.A.E. Steel No. 3435
3099 S.A.E. Steel No. 3450
10950 S.A.E. Steel No. 4120
3100 S.A.E. Steel No. 4130
6186 S.A.E. Steel No. X-4130
6187 S.A.E. Steel No. 4135
3101 S.A.E. Steel No. 4140
3102 S.A.E. Steel No. 4150
6188 S.A.E. Steel No. 4340
6189 S.A.E. Steel No. 4345
3103 S.A.E. Steel No. 4615
5781 S.A.E. Steel No. 4615 (Timken)
6190 S.A.E. Steel No. 4620
6191 S.A.E. Steel No. 4640
6192 S.A.E. Steel No. 4815
6193 S.A.E. Steel No. 4820
3104 S.A.E. Steel No. 5120
3105 S.A.E. Steel No. 5140
3106 S.A.E. Steel No. 5150
3108 S.A.E. Steel No. 6115
3109 S.A.E. Steel No. 6120
3110 S.A.E. Steel No. 6125
3111 S.A.E. Steel No. 6130
3112 S.A.E. Steel No. 6135
3113 S.A.E. Steel No. 6140
3114 S.A.E. Steel No. 6145
3115 S.A.E. Steel No. 6150
3116 S.A.E. Steel No. 6195
3117 S.A.E. Steel No. 7260
3120 S.A.E. Steel No. 9250
6199 S.A.E. Steel No. 9255
3121 S.A.E. Steel No. 9260
6184 S.A.E. Steel No. 30905
6185 S.A.E. Steel No. 30915
6219 S.A.E. Spec. No. 32510 M.I. Castings
6220 S.A.E. Spec. No. 35018 M.I. Castings
6194 S.A.E. Steel No. 51210

6196 S.A.E. Steel No. 51335
6195 S.A.E. Steel No. X-51410
6197 S.A.E. Steel No. 51510
6198 S.A.E. Steel No. 51710
3107 S.A.E. Steel No. 52100
3118 S.A.E. Steel No. 71360
3119 S.A.E. Steel No. 71660
3707 Safaloy
3530 Safe Plate
7014 Safweld KA-2T
7013 Safweld KA-2S T
10951 S. A. Grey Label
1700 Sahib
10952 SA-HY-PRO
10953 SA-HY-PRO Die Steel
5285 Saitie
10967 S & J Special
2994 Salge Anti-Friction Metal
10954 SA Lily Brand
2995 Sallit's Speculum
5061 Salvo
12453 S.A.M.B.
2996 Samlegierung
2997 Sampson
981 Samson
1604 Samson No. 1
1605 Samson No. 2
1606 Samson No. 3
255 Samson No. 4
1607 Samson No. 4A
1608 Samson No. 4B
1609 Samson No. 4C
8774 Samson No. 5
10955 Samson No. 158
10956 Samson No. 436
10957 Samson No. 500
10958 Samson No. 2-547
10959 Samson No. 3-427
10960 Samson No. 3-547
10961 Samson No. 4-408
10962 Samson No. 5-317
10963 Samson No. 5-720
10964 SA-N65
10965 SA-N88
3122 Sandel
982 Sanderson
7137 Sanderson Double Special
7138 Sanderson Extra
7139 Sanderson Extra 3½
7140 Sanderson Extra 4½
7141 Sanderson Special
7142 Sanderson Tool
10966 Sanderson XX
1256 Sandusky No. 1N
10968 Sandusky No. 2
10969 Sandusky No. 3
10970 Sandusky No. 4
11777 Sandusky No. 5
10971 Sandusky No. 6
10972 Sandusky No. 8
10973 Sandusky No. 9
10974 Sandusky No. 10
1785 Sandvik No. 2-C-27
1786 Sandvik No. 2-C-34
1787 Sandvik No. 2-C-40
983 Sandvik No. 2 MF
1610 Sandvik No. 2 MFX
1788 Sandvik No. 2 N-3-C-1
1789 Sandvik No. 2 N-5
1790 Sandvik-2N-8C-36
1791 Sandvik-2N-8C-36Mo
1792 Sandvik-2N-12C-30
1792 Sandvik No. 2R1
1790 Sandvik No. 2R2
1791 Sandvik No. 2R3
1794 Sandvik No. 3 N-3
1795 Sandvik No. 3 N-4C-2
1796 Sandvik No. 3 N-5
1793 Sandvik No. 3 S
1797 Sandvik No. 4 C-48
1798 Sandvik No. 4 N-3C-2
1799 Sandvik No. 6 N-3C-2
1800 Sandvik No. 6 N-4C-2
2160 Sandvik No. 7 C-27
2161 Sandvik No. 7 N-3C-3
5765 Sandvik No. 8
2162 Sandvik No. 8 M
2163 Sandvik No. 8 N
2164 Sandvik No. 8 N-1C-2
2165 Sandvik No. 8 N-3
984 Sandvik No. 12 W-12
984 Sandvik No. 12 W-12-C1
985 Sandvik No. 13 W-12C-1
986 Sandvik No. 16 C-4
986 Sandvik No. 16 C-6
10975 Sandvik No. 20W IV
10976 SA-NN
10977 SA Non-Pa-Reil
10978 Saranac
3708 Saratoga
10979 Sardo
2998 Sashchain
1507 Satco
11681 Satco
987 Saturn
5990 Saville Permabrite
5991 Saville Rustless Iron
5992 Saville Stainless Steel
10980 SA-White Label
10981 SA-Yellow Label
11642 S-Babbitt
3979 S.B. Steel
7983 SC
2999 Sceptre Brass
1926 Schmidt Locomotive Bearing
3000 Schomberg Alloy
3123 Schomberg Bearing
3796 Schulz
3124 Schulz Alloy
4055 Scimitar
5995 Scimitars
988 Scleron No. 1
6278 Scleron No. 2
6297 Scleron No. 3
3331 Scleron (23V)
7531 Scoflex
5870 Scooter
10649 Scotts Acme
3585 Scovill Admiralty
12304 Scovill Cartridge Brass
12306 Scovill Commercial Bronze
12307 Scovill Gilding Metal
12308 Scovill Forging Brass
12309 Scovill Free Cutting Brass
12310 Scovill Engravers Brass

989 Scovill's Hardware Bronze
12303 Scovill High Brass
990 Scovill Leaded Nickel Silver
3125 Scovill Leaded Rod
12305 Scovill Low Brass
3584 Scovill Muntz
1364 Scovill Naval Brass
5187 Scovill 7% Nickel Silver
5185 Scovill 10% Nickel Silver
5186 Scovill 12% Nickel Silver
5184 Scovill 18% Nickel Silver
5744 Scovill No. 99
3125 Scovill No. 187
989 Scovill No. 197
12313 Scovill Oreide
12314 Scovill Platers Metal
3126 Screen Plates
1660 Screw Brass
3797 Screw Brass
2117 Screw Bronze
3127 Screw Metal
2118 Screw Nut Brooze
2015 Screw Wire Brass
10650 S. C. S.S.
6312 S.D.S.
4663 Seaco
10651 Seaco Blue Diamond
4665 Seaco Chrome Vanadium
3984 Seaco Extra
3980 Seaco High Speed
4664 Seaco Hot Die
3983 Seaco No. 70-20
10652 Seaco No-Label
4666 Seaco Non-Shrinkable
3981 Seaco O.H. No. 4 Non-Shrink
10653 Seaco Red Diamond
3982 Seaco Standard
10654 Seaco Yellow Diamond
5369 Sealalloy
10655 Sealmet
3128 Seamless Tubing
1927 Searing Bearing
10656 Sea Steel
3129 Sea Water Alloy
2119 Sea Water Bronze
10657 Secobalt
10658 Secodie
10659 Secoloy
10660 Secovan
10661 Seco XXX
3130 Secretan
3985 Section "A" Auger
3986 Section "B" Auger
991 Seewasser Alloy
7850 Seewasser Alloy, B.S.
2503 Seewasser, Bonner Special (B.S.S.)
6669 Seewasser, Titan
10662 Sefco No. 2
12390 Segment Steel
3131 Seifert
4583 Select
10663 Select B
11844 Select-M
12494 Selenium Copper
992 Self-Hardening
10989 Self-Hardening
4449 Self-Hardening (Dannemora)
4454 Self-Hardening (Edgar Allen)
4005 Self-Hardening (Columbia)
4340 Self-Hardening (Crucible)
4704 Self-Hardening (Ward's)
3312 Selflube Bronze
10097 Selflube Iron
10272 Selflube Iron
3132 Selva Metal
12387 Semi-High
3910 Semi-Hot
4592 Seminole
10664 Seminole Hard
10665 Seminole Medium
993 Seminole Steel
994 Semi-plastic Bronze
3133 Semi-Steel
10666 Semperal
10667 Sendust
12393 Seneca Hot Die
10668 Senera
3134 Seventy-Thirty
10669 Seycast
10670 Seymourco
995 Seymourite
10671 Seymour Nickel Silver Grade A
10672 Seymour Phosphor Bronze Grade A
10673 Seymour Phosphor Bronze Grade C
10674 S H 50
7228 SHA
3136 Shakudo (Shakdo)
12141 Shank Steel
10675 Shaperite
6846 Sharon Stainless 12
6847 Sharon Stainless 17
10676 Sharon Stainless 17-7
6848 Sharon Stainless 18-8
6849 Sharon Stainless 18-8S
6850 Sharon Stainless 21
6998 Sharon Stainless 27
6851 Sharon Stainless RA
11906 Shawinigan CA
11907 Shawinigan HC
11908 Shawinigan HH
11910 Shawinigan HL
6994 Shawinigan HR-1
6995 Shawinigan HR-2
6996 Shawinigan HR-3
11909 Shawinigan HT
6997 Shawinigan Nirosta Heat Resisting
5202 Shawinigan Nirosta KA-2 Mo
6092 Shawinigan SSS
3531 Shear Temper Steel
2120 Sheathing Bronze
10677 Sheepbridge Stokes Mark III
3798 Sheet
1890 Sheet Argentan
2017 Sheet Brass
2121 Sheet Bronze
2107 Sheet Phosphor Bronze
10678 Sheetweld
10679 Sheffalloy
4765 Sheffield
3137 Sheffield Hard Alloy
3138 Sheffield Nickel Silver
898 Sheffield Pewter
4657 Sheffoil, Planet

2016 Shell Head Brass
3139 Shemtschushny
10680 Shenango-Penn No. 1
10681 Shenango-Penn No. 2
10682 Shenango-Penn No. 3
10683 Shenango-Penn No. 4
10684 Shenango-Penn No. 5
12249 Shenango-Penn No. 8
10685 Shenango-Penn No. 9
12250 Shenango-Penn No. 10
10686 Shenango-Penn No. 11
12251 Shenango-Penn No. 12
10687 Shenango-Penn No. 13
12258 Shenango-Penn No. 13A
12259 Shenango-Penn No. 13B
12252 Shenango-Penn No. 14A
12253 Shenango-Penn No. 14B
12254 Shenango-Penn No. 14C
10688 Shenango-Penn No. 15
12256 Shenango-Penn No. 15 HT
12255 Shenango-Penn No. 15 S
12257 Shenango-Penn No. 16B
10689 Shenango-Penn No. 17
10690 Shenango-Penn No. 18
10691 Shenango-Penn No. 19
12260 Shenango-Penn No. 20
10692 Shenango-Penn No. 21
10693 Shenango-Penn No. 22
10694 Shenango-Penn No. 23
10695 Shenango-Penn No. 24
10696 Shenango-Penn No. 25
10697 Shenango-Penn No. 26
10698 Shenango-Penn No. 27
10699 Shenango-Penn No. 28
10700 Shenango-Penn No. 29
10701 Shenango-Penn No. 30
10702 Shenango-Penn No. 31
3140 Shibu-ichi
10703 Shield-Arc 85
10704 Shield-Arc 100
3141 Shiga White Gold
5229 Ship Brand Blue Label
5231 Ship Brand Orange Label
5230 Ship Brand Red Label
3142 Ship Nail Alloy
3143 Ship Nail Brass
6254 Shock
10705 Shock Proof
4577 Shock Resisting
10988 Shock Resisting
3614 Shoe Die
5258 Shoe Die
6478 Shoe Die
7205 Shoe Die (Achorn)
4447 Shoe Die (Balfours)
7205 Shoe Die, Fagersta
7229 Shoe Die, Fagersta Alloy
2028 Shoe Nail Brass
3144 Shoe Tip Metal
3145 Sibley Alloy
3147 Sibley Casting Alloy
3709 Sicromal No. 8
3710 Sicromal No. 9
3711 Sicromal No. 10
3712 Sicromal No. 12
7374 Sicromo
10706 Sicromo 1
10707 Sicromo 2
12105 Sicromo 2½
10708 Sicromo 3
10709 Sicromo 5
12106 Sicromo 5S
12107 Sicromo 7
12108 Sicromo 9M
996 Sideraphite
3148 Siemens-Halske
10710 Sifbrass Brazing Strip No. 6
997 Sifbronze
10711 Sifbronze No. 1
10712 Sifbronze No. 2
10713 Sifbronze No. 3
10714 Sifbronze No. 4
10715 Sifbronze No. 5
10717 Sifonil No. 10
10716 Sifroloy
10718 Sifsilcopper No. 7
10719 Sigal
1712 Sigeron Metal
7453 Sigmalumin
12495 Signal Bronze
5386 Silal
10720 Silal V
3149 Silanca
3713 Silbereisen No. 1
3714 Silbereisen No. 2
3715 Silbereisen No. 3
3716 Silbereisen No. 4
3717 Silbereisen No. 5
5592 Silbereisen No. 6
5593 Silbereisen No. 7
6494 Silbrass
3150 Silchrome
3151 Silchrome Wire
998 Silcrome
6697–6702 Silcrome Alloys
3311 Silcrome CC
3517 Silcrome H-17
3818 Silcrome H-17 EZ
3849 Silcrome KA-2
6845 Silcrome KA-2 B
3873 Silcrome KA-2 EZ
3881 Silcrome KA-2 M
3927 Silcrome KA-2 S
3952 Silcrome KA-2 T
5183 Silcrome KM-1
4004 Silcrome L-12
4011 Silcrome M-17
4026 Silcrome 12
4152 Silcrome 12-EZ
4383 Silcrome 12-2
4464 Silcrome 17
5149 Silcrome 21
5189 Silcrome 25-12
5377 Silcrome 25-20
5408 Silcrome 28
5587 Silcrome 46 M
5588 Silcrome RA
5589 Silcrome RA-EZ
10721 Silcrome X
10722 Silcrome XB
10723 Silcrome XCR
10724 Silcrome X9
10725 Silcrome X10
7358 Silectron
2374 Silferal
999 Sil-fos
1000 Silfram
10726 Silical
10727 Silicalfa
3152 Silico-chromium Steel
7190 Silico-manganese
2029 Silico-manganese Brass
7468 Silico-manganese, Niagara
7685 Silico-manganese, Vancoram

7660 Silico-manganese Spring Wire
3153 Silico-manganese Steel
3158 Silico-spiegel
7192 Silico-spiegel
7560 Silicon-Aluminum, 25-75
4423 Silicon Aluminum DTD-25
5028 Silicon-Aluminum-Vanadium
1001 Silicon-Bronze
3154 Silicon-Copper
7191 Silicon, Electromet
3155 Silicon-Ferrochrome
3156 Silicon-manganese
1971 Silicon Monel—2.5%
3157 Silicon-Nickel
12418 Silicon Nickel
3911 Silicon Punch No. 1
3912 Silicon Punch No. 2
12526 Silicon Red Brass—1027
534 Silicon Steel (Hadfields)
7728 Silicon Steel, Structural
5027 Silicon-Vanadium
2122 Sillman Bronze
10728 Silmal
6601 Silmalec
10729 Silmalec
3159 Sil-man
7061 Silmet
10730 Silmo
5993 Sil-O-Acid No. 7
5768 Sil-Ten
8086 Sil-Ten
8131 Sil-Ten
8203 Sil-Ten
1002 Silumin
10990 Silumin
5434a Silumin-Beta
5433 Silumin, Copper-Manganese Type
5434b Silumin-Gamma
1003 Silvanite
11513 Silvatex
10731 Silvaz
11643 Silvaz 3
1004 Silvel
1005 Silver
1873 Silver, American
1956 Silver, Blatt (Leaf)
1966 Silver, Bolster
3160 Silver, Coinage (U. S. A.)
2333 Silver, China
2331 Silver, Chinese
1319 Silver, Fine
3161 Silver, Foil
10732 Silver Label
3162 Silver, Leaf
2811 Silver, Milling
2819 Silver, Mock
2828 Silver, Mousset's
1053 Silver, Sterling
7295 Silverbond
2123 Silver Bronze
436 Silver Bronze (Emetco No. 1)
5428 Silver Bronze (Parsons)
7206 Silver Die
4975 Silver Fox 10
4976 Silver Fox 11
4977 Silver Fox 12
4978 Silver Fox 13
6311 Silver Fox 14
4979 Silver Fox 17
4980 Silver Fox 18
4981 Silver Fox 20
6302 Silver Fox 21
4982 Silver Fox 22
4983 Silver Fox 24
1529 Silverin
3164 Silverine
3165 Silverite
12067 Silver Magnet Alloy
3166 Silver Metal
1006 Silveroid
10470 Silver Black Agile
11592 Silver Red Agile
3167 Silver Solders
2583 Silver Solder, French
1023 Silver Solder, G.E.Co. No. 1
1024 Silver Solder, G.E.Co. No. 2
1025 Silver Solder, G.E.Co. No. 3
—— Silver Solders (Handy) (See Handy Silver Solders)
3799 Silver Solder, Hard
3800 Silver Solder, Medium
4770 Silver Solder, Pure Silver
2952 Silver Solder, Quick
3202 Silver Solder, Sterling
5050 Silver Star
4111 Silver Steel
10733 Silver Tip
6637 Silvery Mayari
12448 Simbrax
3169 Simeteora
3170 Similargent
3171 Similor
11644 Siminal
8210 Simonds Alnico
10737 Simonds Blue Label
10738 Simonds Blue Streak
4658 Simonds Carbon Steels
10739 Simonds Chromium Magnet Steel
10740 Simonds Chromium Magnet Steel
10741 Simonds Chromium Molybdenum Magnet Steel
3987 Simonds Diamond "S"
3988 Simonds Frontier
3989 Simonds Frontier Special
10742 Simonds Green Streak
10743 Simonds Molva
10734 Simonds No. 47
10735 Simonds No. 12150
3990 Simonds Non Shrinking
10744 Simonds O.H.D.
10745 Simonds Red Streak
4659 Simonds Special Alloys
10746 Simonds S.T.M.
10747 Simonds Super Cobalt
3991 Simonds "T.A.S."
10748 Simonds Teenax 46
10749 Simonds Tunco
10750 Simonds Tungsten Magnet Steel
10751 Simonds 17% Cobalt Magnet Steel
10752 Simonds 35% Cobalt Magnet Steel
10753 Simonds 40% Cobalt Magnet Steel

1365 Simplex C.H.
1007 Simplex Forging
3172 Sin-chu (Japanese Brass)
3435 Sini
10754 Sinterloy A
10755 Sinterloy B
10756 Sinterloy C
7534 Sioux H
6257 Sioux Supercast
12419 Sironze
3992 Sisco
3816 Sisco
4530 Sisco C.N.V.
4531 Sisco C.V.R.
4529 Sisco C.V.S.
4527 Sisco Extra No. 2
10757 Sisco Oil Hardening Chisel
4528 Sisco Standard No. 3
4532 Sisco V.A.S.
3173 Siserskite
10758 Sivyer 5% Cr
1275 Sivyer No. 60
1276 Sivyer No. 62
2960 Sivyer No. 64
1277 Sivyer No. 66
1278 Sivyer No. 67
1279 Sivyer No. 70
1008 Sivyer High Carbon Steel
3135 Sivyer High Silicon
1009 Sivyer Chrome Electric Steel
1010 Sivyer Chrome Nickel Electric Steel
2350 Sivyer Dynamo
1011 Sivyer Manganese Carbon Electric Steel
2547 Sivyer Nitro
2053 Sivyer Nuloy
2333 Sivyer Pole
1012 Sivyer Vanadium Electric Steel
10759 SIWI
4379 Sixleda
10760 Six-Max
7909 SK
1013 Skefko No. 1
1014 Skefko No. 2
1015 Skefko No. 3
3993 S.K.F. Carbon
4669 S.K.F. Drill
1244 S.K.F. No. 1
3999 S.K.F. No. 2
1245 S.K.F. No. 3
3994 S.K.F. No. 3 Tubing
3995 S.K.F. No. 6
3996 S.K.F. No. 7
3997 S.K.F. No. 9
3998 S.K.F. No. 13
1246 S.K.F. No. 22
1247 S.K.F. No. 36
7371 S.K.F. No. 46
8206 S.K.F. No. 48
4000 S.K.F. No. 50
10761 S.K.F. No. 85
4001 S.K.F. No. 99
3993 S.K.F. Steel No. 100
4002 S.K.F. No. 100
4673 S.K.F. No. 114
4674 S.K.F. No. 685
1241 S.K.F. No. 711
1295 S.K.F. RT. 1733
4668 S.K.F. Special
7908 SKL
10762 SLB
3174 S-less Steel (Brearly)
1026 Slicker Solder
2124 Slide Valve Bronze
118 Slocrode
5291 S.L.V.
10763 S.M.
5753 S.M. Alloy
10764 Smena No. 1
6154 Smena No. 2
6680 S-Metal
1016 Smithco Dynamo
1017 Smithco High Cr-Ni
1018 Smithco Low Cr-Ni
6643 Smith No. 10
3175 Smitter Lenian
3176 SML Alloy (Monel)
1919 S-Monel
7207 Smooth Bor Hollow
10765 Smoothare AP
10766 Smoothare DH
10767 Smoothare FR
10768 Smoothare Hardcast
10769 Smoothare Harcote
10770 Smoothare Harmang
10771 Smoothare Harni
10772 Smoothare Har-Ten
10773 Smoothare L.G.
10774 Smoothare Litecote
10775 Smoothare PF
10776 Smoothare WC
10777 Smoothare 110
7324 Smoothole
10778 Smoothole Granite Drill
3177 S.M. Steel (Carpenter)
10779 S.M.Z.
11847 S.N.C.
10780 SNCG
1019 S.O.B.V. Alloy
—— Society Automotive Engineers Alloys (See S.A.E. Alloys)
4469 Soderfors Anvil
4468 Soderfors Arrow
1772 Soderfors Best
4467 Soderfors Crown W
4466 Soderfors Double Crane
4465 Soderfors Drill
4932 Soderfors No. 1
4933 Soderfors No. 2
4934 Soderfors No. 3
4935 Soderfors No. 3½
4936 Soderfors No. 4
4937 Soderfors No. 5
4938 Soderfors No. 6
4939 Soderfors No. 7
4940 Soderfors No. 8
4941 Soderfors No. 9
4942 Soderfors No. 9A
4943 Soderfors No. 9B
4944 Soderfors No. 10
4945 Soderfors No. 11
4946 Soderfors No. 12
4947 Soderfors No. 13
4948 Soderfors No. 14
4949 Soderfors No. 16
4950 Soderfors No. 17
4951 Soderfors No. 18
4952 Solderfors No. 19
4953 Soderfors No. 20
4954 Soderfors No. 21
4955 Soderfors No. 22
4956 Soderfors No. 23
4957 Soderfors No. 25
4958 Soderfors No. 26
4959 Soderfors No. 27
4960 Soderfors No. 28

4961 Soderfors No. 41
4962 Soderfors No. 42
4963 Soderfors No. 43
4964 Soderfors No. 61
4965 Soderfors No. 62
4966 Soderfors No. 85
7039 Sodium-Lead
6725 Sodium-Zinc Alloy
4517 Soft (Electro Steel Co.)
1340 Soft Babbitt, Tin Base
10781 Softweld
4003 Soho Self Hardening
1020 Solar
10782 Solar Eclipse
10783 Solbiskys Alloy
10784 Soldaloy No. 1
10785 Soldaloy No. 8
22 Solder, Ajax Honest
26 Solder, Ajax Wiping
1862 Solder, Aluminum
4238–4245 Solders, Aluminum
4375 Solder, Aluminum
4376 Solder, Aluminum
6642 Solder, Aluminum
2147 Solder, Aluminum (Bur. of Stds.)
2148 Solder, Aluminum (Burgess)
2572 Solder, Aluminum (Frismuth)
2608 Solder, Aluminum (Grimm's)
1863 Solder, Aluminum High Strength
1892 Solder, Argentan
1021 Solder, Bismuth
3382 Solder, Brazing
3030 Solder, Brazing (S.A.E.)
1022 Solder, Cadmium
3178 Solder, Class A (A.S.T.M.)
3179 Solder, Class B (A.S.T.M.)
2609 Solder, German Silver
2626 Solder, Gold
4348 Solder, Gold 12 Carat
3180 Solder, Half and Half
2651 Solder, Hard
2650 Solder, Hard Yellow
10786 Solder, HC
3718 Solder No. 1
3719 Solder No. 2
2924 Solder, Platinum
2931 Solder, Plumber's
2952 Solder, Quicksilver
3472 Solder, Readily Fusible
2965 Solder, Refractory
3001 Solders, S.A.E. No. 1
3002 Solders, S.A.E. No. 2
3003 Solder, S.A.E. No. 3
3004 Solder, S.A.E. No. 4
2312 Solder, Silver, Common
2583 Solder, Silver, (French)
1023 Solder, Silver, G.E. Co. No. 1
1024 Solder, Silver, G.E. Co. No. 2
1025 Solder, Silver, G.E. Co. No. 3
4187-4200 Solders, Silver (Handy)
3181 Solder, Silver, (U.S. Bur. of Std.)
2652 Solder, Silver (Hard)
3799 Solder, Silver (Hard)
3800 Solder, Silver (Medium)
2796 Solder, Medium Silver
2951 Solder, Pure Silver
1026 Solder, Slicker
4766 Solder, Soft White
3228 Solder, Tinman's
4768 Solder, Very Refractory
4769 Solder, Very Soft White
4767 Solder, White
3297 Solders, White Gold
4353 Solder, White Gold, 14 Carat
4354 Solder, White Gold, 18 Carat (A)
4355 Solder, White Gold, 18 Carat (B)
4356 Solder, White Gold, 18 Carat (C)
1027 Solder, Wiping
26 Solder, Wiping, Ajax
4156 Solderal
10787 Solid Drill
3615 Solid Drill
10788 Solid Drill
3846 Solid Drill
7208 Solid Drill (Achorn)
7119 Solid Drill, Crusca
7519 Solid Drill (Kloster)
4642 Solid Drill (Potts)
3811 So-luminum Aluminum Solder
4805 Solusal
10789 Sova-Metall
1463 Sonderlegierung, No. 41
3182 Sondermessing
3183 Sorel's Alloy
6153 Sormite
7682 Sovereign Babbitt
1901 Spandau, Austrian
10790 Spang Chalfant 1
10791 Spang Chalfant 2
10792 Spannal 320
1028 Spares Manganese Bronze
10794 Sparkaloy
4928 Spark Plug Electrode Wire Alloy, No. 667
1029 Spark Plug Metal
10795 Sparta
10796 Spartan
10797 Special
10798 Special
10991 Special
1778 Special
4006 Special
4007 Special
4009 Special
4010 Special
4012 Special
4013 Special
4017 Special
6258 Special (Albertson)
7147 Special, Cannon
11996 Special, Columbia
7177 Special Crescent
7130 Special, Darwin No. 505
4518 Special (Electro)
1546 Special (Emetco)

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4534 Special (Firth)
3847 Special (F.J.A.B.)
7141 Special, Sanderson
4659 Special (Simond's)
4056 Special (Timken)
1166 Special (Vulcan)
4706 Special (Wards)
3550 Special "A"
10799 Special Alloy
7083 Special Alloy (Atlas)
4502 Special Alloy (Disston)
4510 Special Alloy (Driver-Harris)
4417 Special Alloy Type "D"
7209 Special Alloy Die
2054 Special Aluminum Bronze
5048 Special A.S.V.
4179 Special Auto, Type A
4014 Special Bolt Die
4048 Special Carbon
10800 Special Carbon
10801 Special Carbon
10802 Special Carbon SSC
5783 Special Carburizing
3532 Special Chrome
4015 Special Chrome Nickel
4016 Special Chrome Vanadium
10803 Special Chrome Vanadium
10804 Special D
378 Special Defirust
5922 Special Defistain
10805 Special Draco
4644 Special Drill Rod (Potts)
4474 Special Drill Rod (Rita)
11927 Special Dynamo
2809 Special Finishing (Midvaloy)
10806 Special G
1414 Special High Carbon "51-V"
1413 Special "HM" Oil Hardening
3913 Special Hot Die
12138 Special Hot Work No. 57
6256 Special Iron
4018 Special "K"
10807 Special "M"
11926 Special Motor
7350 Special Motor Babbitt
1636 Special No. 7T (Vasco)
1030 Special No. 8T
1637 Special No. 9T
1031 Special No. 10T
3543 Special No. 11
1638 Special No. 11T
1639 Special No. 12T
10808 Special No. 13
1640 Special No. 13T
1641 Special No. 14T
1546 Special No. 16
4023 Special No. 18
4024 Special No. 19
4025 Special No. 20
4463 Special No. 847
4162 Special, Oil Hardening
10809 Special, Oil Hardening
10810 Special, Oil Hardening
4554 Special Peerless
2508 Special Piston Alloy (K.S.)
7239 Special Piston Steel
11929 Special Power Transformer No. 65
10811 Special Processed
4019 Special Punch
10812 Special Punch
4020 Special Shell Turning
4456 Special Tap (Anchor)
4555 Special Tap (Hobson)
4144 Special Tool (A)
4143 Special Tool (B)
2453 Special Tool (Rita)
4630 Special Tungsten Alloy Drill Rod
12215 Special Vanadium
10813 Special Vanadium
10814 Special Vanadium
4021 Special Vanadium
2250 Special Vanadium (Crasco)
3275 Special Vanadium (Vulcan)
4022 Special Very Hard
10815 Special Wire Drawing Die
10816 Special Wortle Die
7240 Special XX
3802 Speculum
1032 Speculum Metal
2330 Speculum, Chinese (Elsner's)
2558 Speculum, Edward's
2546 Speculum, English
2752 Speculum, Laderig's
2735 Speculum, Little's
2763 Speculum, Mach's
2830 Speculum, Mudge's
2980 Speculum, Richardson's
2995 Speculum, Sallits
5996 Spedex
1736 Speedaloy
10817 Speedcase X1515
7328 Speedcase X1525
10818 Speedcase X1535
10819 Speedcase X1535
10820 Speedcase X1545
10821 Speedcase X1545
1033 Speedicut
1034 Speedicut Leda
1035 Speedicut, Maximum
1635 Speedicut, "14%W"
1634 Speedicut "18%W"
3184 Spelter Wire
7975 Spezial No. 5
7899 Spezial W
3185 Spiauter (Hard Zinc)
3186 Spiegeleisen
7193 Spiegeleisen
3187 Spinning Silver
10822 Spinzwel
4927 Sponge Iron
3188 Spoon Metal
7444 S. P. Pig Iron
10823 Sprababbitt A
10824 Sprabrass
10825 Sprabronze C
10826 Sprabronze M
10827 Sprabronze P
10828 Sprabronze T
10829 Sprairon A
10830 Sprasteel 10
10831 Sprasteel 25
10832 Sprasteel 40
10833 Sprasteel 80
10834 Spraysteel 120

8050 Spreemetall
1036 Spring Brass
3189 Spring Gold
1037 Spring Oreide
3190 Spring Silver
3191 Spring Steel
2030 Spring Wire, Brass
7648 Spring Wire, Chrome Vanadium
4745 Spring Wire, Phosphor Bronze
7660 Spring Wire, Silico-Manganese
10835 SPS 245
4637 SP Special
4635 "SPS" Special
7501 Spuncast Holfos Bronze
7416 S.R.
4634 SR-4 Regular
12232 SS—Extra Cold Heading
7862 SS-1 Extra Extra
7863 SS-2 Extra Extra
7864 SS-3 Extra Extra
7897 SS-3V
7865 SS-4 Extra Extra
7866 SS-5 Extra Extra
7867 SS-6 Extra Extra
7988 SSB
10987 SSB
7882 SSC
7986 SSF
7987 SSM
7661 SS Tool
10836 ST-10 Solder
10837 ST-15 Solder
10838 ST-20A Solder
10839 ST-20B Solder
10840 ST-20C Solder
10841 ST-30 Solder
10842 ST-48
5764 ST-52
4545 Stabil
920 Stabil (Poldi)
7629 Stable-Arc
6524 Stabrite
2179 Stag Air-Hardening
10843 Stag Allemite
2177 Stag Extra Special
1038 Sta-Gloss A
5994 Sta-Gloss B
2176 Stag Major
10465 Stag Mo
3533 Stagpick
2178 Stag Special
5127 Stainex No. 1
5128 Stainex No. 2
5129 Stainex No. 3
10844 Stainlend 18/8 MO
10845 Stainlend HC
10846 Stainlend K
6692 Stainless
12100 Stainless 302
12094 Stainless 420
12095 Stainless 440
12096 Stainless 410
12097 Stainless 416
12098 Stainless 430
12099 Stainless 441
6936 Stainless B-100
7136 Stainless B-100
6091 Stainless Invar
4931 Stainless Iron (American)
6942 Stainless Iron
6000 Stainless Iron C-1
6001 Stainless Iron C-2
5228 Stainless Iron C-2 (Vulcan)
6002 Stainless Iron C-3
6003 Stainless Iron C-4
321 Stainless Iron C.N.C.
322 Stainless Iron C.N.C.-430
323 Stainless Iron C.N.C.-795
324 Stainless Iron C.N.C.-FMS
2278 Stainless Iron (Crucible)
4300 Stainless Iron Free Machining No. 2
634 Stainless Iron "H"
2174 Stainless Iron, Imperial
636 Stainless Iron "L"
1039 Stainless Iron "N"
1269 Stainless Iron No. 2FM
2512 Stainless Iron No. 12
3559 Stainless Iron No. 12
5163 Stainless Iron No. 12
2513 Stainless Iron No. 16
5165 Stainless Iron No. 16
6847 Stainless Iron No. 17
6937 Stainless Iron No. 17
2514 Stainless Iron No. 18
3560 Stainless Iron No. 18
5166 Stainless Iron No. 18
6938 Stainless Iron No. 20
6850 Stainless Iron No. 21
2515 Stainless Iron No. 24
3561 Stainless Iron No. 24
5167 Stainless Iron No. 24
6939 Stainless Iron No. 27
6694 Stainless "N"
6695 Stainless "O"
6696 Stainless "S"
7001 Stainless Steel
1268 Stainless Steel (American)
181 Stainless Steel (Bethlehem)
260 Stainless Steel, Carpenter No. 1
261 Stainless Steel, Carpenter No. 2
262 Stainless Steel, Carpenter No. 3
263 Stainless Steel, Carpenter No. 4
264 Stainless Steel, Carpenter No. 5
5118 Stainless Steel, Carpenter No. 7
325 Stainless Steel, Colonial "A"
326 Stainless Steel, Colonial "B"
327 Stainless Steel, Colonial "I"
328 Stainless Steel, Colonial "N"
329 Stainless Steel, Colonial "U"
3562 Stainless Steel, Crucible "A"
3563 Stainless Steel, Crucible "B"
3564 Stainless Steel, Crucible No. 12
3565 Stainless Steel, Crucible No. 18
3566 Stainless Steel, Crucible No. 24
457 Stainless Steel, "E-Z"
491 Stainless Steel, Firth-Sterling "A"

492 Stainless Steel, Firth-Sterling "B"
3724 Stainless Steel, Firth-Sterling "BH"
5148 Stainless Steel, Firth-Sterling "BHH"
3725 Stainless Steel, Firth-Sterling "H"
3726 Stainless Steel, Firth-Sterling "M"
3728 Stainless Steel, Firth-Sterling "MG"
3723 Stainless Steel, Firth-Sterling "SB"
493 Stainless Steel, Firth-Sterling "T"
2173 Stainless Steel, Imperial
2688 Stainless Steel, Ingo-Clad
2175 Stainless Steel, Malleable, Imperial
2478 Stainless Steel — 7 (Midvaloy)
5992 Stainless Steel (Saville)
5214 Stainless Steel (Thomas)
5234-5241 Stainless Steels (Whelco)
325 Stainless Steel A
1331 Stainless Steel A
1646 Stainless Steel A
3562 Stainless Steel A
3720 Stainless Steel A
4255 Stainless Steel A
5160 Stainless Steel A
5227 Stainless Steel A
5998 Stainless Steel "A"
326 Stainless Steel B
1332 Stainless Steel B
3563 Stainless Steel B
3721 Stainless Steel B
4256 Stainless Steel B
5161 Stainless Steel B
5162 Stainless Steel B
5999 Stainless Steel "B"
3724 Stainless Steel BH
5148 Stainless Steel BHH
7135 Stainless Steel BM
6936 Stainless Steel B-100
7136 Stainless Steel B-100
457 Stainless Steel EZ
4394 Stainless Steel FC
10986 Stainless Steel Gr. A
10985 Stainless Steel Gr. B
10847 Stainless Steel Grade HC
3725 Stainless Steel H
327 Stainless Steel I
3726 Stainless Steel M
3728 Stainless Steel MG
328 Stainless Steel N
3723 Stainless Steel SB
493 Stainless Steel T
3722 Stainless Steel T
6354 Stainless Steel TX
7802 Stainless Steel Type 301
7803 Stainless Steel Type 301S
7535 Stainless Steel Type 302
7705 Stainless Steel Type 302
7804 Stainless Steel Type 302
7536 Stainless Steel Type 304
7706 Stainless Steel Type 304
7805 Stainless Steel Type 304
7707 Stainless Steel Type 305
7806 Stainless Steel Type 305
7807 Stainless Steel Type 306
7808 Stainless Steel Type 307
7809 Stainless Steel Type 308
7810 Stainless Steel Type 309
8077 Stainless Steel Type 320
8078 Stainless Steel Type 321
1021 Stainless Steel Type 345
7710 Stainless Steel Type 345
7022 Stainless Steel Type 346
7711 Stainless Steel Type 346
7023 Stainless Steel Type 347
7712 Stainless Steel Type 347
7024 Stainless Steel Type 348
7713 Stainless Steel Type 348
7537 Stainless Steel Type 410
7538 Stainless Steel Type 425
7813 Stainless Steel Type 425
7539 Stainless Steel Type 430
7811 Stainless Steel Type 430
7812 Stainless Steel Type 434A
1040 Stainless Steel X
6805 Stainweld A
10848 Stainweld A-5
10849 Stainweld A-7
10850 Stainweld B
10851 Stainweld C
10852 Stainweld D
1041 Stalinite
10853 Stalinite No. 2
1042 Stalloy
5059 Staminal
10854 Staminal
105 Stancast
10855 Standard
2451 Standard
10983 Standard
3803 Standard
10984 Standard
7143 Standard
7532 Standard
7210 Standard (Achorn)
4176 Standard (Bourne-Fuller)
11997 Standard (Columbia)
4163 Standard (Soderfors)
1545 Standard (Emetco No. 15)
4496 Standard (Cyclops)
4520 Standard (Dannemora)
4501 Standard (Disston)

5053 Standard (Halcomb)
1779 Standard (Latrobe)
7515 Standard (Pure-Ore)
4091 Standard (Whelco)
4703 Standard (Wards)
3477 Standard Admiralty Bronze
5009 Standard Alloy "AR-1"
1626 Standard Alloy "HR-1"
1627 Standard Alloy "HR-2"
1628 Standard Alloy "HR-3"
1629 Standard Alloy "HR-4"
1630 Standard Alloy "HR-5"
1250 Standard Alloy HR-5M
1631 Standard Alloy "HR-6"
1632 Standard Alloy "HR-7"
1633 Standard Alloy "HR-8"
5205 Standard Alloy "HR-9"
6983 Standard Alloy "HR-10"
6984 Standard Alloy "HR-11"
1624 Standard Alloy KA4
1625 Standard Alloy, Special
11903 Standard Alnico
1044 Standard Cadmium Silver
11854 Standard Carbon
7211 Standard Cutlery
10856 Standard Draco
2452 Standard Drill Rod
2580 Standard Friction Alloy
10857 Standard G
3192 Standard Gold, Great Britain
3193 Standard Gold, U.S.A.
1043 Standard "HR"
1267 Standard Misco
3478 Standard Nickel Bronze
3194 Standard No. 4 Babbitt Metal
1045 Standard Phosphor Bronze
2108 Standard Phosphor Bronze ("S")
866 Standard Red Composition
3195 Standard Silver
3196 Standard Silver (Sterling)
2451 Standard Tool
7143 Standard Tool
10858 Standard Vanadium
6716 Stanley, Grade A
6717 Stanley, Grade B
6718 Stanley, Grade C
6719 Stanley, Grade D
6720 Stanley, Grade E
3197 Stanniol
10859 Stanelec
10860 Stanfire
1046 Stannum Metal
5314 Stanslog
7846 Star
10861 Star
11646 Star Boron
6651 Star Brand
10862 Star J Metal
10863 Star-Max
10864 Star-Mo
7781 Star-Moly
9691 Star Tung
1047 Star-Zenith
2125 Statuary Bronze
4314 Statuary Bronze, Augsburg (A)
4315 Statuary Bronze, Augsburg (B)
4316 Statuary Bronze, Bacchus, Potsdam
4317 Statuary Bronze, Bavaria, Munich
4318 Statuary Bronze, Column Vendome
4319 Statuary Bronze, Melanchton, Wittenberg
4320 Statuary Bronze, Munich
10865 Stayblade Max
10866 Staybolt
1048 Staybrite
5287 Staybrite D.D.Q.
5289 Staybrite F.D.P.
5288 Staybrite F.M.B.
5286 Staybrite F.S.T.
3860 Stayput Oil Hardening
1049 Steam Bronze
668 Steam Bronze (Lumen)
2126 Steam-fitting Bronze
3479 Steam Metal
1296 Steam Metal (Ajax)
2127 Steam Valve Bronze
3804 Steam Valve Bronze
5997 Steb Metal
2219 Stedmetal
1237 Steel, Nickel-Clad
924 Steel, Projectile
2128 Steel Bronze (Stahl Bronze)
7069 Steelton L.P. Iron
1050 Stellite
1611 Stellite, Festel
1408 Stellite, J-Metal
1619 Stellite, Malleable
1612 Stellite No. 1
1613 Stellite No. 2
1614 Stellite No. 3
1615 Stellite No. 4
1616 Stellite No. 6
1617 Stellite No. 8
1618 Stellite No. 12
10490 Stellite No. 2400
9892 Stellite 93 Alloy
10867 Stellite 98M2
10868 Stellite TTS No. 1
10869 Stellite TTS No. 2
1051 Stentor
1052 Stephenson
1928 Stephenson Locomotive Bearings
2525 Stereotype, English
3198 Stereotype Metal
3199 Sterlin
3200 Sterline
10982 Sterling
4414 Sterling
4536 Sterling (Firth-Sterling)
3805 Sterling Aluminum Solder
—— Sterling Alloys. See, also: Firth-Sterling Alloys

7241 Sterling M Drill Steel
3291 Sterling Metal
490 Sterling Nirosta
1415 Sterling Nitrard No. 1
3202 Sterling Silver Solder
4394 Sterling Stainless "FC"
3720 Sterling Stainless Steel "A"
3721 Sterling Stainless Steel "B"
5148 Sterling Stainless Steel "BHH"
3722 Sterling Stainless Steel "T"
3724 Sterling Stainless Type "BH"
3725 Sterling Stainless Type "H"
3726 Sterling Stainless Type "M"
3727 Sterling Stainless Type "MG"
3723 Sterling Stainless Type "SB"
3196 Sterling Standard Silver
10870 Sterling TX
7242 Sterling V (Punch)
7243 Sterling V (Shearknife)
7244 Sterling V (Tap)
7245 Sterling XX
1054 Sterlite
10871 Steropes
1055 Sterro Metal
12339 Stewart Aluminum No. 10
12340 Stewart Aluminum No. 10R
6242 Stewart Aluminum No. 12
6243 Stewart Aluminum No. 13
6244 Stewart Aluminum No. 35
6240 Stewart Lumite No. 5
6241 Stewart Lumite No. 10
12344 Stewart Magnesium No. R
7372 Stewart White Brass No. 3
7640 Stewart White Brass No. 5
7373 Stewart White Brass No. 19
12343 Stewart Zinc No. 2
12341 Stewart Zinc No. 3
12342 Stewart Zinc No. 5
3203 Stirling, Cast
3204 Stitching Wire
10746 S.T.M.
3806 Stone Bronze
1056 Stone's English Gear Bronze
4816 Stone's English Worm Gear Bronze
4426 Stone's Gear Bronze
5448 Stone's "608" Superheat Bronze
5449 Stone's "Z" Metal
7385 Stonewall
10873 Stoodex
1057 Stoodite
10874 Stoodite 45
10875 Stoodite 54
10876 Stoodite 63
10878 Stoodite AC
10877 Stoodite K
8209 Stoody 1
11782 Stoody 6
1058 Stoody Self-Hardening Welding Rod
3205 Stovall
11647 Strainfree Elastuf Penn
1059 Strauss Metal
2027 Strollberg Sheet Brass
10879 Strenes
10880 Strenes AA
10881 Strenes B
10882 Strenes C
10883 Strennes Metal
11784 Stressite
10884 Stress-Proof
10885 Stress-Proof No. 1
10886 Stress-Proof No. 2
10887 Stress-Proof No. 3
10888 Stroh
3593 Stronger-Than-Steel
7585 Strontium-Aluminum
1821 Structural Bronze
7728 Structural Silicon
8203 Structural-Silicon
10889 Studal
3480 Stuffing Box Alloy
11431 Sturdy Forty
10890 Stylus Metal
10891 Stylus Metal
10892 Styrian Blue Label
2611 Styrian Gray Label
3299 Styrian New Rapid
3298 Styrian White Label
3206 Subler White Copper
3207 Substitute
3481 Sudal
3482 Sudalon "A"
3483 Sudalon "B"
3484 Sudalon "C"
1060 Sumet Bronze SM- 2
6260 Sumet Bronze SM- 4
6261 Sumet Bronze SM- 8
6262 Sumet Bronze SM-10
6263 Sumet Bronze SM-12
6264 Sumet Bronze SM-14
6265 Sumet Bronze SM-16
6266 Sumet Bronze SM-18
11648 Sumet Bronze SM-22
2129 Sun Bronze
4806 Sunray Gold
10893 Sunshine Metal
10894 Supard Chrome
10895 Super
10896 Super Alloy
792 Superalloy (Nevastain RA)
7516 Super Alloy, Pure-Ore
10897 Super A—Mechanite
1061 Super Ascoloy
10898 Super Avional
4589 Superb
10899 Superbasique
1062 Superbronze
4546 Supercase
6257 Supercast Iron
4027 Super Cesco Diamond
4028 Super Chrome
10747 Super Cobalt
9276 Supercomo
6079 Supercut, Union
11786 Super DBL
381 Super deLavaud Metal
1063 Superdie
4029 Super Dreadnaught
6085 Super-Duct F-3
1064 Super Duralumin

8365 Super Dynamo
10901 Superfine IX
10902 Superfine MM
10903 Superfine Mold
10904 Superfine MX
10905 Superfine XXX
6721 Super-Genuine Babbitt
3306 Superheat
5448 Superheat Bronze "608"
7068 Superheater Bolt Steel
1416 Super High Speed
5396 Super Holfos Bronze
3208 Superior
10906 Super-Invar
4326 Superior
10907 Superior
4327 Superior
6957 Superior
4057 Superior (Toledo)
4092 Superior (Whelco)
10908 Superior A Nickel Chrome
4030 Superior Ark
10909 Superior Ark High Speed
10910 Superior Chrome
11649 Superior Copper Steel
182 Superior Hollow Drill
2856 Superior Nickel Chrome
7074 Superior No. 1
7075 Superior No. 2
10911 Superior No. 3
2694 Superior Oil Hardening
4032 Superior Oil Hardening
7212 Superior Oil Hardening
4595 Superior Swedish (Macco)
12191 Superior Tool
3210 Superior Tool Steel
183 Superior Tool (Bethlehem)
1166 Superior Tool (Vulcan)
4182 Superior XX
7522 Superloy K-2 Mo
10913 Superloy Manganese Steel
10914 Superloy Mo-Chip High Speed
5452 Superloy No. 4
5453 Superloy No. 7
10912 Superloy No. 10
7454 Supermagaluma
5757 Super-Manga Iron
1362 Supermanganese Bronze
670 Supermanganese Bronze (Lumen)
1065 Supermal
7638 Supermetal
10915 Super-Motung
10916 Superneutral
9941 Super Nerva
1303 Super Nickel—701
10917 Super Nilvar
10918 Super Oilite
11650 Super Oilite 16
4033 Super Panther
4031 Super Rapid
1965 Super Rapid (Böhler)
5681 Super Rapid Extra
5683 Super Rapid Extra—HV
5682 Super Rapid Extra—214
5684 Super Rapid Extra—500
5366 Super-Safety
10919 Super Silicon Cast Iron No. 9
11651 Super Star-Mo
3209 Super Steel
6668 Superston L-189
8978 Superstrength 49 A
8979 Superstrength 50
8980 Superstrength 50 A
5890 Superstrength Bronze
4438 Superstrength Bronze (Cramp's) Grade A
4439 Superstrength Bronze (Cramp's) Grade B
4440 Superstrength Bronze (Cramp's) Grade C
4441 Superstrength Bronze (Cramp's) Grade D
1066 Supertemp
2432 Supertough "A"
2433 Supertough "B"
2434 Supertough "C"
2435 Supertough "C-20"
7133 Supervan, Rex
7655 Supervan Dreadnaught
7401 Superweld No. 55
7402 Superweld No. 66
7403 Superweld No. 77
10920 Super W H Meehanite
12441 Super-X-Leaded Nickel Silver
12442 Super-X-18%-Nickel Silver Grade A
12443 Super-X-18%-Nickel Silver Grade B
12444 Super-X-18%-Nickel Silver Grade C
10921 Super X-Nickel Silver 12%
10922 Super X-Phosphor Bronze
12445 Super-X-Phosphor Bronze Grade C
12446 Super-X-Phosphor Bronze Grade D
12447 Super-X-Phosphor Bronze Grade E
10923 Super-Y
10924 Super Zorite
10925 Supra
6763 Suprakolbenmetall
11652 Supraloy
4588 Supreme
1417 Supremus
1418 Supremus Extra
10926 Sureweld A
10927 Sureweld B
10928 Sureweld C
10929 Sureweld F
10930 Sureweld MLY
10931 Sureweld N
10932 Sureweld No. 450
10933 Sureweld No. 520
10934 Sureweld No. 550
10935 Sureweld No. 650
10936 Sureweld TD
10937 Surfaceweld
3211 Susini
11949 Suttonite
2524 Svea Metal
10938 Sweaton
4035 Swedesteel "A"
4036 Swedesteel "B"
4037 Swedesteel "C"
4038 Swedesteel "D"

4039 Swedesteel "E"
4596 Swedish Chrome Tungsten
7520 Swedish Iron, Ram Brand
6361 Swedish Steel No. 4
7594 Swedish No. 4
6362 Swedish Steel No. 9
7595 Swedish No. 9
6363 Swedish Steel No. 41
7596 Swedish No. 41
4034 Swedish Vanadium
4040 Swed-Oil Non Shrinking
2517 Sweetaloy 16
2518 Sweetaloy 17
6005 Sweetaloy 17 Mo
6006 Sweetaloy 17 S
6007 Sweetaloy 17 Se
6008 Sweetaloy 17 S-Mo
2519 Sweetaloy 18
2520 Sweetaloy 19
2521 Sweetaloy 20
2522 Sweetaloy 21
6009 Sweetaloy 21A
2523 Sweetaloy 22
5132 Sweetaloy CA-5
5130 Sweetaloy KA-4
5131 Sweetaloy KNC-3
10939 Swiftweld
7386 Syracuse Government Genuine Babbitt
12420 Sylvaloy

T

11136 T-1 Alloy
4043 Tack Die
12401 Tack Die
4693 Tacony Alloy Die
4695 Tacony Alloy Tool
4692 Tacony Alloy (Trimmer)
4686 Tacony Bit
4688 Tacony Carbon
4690 Tacony Chisel and Drill
4694 Tacony Gol Chisel
4687 Tacony Jar
4689 Tacony Regular Die
4691 Tacony Regular Trimmer
11139 Tail Shaft Bronze
11137 Talide
6535 Talisman
11138 T-Alloy "A"
12242 T-Alloy "N"
4325 T-Alloy Tool
6306 Tally-Ho 100
6307 Tally-Ho 200
6308 Tally-Ho 300
6309 Tally-Ho 400
3212 Talmi Gold
4453 Talon
11140 TAM
5393 TAM-Cupro-Titanium
4906 TAM Foundry Ferro-Titanium
4907 TAM Low Carbon Ferro-Titanium, 25% Grade
7470 TAM Low Carbon Ferro-Titanium, 40% Grade
11141 TAM Manganese Titanium Gr. 1
11142 TAM Manganese Titanium Gr. 2
7469 TAM Medium Carbon Ferro-Carbon-Titanium
7471 TAM Metallic Titanium
11143 TAM Molybdenum Titanium
11144 TAM Nickel Titanium
4310 TAM Original Ferro-Carbon-Titanium
3213 Tandem
11145 Tank Brand
11146 Tantaloy
1068 Tantalum
4903 Tantalum Bronze
7570 Tantalum-Nickel
7569 Tantalum-Tungsten
1069 Tantiron
11147 Tantung
11148 Tantung G
12295 Tantung G2
1070 Tap Die
5500 Tappi Corrosion Resisting Steel
2965 Tap Steel, Red Star
4610 Tap Steel Special
3214 Tarnac
11149 Tarpon
7783 Tatmo
1304 Taurex Bronze
6010 Taurus Bronze Mark I
6011 Taurus Bronze Mark II
6012 Taurus Bronze Mark III
6013 Taurus Bronze Mark IV
6014 Taurus Bronze Mark V
6015 Taurus Bronze Mark VI
6016 Taurus Bronze Mark VII
6017 Taurus Bronze Mark VIII
6018 Taurus Bronze Mark IX
6019 Taurus Bronze Mark X
6020 Taurus Bronze Mark XI
6021 Taurus Bronze Mark XII
11150 Taylor Ni-Mo Steel
3215 Taylor-White
11151 T.C.M.
10283 T.C.M.
4475 T.C.V.
3216 Tea Lead
2397 Tech-Aloy
11152 Technalloy A
11153 Technalloy AX
11154 Technalloy B
11155 Technalloy C
11156 Technalloy D
11157 Technalloy E
11158 Technalloy Standard
11159 Teco
11160 Teco Gr. 23
11161 Teco Gr. 68
11162 Teco Gr. 607
11163 Teco Gr. 610
11164 Teco Gr. 625
11165 Teco Gr. 946
11166 Teco Gr. 946X
11167 Teco Gr. 964
11168 Teco Gr. K-65
11169 Teco Gr. KT-13
11170 Teco Gr. T-13
4708 Teenax
11557 Teenax

10748 Teenax 46
921 Teenax N
11172 Teenax NB
6290 Tego
11173 Telastic Moly
5407 Telconstan
6764 Telectal
491 Teledium
2130 Telegraph Bronze
7329 Tellurium Lead
11800 Telnic Bronze
11174 Temcross
4398 Tempaloy A
11501 Tempaloy B
12513 Tempaloy 841
12501 Tempaloy 917
11558 Temp Alloy
1071 Tempalloy
11175 Temperite
11176 Templato
3217 Tenax Metal
4044 Tennessee Special
3218 Tensilia
1072 Tensilite
12421 Tensite
11177 Tenual 50
1073 Tenual No. 226
11178 Tenual I
11181 Tenual T
11179 Tenual T Titanite
1074 Terne Metal
2131 Tetmajer Aluminum Bronze
3729 Teton
5213 Texalloy Heat Resistant
3730 TH-30
3731 TH-31
7851 TH-60B
7852 TH-61B
7853 TH-62B
6765 Thalassal
3219 Therlo
11182 Thermal B
11183 Thermal BB
1075 Thermalloy "A"
1076 Thermalloy "B"
1077 Thermalloy "C"
1620 Thermalloy "D"
6048 Thermalloy "E"
6964 Thermalloy 18-8
6049 Thermalloy No. 50
6050 Thermalloy No. 72
11184 Thermalloy No. 72M
7946 Thermax 8
7945 Thermax 9
7944 Thermax 9S
7943 Thermax 10
7942 Thermax 11
7941 Thermax 12
6793 Thermimphy
1078 Thermisilid
1524 Thermisilid Extra
1079 Thermit
11186 Thermo
11185 Thermocrom
4045 Thermo Die
11559 Thermo Die
11560 Thermo Die
11187 Thermoflex
8860 Thermoflex No. 6150
11188 Thermold A
11189 Thermold B
1080 Thermo-Lectric Nickel Babbitt
4880 Thermo-Lectric Copper-Hardened Babbitt
7524–7532 Thermometals, Wilco
11785 Thomastrip
11209 Thompson Products Alloy
1081 Thoran
8047 Thredwel
2450 Three Point
4046 Three Star High Speed
3220 Three-Twenty
2031 Thurston Brass
2159 Thurston Buttons
4262 Thurston Paktong
3221 Tibon
3222 Tico
11191 Ticonium
1258 Ticrank
3223 Tiers Argent
5498 Tifer Iron
3224 Tifico
4047 Tiger
7351 Tiger Bronze
6086 Tigerloy
3225 Tiloy
1082 Timang
11192 Timken 2%C-½% Mo
11193 Timken 2¼%C-1% Mo
6249 Timken 4-6% Cr
5775 Timken 4-6 Cr-Mo
6250 Timken 4-6% Cr-W
5776 Timken 17-22
5216 Timken 18-8
5215 Timken 18-8-S
11654 Timken Alcrosil No. 3
5785 Timken CNM-40
11194 Timken DM
11195 Timken DM2
12212 Timken DM2-45
5777 Timken DM-15
5778 Timken DM-45
5779 Timken Fine-Grained C-Mo
5217 Timken Iron-Chromium
6248 Timken Krupp
5780 Timken MM-9
6251 Timken QV
5781 Timken S.A.E. 4615
4048 Timken Special Carbon
12109 Timken TW
1083 Tin
2132 Tin Bronze
11200 Tinea
3226 Tin Foil
1084 Tinicosil No. 10
1085 Tinicosil No. 15
3227 Tinite
3228 Tinman's Solder
3229 Tinsel
11198 Tioga
11199 Tiona
5487 Tisco 1
11899 Tisco 2
1082 Tisco 4
11900 Tisco 6
5481 Tisco 18
5482 Tisco 19
5483 Tisco 20
5484 Tisco 21
5485 Tisco 22
5486 Tisco 23
11901 Tisco 23X
5487 Tisco 24
5489 Tisco 40
5490 Tisco 41
5495 Tisco 50
5496 Tisco 51

5491 Tisco 53
5488 Tisco 65
5493 Tisco 70
5492 Tisco 71
5494 Tisco 72
11902 Tisco 80
5497 Tisco 81
5498 Tisco 90
6908 Tisco 101
6909 Tisco 101A
6910 Tisco 102
6911 Tisco 102A
6912 Tisco 103
6913 Tisco 103A
6914 Tisco 104
6915 Tisco 104A
6916 Tisco 105
6917 Tisco 105A
6918 Tisco 106
6919 Tisco 106A
6920 Tisco 107
6921 Tisco 108
6922 Tisco 109
6923 Tisco 110
6924 Tisco 130
6925 Tisco 131
6926 Tisco 132
5504 Tisco 150
6927 Tisco 160
5480 Tisco Cast Carbon Steel, Extra Soft
5503 Tisco High Chrome Iron
5501 Tisco Low Chrome Iron
5502 Tisco Medium Chrome Iron
5499 Tisco Nirosta 28-11
12546 Tiscor
5206 Tiska Nirosta KA-2
5208 Tiska Nirosta KA-2 H
5211 Tiska Nirosta KA-2 H-Mo
5209 Tiska Nirosta KA-2 Mo
5207 Tiska Nirosta KA-2 S
5210 Tiska Nirosta KA-2 S-Mo
5212 Tiska Nirosta KNC-3
1086 Tissier's Metal
5010 Titan
1089 Titan Bronze A
11797 Titan Bronze B
5011 Titan Bronze Welding Rod
11561 Titanite
1090 Titan Manganese Bronze
7791 Titan Manganese Steel
1091 Titan Muntz
5010 Titan Naval Brass Rod
11512 Titan No. 11
8121 Titan Resistaloy Bronze
6669 Titan Seewasser
7792 Titanic Carbon Steel
742 Titanit
7471 Titanium (TAM)
5019 Titanium 75% Grade
1087 Titanium Aluminum Bronze No. 1
1088 Titanium Aluminum Bronze No. 5
3230 Titanium Steel
3231 Titem
4049 Ti-Tex
4050 Titus
3232 Tivan
1092 Tizit
4051 "T-K" Alloy
3233 "T" Metal
7782 T-Mo
7291 T-Nickel
11843 T.N.W.
1093 Tobin Bronze
4368 Tobin Bronze No. 1875
3042 Tobin Bronze Rod (S.A.E.)
3045 Tobin Bronze Tubing (S.A.E.)
3234 Toledo
7621 Toledo Alloy No. 3
7622 Toledo Alloy No. 4
7623 Toledo Alloy No. 6
7624 Toledo Alloy No. 7
7625 Toledo Alloy No. 8
4052 Toledo Extra
4053 Toledo High Speed
4054 Toledo Non Shrinking
4055 Toledo Scimitar
4056 Toledo Special
4057 Toledo Superior
3807 Tombac, Arcet
3808 Tombac, Cast
1094 Tombac, Common
1095 Tombac, French
3809 Tombac, Golden
3810 Tombac, Ludenscheidt
3811 Tombac, Oker
1621 Tombac, Red Brass
1096 Tombac, Red Vienna
3812 Tombac, Sheet (Paris)
1097 Tombasil
11655 Tombasil A
8277 Tombasil, Ajax Navy
1098 Toncan Enameling Iron
3235 Toncas
1059 Tools
4058 Tool Holder
8584 Tool Maker
4460 Tool Room
11201 Tool Steel
184 Tool Steels, Bethlehem
185 Tool Steels, Bethlehem
186 Tool Steels, Bethlehem
187 Tool Steels, Bethlehem
188 Tool Steels, Bethlehem
189 Tool Steels, Bethlehem
190 Tool Steels, Bethlehem
191 Tool Steels, Bethlehem
192 Tool Steels, Bethlehem
628 Tool Steel, Lehigh
6806 Toolweld
11202 Toolweld 55
11203 Toolweld 60
1099 Topal "H"
1622 Topal "W"
1100 Tophet "A"
7002 Tophet "B"

1101 Tophet "C"
6022 Tophet "D"
7003 Tophet "X"
1419 Top Notch
11204 Tordal
6023 Toreador
6024 Toreador Supra
4991 Tormanc
4992 Tormanc Major
5958 Tormol
11205 Torpedo
2133 Torpedo Bronze
7892 TOS
3235 Toucas
4458 Tough
5685 Tough
11206 Tough Devil
4516 Tough (Electric)
4515 Tough Hard (Electric)
11207 Toughite No. 5
11208 Tough M Temper
1102 Tournay's Metal
3236 Tourun Leonard's Metal
7974 TP
11209 TPA
1103 Trabuk
5489 Tractor Shoe
11211 Tranelec A
11212 Tranelec B
11213 Tranelec C
11210 Trance Phosphor Bronze
7815 Trancor 60
7816 Trancor 66
7817 Trancor 72
8366 Transformer A
8367 Transformer B
8368 Transformer C
12489 Transformer 52
7714 Transformer 58, U.S.S.
7715 Transformer 65, U.S.S.
7388 Transformer 72, U.S.S.
7716 Transformer 72, American Radio
7818 Transformer, Armco
11214 Transweld
11687 Trantinyl
11215 Trenite
6492 Trenite H
7375 Trenite P
7376 Trenite WX
4060 Triangle "X"
11216 Triangle X—Extra
11217 Triangle X—Special
11218 Tri-Lok
11219 Tri-Lok
4807 Trimax
11220 Trimet
11221 Trimwax
11222 Trimmer Die
11556 Trimo
4061 Tri-mo
4062 Tri-mo (Air Hardening)
5987 Tri-Mo
8547 Tri-Mo
4063 Triple Alloy Punch
4542 Triple Die
4064 Triple Express "A"
4065 Triple Express "B"
7084 Triple Extra
4605 Triple Extra
4606 Triple Extra Die
5918 Triple Life
11223 Triple Life D-C
11224 Tripli-Cast
5387 Tri-Ply
11225 Tritex
11226 Tritex Broachrite
11436 Tritex No. 1
12168 Tritex No. 2
11227 Tritex Plus
7076 Triton
11228 Triton A
1539 Triumph, Emetco No. 9
4066 Trivan
7283 Trod-aloy No. 1
11229 Trodaloy No. 7
7097 Trojan
11565 Trojan
3237 Trojan Babbitt Metal
11180 Trojan Shank
1330 Trojan Steel
4640 Trojan Steel No. 8
8061 Trojan Steel No. 9½
7793 Tropic Hot Die
5375 Troxeit, Grade 85
5376 Troxeit, Grade 95
4648 Troxeit, Grade 100
11230 Trualoy Aluminum
11231 Trualoy Aluminum Bronze
11232 Trualoy Bearing Bronze
11233 Trualoy Copper
11234 Tru Die
11235 Truflex A
11236 Truflex A-2
11237 Truflex B
11238 Truflex B-2
11239 Truflex B-12½
11240 Truflex B-15
11241 Truflex B-20
11242 Truflex B-25
11243 Truflex B-30
11244 Truflex B-35
11245 Truflex B-40
11246 Truflex B-47
11247 Truflex D
11248 Truflex E
11249 Truflex E-2
11250 Truflex F
11251 Truflex G
11252 Truflex G-2
11253 Truflex H
11254 Truflex J
11255 Truflex K
11256 Truflex L
11257 Truflex M
11258 Truflex N
11259 Truflex O
11260 Truflex Q
11261 Truflex R
11262 Truflex T
1104 Truform
4579 Truform Special
11566 Truform Special
12520 Trumpet Brass—435
5301 Trutap
11263 TSB
7561 "T" Series Alloys (Apex)
7847 T.S.S. 3 Alloy
7848 T.S.S. 5 Alloy
7849 T.S.S. 8 Alloy
11264 TTQ High Speed
7579 T.T.S.
1105 Tube Brass
10235 Tubeloy
11265 Tube Mandrel
1106 Tuc-Tur
11567 Tufaloy
1107 Tufaloy Steel
11266 Tufcut
11267 Tuffaloy
1234 Tuf-Stuff
4409 Tuf-Timber

11268 Tuftork
11269 Tufwear No. 2
11270 Tufwear No. 3
3238 Tula
10749 Tunco
11271 Tuncro
6069 Tungay
3239 Tungo
1108 Tungsten
7688 Tungsten (Vancoram)
2032 Tungsten Brass
2134 Tungsten Bronze
5321 Tungsten Chrome Magnet
3240 Tungsten Filaments
11272 Tungsten Hack Saw
3977 Tungsten Hot Work
11568 Tungsten Hot Work
6477 Tungsten Magnet
1109 Tungsten Magnet
4864 Tungsten Magnet
1406 Tungsten Magnet
5320 Tungsten Magnet
7662 Tungsten Magnet M-5
7663 Tungsten Magnet M-6
3241 Tungsten Steel
4523 Tungsten Tap
7246 Tungsten Tap
4345 Tungsten Valve Steel
1110 Tungum
5898 Turbadium
1111 Turbadium Bronze
11798 Turbadium Bronze
3242 Turbine Blading
2033 Turbine Brass
2151 Turbine Bushing
11991 Turbine Metal
1112 Turbiston Bronze
2034 Turbiston's Brass
1113 Turbo
9801 Turbo Glyco
1623 Turbo "S"
3534 Turners Safe Plate Steel
3243 Turning
4301 Tusco
3244 Tutania, Cast
3245 Tutania, Cast Plate
3246 Tutania, English
3247 Tutenag
4263 Tutenag Paktong
4884 Twenty-One % Chromium Rustless Iron
11273 Twin Six
4067 Twinvan
3616 Twisted Auger
6107 Twoscore
4068 Two Star High Speed
11274 Two Star Special
3248 Two-To-One
11275 Tylerite
258 Type D Chrome-Vanadium
1114 Type Metal
4129 Type Metal, Best
1650 Type Metal, Common
4132 Type Metal, Common
4133 Type Metal, Common
1653 Type Metal, English
4249 Type Metal, English
4250 Type Metal, English
4251 Type Metal, English (Old C)
4138 Type Metal, English
4139 Type Metal, English
1652 Type Metal, French
4130 Type Metal, French
4131 Type Metal, French
1651 Type Metal, German
4134 Type Metal, German
4135 Type Metal, German
4136 Type Metal, German
4137 Type Metal, German
2711 Type Metal, Krupp
1115 Type Metal, Monotype
1116 Type Metal, Standard
1117 Type Metal, Stereotype
3249 Typewriter Metal
11276 Typlex
1118 Tyseley Alloy

U

11277 U-20
1784 "U-42" (Chrogo)
4696 UB Double Bolt
11278 UCA 2-2
2135 Uchatius (Uchatin's) Bronze
—— Uddeholms. See U.H.B. Alloys
3250 Udylite
4071 U.H.B.
752 U.H.B. Carbon Tool Steel
11279 U.H.B. Cold Header Die
4069 U.H.B. Crown
7377 U.H.B. Fingal
11280 U.H.B. Forma
4072 U.H.B. Header
4073 U.H.B. No. 46
11575 U.H.B. No. 46
4070 U.H.B. No. 46 Crown
7378 U.H.B. Regin
4074 U.H.B. Special
5218 U.H.B. Stainless 1
6837 U.H.B. Stainless 1H
5219 U.H.B. Stainless 2
5220 U.H.B. Stainless 3
6838 U.H.B. Stainless 3H
6839 U.H.B. Stainless 3M
5221 U.H.B. Stainless 4
6840 U.H.B. Stainless 4H
6841 U.H.B. Stainless 4M
5222 U.H.B. Stainless 5
5223 U.H.B. Stainless 6
6842 U.H.B. Stainless 6H
5224 U.H.B. Stainless 7
11281 U.H.B. Standard
4075 U.H.B. Super
7379 U.H.B. Valand
11282 U.H.B. Valand 2
1119 Ulcometal (Frary)
3251 Ulcony
6660 Ulmal
6665 Ulminium
11656 U-loy
11283 Ultimo 4
7098 Ultimo No. 6
3764 Ultra
3252 Ultra-Capital Steel
11284 Ultra Crystal Plus One
6267 Ultracut
1120 Ultradie No. 1
7146 Ultradie No. 2
6616 Ultraloy
1121 Ultralumin
1122 Uma No. 1 (Agathon)
1123 Uma No. 2 (Agathon)
1124 Uma No. 3 (Agathon)

1125 Uma No. 4 (Agathon)
1126 Uma No. 5 (Agathon)
3732 U.M.A. Spring (Agathon)
11285 Una
11286 Una High Speed No. 44
11287 Una High Speed No. 45
11288 Una High Tensile No. 65
11289 Una No. 76
11290 Una No. 156
11291 Una No. 158
11292 Una No. 160
11293 Una No. 200
11294 Una No. 300
11295 Una No. 325
11296 Una No. 350
11297 Una No. 425
11298 Una No. 470
11299 Una No. 560
11300 Una No. 601
11301 Una No. 712
11302 Una No. 911
11303 Una No. 912
11304 Una No. 914
11305 Una No. 916
11306 Una No. 917
11307 Una No. 918
11308 Una No. 1500
11309 Una No. 2150
11310 Una No. 3175
11311 Una No. 3200
7213 Unbreakable Chisel
4076 Unico
4837 Uni-Die
7296 Uniform Oil Hardening
—— Uniloy (Universal)
1127 Uniloy No. 1
1128 Uniloy No. 2
6025 Uniloy 4-6 Chrome
1642 Uniloy No. 18-8
1643 Uniloy No. 21-12
1644 Uniloy No. 1409
1645 Uniloy No. 1409-M
1646 Uniloy No. 1435 (Grade "A" Stainless)
1129 Uniloy No. 1809
6026 Uniloy No. 1860
11312 Uniloy No. 25-12
1130 Uniloy No. 2825
1642 Uniloy Special No. 1
1643 Uniloy Special No. 2
1649 Uniloy Special No. 12-12
1648 Uniloy Special No. 18-8 S
4140 Uniloy Special No. 24-11
1646 Uniloy Stainless, Grade "A" (No. 1435)
1647 Uniloy Stainless, Grade "B" (No. 1855)
4401 Unimetal
11313 Union
1131 Unionaloy
4308 Union 1020-90
6078 Union Free-Cut Bessemer
4814 Union Hymo Steel
5786 Union Hymo 30-40 Carbon
11314 Union Maxcut
6077 Union McQuaid-Ehn
11315 Union Metal
11316 Union Multicut
5783 Union Special Carburizing
6079 Union Supercut
2733 Union-Larssen Steel Resista
4180 Unique
4307 United Magnet
4077 Unito Drill Rod
1132 Univan
3328 Univan "C"
11317 Universal Alloy No. 10
7353 Universal Babbitt
6543 Universal Bronze
3253 Unmagnetizable Watch Wheels
3254 Uranium Steels
4911 Uranus Extra
11318 U.S.C.O.
7390 U.S. Electrical
2035 U.S. Navy Brass
1975 U.S. Navy Spec. [illegible]
1976 U.S. Navy Spec. [illegible]
4745 U.S. Navy Spec. 2[illegible] W5d, Spring Wire
4743 U.S. Navy Spec. 46 B 5 g, Composition "P-c"
4742 U.S. Navy Spec. 46 B 8 e, Composition "M"
1975 U.S. Navy Spec. 46 B 11 e
4744 U.S. Navy Spec. 46 B 14 d, Composition "P-r"
4746 U.S. Navy Spec. 46 B 22 b, Bearing Castings
104 U.S. Navy Spec. 46 B 18 c
522 U.S. Navy Spec. 46 M 6 f, Composition "G"
1976 U.S. Navy Spec. 47 B 2 f
2136 U.S. Navy, Valve Bronze
11319 USO
11320 USO-AD
11321 USO-HE
11322 USO-NS
11323 USO-Special Vanadium
11324 USO 30CF
11325 USO Tungsten
11326 USO Vanadium
11327 USO 5S
4396 U.S.S. 4-6 Chrome
8094 U.S.S. 4-6 Cr
6027 U.S.S. 4-6 Cr-Mo
7741 U.S.S. 4-6 Cr-Mo-Ti
6028 U.S.S. 4-6 Cr-Ti
7771 U.S.S. 5
12484 U.S.S. 5
12485 U.S.S. 5S
6899 U.S.S. 5W
1133 U.S.S. 12
8074 U.S.S. 12
8095 U.S.S. 12
812[illegible] U.S.S. 12
1136 U.S.S. 12 Al
12302 U.S.S. 12 Cr-Al
7732 U.S.S. 12FM
11[illegible]5 U.S.S. 12 Turbine
[illegible]904 U.S.S. 12W
52[illegible]5 U.S.S. 12-Z
6901 U.S.S. 16-6
1134 U.S.S. 17
8075 U.S.S. 17
8089 U.S.S. 17

8137 U.S.S. 17
12483 U.S.S. 17-7
6902 U.S.S. 17W
8088 U.S.S. 18-8
8096 U.S.S. 18-8
7709 U.S.S. 18-8 Cold Rolled
7733 U.S.S. 18-8 FM
8133 U.S.S. 18-8 FM
6029 U.S.S. 18-8 Mo
8079 U.S.S. 18-8 Molybdenum-bearing
4900 U.S.S. 18-8 S
8083 U.S.S. 18-8S
6903 U.S.S. 18-8S Mo
8093 U.S.S. 18-8S Mo
2511 U.S.S. 18-8 Stabilized
8084 U.S.S. 18-8 Stabilized
8077 U.S.S. 18-8 Stabilized Type 320
8078 U.S.S. 18-8 Stabilized Type 321
6904 U.S.S. 18-8 Ti
8092 U.S.S. 18-8 Ti
8139 U.S.S. 18-8 Ti
7705 U.S.S. 18-8 Type 302
7706 U.S.S. 18-8 Type 304
7707 U.S.S. 18-8 Type 305
7708 U.S.S. 18-8 Type 306
7710 U.S.S. 18-8 Type 345, Columbium-Bearing
7711 U.S.S. 18-8 Type 346, Columbium-Bearing
7712 U.S.S. 18-8 Cb, Type 347
7713 U.S.S. 18-8 Type 348, Columbium-Bearing
7770 U.S.S. 18-10 Cb
4397 U.S.S. 18-12
4901 U.S.S. 19-9
8098 U.S.S. 19-9
6905 U.S.S. 19-9S
7734 U.S.S. 19-9 Ti
4902 U.S.S. 20-10
8099 U.S.S. 20-10
6906 U.S.S. 20-10S
4899 U.S.S. 21
8076 U.S.S. 25-12
8091 U.S.S. 25-12
8097 U.S.S. 25-12
7735 U.S.S. 25-12 Ti
6907 U.S.S. 25-20
12265 U.S.S. 25-20
1137 U.S.S. 27
8080 U.S.S. 27.
8090 U.S.S. 27
8138 U.S.S. 27
7387 U.S.S. Armature
8544 U.S.S. A.R. Steel
8134 U.S.S C12 10Cu
11328 U.S.S. Carilloy
7722 U.S.S. Copper Steel
8081 U.S.S. Cor-Ten
8129 U.S.S. Cor-Ten
8205 U.S.S. Cor-Ten
7389 U.S.S. Dynamo
7390 U.S.S. Electrical
7718 U.S.S. Field
5769 U.S.S. Lynore
5768 U.S.S. Manganese-Nickel-Copper
8082 U.S.S. Man-Ten
8130 U.S.S. Man-Ten
8204 U.S.S. Man-Ten
7717 U.S.S. Motor
12486 U.S.S. Open Hearth Iron
12487 U.S.S. Radio Transformer 52
12488 U.S.S. Radio Transformer 58
12490 U.S.S. Radio Transformer 65
7716 U.S.S. Radio Transformer 72
8086 U.S.S. Sil-Ten
8131 U.S.S. Sil-Ten
12489 U.S.S. Transformer 52
7714 U.S.S. Transformer 58
7715 U.S.S. Transformer 65
7388 U.S.S. Transformer 72
5770 U.S.S. Vitrenamel
11329 Utex
1138 Utica
1421 Utilitas
11330 Utility
7500 Utility Bearing Metal

V

2789 "V"
1512 V1-M
739 V2-A
955 V2-A
2709 V2-A
4362 V2-A
5714 V2-A Extra
7301 V2-A Spezial
7302 V2-A Supra
4215 V3-M
1594 V4-A
1657 V4-A
7303 V4-A Extra
7304 V4-A Supra
12364 V-5 Alloy
1497 V6-A
12365 V-7 Alloy
7305 V12 Supra
7306 V13-F
7307 V14-A Supra
7308 V16-A Supra
7309 V17-F
7517 V-995
7359 Vac-Melt A
7360 Vac-Melt AA
7361 Vac-Melt B-7M
7362 Vac-Melt C
6677 V.A.G. 160
7379 Valand
11331 Valentine Steel
4974 Valmax 3/8
4698 Valutap (Die Steel)
1363 Valve Bronze
668 Valve Bronze (Lumen)
1139 Valve Copper
4257 Valve Packing
869 Valve Rod Packing
3256 Valve Steel
4343 Valve Steel, Chrome I
4344 Valve Steel, Chrome II
4345 Valve Steel, Tungsten
4346 Valve Steel, Very Hard
1820 Valve Stem Bronze (Ajax)
5436 Valve Stem Bronze (Chase)
5919 Vanadia
1140 Vanadium
7686 Vanadium
12101 Vanadium 6-6-2
7148 Vanadium, Cannon
3255 Vanadium Alloy
2036 Vanadium Brass
2137 Vanadium Bronze
2790 Vanadium Crucible
2449 Vanadium Drill Rod
12360 Vanadium Grainal No. 1
12361 Vanadium Grainal No. 6

4562 Vanadium Hot Work (Illingworth)
7506 Vanadium Permendur
4645 Vanadium Potts Best
3257 Vanadium Steel
4341 Vanadium Tool
1147 Vanadium BB
1148 Vanadium D
1149 Vanadium G
1150 Vanadium H
1151 Vanadium K
1152 Vanadium N
3258 Van Allen
1142 Vanalium
11338 Vanasil
5029 Vancoram Aluminum Chromium
5020 Vancoram Aluminum Vanadium
5018 Vancoram Alsifer
4400 Vancoram Brand
5023 Vancoram Copper Aluminum Vanadium
5024 Vancoram Copper Manganese Vanadium
5022 Vancoram Copper Nickel Vanadium
5017 Vancoram Ferro Chromium High Carbon
5016 Vancoram Ferro Silicon
5015 Vancoram Ferro Vanadium
12356 Vancoram Ferro Vanadium Open Hearth Gr. A
12357 Vancoram Ferro Vanadium Crucible Gr. B
12358 Vancoram Ferro Vanadium Primos Gr. C
12359 Vancoram Ferro Vanadium Special High Vanadium
286 Vancoram High Carbon Chromium Metal
7689 Vancoram High Carbon Ferro Titanium
7690 Vancoram Low Carbon Ferro Titanium
5026 Vancoram Nickel Vanadium
5027 Vancoram Silicon Vanadium
5019 Vancoram Titanium 70% Gr.
7686 Vancoram Vanadium Metal
1143 Van Die Car
7107 Vanite
11340 Van-Lom
1144 Van-Nic
11339 Vanolite
1145 Vasco
—— Vasco Alloys (Vanadium Alloys Steel Co. Alloys)
4078 Vasco Hot Form
1146 Vasco Non-Shrinkable Die Steel
1636 Vasco Special No. 7T
1637 Vasco Special No. 9T
1638 Vasco Special No. 11T
1639 Vasco Special No. 12T
1640 Vasco Special No. 13T
1641 Vasco Special No. 14T
1147 Vasco-Vanadium Type "BB"
1148 Vasco-Vanadium Type "D"
1149 Vasco-Vanadium Type "G"
1150 Vasco-Vanadium Type "H"
1151 Vasco-Vanadium Type "K"
1152 Vasco-Vanadium Type "N"
1509 Vascoloy
7363 Vascoloy Ramet Grade A
11981 Vascoloy Ramet Grade 2A3
11197 Vascoloy Ramet Grade 2A5
11196 Vascoloy Ramet Grade 2A7
11537 Vascoloy Ramet Grade 2A9
9277 Vascoloy Ramet Grade 2A68
12169 Vascoloy Ramet Grade 3150
7364 Vascoloy Ramet Grade AA
7631 Vascoloy Ramet Grade AAA
11341 Vascoloy Ramet Grade AM
11342 Vascoloy Ramet Grade AR
7632 Vascoloy Ramet Grade AT
7633 Vascoloy Ramet Grade AW
7365 Vascoloy Ramet Grade B
7366 Vascoloy Ramet Grade C
7634 Vascoloy Ramet Grade CC
7367 Vascoloy Ramet Grade D
7635 Vascoloy Ramet Grade DD
11343 Vascoloy Ramet Grade DT
11344 Vascoloy Ramet Grade DW
11345 Vascoloy Ramet Grade E
11346 Vascoloy Ramet Grade EE
11347 Vascoloy Ramet Grade EM
940 Vascoloy Ramet Grade M
7636 Vascoloy Ramet Grade S
11348 Vascoloy Ramet Grade SS
7368 Vascoloy Ramet Grade X
7637 Vascoloy Ramet Grade XX
11349 Vatool
3259 Vaucher's Alloys
5876 V-Chrome Steel
4079 "V.D."
11034 Vectalite

1713 Vedal
4080 Velvet
4184 Velvet
6753 Velvet
11350 Velvet Antifriction Metal
11351 Velvetouch
11352 Venango
7878 Veresta
7879 Veresta Special
11353 Veribest Drill Rod
6030 Veriloy
1153 Verilite
11354 Vernalloy
4081 Very Best
4522 Very Best (Dannemora)
4082 Very Best, Water Hardening Soderfors
4511 Very Hard (Electric)
3260 Vestalin
5292 Vesuvius, castings
5293 Vesuvius, forgings
4679 VH-54
1297 VH-63 Steel
4678 VH Atlas
1154 "V" High Speed Steel
11355 Viag
11356 Vibrac Steel
1155 Vibrac V-30
1156 Vibrac V-45
11357 Vibraloy
11358 Vibresist Hollow Drill
4083 Vibro
11359 Vicalloy
1157 Vickers B.C.T.
2194 Vicker's Duralumin
2138 Victor Bronze
11360 Victor Drill Rod
1158 Victor Metal
3261 Victoria Aluminum
11600 Victory Cobalt
8680 Victory No. 7
1891 Vienna Argentan
3262 Viennese Ornaments
3263 Viennese Sheet
3813 Viennese Tableware
11361 Viking
7077 Viking Extra
1159 Vikro
1160 Vinco
7078 Vinco HW.
11362 Violet Label
3814 Virginia Silver
3264 Virginia Steel
6490 Virgo
11553 Visto
7406 Visto
4084 Visto Superior
6766 Vital
11363 Vitallium
11364 Vitallium
11365 Vitalu
5770 Vitrenamel, U.S.S.
11366 Vival
1468 V.L.W. (Leichtmetalle) Alloys
11367 V.L.W. 1
11368 V.L.W. 2
11369 V.L.W. 3
11554 V.L.W. 6
991 V.L.W. 6
11370 V.L.W. 14
11371 V.L.W. 17
11372 V.L.W. 19
11373 V.L.W. 23
11374 V.L.W. 31
11375 V.L.W. 41
11376 V.L.W. 61
11377 V.L.W. 63
11378 V.L.W. 99
11379 V-Mang
11380 VM-Dreadnaught
1656 V.M. Krupp
11851 "V" Moly High Speed
3265 "V.M." Steel
3408 Vogel File Metal
11381 Voizit
11382 Vokar
9041 Volco No. 5
12547 Volco No. 8
9036 Volco No. 10
12548 Volco No. 11
12549 Volco No. 12
12550 Volco No. 14
9037 Volco No. 30
10900 Volco No. 65
10872 Volco No. 68
1647 Volco No. 80
9038 Volco No. 95
3266 Volomit
1161 Volumit
6070 Volvit
11383 VS 4
7976 VS Spezial Extra
3734 VT-Steel (VT-Stahl)
1162 Vulcan
11384 Vulcan 4HW
11385 Vulcan 6HW
11386 Vulcan A-41
11387 Vulcan A-42
11388 Vulcan Alidie
11555 Vulcan Auto
3267 Vulcan "Auto" Steel
11389 Vulcan Blue Edge
2223 Vulcan "Calo-Ferro" Steel
11390 Vulcan Carbon Vanadium
11391 Vulcan CK
11392 Vulcan CWD
11393 Vulcan Drawing Die
1163 Vulcan "Extra"
3268 Vulcan "Extra Chrome" Steel
1164 Vulcan "Extra Drill"
11394 Vulcan Extra Vanadium
1165 Vulcan "Fort Pitt"
3269 Vulcan "Hardrite"
11395 Vulcan Heavy Duty
3270 Vulcan "Hecla" Steel
3312 Vulcan High Speed Steel
3271 Vulcan "Hi-Pro" Steel
3272 Vulcan "K.R." Steel
3273 Vulcan Metal
11396 Vulcan No. 14
11397 Vulcan No. 50
11398 Vulcan No. 212
11399 Vulcan No. 2300
11400 Vulcan No. 4870
3274 Vulcan "Non-Shrinkable" Steel
11401 Vulcan Q.A.
3815 Vulcan "Regal No. 2" Steel
11402 Vulcan Self Hardening
1166 Vulcan "Special"
3275 Vulcan Special Vanadium Steel
5228 Vulcan Stainless Iron C-2

5227 Vulcan Stainless, Type A
1167 Vulcan "Superior"
3209 Vulcan Super Steel
11404 Vulcan Silico Manganese
8512 Vulcan TM-5
11405 Vulcan Vairloy
3312 Vulcan "Wolfram"
11406 Vulcan Wolfram Cobalt
11407 Vulc-Iron
7780 Vul-Mo

W

11408 W 2
4908 W.3 Tungsten
3276 W.O. 33
4909 W. 9 Tungsten
11409 W A 301
3735 Wab Alloys
3736 Wabcoloy
11410 Wabik Metal
3277 Wagner's Formula
3285 Wagner & Guhrs Aluminum
11779 W-Al-Co Type 1
11778 W-Al-Co Type 2
11411 W-Al-Co Type E-1
11412 W-Al-Co Type G2
11413 Walde-Loy No. 100 Metal
3278 W-Alloy
3279 Walramite
11414 Wando No. 1
11415 Wando No. 2
1168 Wando Steel
11659 Waraloy 20X
11660 Waraloy 30X
2802 War Babbitt
1169 War Bronze
4709 Wardlow's
4710 Wardlow's Tough
6949 Warman 5
6950 Warman 5M
1249 Warman 6
6031 Warman 6M
6032 Warman 13
11939 Warman 13M
1220 Warman Calduro 13-2
1221 Warman Calmar 18-8
6033 Warman Calmar 18-8M
6034 Warman Caloxo 18-8
6035 Warman Caloxo 15-25
6036 Warman Caloxo 15-25M
6037 Warman Caloxo 15-35
1232 Warman Caloxo 18
6038 Warman Caloxo 18-2
1222 Warman Caloxo 25-20
6040 Warman Caloxo 25-20 M
6041 Warman Caloxo 26
6042 Warman Caloxo 26-4
6043 Warman Caloxo 28-10
6044 Warman Caloxo 28-10-M
1249 Warman Chrome
1170 Warne's Metal
11417 Warplis
7580 Warranted, Darwin's
3883 Warranted Best
1171 Washconite
2037 Washer Brass
1422 Washington
3281 Watch Alloy
3282 Watch Case Bezels
3283 Watch Case Metal
3284 Watchmaker's Alloy
11418 Watch Nickel
1172 Water Die
11419 Water Die B
6360 Water Hardening
11416 Waukesha Metal
7154 W-Brand
11420 WBZ6 Bronze
7898 WC-2
11421 WDD
10604 WE III
10605 WE IV
10606 WE V
10607 WE VI
10608 WE VII
10609 WE VIII
10610 WE IX
10287 WE X
11422 Wearaloy
11423 Wear Devil
11424 Wear Devil A
11425 Wear Devil B
11426 Wear Devil C-1
11427 Wear Devil C-2
11428 Wear Devil C-3
11429 Wearloy
6045 Wear-Proof, Mac-Hempite
8048 Weartuf Steel
6807 Wearweld
11430 Webb Blue Label
11432 Wegner
11433 Wegucid
6808 Wehralloy No. 1
6809 Wehralloy No. 2
6810 Wehralloy No. 3
6811 Wehralloy No. 4
6812 Wehralloy No. 5
6813 Wehralloy No. 6
6814 Wehralloy No. 7
6815 Wehralloy No. 8
6816 Wehralloy No. 9
6817 Wehralloy No. 10
6818 Wehralloy No. 12
6819 Wehralloy No. 13
6820 Wehralloy No. 14
6821 Wehralloy No. 16
6822 Wehralloy No. 17
6823 Wehralloy No. 18
6824 Wehralloy No. 19
6825 Wehralloy No. 21
6826 Wehralloy No. 22
6827 Wehralloy No. 23
6828 Wehralloy No. 24
6829 Wehralloy No. 26
6830 Wehralloy No. 27
6831 Wehralloy No. 28
6832 Wehralloy No. 29
6833 Wehralloy No. 31
6834 Wehralloy No. 43
6835 Wehralloy Stainless 18-8
6836 Wehralloy Stainless 18-8 Special
2139 Weatherstrip Bronze
6046 Weibert Alloy
6093 Webbite
11434 Weidrium
3286 Weiger
3287 Weights
11987 Weiralead
11435 Weircoloy
7484 Weirite
11986 Weirzin
3288 Welch's Alloy
1325 Weldable Auto Steel No. 492
6103 Weldanka
11437 Weld Fast
3535 Welding Steel
11438 Weldmaco
4085 Weldo

11439 Weldoloy No. 685
11440 Weldoloy No. 690
11441 Weldrawn 18-8
11442 Wellcast No. 3S
11443 Wellcast No. 4A
11444 Wellcast No. 5S
11445 Wellcast No. 13A
11446 Wellcast No. 16S
11447 Wellcast No. 17S
11448 Wellcast No. 65
11449 Wellcast No. 73
11450 Wellcast No. 78
11451 Wellcast No. 80
11452 Wellcast No. 85
11453 Wellcast No. 88
11454 Wellcast No. 99C
11455 Wellcast No. 116
11456 Welmet No. 1
3289 Wessel's Silver
105 West No. 1
106 West No. 2
107 West No. 3
108 West No. 3A
109 West No. 4
110 West No. 4A
111 West No. 5
156 West No. 6
337 West No. 6A
2495 West No. 7
4015 West No. 7A
4327 West No. 8
6291 West No. 9
6292 West No. 9A
6293 West No. 10
6294 West No. 11
6295 West No. 12
6296 West No. 13
6297 West No. 14
6298 West No. 14A
11457 West 60 Stancast
11458 West 75 Hy-Cast
11459 West 90 Duracast
11460 West 110 Supercast
6087 Westeeco No. 5
5392 Westeeco No. 35-15
12438 Western Bearing Bronze
12437 Western Bronze No. 222
9564 Westinghouse K42B
2038 Wheel Brass
3290 Wheel Brand Babbitt
11462 Wheeling Metal
11463 Wheeling Super Steel
5232 Whelco "A"
4711 Whelco Alloy Tap
5233 Whelco "B"
4086 Whelco Die and Tool Steel
4087 Whelco Finishing
5068 Whelco High Speed
4088 Whelco Hot Work
5234 Whelco No. 1 Stainless
5235 Whelco No. 2 Stainless
5236 Whelco No. 3 Stainless
5237 Whelco No. 4 Stainless
6852 Whelco No. 5 Stainless
5238 Whelco No. 6 Stainless
5239 Whelco No. 7 Stainless
5240 Whelco No. 8 Stainless
5241 Whelco No. 9 Stainless
4089 Whelco Oil Hardening
4090 Whelco Piston
4091 Whelco Standard
4092 Whelco Superior
3291 Whistle, Lafond's
3292 White Alloy
3293 White Benedict
2039 White Brass
7372 White Brass No. 3
7640 White Brass No. 5
6243 White Brass No. 13
7373 White Brass No. 19
6244 White Brass No. 35
5891 White Brass "SA"
3294 White Button Alloy
2140 White Bronze
1173 White Cast Iron
3206 White Copper
3295 White Copper
11464 White End
3296 White Gold
7214 White Gold
2902 White Gold, Pechko
3141 White Gold, Shiga
4349 White Gold, Ten Carat
4350 White Gold, Fourteen Carat (A)
4351 White Gold, Fourteen Carat (B)
4352 White Gold, Eighteen Carat
3297 White Gold Solders
4353 White Gold Solder, Fourteen Carat
4354 White Gold Solder, Eighteen Carat (A)
4355 White Gold Solder, Eighteen Carat (B)
4356 White Gold Solder, Eighteen Carat (C)
4165 White Label
2247 White Label (Crasco)
4561 White Label (Houghton & Richards)
4626 White Label (Peninsular)
3298 White Label Styrian
3299 White Label Styrian New Rapid
3300 Whiteley
3301 White Metal
4365 White Metal, Dutch
2666 White Metal, Hanover
4364 White Metal, Hanover
2665 White Metal, Hawks Brand
4366 White Metal, Small Castings A
4367 White Metal, Small Castings B
3303 White Nickel Alloy
2040 White Nickel Brass
11466 Whitworth
4646 Whiz
11467 WI-301
11468 Widder
1174 Widia
6126 Widia H
6127 Widia S
6128 Widia M-68
6125 Widia N
6129 Widia X
6130 Widia XX
11469 Widie
1175 Wiegold
1176 Wig Metal
11470 Wilco No. 6
7523 Wilco No. 50 Alloy

11471 Wilco Silver Solder No. 2
11472 Wilco Silver Holder No. 18
11473 Wilco Silver Solder No. 25
11474 Wilco Silver Solder No. 27
7524 Wilco Thermometal Amplex
11475 Wilco Thermometal Cirflex
7525 Wilco Thermometal Highflex
7526 Wilco Thermometal Highflex 45
7527 Wilco Thermometal Highheat
7528 Wilco Thermometal Highheat 47
7529 Wilco Thermometal H.T. Constant
7530 Wilco Thermometal H.T. Special
11476 Wilco Thermometal Midflex 46
11477 Wilco Thermometal Ruflex
7531 Wilco Thermometal Scoflex
7532 Wilco Thermometal Standard
7533 Wilcoloy
11686 Willeys E-5
12527 Willeys E-6
12528 Willeys E-8
12529 Willeys E-12
12531 Willeys 509
12530 Willeys 710
1177 Wilmil
3304 Wilmott's Aluminum
11478 Wilrich 300
11479 Wilrich 301
11480 Wilrich 350
11481 Wilrich 600
11482 Wilrich 625
11483 Wilson
11484 Wilson
11485 Wilson No. 520
3305 Winchester Drawing Die
11486 Windsor
3306 Winn's Superheat
1027 Wiping Solder
26 Wiping Solder (Ajax)
11487 Wipla Metal
8136 Wire, 9260
8135 Wire, 52100
3308 Wire, Augsburg
1662 Wire Brass
2141 Wire Bronze
3309 Wire, Common
8134 Wire, Copper Bearing
11488 Wire Drawing Alloy Special
3310 Wire, English
1178 Wissco No. 1
5388 Wissco No. 1-M
1179 Wissco No. 2
1180 Wissco No. 3
1181 Wissco No. 4
1182 Wissco No. 4-HT
5389 Wissco No. 4-M
1183 Wissco No. 4-S
7395 Wissco 5A
1184 Wissco No. 5-C
1185 Wissco No. 5-CN
2675 Wissler High Speed
11551 Wizard
4093 Wizard (Ziv)
6047 Wizard (Worthington)
11489 WJ-301
7216 WKE
4560 W.K.Z. Hot Work
11490 WMS
4094 Woco
1186 Wolfram
7870 Wolframant
5308 Wolfram C.S.
3312 Wolfram High Speed Tool
1187 Wolframinium
4095 Wolva
5767 Wompco
511 Wood's Metal
12399 Wood Saw
7066 Wood Screw
8071 Worthite
4096 Wortle Die
11552 Wortle Die
4584 Wortle Die (Latrobe)
7664 Wortle Die No. 1
7665 Wortle Die No. 4
7666 Wortle Die No. 5
4549 Wortle, Drawing Die (Halcomb)
11491 Wortle No. 4 Drawing Die
1188 Wrought Iron (Genuine)
1317 Wrought Iron (Genuine Alloyed)
1318 Wrought Iron (Reading)
7883 WSP
7884 WSPS
11842 W.T.
11492 W Tap
11493 WT Drill Rod
7443 Wundus
4106 Wüst Aluminum Solder
4411 Wüst No. 1
4412 Wüst No. 2
7485 Wyco Cold Finished Steel

X

11494 Xaloy
3489 X.A.M. No. 65-S
3490 X.A.M. No. 67-S
7856 Xantal A
7857 Xantal B
7859 Xantal M
7858 Xantal S
11497 XB
12158 XB75S
12157 XB75S Alclad
6355 X.D.H.
7247 X.D.L.
5052 X.D.M. Steel
1189 X-Ite
11495 XL Chisel
6679 XL Metal
11496 XLO
1190 XL Steel
11498 XX Metal
4098 XX Superior

Y

2142 Yale Bronze
1191 Y-Alloy
1213 Y-Alloy (Birmidium)
7417 Y-Alloy (Hiduminium)
2509 Y-Alloy (K.S.)

836 "Y" Alloy (N.P.L.)
5470 "Y" Alloy (Permite) No. 2014
3589 "Y" Alloy, Special Duralumin
2041 Yellow Brass
1192 Yellow Gold
4097 Yellow Label
4551 Yellow Label (Heller)
4099 Yellow Label Cast (Very Best)
2764 Yellow Metal, Macht's
8241 Yellow Rod Agile
6469 Yoloy
7397 Youngstown Copperoid Steel
7396 Youngstown Galvannealed
8706 Youngstown Piladuc
4808 Y-Phosphor Bronze No. 207A
4809 Yorcalbro
11499 Yorcalbro
11500 Yorcalnic
11502 Yuma Chrome Magnet Steel

Z

11666 Z-1R
11503 Z-2
11684 Z-3
4810 Z-3 Alloy
1743 Z-3 (Electron)
7518 Z-457 Die Casting Steel
6500 Z (Rex)
7630 Z.A
12296 Z-Alloy
6617 Z.A.M.
11661 Zamak Alpha
11662 Zamak Beta
11663 Zamak Eta
11664 Zamak Eta H
1193 Zamak No. 2
1194 Zamak No. 3
1195 Zamak No. 5
1196 Zamak No. 6
11504 Zamium
3314 Zelco
11505 Zelnicker Babbitts
2582 Zenel
3315 Zenith High Speed
3316 Zeppelin Alloys
5382 Zeron Metal
11506 Zetonia
11507 Zeus
4223 Z-Guss
1197 Zilloy
6673 Zimal
1198 Zimalium
1199 Zinc
7286 Zinc Alloy Steel
3317 Zinc Babbitt
1343 Zinc Babbitt, Tin Base
3318 Zinc Duralumin ("E" Alloy)
11508 Zincgrip
11685 Zinell
11665 Zinkal M
3319 Zinkalium
1200 Zinnal
4100 Zip
11547 Zip
1423 Zip Zip
1201 Zirconium
7194 Zirconium (12-15%)
7195 Zirconium (35-40%)
3320 Zirconium Steel
11509 Zirkonal
3321 Zisium
3322 Ziskon
4102 Ziv's Block Tested Hollow Drill
4103 Ziv's Cobalt
4714 Ziv's Regular
4104 Ziv's Solid Drill
4105 Ziv's Super
4101 Zivco
1202 "Z" Metal
9382 "Z" Metal
5449 "Z" Metal (Stone's)
11510 Z.N.
11511 Z Nickel
1203 Zodiac
1204 Zorite
8037 ZOVM
6055 ZS-32
4186 "Z. T." Die Steel
11850 ZTM
11512 Zurco Galvacote
1205 Zurco No. 18
1206 Zurco No. 25
1207 Zurco Rustless Iron
1782 Zurco Rustless Steel
11513 Zurco Silvatex
1208 Zurco Steel A.
1209 Zurco Steel AAA
1210 Zurco Steel B
1211 Zurco Steel C
11692 408 Special Babbitt
11693 3.8-78.5 Cr Permalloy
11923 90-10
11947 No. 73 Hot Work
11950 No. 75X Water Hardening
12047 70-30 Brass
1141 4-79 Molybdenum Permalloy
12297 2-81 Molybdenum Permalloy
11514 2-81 Molybdenum Permalloy
11515 1.7V Permendur
11516 2B (MC)
11517 3-C Die
11518 6-6 Motung
11519 8CC Metal
11520 8:2 Copper-Silicon-Aluminum Alloy
11521 11A45
11523 21VFS
11525 40D
11526 41SM
11533 89 MC
11538 600 Metal
11540 2002 Special
11541 2129 Alloy
11542 3074 Hot Work
11543 3581 Chisel
11548 2B (HC)
11549 2B (LC)
11550 3074 Hot Work
11667 7-70 Perminvar
11668 7.5-45-25 Mo-Perminvar
11669 45-25 Perminvar
11670 2V-Permendur
11672 12.5-80 Mo-Permalloy
7684 78.5 Permalloy
11673 78.5 Permalloy
11674 45 Permalloy
12156 68 Permalloy
11675 4-79 Mo-Permalloy

SECTION II

ALLOY DATA

Names, Properties, Uses

THIS SECTION gives condensed data on proprietary alloys sufficient in most instances to identify the alloy, its salient characteristics and its manufacturer. In order that this information could be presented on all known alloys, it was necessary to condense the data. For this reason some who desire to use this data may not find it up to their expectations. It is evident, however, that no one volume can adequately present all the information that may be desired concerning the 12,500-odd alloys listed here. This book is not encyclopaedic nor will it supersede any handbook or buyer's guide. In the event that the information given here proves inadequate, it is suggested that additional data be obtained from the manufacturer whose address is given.

There are several reasons for suggesting that contact be made with the manufacturer for more detailed information than appears in the book. A pertinent admonition to anyone seeking information on alloys is:

"A little learning is a dang'rous thing;
Drink deep, or taste not the Pierian spring."

Some of the reasons for seeking additional information are discussed below.

In the first place, the alloys listed are for the most part proprietary, and as such may be protected by patents or registration of trade-mark. The absence of any note to such effect does not mean that the alloy is not thus protected, and the user of this book is advised that he may be held accountable for any infringement of such proprietary rights.

In the second place, the manufacturers are always in a position to offer valuable advice if informed of the purpose the alloy is to serve, owing to their experience with related problems.

Finally, it is possible that the data presented may be misinterpreted. This point will be elaborated upon in what follows.

Consider, first, the composition of the alloys. Apparently identical analyses do not necessarily mean equivalent quality or equivalent characteristics. There are, for example, several grades of tool steels marketed that possess practically identical analyses yet divergent characteristics and command prices in proportion to their grade or quality. Inherent grain size, hardenability, fracture, general soundness, manufacturing process, even ingot size and extent of reduction are illustrative of some items other than composition as usually expressed that influence serviceability and performance of tool steel. The compositions as furnished by the manufacturers differ in detail and presentation: Some give nominal analyses, some give typical analyses, some give the composition limits, and others only indicate the important alloy elements present or give no composition data at all. This variation is not due to any inconsistency so much as to divergence of opinion. Furthermore, some of the compositions may have been altered somewhat since the data was originally received and last checked, or there may be various grades of the same type differing considerably in properties and uses as is the case where certain steels are offered in various grades based on the carbon content.

Next, with regard to the physical properties listed: It is important to appreciate the fact that a given piece of metal will have a wide range of properties dependent on such factors as thermal treatment, mechanical treatment, and mass. All of the details associated with a given set of physical properties could not be listed. In many instances information was lacking, for example, as to whether the piece tested was a fine wire, small bar, or test bar cut from a heavy section, even whether the material was wrought or cast, yet for the same analysis and corresponding treatment in all possible respects, the properties would be materially different for each of these possibilities. A similar criticism applies to details of the heat treatment. For example it may be stated that the piece was tested in the heat treated condition without specifying relevant conditions of quenching temperature and rate or extent of tempering after quenching. Lack of specific and universally accepted terms applicable to the heat treatments given precipitation-hardenable alloys also leads to confusion. Even the type of test piece used influences the values obtained, and it is difficult to compare results quoted on various "standard" test bars such as the diverse types used in the different countries. As an illustration of another source of ambiguity it is sufficient merely to mention "yield point," an indefinite term but one to which much importance is attached.

In regard to the uses cited, it is apparent that this subject could be treated only in the most brief fashion and any one alloy might be suitable for a multitude of uses. The uses cited are intended to indicate the class of service to which the alloy is suited. The majority of manufacturers supplied more data on possible uses than could be recorded in Section II: the reader is referred to Section III

wherein some uses are listed that do not appear in Section II. The adaptability to a given use depends very much on the condition of the alloy as regards heat treatment, etc., and the manufacturer should naturally be consulted.

Owing to the fact that the information summarized in this book required some years to accumulate, it was not practical to group the data on all alloys produced by a given manufacturer; a list of each manufacturer's alloys does appear, however, in Section IV, the guide to manufacturers. Reference should be made to that same section for information regarding licensors, licensees, and agents.

It will be noted that certain obsolete or discontinued alloys are listed. The reason for this is that a question concerning the alloy may arise in which event it is of value to know that it *is* obsolete. The fact that an alloy of proprietary nature does not appear in this book shall not be construed to indicate obsolescence or anything other than the fact that the authors have human limitations and the number of proprietary alloys is not constant but increasing.

This book will be revised periodically to bring all information up-to-date and to add all new alloys developed and manufactured in the interim.

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1a	Acieral	M–281	6 Cu, 0.4 Zn, 0.9 Ni, 0.1 Fe, 0.4 Si, bal. Al	Cast	20000					Automotive Engine parts	Castings
1b	Acieral	M–281	2.3-3.8 Cu, 0.7-1.4 Fe, 1-1.5 Mn, bal. Al	Sheet	22000		2.0			Automotive engine parts	Sheets
2	Acron		4 Cu, 1 Si, 95 Al	Annealed	31000					Automotive engine parts	High electrical conductivity
					35000					Aircraft Construction	corrosion resistant
				Heat treated	42000						
					60000						
3	Adamantine	M–447	0.7 C, 0.7 Cr, 0.7 Mn, bal. Fe	Heat treated	145000	77000	6.5	16.6	260	Heat treated steel balls for grinding mills	Wear resistant
									300		
4	Adamite	M–229	High C, 1 Cr, 0.75 Ni, bal. Fe							Press dies, rolls, mill guides, furnace parts—castings	Cast iron-pearlitic Wear resistant
5	Admiralty Brass	M–8	62 Cu, 37 Zn, 1 Sn	Cast	56000	27000	15	25		Pump rods, sheets	
				Rolled hard	71680	55500	20	30	19		
				Rolled soft	62700	49700	35	40	8		
6	Admiralty Bronze	M–8	88 Cu, 10 Sn, 2 Zn	Sand cast	38500	23300	14		77	Gears, worm wheels, trolley wheels	
7	Admiralty Gun Metal		87.74 Cu, 10.3 Sn, 1.39 Zn, 0.42 As, 0.08 Pb, 0.05 Fe		37300	21300	9			Valves	
8	Admiralty Metal	M–33	70 Cu, 0.90 Sn, bal. Zn, 0.075 max. Pb, 0.06 max. Fe	Annealed	45000	24100				Condenser tubes, head plates	Corrosion resistant
					50000		5–75				
				Hard	95000		5				
				Soft	52400	24100	68				
9	Admiro	M–2	48 Cu, 10 Ni, 35 Zn, 2 Al 3 Mn, 2 Fe	Cast	57000				110	Turbine bearings, tubes	Stainless
					70000		40–20		130		
				Hot pressed	63000		40–25		170		
					76000				150		
10	Admos	M–2	40-55 Cu, 3-15 Ni, 1-3 Mn, 1-2 Fe, 0.5-3.0 Al, bal. Zn	Cast	56000		35		80	Bearing bushes, worm wheels, condenser tubes, turbine blading, gear wheels, valves	Resists corrosion and erosion of superheated steam
					71680		20		90		
				Hot pressed	69440		35		90		
					85120		20		120		
11	Admic	M–102	70 Cu, 29 Ni, 1 Sn	Hard	113000	107000	10	56.5		Condenser tubes, auto head lights, cafeteria, ware	Corrosion resistant
				Hot rolled	64500	35600	46	72.2			
12	Advance	M–44	54-55 Cu, 44-46 Ni,		62000	40000	40	75		Rheostats, electrical instrument work, resistance metal	Similar to Constantan and Ideal
13	Aerolite		86 Al, 12 Cu, 2 Mn		22000					Pistons, automobile parts	
14a	Aero Metal (Cast)	M–287	4.2 Cu, 27.8 Zn, 0.5 Fe, 0.5 Si, 67 Al		25000					Automotive engine parts	Cast
14b	Aero Metal (Sheet)	M–287	0.2-0.6 Cu, 2.1-2.9 Mg, 96 Al, 0.3-1.3 Fe							Automotive engine parts	Sheet
15	Aeromin	Germ.	92.7 Al, 6.2 Mn, 0.8 Fe, 0.3 Si							Light alloy parts	
16	Aeron	M–584	4.5 Cu, 0.75 Si, 0.75 Mn	Annealed	23000	7000	12		45	Light anti-corrosive alloy parts	Light anti-corrosion alloy. Similar to Alcoa No. 25S
					35000	12000	20		55		
				Quenched	45000	15000	15–		68–		
					53000	30000	22		85		
17	Agrilite No. 5	M–128	70.49 Cu, 5.39 Sn, 24.0 Pb, 0.09 Ni, 0.005 P							Connecting rod bearings for aero engines, rolling mill bearings	Self lubricating bearing bronze
18	Agrilite Bearing Metal	M–128	70 Cu, 5 Sn, 25 Pb		25000	16350			50	Bearings for rolling mill, thrust bearings on steam boats, bearings for washing and ironing machines	Self Lubricating bearing bronze
19	Aich Metal (Aitch)		59.37 Cu, 39.68 Zn, 0.95 Fe	Cast	60000	21000	44	45	90	Hydraulic cylinders and forgings	Resists oxidation. Similar to "Sterro"
				Forged	64500	31000	44	64	107		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
20	Ajax	M-123	78.3 Cu, 11 Sn, 10 Pb, 0.7 P							Bearings	(Discontinued)
21	Ajax Bull	M-123	76 Pb, 17 Sb, 7 Sn		*30000*					*Bearings*	
22	Ajax Honest Solder	M-123	50 Sn, 50 Pb							Solder	
23	Ajax Manganese Bronze	M-123	57 Cu, 40 Zn, 3 Mn, Hardener	No. 1	70000	35000	20	20		Valve stems, propellers, golf clubs, nuts	Strong, tough, corrosion resistant
				No. 2	60000	30000	15	25			
24	Ajax Phosphor Bronze	M-123	79.7 Cu, 9.5 Pb, 10 Sn, 0.7 P	Cast	24000		2.9		55	Bearings	P. L.–19000
25a	Ajax Plastic, Bronze	M-123	64 Cu, 31 Pb, 5 Sn		40000		34			Bearings	
25b	Ajax Plastic, Bronze		90 Cu, 5 Pb, 5 Sn		21000		10	8		Bearings	
25c	Ajax, Plastic, Bronze	M-123	64 Cu, 30 Pb, 5 Sn, 1 Ni							Bearings	
26	Ajax Wiping Solder	M-123	40 Sn, 60 Pb							Solders	
27	Alamo	M-325 M-559	0.30 C, 0.40-0.70 Mn, 1–1.5 Al, 0.60-1.00 Mo, bal. Fe-	Heat treated	160000	135000	18	60	340	Nitrided parts	Nitriding steel
28	Albany	M-76	0.75 C, 0.80 Cr, 0.20V, 0.60 Mn, bal. Fe							Shear blades, dies, punches, knives, collets, cutlery dies, machine tool parts.	Great toughness and resistance to impact
29	Alclad 17 S	M-4	4 Cu, .5 Mn, .5 Mg, bal. Al-Clad	T	55000	31000	20			Metal wing covers, metal clad airships, fuel tanks, floats	Corrosion resistant. Strength of Duralumin. "Registered"
				RT	57000	40000	18				
30	Alcoa Alloys	M-4	Al alloys							Light metal structural parts	"Registered"
31	Alcres		83 Fe, 12 Cr, 5 Al							Electrical resistors	Heat resisting, corrosion resisting
32a	Alcumite	M-46	88.92 Cu, 7.65 Al, 2.02 Fe, 1.41 Ni	Sand cast	75000	25000	30	35	116	Blowers, pumps, ventilator tanks to resist weak acids and other corrosives	High resistance to fatigue and wear
				Hot rolled	100000	52000	10	18	187		
				Rolled, an'led	90000	47000	25	38	132		
32b	Alcumite	M-46	88.2 Cu, 8 Al, 3 Fe, 0.8 Ni	at 500° F	58740	26520	18.5	30.		Blowers, pumps, pickling baskets	Corrosion resistant
				at 900° F	23560	17340	7.5	10.5			
33	Alcunic	M-102	80 Cu, 1 Ni, 2 Al, 17 Zn	Hard	103000	94000	3.5–		200–	Condenser tubing, belt buckles	Corrosion resistant
					112000	106000	3.0		220		
34	Aldrey	M-249	0.5-0.6 Si, 0.4 Mg, 0.3 Fe bal. Al		44000	38000	9–5		90	Automotive engines, electric transmission wires	Aged alloy, wrought
					49000	43000					
35	Aldurbra	M-282 M-150	76 Cu, 22 Zn, 2 Al		80000	44000	16		130	Condenser tubes	Corrosion resistant
36	Allan Red Metal	M-124	50 Pb, 50 Cu						13.5	Bearings, crank-pins for facing pistons	Not a true alloy but a mechanical mixture
37	Allegheny Metal	M-1	0.20 C, 0.50 max. Mn, 17-20	Unannealed	120000	86000	36	52	253	Hardware, fittings, bumpers, automobile radiator shells, dairy and hospital equipment.	Corrosion resistant, Austenitic
		M-240	Cr, 7-10 Ni, bal. Fe	Annealed	90000	45000	61	75	135		
				at 500–C.	72730	20880	47	69.5			
				at 900–C.	24560	13580	36	57			
38	Allegheny No. 66	M-1	0.12 max. C, 16-18 Cr, bal. Fe	Annealed	85000	55000	20	85		Hardware, steam engine parts, fans, blowers, condensers, evaporators	Corrosion resistant to HNO_3
		M-240			70000	40000	35	75	156		
39	Almasilium	M-767	2 Si, 1 Mg, bal. Al		50000		6		90	Light alloy parts	Corrosion resistant
40	Almelec	M-979	0.4-1.2 Mg, 0.5-1.2Si, 0-0.3 Fe, bal. Al		44600		6–8		90	Electrical transmission lines	Heat treated wrought French alloy
41	Almo No. 1	M-38	C, Mo, Cr, bal. Fe	Annealed	110600	88600	26	71.2	187	Crankshafts, axles, connecting rod	(Discontinued)
				Heat treated	167500	141500	17.5	58.7	340		
42	Almo No. 1 C. H.	M-38	Low C, Mo, Cr, bal. Fe	Oil treated	110800	110000	20.5	72.9	212	Gears	(Discontinued)
43	Almo No. 2	M-38	C, Mo, Cr, bal. Fe	Annealed	105000	84700	24	71.6	174	General, axles, crankshafts	(Discontinued)
					138800	130000	17	62.6	269		
44	Almo No. 2 C. H.	M-38	Low C, Mo, Cr, bal. Fe	Case-hard'd	105000	95000	22.5	72.3	217	General, gears	(Discontinued)
45	Almo No. 3	M-38	C, Mo, Cr, bal. Fe	Annealed	94500	79500	30.5	69.8	166	Crankshafts, axles	(Discontinued)
				Hardened	134400	114100	15	57.8	277		
46	Almo No. 3 C. H.	M-38	Low C, Mo, Cr, bal. Fe		95400	63800	34	82.5		Gears	(Discontinued)

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
47	Alneon	M–283	70-90 Al, 2-3 Cu, 7-22 Zn, 0.4-1.0 other elements		28000 48500	10700– 17000	up to 3		100– 150	Light alloy parts	Age-hardening, high endurance limit.
48	Alniloy	M–158	4 Cu, 4 Ni, 2 Si, 2 max. Fe bal. Al		30000	15000	2		75	Ornaments	Not suitable for Al-die casting
49	Alpakka (Alpaca)		60 Cu, 19 Zn, 15 Ni, 2 Ag							Base metal for silver plated tableware	Resists corrosion
50	Alpax	M–75	12.5-13.0 Si, bal. Al plus Fe, Cu, Mn, Na		24000 31000	11000	5– 15		46–65	Production of castings, vessels	Alcoa 47. Corrosion resistant
				Rolled, ann'l	22800		25–				
				Hard worked	35000		5				
51	Alpha	M–33	64-68 Cu, 0.80 max, Pb, 0.07 max. Fe, bal. Zn	Annealed	50000		40			Condenser tubes, pipes	Resists corrosion of natural water
52	Alpro No. 220	M–126	10 Al, 90 Cu							Gears, cams, valves	Resists abrasion, wear and shock
53	Alpro No. 221	M–126	10 Al, 89 Cu, 1 Fe							Ball bearings	Resists abrasion, wear and shock
54	Alpro No. 223	M–126	10 Al, 87 Cu, 3 Fe							Bearings	
55	Alpro No. 224	M–126	10 Al, 86 Cu, 4 Fe							Bearings	
56	Aludur	M–284	0.5 Mg. 0.7 Si, 0.45 Fe, bal. Al	Heat treated	50000		6		90	Overhead transmission lines	Self-ageing alloy. High corrosion resistant
57	Alumac No. 85		4 Cu, 5 Si, bal. Al		30000		4.0		70	Die casting	Die casting alloy Discontinued
58	Alumalun	M–250	Al, Si alloy plus abrasive grains imbedded in wearing surface							Floor plates, stair treads, car steps	Wear resisting, anti-slip
59	Alumbro	M–188 M–282	76 Cu, 22 Zn, 2 Al		91000		11		136	Condenser tubing to resist sea water corrosion, plates	High realstance to corrosion
60	Alumel	M–65	95 Ni, bal. Si-Mn-Al	H. R. and Cold Drawn	85000		30			Negative thermocouple wire	Max. 2400 °F.
61	Aluminum	M–4	99.96 Al	Wrought	28000 35000	14000 25000	5 15		25 40	Foil	Work hardens
62	Alcoa 2S	M–4	99 min. Al	Annealed Hard	13000 24000	5000 21000	35 5		23 44	Containers, tanks, auto body parts	Wrought
63	Alcoa 3S	M–4	98 Al, 1.25 Mn, 0.11 Cu, 0.52 Fe, 0.22 Si	Annealed Hard	16500 29000 min.	8145 25000	33 1–4		28 55	Structural work, tank cars, pipes, storage containers	Resists reducing and oxidizing atmosphere
64	Alcoa 6	M–4	12.5-14.5 Zn, 2.5-3.0 Cu, 0.8 max. Fe, 0.7 max. Si, bal. Al	Sand cast	24000	14000	3			Light alloy parts	(Discontinued)
65	Alcoa 12	M–4	8.03 Cu, 0.48 Fe, 1.54 Si, 0.06 Mn, bal. Al	Cast	16000 24000	15400	1 2	49	50 65	Household articles, aircraft and automotive industry, ship building, ornamental work, dairy and farming industry	Casting alloy soft and gummy on machining
66	Alcoa 13	M–4	12 Si, 88 Al	Chill cast Sand cast Die cast	30000 26000 33000	18000	11 9.5 1.8		60.5 50.8 80	Carburetor frames, brake shoes adding machine frames	Die casting M. E.-10,000,000
67	Alcoa 14	M–4	4.4 Cu, .8 Si, .7 Mn, .3 Mg, bal. Al	Die cast	36000		1.0		95	Adding machine frames, carburetors, brake shoes, radio parts	Die casting Discontinued
68	Alcoa 17 S	M–4	4.0 Cu, 0.50 Fe, 0.60 Si, 0.5 Mn, 0.5 Mg, bal. Al	Heat treated SO. ST.	65000 25000 35000 55000 63000	50000 7000 10000 30000 40000	8 14 22 18 25		45 55 90 105	Airplane structures and floats, dirigibles, buses, trucks, cars	Age-hardening Duralumin

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
69	Alcoa A17S	M–4	2.5 Cu, 0.5 Fe, 0.6 Si, 0.5 Mn, 0.5 Mg, bal. Al	SO	20000	8000	20–		30	Airplane structures, floats, dirigibles, rivets	Age - hardening, duralumin alloy S. S.-26000
					25000		28		40		
				ST	35000	15000	20–		55		
					45000	20000	28		75		
70	Alcoa B-17S	M–4	3.5 Cu, 0.50 Fe, 0.60 Si, 0.56 Mn, 0.55 Mg, bal. Al	SO	20000		20–		30	Airplane structures, floats, dirigibles	Age - hardening, Duralumin alloy (Discontinued)
					25000		28		40		
				ST	42000	20000	20–		65		
					50000	25000	28		85		
71	Alcoa C-17S	M–4	4.07 Cu, 0.50 Fe, 0.60 Si, 0.56 Mn, 0.55 Mg, bal. Al	SO	25000	7000	12–		42	Airplane structures, floats, dirigibles	Duralumin alloy Age-hardening. (Discontinued)
					35000	10000	20		55		
				SW	55000	30000	18–		90		
					63000	40000	25		105		
				ST	63000	50000	8–		95		
					90000	55000			125		
							14				
72	Alcoa 25S	M–4	0.8 Mn, 0.8 Si, 4.5 Cu, bal. Al	SW	45000	15000	15		68	Propellers, automobile hardware, aircraft engines, motor busses	Wrought alloy C. Y. P.-9000 C. S.-25000
					53000	30000	22		85		
				ST	55000	30000	16–		90		
					63000	40000	25		105		
				SO	23000	7000	12–		45		
					35000	12000	20		55		
73	Alcoa 43	M–4	5 Si, bal. Al	Sand cast	19000	9000	6		40	Intricate castings	Corrosion resistant
				Perm. Mold	24000	9000	6		40		
74	Alcoa 45	M–4	10 Si, 0.6 max. Fe, 0.5 max. Mn, 0.6 max. Cu, bal. Al	Sand cast	22000	10000	4		50	Light alloy parts & castings requiring very fluid alloy	Sand and permanent mould casting
75	Alcoa 47	M–4	0.13 Cu, 0.40 Fe, 12.5 Si, 0.09 Mn, 0.05 Na, bal. Al	Sand cast	24000	9000	5–		55	Light alloy parts and leak-proof castings	Castings corrosion resistant
					31000		15				
				Modified	26000	11000	8		50		
76	Alcoa 51	M–4	1.9 Cu, 0.6 Mg, 1.0 Si, 96.5 Al	SO	14000	4000	15–		25	Airplane propellers, pistons, crank cases, connecting rods	Strain hardened when cold worked Obsolete
					18000	6000	30		32		
				SW	30000	15000	20–		55		
					40000	20000	30		70		
				ST	45000	30000	10–		85		
					50000	40000	18		100		
77	Alcoa 83	M–4	3.0 Si, 2.0 Cu, bal. Al	Die cast	25000		3–		55	Pressure die castings for small machine & ornamental parts	Die castings
					30000	14000	6		65		
78	Alcoa 93	M–4	2.0 Si, 4.0 Ni, 4.0 Cu, bal. Al	Die cast	33000	28000	1–		80	Light alloy parts & castings for small machines	Die castings
							0.5				
79	Alcoa 100	M–4	1.0 Fe + Si, 99 Al	Sand cast	12000	4000	15–		25	Foundry alloy, Light alloy parts	Sand castings, commercial ingot
					14000		20				
80	Alcoa 406	M–4	2 Mn, bal. Al	Sand cast	20000	9000	12		35	Cast fittings	Resists corrosion of S gases
81	Hollup Gr. No. 30-X	M–844	.10–.15 C, bal. Fe							Welding electrode	Coated
82	Alcoa 109	M–4	12 Cu, 88 Al	Sand cast	20000	18000	0.5	1.0	75	Pump parts, automobile engine manifolds	Castings (sand)
					28000		1.5				
83	Alcoa 112	M–4	7.5 Cu, 1.5 Zn, 1.2 Fe, bal. Al	Sand cast	19000	12000	1		50	Crank cases, oil pans, motor housing, vacuum sweeper parts	Casting alloy
					24000	14000	2 5		70		
				Permanent Mold	21000		1.5		70		
					29000		3.0		90		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
84	Alcoa 122	M–4	0.18 Si, 10 Cu, 1.25 Fe, 0.25 Mg, bal. Al	Sand cast	26000	20000		0	90	Pistons, valve guides, cam shaft bearings	Wear resisting castings
				Heat treated	40000	24000		1	115		
85	Alcoa 142	M–4	4 Cu, 2 Ni, 1.5 Mg, 0.7 Si, bal. Al	Sand cast	30000	17000		0.5	85	Pistons, air cooled cylinder heads, bearings	Retains strength at high temperatures
					40000	35000		3.0	105		
				Permanent Mold	30000			0	90		
					49000	34000			120		
86	Alcoa 145	M–4	86.3 Al, 10 Zn, 2.5 Cu, 1.2 Fe	Sand cast	25000	12000	3–6		65	Cast parts of aircraft and automotive engines, trucks, busses and small boats	Sand cast, Great shock resistance Now Alcoa 645
					37000						
87	Alcoa 195	M–4	0.25 Zn, 4.5 Cu, 0.75 Si, 0.5 Fe, 0.02 Mn, bal. Al	Cast 195-4	28000	13500	6		65	Crank cases, water jackets, girders, automobile and dirigible parts	Sand and permanent molds. Not shock resistant.
					38000	16000	12				
				Cast 195-10	36000	27000	0–5		100		
					50000						
				Cast 195-16	30000	21000	3–8		75		
					40000	22000			85		
				As cast	28000	13000	12		65		
88	Alcoa 196	M–4	4 Cu, 0.2 Mg, bal. Al	Sand cast 196-6	33000	27000	0.2		110	Special fittings for high strength	Casting alloy. Low shock resistance. Discontinued
					45000		2.5		115		
					43000	40000	2.0		110		
89	Alcoa 212	M–4	7–8.5 Cu, 1–1.5 Si, 0.8–1.2 Fe, bal. Al	Sand cast	19000	11000	1.0		50	Commercial castings for general utility	Corrosion resistant
90	Alcoa 355	M–4	5 Si, 1.3 Cu, 0.5 Mg, bal. Al	Sand cast T-4	28000	23000	1.5		60	Liquid cooled engine parts	Retains strength to 400°F.
				Sand cast T-6	35000	25000	3.5		80		
				P. M. T-4	30000	24000	2		75		
				P. M. T-6	43000	26000	4		90		
91	Alcoa 356	M–4		Sand cast T-4	25000	20000	2		60	Leak proof castings	Corrosion resistant
				Sand cast T-6	32000	22000	4		70		
				P. M. T-6	40000	24000	5		90		
92	Cyclops B-8	M–39	4 Cr, 14W, 2.5V, 4.25 Co, bal. Fe, 0.50 Mo, 0.75C							High speed cutting tools	High speed steel
93	Cyclops K-R (K-Rustless)	M–39	0.6C, 8Cr, 8W, bal. Fe		215000					Cutlery, valves, propeller shafts, ball races, dies	Non-rusting, Non-staining
94	Cyclops B-6	M–39	4 Cr, 18 W, 1 V, bal. Fe, 0.65 C							Lathe tools, taps, reamers, twist drills, milling cutters, dies, lathe centers	High speed steel, Wear and abrasion resistant
95	Cyclops B-7	M–39	4 Cr, 18 W, 1 V, bal. Fe, 4 Co, 0.6 C, 0.5 Mo							Lathe tools, planer tools for high speed cuts	High speed steel
96	Cyclops 17-A	M–39	0.35–0.45C, 0.7–1.5 Si, 0.5–0.75 Mn, 6.75–8.0 Cr, 18.75–20 Ni, bal. Fe	Forged	141000		27	50	248	Used for applications where super-heated steam, hot oils, sulfides, hot sulfur are encountered	Non-corrosive and heat resistant. Resists scaling up to 1500° F.
					108000		50	64	167		
				at 1250°F.	65400		18.5	49			
97	Cyclops 17-B	M–39	0.10–0.30 C, 0.7–1.5 Si, 0.5–0.75 Mn, 6.75–8.0 Cr, 18.75–20 Ni, bal. Fe	Forged or rolled	80000		42	63	160	Used for applications where super-heated steam, hot oils, sulfur oils and sulfides are encountered	Non-corrosive and heat resistant
					71000		52	68	128		
98	Gallium	M–133	Pure Ga							Optical mirrors, photo-electric cells, electron tubes	M. P.-29.9° C. Coef. exp.-0.000018
99	B.A./40D Alloy	M–28	10–13 Si, bal. Al.	Sand Cast	23500	11000	8		50	Light alloy parts, wrought forms, corrosion resistant castings	Resists sea water corrosion. Modified alloy
					24000	13500	5		55		
				Chill Cast	29000	12000	15		55		
					31300	14500	8		60		
100	Al-Alloy-L-24	M–28	4 Cu, 2 Ni, 1.5 Mn, 0.75 Si, bal. Al	Cast and treated	36000		1.5		90	Pistons, valves, cylinder heads, internal combustion engines	Resists high temp. (Discontinued)
				Chill cast	40000		4				
				and treated	46000		7				
101	3L.5 Specification	M–28	13.5 Zn, 2.75 Cu, bal. Al	Chill cast	24000		3		65	Internal combustion engine parts, crankcases	Age-hardening 1z-2-7
					33000		10		70		
				Sand cast	20000	11000	4		62		
					74600	13000	2		65		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
102	Aluminum Brass	M–8	1-6Al, 24-42 Zn, 55-71 Cu		85000	73000	6	8	193	Bushings, hardware	
					45000	32000	50	33	114		
103a	Aluminum Bronze	M–285	91-94 Cu, 0-1.2 Fe,	Sand Cast	71000	25300	21.7			Bearing metals, ball bearings,	Very close- grained
		M–8	6.6-7.0 Al, 0-1.0 Mn		112000	50000	3.0			pin pivots, pump, propeller	castings. Corrosion
103b	Aluminum Bronze	M–129	87.5 Cu, 12.5 Al	Chill cast	57000	27800	30.5			blades, bearings, gears	resistant
					86000	39000	22				(Obsolete)
103c	Aluminum Bronze	M–129	87.5 Cu, 4.1 Al, 1.7 Fe, 6.6 Zn	Hot rolled	63900	35000	6.5			Bearings, gears	
				Cold drawn	98000	90500	13.0	14.0			
104	Aluminum Bronze U. S. N. Spec. 46-B-18	M–8	7-9 Al, 2.5-4 Fe, 0.5 Sn, bal. Cu.		70000		2.5			Bearings	Corrosion resistant
105	West No. 1 Regular-Stancast	M–465	0.28-0.20 C, 0.6-0.8 Mn, 0.3-0.4 Si, bal. Fe	Annealed	38000				112	Machinery parts, shafts	SAE. 1225
					65000				149		
106	West No. 2	M–465	0.4-0.5C, 0.6-0.8 Mn, 0.3-0.4 Si, bal. Fe	Annealed	45000				156	Machinery parts, gears, shafts, axles	Tough SAE-1245
					80000				196		
107	West No. 3	M–465	0.15-0.20C, 0.3-0.5 Mn, 2.0-3.0 Si, bal. Fe	Special	70000				170	Heat treating boxes	Cannot be welded
108	West No. 3A	M–465	0.15-0.20C, 0.3-0.5 Mn, 1.5-2.0 Si, bal. Fe	Special	70000				156	Heat resisting parts	Heat resistant
109	West No. 4	M–465	0.20 max. C, 0.3-0.5 Mn, 0.3-0-4 Si, bal. Fe	Annealed	30000				103	Electrical magnetic parts	SAE-1215
					55000				131		
110	West No. 4A	M–465	0.20 max. C, 0.6-0.8 Mn, 0.3-0.4 Si, bal. Fe	Annealed	35000				103	Machinery parts, case-hardened parts	Carburizing steel SAE -1215
					60000				137		
111	West No. 5	M–465	0.28-0.35 C, 0.6-0.8 Mn, 0.3-0.4 Si, bal. Fe, Ti.	Annealed	42000				137	Machinery parts	SAE-1230
					75000				156		
112	Aluminum Iron Bronze	M–8	85-89 Cu, 6-9.5 Al, 3.5-7.5 Fe		74000			23	100	Propeller blades, pump parts, bearings	
113	Amberoid	M–135	15 Ni, 23 Zn, 62 Cu							For deep stamping in electro-plate trade	Nickel Silver
114	Ambrac A	M–8	20 Ni, 5Zn, 75 Cu	Castings	44400	14800	19.4			Laundry and paper machinery	Resists corrosion
				Hot rolled	50000	16000	29.0				
				Cold rolled	80000	70000	13.0	55.0			
				Wire	55000	20000	1.0				
					125000						
115	American Black Heart Malleable Iron	M–113	2.8-3.5 C, 0.6-0.8 Si, Mn, bal.		20000		0.2		105	Plumbing, hardware, fittings,	Castings
		M–24	Fe.		46000		15		220	pipes.	
116	A.M.F. Alloy (Imphy)	M–104	55-60 Ni, 0.3 Mn, 0.2-0.4 C, bal. Fe	Annealed	100000	62000	40	50		Valves of expansion engines	Great ductility at low
				(Liquid air T)	102000	50000	40	55		used in liquid air plants, refrigeration machines	temperature
117	Ampco Metal	M–285	82-88 Cu, 9-12 Al, 3.4-5.3 Fe	Cast	75000		20	18	149	Gears, forming dies, valves,	Resists corrosion
				Forged	116000		4	16	340	bushings, tools, trolley shoes	Shock resisting
				Hot rolled	100000		20	18	149	and wheels	
118	Slocrode	M–494	high C, 0.75-1.25 Ni, 0.5-0.75 Cr, bal. Fe.	Oil treated	36000				200	Castings for high duty purposes	Cast iron
					40000				500		
119	Amsco Manganese Steel	M–9	10-14 Mn, 1-1.4 C, bal. Fe	Heat treated	140000	30000	8	8	300	Steam shovel teeth rolls, ball	Tough and shock resisting. Resists abrasion
		M–231			160000		12	10	500	mill liners, wheels, gears and pinions	
120	Anaconda Phosphor Bronze A–351	M–8	95 Cu, 5 Sn	Hard drawn	130000					Tubes, sheets, wire, general parts	Resists fatigue and corrosion and abrasion
				Scft	45000		50				
121	Anaconda Phosphor Bronze B–979	M–8	94 Cu, 5 Sn, 1 Pb	Hard wire	130000					Tubes, sheets, wire, general parts	Resists fatigue and corrosion
				Soft	65000		40				
122	Anaconda Phosphor Bronze C–353	M–8	92 Cu, 8 Sn	Hard drawn	130000					Tubes, sheets, wire, general parts	Resists fatigue and corrosion
				Hard sheet	110000		3				
123	Anaconda Phosphor Bronze D–354	M–8	10 Sn, 90 Cu	Hard	130000		5			Tubes, sheets, wire, general parts	Resists fatigue and corrosion
				Soft	60000		65				
124	Annite	M–38	C. alloy, bal. Fe							Dies, tools, punches, rotary shears, blanking dies	Resists abrasion
		M–334									

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
125	Antimonial Lead	M–88	0-25 Sb, 75-100 Pb							Storage battery plates, fuses bullets, type metal, pipes.	
126	Antimony		100 Sb						60	Constituent in alloys, bearings, etc.	Hard, brittle, expands on solidifying.
127	Apex		Fe-Ni		24000 26000	10000	6 8		50 60		
128	Apolloy	M–131	0.08 C, 0.25 Cu, bal. Fe							Building construction	Corrosion resisting to weather
129	Arboga		Tungsten carbide							Tools, hard cutting tools	Sintered alloy
130	Aremite	M–195	Synthetic cast iron		30000 50000				165	Pipes, fittings, hardware	
131a	Argentan		50-90 Cu, 3-40 Ni, 0-10Al, 0-40 Zn							Cutlery	
131b	Argentan		48.35 Cu, 34.05 Zn, 17.60 Ni							Table cutlery, ornaments	High resistance to corrosion
131c	Argentan (Neusilber)	Ger.	26 Ni, 56 Cu, 18 Zn							Chemical equipment construction	Substitute for Ag. a nickel silver
132	Argentine Metal		85.5 Sn, 14.5 Sb							Statuettes and small ornaments	Expands on cooling
133	Argilite	French	90 Al, 6 Cu, 2 Si, 2 Bi							Automotive engine parts	
134	Arkit		38 Co, 30 Cr, 16 W, 10 Ni, 4 Mo, 2.5 C							High speed cutting tips of lathe tools	
135	Armco Iron	M–10	0.012 C, 0.017 Mn, 0.005 P, 0.025 S, bal. Fe	Treated Annealed	38000 45000 38000	20000 25000 19000	40 40	50 50	85 85	Pipes, roofing, tanks, culverts, stoves, metal furniture	
136	Armide	M–132	Carbide alloy Ta C		250000					Tipped cutters and tools	Hard, tough and wear resisting
137	Armstrong		12 Cr, 5 Si, 0.5 C, bal. Fe							Heat resisting steel parts	Heat resisting stainless steel
138	Arsenic		100 As							Constituent in alloys	Very brittle Metalloid
139	Arsenic Bronze		80 Cu, 10 Sn, 9.2 Pb, 0.8 As		30000				60	Bearings	
140	Art Die	M–35	0.95 C, 0.30 Cr, 0.02 V, 0.25 Mn, bal. Fe	Annealed					170	Jewelers Dies	Deep hardening
141	Allegheny No. 33	M–1	0.12 C, 0.50 Mn, 12-14 Cr, bal. Fe	Annealed	73000		35	75	150	Furnace and stack dampers, kiln finings	Formerly Ascoloy No. 33
142a	Ashberry Metal		80 Sn, 1 Zn, 14 Sb, 2 Cu, 2 Ni, 1 Al							Tableware and utensils	Same as "Brittania"
142b	Ashberry Metal		78-80 Sn, 0-2.8 Zn, 14-19 Sb, 0-3 Cu							Tableware, utensils	
142c	Ashberry Metal		80 Sn, 14 Sb, 2 Cu, 1 Zn, 3 Ni							Tableware, utensils	
142d	Ashberry Metal		79 Sn, 15 Sb, 3 Cu, 2 Zn, 1 Ni							Tableware, utensils	
143a	Aterite	M–19	10 Ni, 65 Cu, 2 Fe, 23 Zn	Rolled Cast	53000 163000 55000 110000	40000 110000 35000 110000	59 1 45 0.6	62 17 36 10		Hardware, valves, plumbing, fixtures, cocks, chemical equipment	Corrosion resistant Discontinued
143b	Aterite	M–19	35-44 Ni, 55-36 Cu, 5-20 Fe, 5-0 Zn							Hardware, valves, fixtures	Discontinued
143c	Aterite	M–19	62.40 Cu, 18.9 Zn, 12.6 Ni, 2 Pb, 2.9 Fe							Hardware, chemical equipment	Discontinued
144a	Atha No. 2500	M–38	22.9 Ni, 5.42 Cr, 1.65 Si, 0.78 Cu, 0.8 Mn, 0.24 C, bal. Fe		98000		32.3	58.6		Furnace parts	Resists high temperatures. (Discontinued)
144b	Atha No. 2600	M–38	22 Ni, 8 Cr, 1.75 Si, 1.0 Cu, bal. Fe							Furnace parts, heat treating boxes	Heat resistant (Discontinued)
145	Chrome Die	M–253 M–76	C, Cr, bal. Fe							Hot dies, hot punches and hot shearing	Hot work steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
146	Atlas Hot Die	M–253 M–76	C, Cr, W, V, bal Fe							Hot dies, hot punches, hot shearing	Hot work steel
147	Atlas Iron No. 1	M–285	2.9-3.0 graphitic carbon 0.5-0.6 combined carbon 2.0-2.15 Si, bal. Fe						200 250	Dies	High test iron Tr.S.-6900 (Discontinued)
148	Atlas Iron No. 2	M–285	2.75 graphitic carbon, 0.50 combined C, 1.85-1.95 Si, bal. Fe						200	Valves	High test iron Tr, S.-6100 (Discontinued)
149	Atlas Iron No. 3	M–285	2.7 graphitic carbon, 0.6 combined C, 1.5-1.75 Si, bal. Fe						350	Abrasion iron hammers	High test iron Tr. S-5000 (Discon.)
150a	Auer Metal		35 Fe, 65 Ce							Gas and cigarette lighters	Pyrophoric
150b	Auer Metal		53 Fe, 30 Mn, 10 Sb, 7 Misch metal							Gas and cigarette lighters	Pyrophoric, sparking alloy
150c	Auer metal		35 Fe, 35 Ce, 29 Misch metal							Gas and cigarette lighters	Pyrophoric
150d	Auer metal		35 Fe, 35 Ce, 24 La, 3 Yb, 2 Er							Gas and cigarette lighters	Pyrophoric
151	Avesta No. 393	M–16	0.06 C, 0.5 Si, 13.5-14.5 Cr,	Cast	99000	76000	28	71		Pumps, shafts, bolts, screws	Rust and heat resisting
		M–332	0.3 Ni, bal. Fe.	Heat treated	132000	96000	24	49			
152	Avesta No. 739	M–16	0.28-0.35 C, 0.5 Si, 13-14 Cr,	Castings	231000		2.5	5.0		Cutlery, springs, valves turbines	Heat and rust resisting
		M–332	0.3 Ni, bal. Fe	Oil treated	238000		6.0	49.0			
				Treated	112000	80000	26	60			
153	Avesta No. 831	M–16	0.10 C, 1.0 Si, 20-22 Cr, 0.5 Ni	Air cooled	72000	54000	30	50		Pumps, turbines, valves, chemical apparatus	Heat and corrosion resistance
		M–332	bal. Fe	casting							
154	Avesta No. 832	M–16	0.10 C, 0.5Si, 17-18 Cr, 7.5-8.5	Air cooled	110000		61	64		Pumps, turbines, valves, chemical apparatus	Heat and corrosion resistance
		M–332	Ni, bal. Fe	casting							
155	Avialite–915	M–8	90 Cu, 0.5 Fe, 9.5 Al		80000	40000	22			Valve seats, spark-plug bushings in aircraft engines	Same as "Millard Metal"
156	West No. 6	M–465	0.30-0.40C, 1.25-1.50 Mn,	Annealed	60000				126	Cylinders, housings, valves	Tough, close grained
			0.30-0.40 Si, 0.12V, bal. Fe		95000				228		
157	Badger Steel	M–253	0.9-1.2C, bal. Fe							Taps, reamers, threading dies	
158	Barberite	M–19	88.0 Cu, 5 Ni, 5 Sn, 1.5 Si, 0.50 Mn, 0.04 C, 0.50 Fe	Cast	56800	41500	6.6	6.6	77	Marine parts, ornaments, fixtures	Corrosion resisting casting (Discon.)
					60000	48000	6.0	6.8			
159	Barium		100 Ba							Constituent in bearing metals	Malleable & lustrous
160	Barronia Metal	M–20	83 Cu, 0.5Pb, 4 Sn, bal. Zn	Cast	42400	20400	38	33	72	Condenser tubes, heat exchangers, evaporators, fittings	For superheated steam work
				Drawn	84000	74000	18	46	171		
161	Batterium	M–21	89 Cu, 9 Al, 1 Ni, and 1 other metal		78000		35		158	Chemical apparatus, valves, plug cocks, plate terminals	Non - corrodible, acid resistant
					101000		48		168		
162	Bearingoy	M–208								Machine bearings	Long life under poor lubrication.
163a	Bearing Metals Bronze		30.70 Cu, 30-70 Pb, >S							Bearings	Bronze bearings
163b			84-50 Cu, 8-40 Pb, 6-10 Sn								
163c			80 Cu, 16 Sn, 2 Pb, 2 Sb								
163d			>20 Sn, bal. Cu.								
163e			>20 Sn, >1 Pb, bal. Cu								
163f			86-83 Cu, 8.8-1.5 Sn1-7.5 Zn								
163g			86 Cu, 6 Sn, 5 Zn, 2.7 Mn								
163h			88-75 Cu, 7-14 Sn, 2-9 Zn, 1-9 Pb								
163i			82 Cu, 14 Sn, 2 Zn, 1 Pb, 1 P								
163j			77-75 Cu, 14-21 Zn, 4-9 Sn								
163k			67 Cu, 28 Zn, 4.3 Sn, 1.4 Pb								
164	Bearite	M–214	80.1 Pb, 0.37 Cu, 0.13 Bi, 16.75 Sb, 2.65 hardener	at 70 °F.	9750		1.5		29.1	Bearings not subject to vibration or pounding	High compressive value, low coef. fric. (Discontinued)
				at 212 °F.					24.5		
165	Beaver	M–253	C, W, bal. Fe							High speed tools	
166a	Bell Metal		83 Al, 10 Mn, 7 Cd							Bells, chimes, whistles, ornaments.	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
166b	Bell Metal		85-60 Cu, 15-40 Sn.							Bells, chimes	Hard bronze
166c	Bell Metal		75-80 Cu, 25-20 Sn							Bells, chimes	
167a	Bemal	M-286	70.11 Cu, 0.32 Pb, 29.43 Zn							Condenser tubes	Discontinued
167b	Bemal	M-286	70 Cu, 29 Zn, 0.45 P, 0.15 Fe							Condenser tubes	Discontinued
168	Cerrobend	M-216	50 Bi, 26.7 Pb, 13.3 Sn, 10 Cd		5990		140		9.2	Filler for bending tube, low melting solder, sealing glass to metal	Formerly called Bendalloy
169a	Benedict Metal		75-80 Cu, 20-25 Ni, 0.75 max. Fe and Mn	Hard rolled Annealed	88300 50000	83000 30000	6.5 46	35 63	148 76	Seamless drawn tubes for condensers and feed water heaters, coinage	Non-corrosive
169b	Benedict Metal		86-84 Cu, 14-16 Ni, 0.04 C							Seamless drawn tubes for condensers	Non-corrosive
170	Berdo Alloy No. 1	M-20	Cu, Sn, Pb, Ni		30000	20000	1.5	2.6	99	Bearings	Heavy service C.Y.P.-38000
171	Berdo Alloy No. 2	M-20	Cu, Sn, Pb, Ni						75	Bearings	General service C.Y.P.-28000
172	Berdo Alloy No. 3	M-20	Cu, Sn, Pb, Ni						44	Bearings	Light service C.P.Y.-14000
173	Bersch Metal		93 Al, 7 Ni							Bearings	
174	Beryllium	M-255	100 Be		60000 70000				90 110	Windows for X-ray tubes, constituent for alloys, electrodes for Neon signs	Light metal Coef. exp. of cast iron
175	Beryllium Bronze 2.5% Be	M-198 M-199 M-296	97.5 Cu, 2.5 Be	Treated soft Treated hard	62000 176000	20000 160000	52 0.6	66.4	98 396	Springs and parts subjected to frictional wear	Wear resistant
176	Bethadur No. 410	M-24	.12 max. C, 12-14 Cr, bal. Fe	Oil treated	75000 183000	45000 148000	34 18	68 57	143 388	Turbine blades, valves, dam equipment	Corrosion resistant
177	Bethadur No. 302	M-24	.08-.2 C, 17-19 Cr, 7-9.5 Ni, bal. Fe	Water quench	95000	57000	42	75	152	Ship fittings, food containers, ornamental trim	Non-magnetic, austenitic, cor. resist.
178	Bethadur No. 3	M-24	.12 C, 19 Ni, 9 Cr, bal. Fe	Annealed	76500	54000	42	50	128	Chemical plants. Not used for atmospheric corrosion	Corrosion resistant to H_2SO_4 and HCl
179	Bethadur No. 486	M-24	.35 max. C, 23-30 Cr, bal. Fe	Water quench	95000	50000	15	20	187	Protection tubes, conveyor chains, furnace parts, bolts, nuts	Corrosion and heat resistant
180	Bethalon No. 416	M-24	.12 max. C, 12-15 Cr, Mo, S, Se, bal. Fe							Automatic and screw machine parts	Not to be welded. Similar to Bethadur No. 1 plus machinability
181	Bethlehem Stainless Type "A"	M-24	0.35 C, 0.30 Mn, 14 Cr, bal. Fe	Hot rolled	95000	65000	30	55	179	Stainless steel parts	Discontinued
182	Bethlehem Superior Hollow Drill	M-24	0.8 C, low P and S, bal. Fe							Hollow drills and bits	Resistance to abrasion, shock and vibr.
183	Bethlehem Superior	M-24	Varying C, 0.15-0.25 V, bal. Fe							Taps, reamers, cutters, punches, dies, broaches, chisels	Tool steel
184	Bethlehem No. 6 Ni Steel	M-24	0.3 C 3.4-3.6 Ni, 1.05 Mn, 0.25 Cr, 0.2 S, bal. Fe							Tools	Discontinued
185	Bethlehem No. 57 Hot Work	M-24	0.35 C, 2.75 Cr, 0.5 V, 9 W, bal. Fe							Dies, trimmers, pliers, punches, shear blades	Hot work tool steel for form. hot metal

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin No.	Uses	Remarks
186	Bethlehem No. 67 Chisel	M-24	0.45 C, 1.25 Cr, 0.2 V, 2.25 W, bal Fe							Chisels, rivet sets, dies, pneumatic tools	Resistant to fatigue, tough
187	Bethlehem No. 71 Alloy	M-24	0.65 C, 0.25 Ni, 0.8 Mn 0.25 max. Cr, 2 Si, bal. Fe							Tools, hand and pneumatic chisels, shear blades, punches	Resists shock
188	Bethlehem No. 445 Hot Work	M-24	0.85 C, 3.75 Cr, 0.3 Mn, 0.15 max. Ni, 0.25 Si, bal. Fe							Spike dies, forming dies, heading tools. For forming and shaping of hot metals	High toughness and hardness. Heat resisting.
189	Bethlehem X	M-24	Varied C, bal. Fe							General tools, quarrying tools, crow bars, soft rock drills, chisels	Water hardening
190	Bethlehem XX	M-24	Varied C, bal. Fe							Taps, reamers, cutters, punches, dies, tools	Extra quality carbon tool steel
191	Bethlehem XXX	M-24	Varied C, bal. Fe							Finishing tools and cutters	Special quality
192	Bethlehem XLC	M-24	Varied C, bal. Fe							Dies, cold cutters, chisels, punches, shear blades	Regular quality carbon tool steel
193	Birdsboro No. 26	M-136	C, Mo, Cu, bal. Fe							Engineering construction	High physical properties
194	Birdsboro No. 30	M-136	0.30 C, 0.20 Mo, 1.0 Cu, bal. Fe		85000	55000	22	40	180	Engineering construction	Corrosion and fatigue resisting
195	Birmidium "Y" Alloy	M-325 M-137	3.5-4.5 Cu, 1.8-2.3 Ni, 1.2-1.7 Mg, bal. Al	Heat treated	35000 42000		2 3			Automobile pistons, piston heads, crankcases	Corrosion resistant
196	Bismuth		100 Bi						14	Constituent of fusible alloys and type metals	Low strength Expands on solidifying
197	Blackor	M-26	87 W, 9 C							Oilwell core bits, cutters, tools	W_2C-Hard facing compound
198	Blue Chip	M-57	0.70C, 0.25 Mn, 4 Cr, 18W, 1V, bal. Fe	Hardened						Tools, cutters, reamers, drills, punches, dies, shears, taps.	High speed steel Rockwell "C"-31-63
199	Rekord Select	M-336	C, Mn, Cr, W, V, Mo, Cu, bal. Fe.							Tools, dies	
200	Bonny-Floyd "MM"	M-139	0.25-0.35 C, 0.20-0.25 Mo, 1.0-1.25 Mn, 0.30 Si, bal. Fe	Heat treated	90000 210000	65000 183000	25 7	55 25	196 480	Power shovels, tractor tread steel, mine car wheels	Resists shock and wear-IZ-3-56
201	Borchers Alloy		24 Ni, 32.5 Cr, 0.5 Ag, 1.8 Mo, bal. Fe							Chemical apparatus, crucibles, pyrometer tubes	Heat and corrosion resistant
202	Boroto A. A.		Graphitic white metal						18	Bearings	High speeds
203	Boroto B. A.		Graphitic white metal						31	Bearings	High stresses
204	Boroto B. L.		Graphitic white metal						35	Bearings	High friction and heavy pressures
205	Boroto B. R.		Graphitic white metal						27	Bearings	Extra high friction speeds and pressures
206a	Brass, Cartridge	M-8	70 Cu, 30 Zn		47000 90000	20000 65000	60 4		63 156	Cartridges, primers, shot shells, tubes	Deep Drawing
206b	Brass, Cartridge		67 Cu, 33 Zn		45000 90000	18000 65000	60 4		60 150	Cartridges, primers, shot shells, tubes	Deep Drawing
207	Brass, Common High	M-8 M-33	65 Cu, 35 Zn	Annealed Hard	45000 70000	20000 65000	50 3			Lamp fixtures, automobile parts, ornaments	Deep Drawing
208	Brass, Deep Drawing	M-8	70 Cu, 30 Zn	Wire	50000 125000		50 2			Seamless tubes, cartridges, primers, shot shells	Deep Drawing
209	Brass, Drawing		67-70 Cu, 30-33 Zn	Sand cast Hard rolled	40000 67200	23000 67000	35 15	35 50	45 145	Seamless tubes	Deep drawing IZ-6.2
210a	Brass, High		65 Cu, 35 Zn	Cold rolled	47000 75000	20000 60000	5 60	5 75	45 180	Used for drawing, forming and spinning parts	
210b	Brass, High		60-63 Cu, 2.25-3.25 Pb, 0.15 Fe, bal. Zn		53700					Used for drawing, forming and spinning parts	
211a	Brass, Leaded High		65 Cu, 0.5-1.5 Pb, bal. Zn							For cupped, formed or drawn parts	Does not foul cutting tools

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
211b	Brass, Leaded High		65-78 Cu, 0.3-0.8 Pb, bal. Zn							For cupped, formed or drawn parts	
212	Brass, Low	M–33	80 Cu, 20 Zn	Annealed	44000	10000	60			Formed and drawn parts requiring high finish	
				Rolled	65000	45000	12				
213	Brass, Percussion Cap	M–8	90 Cu, 9.6 Zn, 0.4 Pb	Soft	35000		40		52	Percussion caps, gilding, electrical parts	
				Hard	55000	39000	4		135		
214	Brastil	M–158	81 Cu, 4.0-5.0 Si, bal. Zn	Average	90000	70000	10		160	Bearing metals, general castings	Corrosion resistant
					95000		7		180		
215	Brazing Metal		84-86 Cu, 14-16 Zn		50000					Brazing metal	Tough and ductile
216a	Bridge Bronze A		80 Cu, 20 Sn, 0.1 P				3	1.8	80	Tubes	
216b	Bridge Bronze B		85 Cu, 15 Sn, 0.1 P						50	Springs, electrical parts	
216c	Bridge Bronze C		80 Cu, 10 Sn, 0.7-1.0 P, 10Pb				15		74	Bearings	
216d	Bridge Bronze D		88 Cu, 10 Sn, 0.3 P, 2 Zn							Bearings, gears, worm wheels	
217	Brightray	M–121	80 Ni, 20 Cr		118000					Electrical resistances	Can be used up to 1100 °C
218a	Brittania Metal	M–332	94-80 Sn, 1.5-5 Zn, 0-9 Cu, 4-16.2 Sb, 1-8.5 Pb, 2-8 Bi		10000		19	25		Bearings	
							11	10			
218b	Brittania Metal		91 Sn, 1.5 Cu, 7.5 Sb		8000		50		8	Bearings, pewter, table ware	
218c	Brittania Metal		91-85 Sn, 0-3 Zn, 0.2-1 Cu, 9-11 Sb							Bearings	
218d	Brittania, English		90-85 Sn, 0-3 Zn, 1.3 Cu, 5-10 Sb							Bearings	
218e	Brittania, German		70-94 Sn, 0-5 Zn, 1.8-5 Cu, 3.7-5 Sb, 0-9 Pb							Bearings	
218f	Brittania, Sheet		90.6 Sn, 1.5 Cu, 7.8 Sb							Bearings	
218g	Brittania, Cast		90.6 Sn, 0.2 Cu, 9.2 Sb							Bearings	
218h	Brittania, Cast		48 Sn, 47 Zn, 3 Cu, 1 Sb, 1.0 Pb							Bearings	
218i	Brittania, Plate		72 Sn, 24 Sb, 3.9 Cu							Plates, bearings	Ludenscheidt
218j	Brittania, Spoons		88-85 Sn, 5.6-15 Sb, 1-5 Bi, 0.1-3.7 Cu, 0-1.5 Zn							Spoons, bearings	
219	Bronzalun	M–250	A bronze with abrasive grains cast in the metal 85 Cu, 15 alumina or carborundum							Floor plates, stair treads, car steps and door saddles	Wear resistant and "anti-slip"
220	Bronze, Commercial	M–8	90 Cu, 10 Zn	Sheets	32000	10000	40		50	Window screen wire, automobile radiators, hardware, ornaments	
		M–33		Wire	100000	50000	1				
221	Carboloy, Grade 831	M–31	WC + Co + Ti C							Cutting tools, dies	Cemented WC
222	Carboloy, Grade 715	M–31	WC + Co							Cutting tools, dies	Cemented WC
223	Carboloy, Grade A-44	M–31	WC + Co							Cutting tools, dies	Cemented WC
224	Carboloy, Grade 119-A	M–31	WC + Co							Cutting tools, dies	Cemented WC
225	Frontier Alloy No. 11	M–58	90 Cu, 6.5 Sn, 2.0 Zn, 1.5 Pb		37000	20000	29	31	55	Bearings, screws, bolts	Formerly Bronze 11
226	Kromal	M–69	C, 9 Mo, 4 Cr, 1.25 V, bal. Fe	Annealed					228	High speed tools and cutters	High speed steel
									241		
227	Mogul	M–69	C, 8 Mo, 4 Cr, 2W, 1V; bal. Fe	Annealed					228	High speed tools and cutters, reamers, drills, dies	High speed steel
									241		
228	Purple Label Extra	M–69	C, Co, W, bal. Fe	Annealed					228	High speed tools and cutters, tool bits, heavy roughing tools	High speed steel
									241		
229	Cobalt Major	M–69	C, high W, high Co, bal. Fe	Annealed					228	High speed tools and cutters	High speed steel
									241		
230	Frontier Alloy No. 24	M–58	70 Cu, 1 Sn, 27 Zn, 2 Pb		29500	10500	26	29	53	Bearings	Formerly Bronze No. 24. Discontinued
231a	Bronze, Bearing		85 Cu, 10 Sn, 5 Pb		28000				60	Bearings	C.S.-18000
231b	Bronze, Bearing		70 Cu, 5 Sn, 25 Pb		15000				40	Bearings	C.S.-10000
231c	Bronze, Bearing		65 Cu, 5 Sn, 30 Pb							Bearings	C.S.-7500
232a	Bronze, Hard	M–165	88 Cu, 2 Pb, 7 Sn, 3 Zn		30000		12			Gears, bushings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
232b	Bronze, Hard	M-165	88 Cu, 10 Sn, 2 Zn							Gears, bushings	G.M. No. 4048M
233	M. H. Alloy No. 6	M-212	77.5 Cu, 7 Sn, 14 Pb, 1.5 Ni		30000	17000	20	21	64	Machinery bearings for high	"Barr Alloy No. 6"
					36000	19000	28	25	64	speed and medium pressures	acid resistant
234a	Bronze, Phosphor		91-97 Cu, 9-3 Sn, 0.5 max. P							Bearings, bushings	
234b	Bronze, Phosphor		80-90 Cu, 10-20 Sn, 1.5 max. P							Bearings, bushings	
235a	Bronze, Plastic		90-70 Cu, 0-5 Sn, 30-50 Pb		15000		10	8	40	Bearings	
235b	Bronze, Plastic		64 Cu, 5 Sn, 30 Pb, 1 Ni							Bearings	
235c	Bronze, Plastic		70 Cu, 10 Sn, 20 Pb							Bearings	
236	B. T. G. Steel		60 Ni, 25 Fe, 12 Cr, 2 Mn, 0.5 C	Sand cast.	50000	40000	2		130	Heating elements	Heat and corrosion resistant
					70000	61000	10		180		
				Rolled	90000	50000	25	50	180		
					109000	70000	45	70	200		
237	Buster	M-35	0.60 C, 2.2 W, 1.25 Cr, 0.25 Mn, 0.10 V, bal. Fe	Annealed					190	Chisels, dies, hot or cold shear blades, forging dies	Shock-resisting
238	"B-W" Standardized	M-213	0.15-0.25 C, 0.30-0.60 Mn, bal. Fe	Rolled	55000	35000	30	55		General, boiler plates	
					65000	40000					
				Heat treated	65000	40000	20	60	158		
					75000	45000					
239	Cadmium		100 Cd							Constituent of bearing alloys and alloys in airplane construction	
240a	Calido (Elalco)	M-44	60 Ni, 16 Cr, 24 Fe		100000	56000	28	59		Dipping baskets, electrical resistance materials	Resists oxidation up to 1000°C
240b	Calido (Elalco)	M-47	64 Ni, 8 Cr, 25 Fe, 3 Mn							Electrical resistances	
240c	Calido (Elalco)	M-47	65 Ni, 11 Cr, 24 Fe							Electrical resistances	
241	Calite A	M-30	0.8 C, 35 Ni, 15 Cr, 49.2 Fe, 0.81 Si	at 1000°F.	68000		2	12	230	Carburizing boxes, hearth plates, retorts	Corrosion and heat resisting to 2000°F.
				Cast	74000		10	7			
242	Calmaloy	M-60	30 Cu, 2.2 Fe, bal. Ni							In devices to compensate for thermal changes	Becomes non-magnetic at 100°C
243a	Calorite	M-60	65 Ni, 12 Cr, 15 Fe, 8 Mn							Resistance wire in electrical heating apparatus	High heat resistance (Discontinued)
243b	Calorite	M-60	65 Ni, 12 Cr, 23 Fe								
244	Camite	M-149	C, W, bal. Fe							Cutting tool tips	Similar to "Carboloy"
245	Cannon	M-40	0.70 C, 16 W, 3.5 Cr, 1.0 V, bal. Fe							High speed tools, planing and lathe tools, twist drills, punches	High speed steel
246	Carboloy	M-31	3-13 Co, bal. Tungsten carbide		250000					Cutting tools and dies, mandrels	Sintered hard alloy.
					290000						
247	Carbomang	M-157	0.9-1.0 C, 1.0-1.25 Mn, 0.45-0.60 Cr, 0.4-0.6 W, bal. Fe							Tools and dies, machine parts	Castings. Oil hardening. Cast to shape.
248	Carralloy No. 1	M-32	0.10 C, 12 Cr, bal. Fe	Heat treated	190000	165000	12	25	380	Pumps, screws, shafts, turbine blades	Corrosion resistant Now "Carpenter Stainless Steel No. 1"
249	Carpenter Chrome Magnet	M-32	0.95 C, 3.5 Cr, bal. Fe							Magnetos, meters, electrical apparatus, permanent magnets	Permanent magnet steel
250	Carpenter Flexo	M-32	0.6 C, 0.75 Mn, 2.0 Si, bal. Fe	Heat treated	135000	100000	20	50	250	Springs	
					325000	300000	4	10	600		
251	Carpenter High Nickel	M-32	23-30 Ni, bal. Fe		73300	39600		68.3		Wire drawing dies	
252	Carpenter No. 3-314	M-32	0.35 C, 1.5 Cr, 3.5 Ni, bal. Fe	Heat treated	285000	250000	6	18	490	Extrusion rams, press parts, heavy shafts	
				Heat treated	120000	100000	23	62	235		
253	Carpenter No. 3-427	M-32	0.30 C, 1.0 Cr, 0.20 Mo, bal. Fe	Heat treated	230000	210000	10	42	460	Gears, spline shafts, bolts, nuts tubing	Tough, shock and wear resisting
				Heat treated	140000	125000	20	61	260		
254	Carpenter No. 3-547	M-32	0.35 C, 3.5 Ni, bal. Fe	Heat treated	210000	180000	12	42	400	Shafts, gears	
				Heat treated	110000	85000	24	65	215		
255	Carpenter No. 4 Samson	M-32	0.4 C, 0.6 Cr, 1.25 Ni, bal. Fe	Heat treated	110000	90000	8	25	230	Tempered set screws, shanks of high speed tools, machine tool parts	
					240000	210000	22	60	440		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
256	Carpenter No. 4-408	M-32	0.40 C, 0.75 Cr, 3.0 Ni, bal. Fe	Heat treated	260000	220000	8	20	440	Shafts, gears	Easy machine at high hardness
				Heat treated	120000	100000	23	63	240		
257	Carpenter No. 4-317	M-32	0.4C, 1.0Cr, 1.7 Ni, bal. Fe	Heat treated	125000	100000	24	62	255	Crankshaft, transmission shaft, propellers, axles, etc.	Tough as treated
				Heat treated	165000	140000	18	52	302		
258	Carpenter No. 5-720 Type D	M-32	0.50 C, 0.90 Cr, 0.20 V, bal. Fe	Heat treated	280000	240000	9	32	540	High duty leaf springs, coil springs, gears, shafts	High resistance to shock and fatigue
				Heat treated	140000	125000	16	52	300		
259	Atlas 90	M-13	90 Cu, 10 Al	Cast	70000	28000	25	25	120	Gears	
260	Carpenter Stainless Steel No. 1	M-32	12-14 Cr, 0.1 C, 0.30 Si, 0.40 Mn, bal. Fe	Annealed	87000	64000	29	76	179	Turbine blades, pump shafts, bolts, nuts, nails	Max. operating temp. 1200°F. Corrosion resistant
				Hardened	182000	160000	15	60	364		
261	Carpenter Stainless Steel No. 2	M-32	12-14 Cr, 0.3 C, 0.30 Si, 0.40 Mn, bal. Fe	Annealed	213000	145000	8	22		Cutlery, scissors, surgical instruments, ball bearings	Corrosion resistant & abrasion
				Hardened	260000	225000	11	32	512		
262	Carpenter Stainless Steel No. 3	M-32	20 Cr, .15 C, 1.0 Cu, 0.30 Si, 0.40 Mn, bal. Fe	Annealed	100000	50000	22	50	196	Scale resisting purposes, furnace parts	Corrosion resistant & abrasion. max. operating temp.-1600°F.
263	Carpenter Stainless Steel No. 4	M-32	18 Cr, 0.12 C, 8.0 Ni, 0.30 Si, 0.40 Mn, bal. Fe	Annealed	100000	50000	50	65	196	Woven screen, stampings	Corrosion resistant Max. operating temp. 1600°F.
264	Carpenter Stainless Steel No. 5	M-32	14 Cr, 0.10 C, 0.3 S, 0.40 Si, 0.40 Mn, bal. Fe	Annealed	86400	63500	26	59	187	Valve trim, pump shafts, bolts, nuts, golf club heads	Max. operating temp. 1200°F. Corrosion resistant and abrasion
				Hardened	127500	92500	16	38	225		
265	Castaloy	M-157	1.5-1.6 C, 12-14 Cr, 0.7-.08 Mo, 0.45-0.55 Mn, bal. Fe							Dies	Easily machined Rockwell "C"-26-30
266	Cataract Metal	M-92	Cu, Ni		55000		20	25		Machine parts, chemical apparatus, valves on superheated steam lines	Corrosion resistant to acids, alkalis and organic compounds
					45000		25	30			
267	Cazin		82.6 Cd, 17.4 Zn							Solder for steel	M.P.-263°C.
268	Cerium		100 Ce							For alloys	Malleable and ductile
269	Chamet Bronze	M-33	60 Cu, 39.25 Zn, 0.75 Sn	Hot rolled	55000	25000	50			Welding rod, bolts, screws	Resists sea water
				Cold rolled	75000	65000	25				
270	Rex Champion	M-38	High C, 14 W, 2 V, 4 Cr, bal. Fe		160000				30	Cutting tools, drills, broaches, dies	High speed steel
271	Charpy Alloy		5.6 Cu, 83.3 Sn, 11.1 Sb							Bearings	Babbitt
272	Chateaugay Low Phosphorus Pig Iron	M-257	4.0 C, 0.75-4.05 Si, 0.1-2.0 Mn, 0.035max. S&P, bal. Fe							Casting rolls, gears, cylinders, steel and iron	Produced from New York State ores
273	Chemical Lead	M-88	99.93 Pb, 0.07 Cu, 0.005 Ag	Cast	1750	1000	40	90	5.5	Tank linings, valves, pipes, fuses	M.E.-2,000,000
				Rolled	2000	1000	54		5.5		
274	Choice	M-115	0.90-1.05 C, 3.7-4.1 Cr, bal. Fe	Annealed	90000	78000	28	57	195	Hydraulic riveters, dies, gripper dies, upsetting and compression dies	Wear and heat resisting
				Heat treated	205000	168000	2	12	412		
275	Rytense AA	M-240	C, alloy, bal. Fe	Annealed	118000	68000	23	48	229	Gears, cams, arbors, rollers, bushings, wrenches, shafts	Free machining
				Heat treated	200000	174000	11	38	415		
276a	Chromax	M-44	35 Ni, 15 Cr, 50 Fe	Cast	60000		3.5	2	168	Furnace parts, carburizing boxes, enameling fixtures	Resists abrasion, impact, strain, heat and corrosion
276b	Chromax		19.55 Ni, 19.55 Cr, 1.25 C, 58.93 Fe, 0.15 Mn, 0.48 Cu	Annealed	100000		25	35	200	Crusher rolls, chain parts	Resists abrasion, impact, fatigue
				Heat treated	160000	115000	20	24	600		
277	Chromax Bronze		67 Cu, 15 Ni, 12 Zn, 3 Cr, 3 Al	Cast	70000					Bearings	
278	Chromel A	M-65	80 Ni, 20 Cr		95000		30		181	Heating elements between 1400-2100°F.	Corrosion and heat resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
279	Chromel B	M-65	85 Ni, 15 Cr						147	Heating elements	Corrosion and heat resistant. Obsolete
280	Chromel C	M-65	60 Ni, 16 Cr, 24 Fe	Cold drawn	88000 107000		30 25		179	Flat irons, toasters, heating elements	Corrosion and heat resistant to 1900° F.
281	Chromel D	M-65	35 Ni, 18 Cr, 47 Fe	Cold drawn	85000		30			Heating elements	Corrosion and heat resistant to 2000°F.
282	Chromel P	M-65	90 Ni, 10 Cr	Cold drawn	90000		30			Heating elements, thermocouples (positive)	High heat and electrical resistance to 2400°F.
283	Chrome Magnet	M-115 M-76	0.90-1.0 C, 0.15-0.25 Si, 3.5-4.0 Cr, bal. Fe							Permanent magnet	Magnet steel
284	Chromidium	M-185	3.1-3.3 total C, 0.6-0.8 combined C, 2.0-2.2 Si, 0.25-0.45 Cr, 0.75-1.0 Mn, bal. Fe		35000 45000				200 250	Automotive cylinders, brake drums, liners	Wear and heat resistant cast iron
285	Cromin "D"	M-61	30.1 Ni, 63.9 Fe, 0.64 Mn, 0.20 C, 4-7 Cr	Annealed	83000					For low temperature heater work, motor starters, fans, irons, toasters	Also known as Comet and No. 193 alloy
286	Vancoram High Carbon Chromium Metal	M-394	86-89 Cr, 10-11.5 C							Constituent of Alloys	Special uses
287a	Chrysokalk		95 Cu, 4.5 Zn, 0.5 Pb							Cheap jewelry	Tarnishes easily
287b	Chrysokalk		59 Cu, 40 Zn, 1 Pb							Tubes	
287c	Chrysokalk		91 Cu, 7.9 Zn, 1-6 Pb							Cheap jewelry	
288	Cimet	M-44	26-28 Cr, bal. Fe							Mine water pumps, corrosion resisting parts	Corrosion and heat resistant
289	Circle "C"	M-57	0.77C, 9 Co, 18.5 W, 4.5 Cr, 1.75 V, 1.0 Mo, bal. Fe							High speed tools, cutters, drills, tools for milling, slotting, forming	Super high speed steel Tough
290	Circle "L" No. 1	M-74	0.30 C, 1-1.5 Mn, bal. Fe V or Mo	Air hardened	85000 100000	55000 65000	22 30	40 55	160 200	General castings	Wear and corrosion resistant
291	Circle "L" No. 2	M-74	0.30 C, 1.4 Mn, 0.75 Cr, 0.3 Mo, bal Fe	Air hardened	100000 120000	70000 90000	17 24	30 55	190 250	Crankshafts, valves, fittings	Wear and corrosion resistant
292	Circle "L" No. 3	M-74	0.45 C, 1.25 Cr, 0.40 Mo, bal. Fe, 1.4 Mn, 0.12 V	Air hardened Cast	120000 150000 110000	85000 110000 25000	18 12 5	30 18 5	250 300 200	Straightening dies, cams, gears, hot pressing or light forging dies	Abrasion and corrosion resistant
293	Circle "L" No. 4	M-74	0.50-0.80 C, 1.25-2.0 Cr, 0.50-1.0 Mo, bal. Fe	Cast and heat treated	125000 275000	90000 225000	12 3	20 3	250 600	Cams, mixer blades rolls, pressing dies	Wear and abrasion resistant
294	Circle "L" No. 5	M-74	0.3 C 2 Ni, 0.75 Cr, 0.3 Mo bal. Fe	Air hardened	100000 120000	65000 85000	24 18	50 30	190 250	Valves, fittings and pressure parts for high temperatures	For high stressed parts
295	Circle "L" No. 11	M-74	0.30 C, 17-20 Cr, bal. Fe	Cast	100000	75000	8	10	200	Chemical apparatus, valves	Stainless steel
296	Circle "L" No. 12	M-74	0.10 C, 12-14 Cr, 0.50 max. Ni, bal. Fe	Cast	75000 95000	45000 60000	24 18	30 30	150 190	Chemical apparatus	Stainless steel
297	Circle "L" No. 13	M-74	0.25 C, 12-14 Cr, 0.50 max. Ni, .4 Mo, bal. Fe	Cast and treated	170000 200000	120000 150000	10 3	15 5	400 500	Chemical apparatus, valves	Stainless steel abrasion resistant
298	Circle "L" No. 14	M-74	0.30 C, 20 Cr, 1.0 Cu 0.50 max. Ni, bal. Fe	Annealed	95000	68000	6	7	195	Exhaust manifolds, boiler tube hangers	Heat corrosion and abrasion resistant
299	Circle "L" No. 15	M-74	0.30 C, 27-30 Cr, 1.50. Ni, bal. Fe	Annealed	60000	35000	3	4	190	Heat and corrosion service	Heat and corrosion resistant
300	Circle "L" No. 16	M-74	2.25 C, 27-30 Cr, bal. Fe	Hardened					450 600	Sand pumps, chemical pumps	(Discontinued)
301	Circle "L" No. 22	M-74	0.07 max. C, 18-19 Cr 8-9 Ni, bal. Fe	Cast	68000 72000	26000 30000	60 50	55 50	130 135	Chemical equipment	Corrosion resistant
302	Circle "L" No. 23	M-74	0.20 C, 18-19 Cr, 8-9 Ni, bal. Fe, 1.2 Si	Cast	75000	35000	50	50	150	Chemical equipment	Stainless, heat resistant
303	Circle "L" No. 24	M-74	0.20 C, 19.5 Ni, 9 Cr, bal. Fe	Cast	60000 70000	25000 30000	55 50	45 40	125	Equipment to resist mine waters and acids	Stainless steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
304	Circle "L" No. 31	M-74	0.25 C, 9 Ni, 27-30 Cr bal. Fe	Cast	83000	47000	15	10	155	Equipment to resist severe acid mine water, acid fumes, and acids	Tough, heat resistant
305	Circle "L" No. 32	M-74	0.30 C, 35 Ni, 15-16 Cr bal. Fe	Cast	75000 77000	26000 30000	7 5	7 5	185 190	Sulfuric acid chemical apparatus, heat resisting castings	Heat resistant
306	Clarite	M-35	18 W, 4 Cr, 1.25 V, 0.72 C, 0.25 Mn, bal. Fe, .8 Mo	Annealed					228	Lathe tools, dies, blanking and punching	High speed steel
307a	Clebruim		2 Ni, 13.1 Cr, 0.75 Mn, 3.6 Mo, 1.5 Si, 2.6 C, bal. Fe							Heat and corrosion resisting cast iron castings	High heat resistant
307b	Clebrium		4.6 Ni, 18.3 Cr, 2.8 Mn, 2.0 C, 2 Cu, bal. Fe							Heat and corrosion resisting cast iron castings	
308	Climax	M-38	25 Ni, 74 Fe, 1 Mn		75000					Heat and corrosion resistant parts	(Discontinued)
309	Clock Brass-243	M-8	36 Zn, 2 Pb, 62 Cu	Hard Soft	75000 45000	60000 17000	10 50			Clock gears and frame, meter parts	Free milling
310	C N M	M-200	C, Cr, Ni, bal. Fe							Alloy steel castings	Wear resistant
311	Coanailium	M-218	Al alloy							Marine parts	Corrosion resistant
312	Cobalt		100 Co	Cast Annealed	34400 36980		1.0	1 0		Constituent of alloys	Corrosion resistant
313	Cobaltcrom	M-40	Co, Cr, C, bal. Fe							Dies, broaches, cutters, tools, valves	Non-scaling steel
314	Cobaltcrom (PRK-33)	M-40 M-157	3.7 Co, 13.6 Cr, 79.5 Fe, 0.84 Mo, 1.5 C, 0.60 Si, 0.25 V, 0.30 Mn, 0.50 Ni	Air hardened					602 654	Milling cutters, twist drills, Press tools	Non-scaling steel Non-deforming
315	Cobalt Steel	M-140	0.73 C, 0.15-0.30 Mn, 3.75-4.25 Cr, 0.85-1.0 V, 17.5-18.5 W, 4-4.5 Co, 0.75-1.0 Mo, bal. Fe							Tools, high speed cutting tools	High speed steel
316	Cold Heading Rod	M-122	63.5 Cu, 36.5 Zn		60000	35000	15	23	112	Cold upsetting work, rivets, thread rolled products	
317	Colhed	M-115	0.95 C, 0.5 V, bal. Fe	Water treated	265000		5	6	550	Tools, dies, cold heading dies	
318	Colonial H-H-No. 3	M-34	0.33 C, 9.5 W, 3.5 Cr, 0.45 V, bal. Fe							Cutting tools, die steel for hot work	Heat resisting
319	Colonial No. 7	M-34 M-115	0.6-1.4 C, 0.18 V, bal. Fe							Tools, chisels, pneumatic riveters, cutting tools, thread cutting dies	Tough, shock and vibration resistant
320	Colonial High Speed	M-34	17.25-18.25 W, 3.25-4.0 Cr, 0.25-0.30 Mn, 0.80-1.0 V, 0.60-0.75 C, bal. Fe							High speed hobs, knives, reamers, saws, taps, forming tools, dies, cutters	For severe service (Discontinued)
321	Colonial Stainless Iron, C N C	M-34	0.10 C, 9 Cr, 2.75-3.25 Ni, 0.10-0.20 Mn, 2.75-3.25 Si, 1.75-2.25 Cu, bal. Fe	Rolled Annealed	153200 137600		7 24	1.2 54	429 285	Stainless parts	Subject to grain growth. Discontinued
322	Colonial Stainless Iron, 430	M-34	0.62 Mo, 0.29 C, 12.63 Cr, 0.69 Ni, bal. Fe		214000 145000	192300 120000	13 14	35 42	477 302	Cutlery	Same as Colonial No. 430""
323	Colonial Stainless Iron, 795	M-34	0.90 C, 17.08 Cr, 0.77 Ni, bal. Fe	Heat treated	203800	190000			555	Wearing parts requiring stainless properties	Same as "Colonial No. 795"
324	Colonial Stainless Iron, F M S	M-34	0.12 C, 11.5-13.0 Cr, 0.10-0.20 Mn, bal. Fe	Heat treated	129000 119000	117000 109000	16.5 19	56 62	285 241	Valves parts, wood screws, golf club heads, gears	Free machining
325	Colonial Stainless Steel "A"	M-34	14 Cr, 0.30-0.35 C, 0.20-0.45 Mn, bal. Fe	Heat treated Hot rolled	250000 195000	225000 170000	11 10	32 32	512 370	Cutlery, dental instruments, valve seats, machine parts, gears	Corrosion and heat resisting
326	Colonial Stainless Steel "B"	M-34	16.5 Cr, 0.60-0.70 C, 0.20-0.45 Mn, bal. Fe	Heat treated	210000 95000	175000 73000	6 12	10 40	440 228	Cutlery, valve seats, surgical instruments	Corrosion and heat resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
327	Colonial Stainless Steel "I"	M–34	14 Cr, 0.12 C, 0.20-0.45 Mn, bal. Fe	Heat treated	178000	160000	16	61	364	Valve seats, pump rods, turbine blades, food machine parts	Corrosion and heat resisting
				Hot rolled	100000	80000	25	55	207		
328	Colonial Stainless Steel "N"	M–34	18 Cr, 8 Ni, 0.15 C, 0.10-0.20 Mn, bal. Fe	Heat treated	128000	84000	44	57	225	Dairy equipment, paper mills, chemical apparatus	Corrosion and heat resisting, austenitic
				Annealed	92000	48000	58	70	115		
				Hot rolled	95000	40000	60	75	110		
329	Colonial Stainless Steel "U"	M–34	18 Cr, 8 Ni, 1.5 Cu, 1.5 Mo, 0.15 C, bal. Fe		101200	55630	40	62	196	Paper mill and chemical plant equipment	Heat and corrosion resisting, austenitic
330	Columbia Double Special	M–35	1.3 C, 3.2 W, 0.55 Cr, 0.4 Si, 0.25 Mn, bal Fe	Annealed					200	Machining chilled rolls, drawing and master dies	Fast finishing
331	Columbia Spring	M–35	0.95 C, 0.35 Mn, 0.25 Si, bal. Fe							Springs	
332a	Comet	M–44	65 Fe, 5 Cr, 30 Ni		85000	47000	37	69		Dipping baskets, electric resistance wire, rheostats	Max. oper. temp.-700°C. Heat resisting
332b	Comet		66.9 Fe, 2.2 Cr, 30.4 Ni Mn-0.8, Cu-0.4		75000 160000					For heavy duty rheostats and electrical control machinery	Heat resisting
333	Comokut	M–24	4.5 Cr, 1.25 V, 18 W, 1 Mo, 5 Co, bal. Fe, .7 C							High speed tools, turning, planing, drilling, tapping dies	High speed steel
334	Composition Brass		84-85 Cu, 4-6 Zn, 4-6 Sn, 4-6 Pb		26000	12000	15			Bearings, screws, hardware	(Ounce Metal)
335	Condor Special	M–253	0.7-1.4 C, Mn, Si, bal. Fe							Drill rods, tools	See Pompton Special
336a	Constantan		60-45 Cu, 40-55 Ni, 0-1.4 Mn, 0.1 C, bal. Fe	Annealed	60000 69500	20000 30000	40 60	50 70	100 120	Electric resistance and thermocouples	High temperature and heat resistance
336b	Constantan		60 Cu, 40 Ni		62000		51	67		Electric resistances	
336c	Constantan		43.9 Cu, 55 Ni, 1.0 Mn 0.10 C, bal. Fe	Cold rolled	69500 141000	30000 125000	40 1	50 5	120 300	Electric resistances	
337	West No. 6A (Hy-Cast)	M–465	0.30-0.40 C, 0.8-1.1 Mn 0.3-0.4 Si, bal. Fe	Annealed	55000 90000				170 208	Shafts, axles, gears	
338	Cooperite		80 Ni, 14 W, 6 Zr							Cutting tools	Extreme hardness
339	Copel	M–65	55 Cu, 45 Ni		60000		40 50			Electrical instruments, rheostats, hot resistances	Resistance alloy up to 800°F.
340	Copernick	M–205	50 Fe, 50 Ni							Transformer cores	Resistance alloy
341a	Copper, Electrolytic	M–33	99.9 Cu	Soft	30000	10000	45			Electric conductors, copper alloys, pipes, tubes	Can be hot or cold worked
341b	Copper, Lake	M–8	99.9 Cu		55000	45000	5				
341c	Copper, Arsenical Lake	M–8	99.4 Cu, 0.3 As, 0.2 O_2								
341d	Copper, Casting	M–8	98.5-99.8 Cu								
342	Copper, Deoxidized	M–8	99.95 Cu + Ag,	Hard	50000	46000	18		95	Condensers, evaporators, heater and condenser tubes	
		M–33	0.01-0.05 P	Soft	32000	17000	38	65			
343	Copper Steel	M–160	4 Cu, 0.37 C, 0.17 Mn, 0.22 Si, bal. Fe	Rolled	138000	116000	11	23	302	Structural parts	
				Annealed	97000	80500	16	42	212		
344	Cop-R-loy	M–206	Ingot iron or low C steel containing small % of Cu		50000 80000	25000 40000	25 40	30 50	100 150	Structural parts, boiler tubes, roofing, wire fencing, pipe	Corrosion resistant Discontinued
345	Coronel		65-70 Ni, 30-35 Cu	Cast	64000	32000	34	32		Valves, pumps, turbine blades	Similar to "Monel Metal"
				Rolled	78000	48000	42	35			
346	Corronil	M–121	70 Ni, 26 Cu, 4 Mn	Hot rolled	81000	36000	46	66	150	Corrosion resisting vessels, electric resistance purposes, chemical equipment	Corrosion and heat resistant, now obsolete
347	Corronium		80 Cu, 15 Zn, 5 Sn		44000		38	37	90		Cast or wrought
348	Corrosiron	M–192 M–23	0.8-1.0 C, 13.5-14.5 Si, bal. Fe	Cast			0	0	250	Acid pans, pumps, valves, cocks, condensers	Corrosion resistant Not forgeable
349a	Corsonite—A	M–280	Cu-Ni-Si							For making copper alloys	
349b	Corsonite—B		Cu-Co-Si								
349c	Corsonite—C		Cu-Fe-Si								
349d	Corsonite—D		Cu-Cr-Si								
349e	Corsonite—E		Cu-Cr								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
349f	Corsonite—F		Cu-Co								
350	Cosmos	M-77	Pb, Sn, Sb		11000		1		28	Shaft bearings	Pb base babbitt
351	Crescent Steel	M-38	6.7 W, 2.7 Mn, 2.1 C, 0.1 Si, bal. Fe							Tools	(Discontinued)
352	Crilley Metals	M-138	Bronze containing Hg		23000					Bearings	C.S.-92000
353a	Cristite	M-152	17 W, 10 Cr, 3.5 C, 2.5 Mo, bal. Fe							Facing dredger, dipper or shovel teeth and bucket lips, agricultural implements, knives, tools, drills, chisels	Resists abrasion and high temp.
353b	Cristite	M-152	17 W, 12 Cr, 3 C, 2 Mo, 0.75 Ti, 0.25 Hf, bal. Fe								
353c	Cristite	M-152	16 Cr, 3 C, 0.80 Ti, 0.28 Hf, 6 Ni, bal. Fe								
354	Crocar	M-115	12 Cr, 2.15 C, 0.75 V, 0.75 Co, 0.30 Si, bal. Fe		103000	51000		14	212	Thread rolling, threading, dies extrusion dies, gages	Heat, abrasion and abrasion resisting
355	Cromal		2-4 Cr, Ni, Mn, bal. Al		50000 65000					Airplane parts, milk and oil separators, pistons, propellers	Corrosion resisting
356a	Cromansil	M-48	0.10 C, 0.4-0.6 Cr, 1.1-1.4 Mn, 0.7-0.8 Si, bal. Fe	Rolled	65000	45000	45	70	130	Staybolts, boilers, pressure vessels, ship plates, tanks	
356b	Cromansil	M-48	0.15 C, 0.4-0.6 Cr, 1.1-1.4 Mn 0.7-0.8 Si, bal. Fe	Rolled	140000	101000	38	65	150	Staybolts, ship plates, tanks, pressure vessels	
356c	Cromansil	M-48	0.20 C, 0.4-0.6 Cr, 1.1-1.4 Mn, 0.7-0.8 Si, bal. Fe	Rolled	90000	60000	28	62	200	Boilers and pressure vessels	Heat treated after welding
356d	Cromansil	M-48	0.25 C, 0.4-0.6 Cr, 1.1-1.4 Mn, 0.7-0.8 Si, bal. Fe	Rolled	115000	70000	25	60	220	Seamless tubing, boilers, pressure vessels	
356e	Cromansil	M-48	0.30 C, 0.4-0.6 Cr, 1.1-1.4 Mn, 0.7-0.8 Si, bal. Fe	Rolled	140000	90000	20	50	265	Heat treated parts, gears,	Iz-11
				Heat treated	172000	131000	11	32	364	buildings, bridges	
357	Chromax	M-162	1.25-1.5 Cr, 0.35-0.45 Mo, 0.30-1.0 C, bal. Fe							Used for resistance to abrasion	(Discontinued)
358	Cromol C-9	M-207	C, Cr, Mo, V, bal. Fe	Air hardened	115000	90000	20	63	217	Rams, sow blocks, dies	Alloy steel casting
359	Cromovan	M-57	1.4-1.7 C, 12-14 Cr, 0.5-1.0 Mo, 1-1.5 V, bal. Fe		181500	127000	14	46	375		
				Annealed					210	Dies for trimming, blanking	Heat and wear resisting "Chromovan Triple Die Steel" Non-deforming
				Hardened					650	extrusion, swaging, pressing, thread rolling, etc., taps, punchers, reamers, broaches, shear blades	
360	Cronite	M-37	0.43 Si, 1.04 Mn, 63.55 Ni, 13.72 Cr, 0.80 Al, 20.32 Fe	at 20°C.	67000		0.5		200	Carburizing boxes, electrical resistance grids, fire doors, furnace parts	Heat and corrosion resisting. Max. operating temp.-1000°C.
					78000		1.5		250		
				at 1000°C.	22500 26000						
361a	Crotorite	M-179	89.5 Cu, 0.06 Pb, 0.56 Fe, 6.32 Ni, 3.08 Al, 0.62 Mn		50000 80000	40000		32 16		For paper mill machinery	Corrosion resistant
361b	Crotorite		70 Cu, 2 Fe, 28 Mn							Heating elements	
362	Crow	M-76	1.2 C, 0.50 Cr, bal. Fe							Drills, reamers, cutlery dies, gages, tools, drawing dies	
363	Crusco Steel	M-153	C, Cr, W, Co, V, bal. Fe							Piercing points, rolling mill plugs, dies, forming rolls	High abrasion resistance at high temp.
364	Cufenium		72-60 Cu, 22-20.5 Ni, bal. Fe							Tableware	Nickel silver
365	Cupal	M-127	Cu-clad Al sheet							Panels for railroad cars	Corrosion resisting
366	Cupron	M-61	55 Cu, 45 Ni	Annealed	62000					Rheostats, voltmeters, shunts, resistances	Similar to "Advance" "Ideal", and "Constantan" and "Ia-Ia"
367	Cutter Alloy	M-35	1.05 C, 0.25 Mn, 0.25 Cr, 0.25 W, bal. Fe	Annealed						Cutting tools for hard materials	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
368	Cuyo	M-155	C, alloy, bal. Fe							Stainless parts, furnace parts	Stainless and heat resisting
369	*Cyclops No. 17 Metal*	M-39	0.45 C, 1.0 Si, 0.75 Mn,	Cast	40000	35000	20	30		Pump rods, engine valves, re-	Corrosion, heat and
		M-114	20 Ni, 7.5 Cr, 70.3 Fe		60000	50000	5	10		sistance grids, turbine blades	abrasion resisting
				Heat treated	125000		28	45	192		
370a	Cylinder Iron	M-165	3-3.25 C, 0.40-0.75 Mn, 2-2.5 Si, bal. Fe							Engine cylinders, pistons, piston rings	
370b	Cylinder Iron	M-165	3-3.5 C, 0.5-0.8 Mn, 1.75-2.75 Si, 1-1.5 Ni, 0.3-0.4 Cr, bal. Fe							Engine cylinders	
371	Cyprus Bronze		65 Cu, 30 Pb, 5 Sn		17000		6		41	Bearings, hardware	
							8				
372	Dairy Metal	M-252	68 Cu, 1.5 Sn, 28 Ni, 0.5 Pb, 2.0 flux.							Stainless filters	Corrosion resisting
373	Darwin 505	M-40	18 W, 5 Co, 0.50 Mo, 0.60 C, 4.5 Cr, 1.0 V, 0.3 Si, 0.3 Mn, bal. Fe							High speed tools, cutters, tool bits, turning tools	High speed steel, "Super"
374a	Darwin Cobalt Magnet	M-40	C, 3 Co, bal. Fe							Permanent magnets	
374b	Darwin Cobalt Magnet	M-40	C, 6 Co, bal. Fe							Permanent magnets	
374c	Darwin Cobalt Magnet	M-40	C, 9 Co, bal. Fe							Permanent magnets	
374d	Darwin Cobalt Magnet	M-40	C, 15 Co, bal. Fe							Permanent magnets	
374e	Darwin Cobalt Magnet	M-40	C, 35 Co, bal. Fe							Permanent magnets	
375a	Davis Metal	M-145	1.5 Mn, 29 Ni, 2 Fe, 67 Cu, 0.5 C, Si	Cast	60000	35000	18		120	Valves and fittings, turbine blades, throttle valves	Corrosion and heat resisting
375b	Davis Metal	M-145	0.2 C, 0.3 Mn, 1 Mn, 25 Ni, 6 Fe, 67 Cu, 0.8 Pb							Valves, fittings	
376	Dawsons Bronze		83.9 Cu, 15.9 Sn, 0.10 Pb, 0.05 As	Cast	30000				146	Journal bearings	Very fluid
377	Defirust	M-100	0.12 max. C, 0.40 Mn, 0.50 Si, 12-15 Cr, bal. Fe	Annealed	75000	44000	37	78	152	Stainless articles, turbine	Corrosion resisting,
				Heat treated	110000	90000	22	65	229	blades, valves	difficultly weldable
					180000	168000	10	50	352		
378	Defirust Special	M-100	0.12 max. C, 0.40 Mn, 0.50 Si, 16-18 Cr, bal. Fe	Annealed	75000	42000	37	70	156	Stainless articles,	Corrosion resisting
				Cold drawn	105000	85000	15	65	210	Nitric acid equipment,	Non hardenable
						65000	23	54	170	ornamental trim	
379	Defist in	M-100	0.20 max. C, 0.50 Mn, 0.50 Si, 17-19 Cr, 7-9 Ni, bal. Fe	Annealed	85000	40000	61	75	160	Stainless articles, chemical	Corrosion resisting
				Cold worked	85000	34000	61	75	135	apparatus, valves, trim	Non-magnetic
					160000	150000	18	52	260		
380	Defloat	M-100	0.30 C, 0.50 Mn, 0.75 Si, 25-30 Cr, bal. Fe	Annealed	75000	55000	35	65	160	Stainless articles, furnace	Corrosion and heat
					100000	80000	23	45	200	parts	resistant
381	Super-deLavand Metal	M-203	high C, high Si, Mn, bal. Fe		32000		0.5			Pipes	*Centrifugal cast iron*
382	Deletots Alloy		80 Cu, 18 Zn, 2 Mn							Brass solder, cartridge cases	Extremely ductile
383	Delhi Iron	M-76	16.5-18 Cr, 0.10-0.11 C,							For replacing galvanized iron,	See Silcrome 17
		M-15	0.75-1.0 Si, bal. Fe							for roofing, auto. body sheets	
384	Delta Bronze—I	M-156	60 Cu, 44 Zr, 2-4 Fe	Cast	80000		20	24		Pumps, piston rods, shafts,	Non-corrosive
		M-450	1-2 Sn	Extruded	100000		25	25		cranks, rams, valves	
385	Rex	M-539	12 Sn, Sb, bal. Pb	Cast	85000		1.2	1.8	25	Bearings	Babbitt
386	Demo Bronze		61 Cu, 33 Pb, 4-6 Sn, 2-1 Ni		18000		3	0.35	52	Bearings, utensils	C.U.S.—56000
387	Deward	M-76	0.96 C, 1.62 Mn, 0.29 Si,	Oil hardened	67000				296	Dies, taps, tools, reamers, cut-	Non-deforming,
		M-253	0.08 Cr, 0.18 Mo, bal. Fe		80000				650	ters, saws, blanking dies	Non-shrinking
388	Dilver	M-104	46-42 Ni, 54-58 Fe							Heating elements, leads in electric light bulbs	Similar to "Platinite"
389	Dimondite	M-57	95.65 W, 3.91 C, bal. Co or 87-95 Tungsten carbide, bal. Co							To tip tools and cutters for high speed cutting	Sintered alloy Hard as diamond Obsolete

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
390	Doler-Zink	M-158	2.5-3.0 Cu, 3.75-4.3 Al, bal. Zn	Diecast	45000 48000		5 6		80 90	Carburetors, valve parts, fuel pumps	Die casting alloy
391	Double Special D.S.	M-35 M-260	1.3 C, 0.25 Mn, 0.55 Cr, 3.25 W, bal. Fe							Tools, finishing tools, rifle barrel drills	(Discontinued)
392	Dow Metals	M-43	Mg alloys							Light alloy parts	"See Magnesium alloys"
393	Dudleys Phosphor Bronze		80 Cu, 10 Sn, 9-6 Pb, 0.8 P		30000		6		55	Bearings	
394	Duilray	M-121	33-35 Ni, 3-5 Cr, bal. Fe		46000					Electrical resistances, motor starter resistances	For temperatures below dull red. Known as "Ferrozoid"
395	Dumet	M-104	54 Fe, 46 Ni, plated with Cu		82000	54600	38	65		Resistance alloy for sealing in leads in electric light bulbs and radio tubes.	Platinite wire with an oxidized Cu plated coating
396	Duplex Gear No. 1	M-38	3.5 Ni, 1.25 Cr, 0.40 C, bal. Fe	Annealed Heat treated	95000 275000	65000 240000	29 11	62 37	187 490	Gears, shafts, axles, crankshafts	
397	Duplex Gear No. 2	M-38	1.5 Ni, 1.0 Cr, 0.50 C, bal. Fe	Annealed Heat treated	98000 265000	60000 220000	25 9	58 28	196 512	Gears, shafts, axles, crankshafts	
398	Duplex Gear No. 3	M-38	3.0 Ni, 0.75 Cr, 0.35 C, bal. Fe	Annealed Toughened	100000 135000	60000 110000	25 18	59 56	311	Gears, shafts, axles, crankshafts	
399	Duraloy "A"	M-45	0.5 Mn, 0.2-1.0 C, 27-30 Cr, bal. Fe	Rolled	80000 90000	60000 70000	10 27	15 45		Valves and pump parts, furnace parts, rabble arms	Resists oxidation, corrosion and abrasion
				Cast	40000 50000	30000 40000	1	0 2			
400	Duraloy "B"	M-45	0.5 Mn, 0.2 max. C, 16-18 Cr, bal. Fe	Rolled Cast	95000 80000 90000	75000 60000 70000	35 10 19		150 160	Valves and pump parts, furnace parts, rabble arms	Resists heat to 1550°F. Corrosion resisting
401	Duraloy-"18-8"	M-45	0.5 Mn, 0.2 max. C, 7-10 Ni, 17-20 Cr, bal. Fe	Rolled Cast	115000 80000	80000 35000	50 35			Stainless articles	Stainless, resists heat to 1600°F.
402	Duralumin	M-4	3.5-4.5 Cu, 0.3-0.6 Mg, 0.0-0.8 Mn, 0.4-1.0 Fe, 0.0-1.0 Si, bal. Fe	Annealed Heat treated	32000 36000 63000	7000 10000 30000 40000	34 18 25		45 55	Airplane and dirigible construction	Same as "Alcoa-No. 17" Age-hardening alloy
403	Durimet A	M-46	25 Ni, 5 Si, 0.25 C, bal. Fe	Rolled	100000	45750	62	76	160	Chemical apparatus, valves, pumps, kettles	Austenitic, abrasion and corrosion resistant, (Discontinued)
404	Durimet B	M-46	35 Ni, 12 Cr, 5 Si, 0.25 C, bal. Fe		110000		20	35		Chemical apparatus, valves, pumps, kettles	Austenitic, abrasion and corrosion resistant (Discontinued)
405	Durimet D	M-46	15 Ni, 2.5 Cr, 3.0 Si, 0.6 C, bal. Fe		75000	48000	62		160	Chemical apparatus, valves, pumps, kettles	Austenitic, abrasion and corrosion resistant (Discontinued)
406a	Durana		64-78 Cu, 29.5 Zn 2.2 Sn, 1.7 Al, 1.5 Fe		60000 64000		14			Chemical equipment construction	Also known as "Duranametal" Corrosion resistant
406b	Durana		65 Cu, 30 Zn, 1.5 Al, 1.5 Fe, 2 Pb							Chemical equipment	
406c	Durana		59 Cu, 40 Zn, 1 Sn, 0.3 Fe, 0.4 Pb							Chemical equipment	
407	Durbar	M-142	70-72 Cu, 20-24 Pb, 4-10 Sn							Bearings, ornaments	
408	Durbar-Hard	M-142	70 Cu, 20 Pb, 10 Sn		22122	14455	12	11	55	Bearings for cranes, excavating machinery, steel mill machinery	(Obsolete) Heavy duty
409	Durbar-Standard	M-142	72 Cu, 24 Pb, Sn 4		19170	13250	10	15	46	Bearings for machine tools, electric motors, pumps, cranks, gas engines	(Obsolete)

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
410	DM	M-268	19.76 Cu, 55.12 Fe, 0.57 Si, 0.87 Ni, 0.29 C, 15.18 Cr						155		Formerly "Durbin"
411	Durex	M-839	4.4-4.7 total C, 10 Sn, 83.22 Cu, 0.60 impurities						30 40	Bearings (porous to absorb oil-25% oil by volume)	Carbon present as graphite
412	Duriron	M-46	82.2 Fe, 14.5 Si, 0.66 Mn, 0.8C		10000					Insoluble anodes, agitators, crucibles, condensers, kettles, evaporators	Very brittle, Non-corrosive
413	Formite	M-35	0.35 C, 14.5 W, 3.75 Cr, 0.4 Si, 0.30 Mn, 0.65 V, bal. Fe	Annealed						Forming tools, hot punches, dies, hot shear blades	Heat resisting Formerly known as "Durite V-40"
414	Durodi	M-55	0.5-0.6C, 0.90 Mo, 0.55 Mn, 0.8 Cr, 1.6 Ni, bal. Fe	Heat treated	225000 130000	200000 120000	15 26	43 51	460 275	Hot work die steel, punches, upsetting and gripping dies, shear knives	Tough steel. Air hardening, non-distorting
415	Duro Gloss C-1	M-69	0.12 C, 15 Cr, bal. Fe	Annealed Hardened	75000 170000	37000 150000	35 15	65 50	150 364	Machine parts, turbine blades, pump rods, gate valves, fire place tools, steam fittings	Stainless and corrosion resisting
416	Duronze I	M-141	97 Cu, 1 Si, 1.5 Sn	Annealed Cold drawn	45000 135000					General, bolts, cable, hardware, cap screws	Corrosion resisting
417	Dutch Metal		76-80 Cu, 24-20 Zn	Cast Hard rolled	38400 66900	22750 66900	33 12	33 42	45 145	Cheap jewelry, gold leaf	
418	Eclipse Bronze	M-241	Sn, bal. Cu							Hardware	White nickel bronze
419	Economo No. 20	M-119	0.18 C, 0.15 Mo, 0.80 Mn, bal. Fe	Rolled Heat treated	73000 100000 124000	50500 81000 86000	32 21 17	61 64 51	143 241 293	Machinery steel for case-hardening, gears, worms, sprockets, clutches, cams, bolts, gages	Free machining carburizing steels
420	Elastuf—Type A—Steel No. 9	M-213 M-307	0.45-0.55 C, Cr, V, bal. Fe	Heat treated	140000 160000	120000 135000	20 15	60 42	302 340	High pressure bolts, gears, worms, arbors, hammer pistons spindles, armature shafts	Heat, wear and shock resisting
421	Elcomet K	M-263	22 Ni, 23 Cr, 1.25-1.0 Si, 3.5-4.0 Cu, 2.0 Mo, 0.30 Mn, 0.12 max. C, bal. Fe							Spinner heads, valves, pumps	Resists abrasion and corrosion
422	Electrex	M-35	0.60 C, 0.35 Mn, bal. Fe.							Brake dies, shafts, arbors	
423	Electrite Steel	M-73	14-18 W, C, bal. Fe.							Heavy lathe tools	
424	Electrite Uranium	M-73	0.70 C, 0.30 Mn, 4.5 Cr, 14 W, 1.80 V, bal. Fe.							Tools, dies, gages, reamers	
425	Electrite No. 1	M-73	0.70 C, 17.5 W, 4 Cr, 1.0 V, 0.30 Mn, bal. Fe.							Twist drills, reamers, milling cutters, tools	High speed steel
426	Electrite No. 2	M-73	high C, 18W, 4 Cr, 1 V, bal. Fe.							Cutting tools, insert saw teeth, wood-working tools, dies, drills	High speed steel
427	Electrolytic Iron	M-205	0.006 C, 0.004 S, 0.005 Si, 0.015 Cu, 99.965 Fe.	Forged	55000	48500	33	83		Thin seamless tubing, magnetic cores, electrical instruments	Brittle as deposited
428	Electromet	M-48	Ferro alloys							Metallurgical applications	Trade name
429a	Electron	M-217	91.6-95.3 Mg, 4.25-7.64 Zn, 0-1.6 Al, 0-0.74 Cu	Cast	17000 21000		2 4		44 46	Crankcases, supercharger castings, propellers, resonator disks	Takes on a protective oxide film. Is 40% lighter than aluminum
429b	Electron	M-217	3-10 Al, 0.3-0.5 Cu, 0.5-3.0 Zn, 0.3-1.0 Mn, 0-3.0 Cd, 0-0.3 Si, bal. Mg.	Worked	63000		3 5		90	omnibus wheels, automotive, electrical textile and aircraft industries	
430	Elianite I		15.1 Si, 82.4 Fe, 0.6 Mn							Pumps, valves, kettles	Corrosion resistant Same as "Duriron"
431	Elianite II		15.1 Si, 80.9 Fe, 0.5 Mn, 2.2 Ni, 0.82 C							Pumps, valves, kettles	Corrosion resistant
432	Elinvar	M-104	36 Ni, 12 Cr, W, 0.8 C, bal. Fe, 1-2 Si		107000	64500				Watches and chronometers, resistance wire hair springs	Slightly magnetic Rust resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
433	Elkonite (10-W-3)	M-265	77 W, 23 Cu		55000				225	Resistance welding electrode dies, valve seats, switches, bearing metals	Sintered alloy. Does not respond to heat treatment
434	Elmarid		5.9 C, 83 W, 4.5 Co, 0.4 Fe							Tips for high speed tools, dies	W_2C+WC
435	Elverite A	M-17 M-447	3.4-3.7 C, bal. Fe						500	Tube mill linings, wheels, jaw crusher sprockets	Wear resisting Chilled cast iron.
436	Emetco No. 1 (Silver Bronze)	M-49								Bearing babbitt for Corliss Engine large marine engines	Hard, tough and dense
437	Emetco No. 2 (Emco)	M-49								Bearing babbitts for high speed engines	Strong, smooth and enduring
438	Emetco No. 3 (Premier)	M-49								Bearing babbitt for gas & gasoline motors	Plastic, firm, anti-heat
439	Emetco No. 4 (Genuine)	M-49								Bearings for general machinery	Soft, flexible, adhesive
440	Emetco No. 5 (Hard Genuine)	M-49								Bearings for heavy duty machinery	Strong, sturdy resilient
441	Duozinc	M-522	Zn-Hg							Anodes in zinc plating processes	
442	Enduro "A"	M-97	16.5-18-5 Cr, 0.25 Ni, 0.1 C, 0.5-1.25 Si, 0.5 Mn, bal. Fe		78000	50000	32	70		Cooking utensils, chemical plant apparatus, tanks	Corrosion resistant (Superseded)
443	Enduro "K A2"	M-97	16.5-19.5 Cr, 7-10 Ni, 0.15 min. C, 0.50 min. Mn, 0.75 min. Si, bal. Fe	Annealed	85000	35000	50	60	163	Cutlery, condensers, tanks, pipes, stills	Stainless and corrosion resisting (Superseded)
				Heat treated	85000	30000	60	75	130		
					95000	40000	57	70	145		
444	Enduro "K M-1"	M-97	13-15 Cr, 2.0 Ni, 0.12 C, 0.3-0.6 Mn, bal. Fe.		130000	90000	14	60		Piston rods, valves	Stainless and corrosion resisting (Superseded)
445	Enduro "S"	M-97	0.10 max. C, 14-16 Cr, 0.3-0.5 Mn, bal. Fe	Normalized	85000	48000	24	18	340	Pump shafts, steam turbine parts, railroad equipment, cutlery, valve seats, scissors, valve parts	Stainless and corrosion resisting
				Heat treated	204300	183400	11	36	207		
					109000	91300	23	69			
446	"Era" Manganese Steel	M-62	1.25 C, 12-14 Mn, bal. Fe		85000		60			Crushers, dredging machines, soldiers helmets	Wear resisting, Non-magnetic
					100000		80				
447	Eraydo	M-226 M-240	1-3 Cu, 0.03-0.1 Ag, bal. Zn	Rolled	30000	12000	40			Panels, indoor trim, electrical appliances, drawn cases	Rustless, Non-magnetic
					50000	22000	15				
448	Ermal	M-51	2.2-2.4 C, 0.9-1.0 Si, 0.7-0.8 Mn, bal. Fe	Cast	62000	46000	5	5		Brake drums, wrench handles, brake levers, bolts, gears	Wear and corrosion resisting
					67000	48000	3	4			
449	Ermalite	M-51	2.4-2.6 total C, 1.6-2.0 graphitic C, 0.6-0.8 combined C, 1.9-2.0 Si, 0.4-0.45 Si, 0.35-0.45 Ni, or Mo, bal. Fe	Cast	60000	60000	1		240	Brake drums	Wear and shock resisting
					65000	65000	2		250		
450	Eureka		60 Cu, 40 Ni	Hot rolled	60500	20000	51	67		Resistance materials and thermocouples	Similar to "Constantan" and "Ferry Metals"
					65000	22400	45	65			
451	Evansteel, Grade 1	M-146	1.5-2.0 Ni, 0.75-1.0 Cr, 0.3 C, bal. Fe.		95000	50000	27	40	200	Sprockets, gears, high pressure valves	Resists abrasion and wear. Resists temp. to 1000°F.
					100000	60000	22	30			
452	Everbrite No. 90	M-154	35 Ni, 60 Cu							Valves, chemical plants	(Discontinued)
453	Everbrite No. 92	M-154	33.5 Ni, 56.75 Cu, 0.35 Co, 2.5 Mn, 1.0 Fe, 3.75 Cr	Cast	95000	60000	20		137	High pressure steam valves	(Discontinued)

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
454	Everdur—1010	M–8	95.89 Cu, 3.03 Si,	Cast	58000	30000	22	23	103	Bolts, screws, turnbuckles for	High resistance to cor-
		M–308	1.06 Mn, 0.09 Fe	Wrought	110000	83000	15	22	189	airplanes	rosive gases and va-
				Annealed	70300		17	26			pors
455	Excello	M–345	85 Ni, 14 Cr, 0.5 Fe, 0.5 Mn							Resistance wires, heating ele- ments	Resists oxidation (Discontinued)
456	Expansive Metal		75 Pb, 16.75 Sb, 8.3 Bi							For filling holes in castings	Expands on cooling
457	E–Z Stainless Steel	M–73	0.3-0.4 C, 13-14 Cr, bal. Fe							Cutlery, table-ware	Stainless, free machining
458	Amsco F-1	M–9	15–18 Cr, 34–37 Ni, bal. Fe							Electric furnace grids, hearth plates, rails, furnace chains	Heat resisting, max. operating temp. 2000°F.
459	Amsco F-2	M–9	21-24 Cr, 3-6 Ni, bal. Fe.							Furnace lead pots	Heat resisting, max. operating temp.- 1800°F.
460	Amsco F-3	M–9	26-29 Cr, 0-3 Ni, bal. Fe							Rabble arms, rabble blades	Corrosion and heat resisting
461	Amsco F-4	M–9	6-9 Cr, 18-21 Ni, bal. Fe							High strength castings	Corrosion resisting
462	Amsco F-5	M–9	16–19 Cr, 65–70 Ni, bal. Fe							Carburizing boxes, oil burner parts	Heat resisting, very tough
463	Amsco F-8	M–9	17–22, Cr, 7–10 Ni, bal. Fe							Pots in chemical plants, acid pumps	Corrosion resisting
464	Fahrite N-1	M–95	13-17 Cr, 34-40 Ni,	at 60°F.	65000	43700	10	10	180	Cyanide boxes, furnace rails,	Heat resisting, Austen-
			0.40-0.50 C, 1-1.25 Si,	at 1000°F.	51500	35000	10	11		glass rolls, lead and cyanide	itic. Abrasion resis-
			0.5-1.0 Mn, bal. Fe	at 2000°F.	6250	5750	21	51		pots.	tant
465	Falcon Extra	M–253	High C, bal. Fe.							Chisels, punches	See Seminole
466	Farrell's "85" Alloy (A)	M–220	Mo, Cr, C, bal. Fe, Mn, Ni		100000	60000	21	36	200	Chains, shovels, crusher rolls,	Resists wear, shock,
					170000	140000	7	15	400	gears, car wheels, sprockets, coal cutters	and abrasion
467	Feran		Sheet Iron coated with Al and rolled together							Engineering construction	Corrosion resistance of Al and strength of Fe
468	Ferry	M–121	55-56 Cu, 45-44 Ni	Annealed	60000		54	72	85	Electric resistances, thermo-	Same as "Constan-
				Drawn	94000		15	62	190	couples	tan" max. operating temp.-2200°F.
469	Firearmor "A"	M–184	65 Ni, 15 Cr,	Cast	60000	46000	2.9	1.2	190	Carburizing boxes	Heat and abrasion
			1.75 Mn, 0.5 C, 1.0 Si, bal. Fe		40000						resisting
470	Firex	M–40	0.40 C, 4.5 Ni, 1.10 Cr, 0.3 Si, 0.6 Mn, bal. Fe							Cutting tools, hot shears, shock resisting tools, chisels	Air or oil hardening
471	Firth A. H. G.	M–56	0.25-0.32 C, 0.3-0.6 Mn,	Air-hardened	224000	190000	17	20	444	Gears, driving pinions, timing	Shock resisting "Firth
			4-4.5 Ni, 1-1.5 Cr, bal. Fe		280000	238000				wheels	-Brown E-84" "Atlas AHNC"
472	Firthaloy	M–57	W, C							Wire drawing and extrusion dies	Cemented tungsten carbide
473	Firth "Best Cast"	M–56	C, bal. Fe	Hardened					500	Turning, planing and slotting	Tool steel interme-
									700	dies, shaping tools, wood saws, axes, scythes, drills	diate quality "Firth Brown L-221"
474	Firth "Cast"	M–56	C, bal. Fe	Hardened					500	Hammers, tools, drills, chisels	Cheap tool steel
									700		"Firth Brown L-222"
475	Firth "Diehard"	M–56	Bal. Fe, high Cr, high C	Hardened					550	Forging, blanking and drawing	Abrasion resisting
									660	dies, cold trimming and punch- ing dies	"Firth Brown M-254" Air-hardening.
476	Firth "Extra Cast"	M–56	C, bal. Fe	Hardened					500	Finishing tools, drills, milling	Tool steel "Firth
									700	cutters, reamers, razors, punches, surgical instruments, taps, needles	Brown L-220"

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
477	Firth "F-65"	M-56	0.2-0.3 C, 2.75-3.50 Ni, 1.0-1.4 Cr, 0.25 max. V, 0.65 Mo, bal. Fe	Oil treated	146000 168000	127000 135000	17	40		Crank shafts, propeller shafts, rear axles, gear box shafts, connecting rods	"Firth Brown E-81" For high duty work
478	Firth FNC-3	M-56	0.08-0.15 C, 2.75-3.5 Ni, bal. Fe	Heat treated	94100	56500	18	45	40	Gears, camshafts, steering gear parts	For case hardening "Firth Brown F-101" "Atlas NCH-3"
479	Firth FCN-5 Steel	M-56	0.08-0.15 C, 4.75-5.25 Ni, bal. Fe	Heat treated	101000	65700	20	50		Motor car gears	Case-hardening "Firth Brown F-102" "Atlas NCH 5"
480	Firth FCNC Steel	M-56	0.12-0.18 C, 4-4.5 Ni, 1.0-1.4 Cr, bal. Fe	Heat treated	180000	144000	12	35		Gears for aero-engines, racing car gears	Case-hardening "Firth Brown F-104" "Browns Atecor"
481	Firth FN-3 Steel	M-56	0.25-0.40 C, 2.75-3.25 Ni, bal. Fe	Oil hardened	101000 123000	65700 80000	22	50		Valves, propeller shafts, rear axles, gear box shafts, connecting rods	"Firth Brown D-61" "Atlas ATN"
482	Firth FNC Steel	M-56	0.28-0.34 C, 3.0-3.75 Ni, 0.5-1.0 Cr, bal. Fe	Oil hardened	123000 146000	92000 110000	20	50		Crank shafts, propeller shafts, rear axles, connecting rods, motor cars	"Firth Brown D-64" "Atlas NC-45"
483	*Firth FT-30 Steel*	*M-56*	*0.28-0.40 C, 0.30 Si, 0.45-0.80 Mn, bal. Fe*	*Normalized*	*67000* 90000	*35500* 45000	25	45		*General engineering use*	*"Firth Brown C-41"* "Atlas ATC-30"
484	Firth FT-40 Steel	M-56	0.45-0.55 C, 0.30 Si, 0.5-0.7 Mn, bal. Fe	Normalized	90000 112000	45000 56000	20	40		General engineering use	"Firth Brown C-43" "Atlas ATC-50"
485	Firthite	M-57	97-87 Tungsten carbide, 5-13 Co							Tipped cutting tools	Cemented tungsten carbide
486	Firth "Nonvar" Cast Steel	M-56	C, bal. Fe, high Mn	Hardened					444 600	Taps, boiler stay bolts, punches, dies, jigs, gages	"Firth Brown M-240"
487	Firth "Pnusnap" Steel	M-56	C, bal. Fe, low W, Cr,	Hardened					512 555	Pneumatic snaps for hot riveting, hand chisels, punches, caulking tools	"Firth Brown M-257" "Browns Metipsa"
488	Firth "RBD" Steel	M-56	C, high W, Cr, bal. Fe	Hardened					286 418	Hot rivet dies, die blocks, shear blades, hot iron punches	Air hardening "Firth Brown M-261"
489	Firth Sterling "J-S" Steel	M-17	0.50 C, 2.25 W, 0.30 Mn, 1.4 Cr, trace V, bal. Fe	Annealed Oil hardened	80000 295000 *115000*	50000 250000 *102000*	32 6.5 25	58 12 *61*	156 578 *241*	Chisels, punches, shears, tools, rivet sets, beading tools, blanking dies	Tough
490	Firth Sterling Nirosta "K2A"	M-57	0.23 C, 0.37 Si, 19 Cr, bal. Fe	Rolled					255	Stainless steel parts, sheets, tubes, cooking utensils	Stainless, corrosion resistant. Obsolete
491	Teledium	M-458	0.02-0.10 Te, bal. Pb	Cold rolled	3800 5000				8	Chemical plant equipment, cable sheathing, batteries, water supply pipes	
492	E. I. S.-31 "Hotkut"	M-64	C, Si, Ni, Cr, V, bal. Fe							Hot cut shear knife	(Discontinued)
493	E. I. S.-42 "Kleenkut"	M-64	2.0 C, 12 Cr, Co, Mo, bal. Fe							Dies, cold cutting shear blades, trimmer and blanking dies	
494	Flecto Iron	M-94	2.0-2.4 C, 0.25 Mn, 1.1 Si, bal. Fe	Cast	54000	35000	14		135	Castings to be hot galvanized	Specially annealed malleable cast iron
495	Flexo Steel	M-32	0.60 C, 0.75 Mn, 2.0 Si, bal. Fe	Heat treated	325000 135000	300000 100000	4 20	10 50	600 250	Leaf springs, recoil springs, shuttle springs	Great toughness for high service stresses
496	Flintcast	M-192	High C, alloy, bal. Fe							Abrasion resisting iron castings	Abrasion resisting
497a	Frary Metal	M-88 M-273	0.3 Hg, 0.2-2.0 Ba, 0.1-1.0 Ca, 0.1-0.3 Sn, bal. Pb	Cast			5	1		Bearings	Non-corrosive die casting. (Discon.)
497b	Frary Metal	M-88 M-273	0.24 Hg, 0.04 Cu, 0.83 Ba, 0.42 Ca, 0.12 Sn, bal. Pb	Hard			1.15	0.92	27	Bearings	(Discontinued)
497c	Frary Metal	M-88 M-273	0.04 Cu, 2.02 Ba, 0.71 Ca, 0.26 Sn, bal. Pb	Medium			2.3	1.8	23	Bearings	(Discontinued)
498	Frontier Alloy No. 5	M-58	10 Al, 89 Cu, 1 Fe, traces Ti	Untreated	60000 80000	22000 28000	30 15		120 130	Housing nuts, worm gears, spur gears, bearings, spacer boxes	Resists wear and shock. Heat resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
				Heat treated	80000	50000	10		180		
					95000	65000	4		200		
499	Furbaloi		0.45 Cu, 0.05 Mn, 0.13 C, 13.35 Cr, 0.08 Ni, bal. Fe		77000		38	75		Corrosion resisting parts.	Corrosion resistant
500	Fusible Alloy, Crouse		45 Bi, 25 Sn, 25 Pb, 5 Cd							Fusible alloy	M.P.-88 °C.
501	Fusible Alloy, Dalton		60 Bi, 15 Sn, 25 Pb							Fusible alloy	M.P.-92 °C.
502	Fusible Alloy, Darcet		50 Bi, 25 Sn, 25 Pb							Fusible alloy, boiler safety plugs, fire sprinkler valves	Expands on cooling M.P.-93 °C.
503a	Fusible Alloy		50 Bi, 34 Sn, 17 Cd							Fusible alloy	M.P.-65 °C.
503b	Fusible Alloy		15 Bi, 42 Sn, 43 Pb							Fusible alloy	
503c	Fusible Alloy		33.3 Bi, 33.3 Sn, 33.3 Pb							Fusible alloy	
504	Fusible Alloy, Lichtenberg		50 Bi, 20 Sn, 30 Pb							Fusible alloy	M.P.-75 °C.
505	Fusible Alloy, Lipowitz		50 Bi, 13.3 Sn, 26.7 Pb, 10 Cd							Fusible alloy, fuses in fire extinguishers	"Lypowitz" M.P.-63 °C.
506	Fusible Alloy, Melotte		50 Bi, 31 Sn, 19 Pb							Fusible alloy	M.P.-99.5 °C.
507	Fusible Alloy, Molyneaux		41.5 Bi, 16.7 Sn, 25 Pb, 16.7 Cd							Fusible alloy, fuses	M.P.-60 °C.
508	Fusible Alloy, Newton		50 Bi, 18.75 Sn, 31.25 Pb							Fusible alloy, fire and signal alarms, plugs for fire extinguishers	Expands on cooling M.P.-95 °C.
509	Fusible Alloy, Onion		50 Bi, 20 Sn, 20 Pb							Fuses, safety plugs	M.P.-92 °C.
510a	Fusible Alloy, Rose		50 Bi, 22 Sn, 28 Pb							Safety plug in fire extinguishers	M.P.-79 °C.
510b	Fusible Alloy, Rose		35 Bi, 30 Sn, 35 Pb							Safety plug in fire extinguishers	M.P.-98 °C.
511a	Fusible Alloy, Wood		50 Bi, 12.5 Sn, 25 Pb, 12.5 Cd							Safety plugs in fire extinguishers	Brittle as cast M.P.-71 °C.
511b	Fusible Alloy, Wood		52.5 Bi, 31.5 Pb, 16 Sn							Safety plugs in fire extinguishers	Brittle as cast M.P.-98 °C.
512	Fusible tea spoons		45 Bi, 17 Sn, 30 Pb, 10 HgS							Solders, binding plugs	M.P.-85 °C.
513	G-Alloy	M-311	18 Zn, 2.5 Cu, 0.35 Mg, 0.35 Mn, 0.20 Fe, 0.75 Si, bal Al	Hot rolled	72000	58000	19			Cast parts for trucks, airplane and boats	
					78000	69500	17				
514a	Gear Bronze		78-91 Cu, 10-12 Sn, 0-3 Zn, 0-2 Pb, 0.1-0.3 P	Cast	38000	20000	10		80	Gears	
514b	Gear Bronze		88 Cu, 10 Sn, 2 P							Gears	
514c	Gear Bronze		85 Cu, 13 Sn, 2 Zn							Gears	
515	Gedge's Metal		60 Cu, 38.2 Zn, 1.8 Fe							Ship sheathing, cylinders for hydraulic presses	Malleable at red heat
516a	Genelite	M 60	73 Cu, 12.5 Sn, 10 Pb, 4.5 graphite		5000				22	Bearings, gun synchronizer	Synthetic bronze Self-lubricating
					8000						
516b	Genelite	M-306	70.18 Cu, 13.72 Sn, 9 Pb, 5.35 graphite, 0.22 Fe, 1.47 Zn							Bearings for aero engines	Synthetic Bronze
517	German Silver		Ni-Cu-Zn alloys.	Cast	41000		28	25	80	Fixtures, utensils, electrical apparatus, cutlery, ornaments	Malleable and tough Corrosion resisting
518	German Silver, Arguzoid		48-56 Cu, 13-21 Ni, 23-31 Zn, 0-4 Sn, 0-4 Pb							Cutlery, ornaments, utensils	German Silver
519	German Silver, Best		46-50 Cu, 20-31 Ni, 29-34 Zn							Springs and contact points in electrical work	German Silver
520	Glowray	M-121	65 Ni, 15 Cr, 20 Fe		94000					Heating elements, furnace parts	Same as Chromel "C"
521	Gohi Iron	M-191	0.02 C, 0.25 Cu, 0.025 Mn, 0.003 Si, bal. Fe		45000		40			Sheet metal construction work, roofing, culverts, pipe, ventilators, skylights	Rust resisting
					50000		50				
522	Government Bronze U.S.N. Spec. 46M6f	M-102	86-89 Cu, 7.5-11 Sn, 1.5-4.5 Zn, 0.75 Ni, 0.3 Pb		35000	17000	14			Valves, gears, fittings, steam valves	Composition "G"
							16				
523	Gramix	M-245	Cu-Sn-graphite							Light machine bearings, bushings	Finely powdered mixture, Self-lubricating

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
524a	Graphalloy Babbitt	M-247	Graphite impregnated with Pb base Babbitt						50	Bearings, electrical brushes	C.U.S.-14000 Self-lubricating
524b	Graphalloy, Copper	M-247	Graphite impregnated with Cu						50	Slip ring brushes, contacts on controllers, relays, bearings	M.R.-12500 Self-lubricating
524c	Graphalloy Silver	M-247	Graphite impregnated with Ag						50	Contacts on relays, circuit breakers	
524d	Graphalloy, Cadmium	M-247	Graphite impregnated with Cd						50	Bearings, contacts for controller, switches	
525a	Graphite Metal		80 Pb, 20 Sb							Crucibles, lubricants, lead pencils	Infusible
525b	Graphite Metal		68 Pb, 17 Sb, 15 Sn							Foundry facings, electric brush carbons	
526	Gray Cast Iron		1.5-3.0 Si, 2.0 max. Mn, 3-4 C, bal. Fe		22500		4			Motor frames, fly wheels, wheels, valves, chilled rolls, crusher jaws	Non-ductile, acid resisting iron
527	Gunite	M-223	0.8 C.C., 2.2 graphitic C, 2 Si, bal. Fe	Cast	50000	45000			212	Automotive brake drums, cams rolls, worms, spring plugs, gear units, dies, rocker arms	Wear resistant under friction. Pearlitic
528a	Gun Metal	M-212	88 Cu, 8 Sn, 4 Zn	Cast	40000	18000	50		70	Steam and structural bronze, expansion joints, gears, bolts, valves, pistons, bearings, bushings	Resists salt water corrosion. Same as U.S. N. "C" Bronze
528b	Gun Metal		95-71 Cu, 0-11 Sn, 0-13 Pb, 0-5 Zn, 0-1.4 Fe	Rolled	48000		20				
					60000		30	25	76		
					32000		15	12	65		
529	Gun Metal, Modified	M-212	86 Cu, 9.5 Sn, 2.5 Pb, 2 Zn		32000		25	23	63	Cast bearings, gears	"Barr Alloy No. 2"
					40000		15	12	72		
530	Hadfield		11-14 Mn, 1-1.3 C, 0.3-0.8 Si, bal. Fe		40500	30400	30		113	Rails, shovel dippers, wear plates	Wear and abrasion resistant
					117100	64900	9		326		
531	Hadfield Manganese Steel	M-62	1-1.5 C, 10-15 Mn, bal Fe		140000		50			Machine cutting tools, dies, taps, chisels, springs	Wear resisting, abrasion and shock resisting
532	Hadfields Era	M-62	13-20 Cr, 0.5-1.5 Mn, 7.23 Ni, W, Si, Cu, Mo, low C, bal. Fe		88000	66000	75		150	Chemical plant and engineering applications, domestic utensils and fittings	Wear and corrosion resistance
					132000	88000	37		230		Range of alloys
533	Hadfields "Era H.R."	M-62	0-30 Cr, 0-20 Ni, 0-2 Si, 0-4 W, 0-2 C, bal. Fe	at 20°C.	130000	85000	37	37	200	Engine valves, crucibles, furnace conveyors, dredger parts, carburizing boxes	Corrosion resisting, stainless
				at 700°C.	69000		35	57			Range of alloys
				at 1000°C.	45000		30	64			
534	Hadfield Silicon Steel	M-62	4 Si, C, bal. Fe							Transformer cores, armatures for dynamos and electric motors, loading coils	Low magnetic hysteresis with high permeability
535	Hampden	M-32	2.1 C, 12.5 Cr, .5 Ni, bal. Fe							Tools, dies, broaches, gages, reamers, taps, cutters	Tool steel. Non-deforming
536	Hardite "A"	M-166	55 Ni, 13 Cr, 1.5-2.0 Si, 2.0 Mn, bal. Fe	at 70°F.	103000					Carburizing boxes, heating elements, lead pots, retorts	Heat resisting
				at 1800°F.	43000						
537	Hardite "B"	M-166	33-35 Ni, 12-14 Cr, 1.5-2.0 Si, 2.0 Mn, bal. Fe							Carburizing boxes, heating elements, lead pots, retorts	Heat resisting
538	Hardite "S"	M-166	88 Ni, 4.5 Si, bal. Fe							Carburizing boxes, heating elements, lead pots, retorts	Heat resisting
539	Hardtem "C"	M-64	0.60 C, 0.70 Mn, 0.61 Cr, Ni, 0.17 V, 0.28 Mo, bal. Fe	Oil treated	123500	101500	53	23	262	Die blocks	Drop forged die steel
540a	Hardware Bronze	M-8	85 Cu, 13.25 Zn, 1.75 Pb	Soft	32000	23000	54	72	62	Bolts, screws, nuts, tie rods	
				Cold rolled	70000	58000	15	49	218		
540b	Hardware Bronze	M-33	89 Cu, 9 Zn, 2 Pb	Annealed	38000	15000	40			Electric construction hardware	"Leaded Commercial"
540c	Hardware Bronze		88 Cu, 9.5-12 Zn, 0-1.5 Sn, 0-1 Pb							Hardware	
540d	Hardware Bronze		88 Cu, 12 Zn							Hardware	
541	Harcus	M-289	0.9-0.95 C, 0.9-1.0 Mn, 0.3-0.4 Cr, bal. Fe.							Taps, dies, reamers, gages	Tool steel. Non-deforming

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
542	Hascrome	M-167	14 Cr, 5 max. Mn, bal. Fe		40000				250 500	Welding rod for hard facing	Self hardening
543	Hastelloy A	M-167 M-280	20 Fe, 60-58 Ni, 20 Mo, 0-2 Mn	Annealed	110000 120000	47000 52000	48 30	54 35	207	Pumps, tanks, chem. equip.	Resists HCl and H_2SO_4 but not Cl2 or HNO_3
				Forge	100000 150000	50000 115000	48 18	40 18	207		
544	Hastelloy D	M-167 M-280	90-85 Ni, 3 Cu, 10 Si, bal. Fe	Cast	35000 40000	35000 40000	0 0	0 0	500 547	Pump valves	Resists HCl and H_2SO_4 butnot Cl2 or HNO_3
545	Hastelloy C	M-167 M-280	20 max. Mo, 18 max. Cr, 6 max. W, 7 max. Fe, bal. Ni	Cast	72000 80000	45000 48000	10 15	11 16	175 215	Pumps and valves	Resists P_2O_5, SO_3 and free Cl2
546	Haystellite	M-167	80 min. W, 11 max. Co, 9 max. bal.							Cutting tool tips, oil well drilling tools	Cast WC
547	Hecla	M-122	60.4 Cu, 0.50 Pb, 1.0 Sn, 38.1 Zn	Cold drawn Normalized	68000 63500	43500 51000	36 43	41 46	147 100	Screw machine parts	Corrosion resistant
548	Hecla A. T.V.	M-62	C, Cr, Ni, bal. Fe	Treated	110000	66000	20	35		Turbine nozzles, turbine blades	Heat resistant
549	E. I. S. 45	M-64	Medium C, high Cr, bal. Fe							Heavy duty long life shear knife	Electric induction steel
550	Heppenstall X-60	M-64	*1.5 Ni, 0.7 Cr, 0.2 Mo,* 0.17 V, 0.60 C, bal. Fe	*Heat treated*	*150000* 140000	*119000* 115000	*18* 20	*49* 52	302 285	Mandrel sleeves	12-15-18
551	Herculoy	M-238	96.25 Cu, 3.25 Si, 0.5 Sn	Annealed Hot rolled Cold drawn	60000 68000 120000		80 60 2			Bolts, nuts, screws, turn buckles, storage tanks, boilers, blowers, fans, hardware	Non-magnetic Corrosion resisting. Silicon bronze
552a	Heusler Alloys		11.1 Al, 66.5 Cu, 22.4 Mn							Electrical machinery	Ferromagnetic
552b	Heusler Alloys		10 Al, 4 Pb, 68 Cu, 18 Mn							Electrical machinery	Ferromagnetic
552c	Heusler Alloys		4-15 Al, 54-76 Cu, 16-30 Mn							Electrical machinery	Ferromagnetic
552d	Heusler Alloys		61 Cu, 13 Al, 26 Mn							Electrical machinery	Ferromagnetic
553	Hibbo No. 100	M-215	Al, bal. Cu		50000				100 120	Light bearings and bushings	
554	Hibbo No. 125	M-215	Al, bal. Cu		55000				120 140	Light bearings and bushings	
555	Hibbo No. 150	M-215	Al, bal. Cu		65000				140 160	Heavy pressure bearings and bushings, gears, pinions	
556	Hibbo No. 175	M-215	Al, bal. Cu		75000				160 190	Gears and pinions	
557	Hibbo No. 225	M-215	Al,-bal. Cu		85000				190 240	Forming dies, bearing slides, cam rollers, non-sparking tools	Resists shock, fatigue and corrosion
558	Hibbo No. 275	M-215	Al, bal. Cu		90000				250	Dies, rolls, pins, cams, bushings	Resists shock, fatigue and corrosion
559	Hiduminium R.R. 50	M-239 *M-86* M-426 M-137	1.2 Cu, 1.3 Ni, 0.1 Mg, *1.1 Fe, 0.18 Ti, 2.2 Si,* bal. Al	Sand cast Heat treated	20000 25000 25000 30000	18000 20000	4 3	8 5	65 72	Cylinder blocks, cylinder heads *pistons*, crank-cases	Rolls Royce automobile
560	High Speed Brass	M-256	88 Cu, 7 Sn, 5 Zn							High speed bearings	
561a	High Speed Steel	M-69	13-19 W, 0.6-0.77 C, 3-4 Cr, 0.25-2.25 V, bal. Fe							High speed cutting tools	High speed steel
561b	High Speed Steel		6 Mo, 6 Co, 4 Cr, 0.6 C, bal. Fe							Cutting tools	High speed steel
561c	High Speed Steel		6-10 Mo, 3-6 Cr, 0.5-2 Co, bal. Fe, 0.2-1 U, 0.5-0.8 C							Cutting tools	High speed steel
561d	High Speed Steel		6-10 Mo, 3-6 Cr, 0.2-0.4 Mn, bal. Fe, 0.5-0.8 C							Cutting tools	High speed steel
561e	High Speed Steel		3-10 Mo, 1-5 Co, 0.2 V, 1-2 Mn, 0.6-1.2 C, bal. Fe							Cutting tools	High speed steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
562	Hi-Gloss "C"	M-69	0.10 C, 18 Cr, 8 Ni, 0.35 Mn, bal. F	Rolled	105000	60000	45	65	196	Cooking utensils, sterlizing equipment, bumpers, piston rods, pumps, valves, radiator shells	Stainless, austenitic, corrosion resisting
					120000	90000	35	45	228		
				Annealed	88000	40000	60	70	135		
563	Ampcoloy 79	M-13									
564	Hioloy "CU"	M-95	C, alloy, bal. Fe							Corrosion resistant parts	Corrosion resisting (Discontinued)
565	Hipernik	M-118	50 Ni, 50 Fe, traces Mn	Annealed	55000	20000	50	50		Core material for radio and current transformers, motors, relays	Soft and ductile magnetic alloy
566	Hitensiloy Bronze	M-122	56.75 Cu, 1.5 Ni, 1 Pb, 0.5 Al, bal. Zn	Annealed	80000	40000	30	25	125	Welding rod, pump rods, valve stems, bolts, nuts	Corrosion resisting
				Cold drawn	95000	50000	20	15	130		
567	Hi-tenso "BB"-961	M-8	99 Cu, 1 Cd	Hard	92000		3			Wire	Wear resisting. High electrical conductivity
				Soft	35000		50				
568	Holfos Bronze	M-169	11-12 Sn, 0.1-0.2 P, 0.25 Pb, bal. Cu		36000		10		100	High duty worm gears and special bearings	Free cutting, close grained
					42000		3				
569	Hombergs Alloy		33.3 Pb, 33.3 Sn, 33.3 Bi							Sprinkler plugs, fusible metal	M.P.-251 °F.
570	Hopkinson Alloy		75 Fe, 24.5 Ni, traces Si		160000	88000	45	68		Corrosion & heat resistant parts	Sc.-21
571	Hot-Die (Chrome)	M-39 M-73	3.5-4.0 Cr, 0.8-0.9 C, bal. Fe							Dies for hot metal, tools	Shock and wear resisting
572	Hot-Die (Tungsten)	M-39 M-73	2-3 Cr, 0.3-0.45 C, 1.0 V 10-14 W, bal. Fe							Dies for hot metal, tools	Shock and wear resisting
573	Hoyt Metal	M-88 M-317	10 Cu, 78 Sn, 12 Pb						26	Bearings for internal combustion engines and pumps	Bronze Babbitt M.P.-360 °C.
574	Hubbard Special	M-225 M-451	C, Ni, Cr, bal. Fe							Rolls, guides, castings	High wear resistance
575	Hughes Alloy	M-161	17 Sn, 70 Pb, 13 Sb						30	Metallic packing	
576	Huron	M-76	2.1C, 12.5Cr, 1.0V, 0.32 Mn 0.45 Si, bal. Fe	Heat treated					744 418	Dies, tools, blanking and cold forming dies and rolls, gages	Abrasion and wear resisting
577	Hyb-lum	M-305	2.0 Ni+Cr, bal. Al							Light alloy parts	Non-corrosive
578	Hybnickel A	M-194	12-25 Ni, 20-24 Cr, bal. Fe	Cast	50000	40000	0–10			Carburizing boxes, hearth plates, furnace conveyor parts	Heat resisting max. operating temp.-2100 °F.
				Forged	100000	70000	20				
579	Hybnickel B	M-194	5-7 Ni, 18-22 Cr, bal. Fe	Cast	50000	40000	0–15			Carburizing boxes, hearth plates, furnace conveyor parts	Heat resisting max. operating temp.-1800 °F.
				Forged	100000	70000	25				
580	Hybnickel C	M-194	15-35 Ni, 25-35 Cr, bal. Fe	Cast	50000	40000	0–15			Carburizing boxes, hearth plates, furnace conveyor parts	Acid resisting max. operating temp.-2200 °F.
				Forged	100000	70000	25				
581	Hybnickel S	M-194	25 Ni, 20 Cr, bal. Fe	Cast	50000	40000	0–15			Furnace parts	Acid and alkali resisting
				Forged	100000	20000	25				
582	Hy-glo	M-73	17-18 Cr, 0.5 max. Mn, 0.6-0.7 C, bal. Fe	Annealed	100000	70000	20	50	187	Cutlery, tools, machine parts	Stainless, corrosion resisting
				Heat treated	282000	248000	0	0	580		
					215000	190000	3	7	420		
583	Hyspeed Nickel Bronze	M-129	Ni, bal. Cu.		45000	30000	15			Housing units, slippers for universals, worm rim wheels, bearings for gear drives, bushings	Excellent wear resistance. (Obsolete)
584	Hyten "B" No. 3	M-119	0.50 C, Mn, Cr, bal. Fe	Heat treated	152000	130000	15	58	311	Shafts gears, arbors, pinions, spring clips, connecting rods	Shock resisting
					220000	192000	11	40	477		
				Rolled	100000	60000	18	45	212		
585	Hy-Ten-Si Gr. 1 A	M-129	60-68 Cu, 20-24 Zn, 3-7 Al, 2-5 Mn, 2-4 Fe	Sand cast	115000	70000	12	12	210	Gears, worm wheels, bearings	Wear and corrosion resisting
				Forged	120000	73000	8	8	240		
				Sand cast							

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
	No. 3			Sand cast	90000	45000	20	20	185		
	No. 4			Sand cast	85000	40000	25	25	150		
586	Ideor	M-40	0.4 C, 2 W, 1 Cr, 1 Si, 0.30 Mn, bal. Fe							Chisels, punches, rivet sets, shears, picks	High tenacity
587	Illium "G"	M-29	56 Ni, 24 Cr, 8 Cu, 4 Mo, plus special elements		60000	50000			170	Chemical apparatus, pump and valve parts	Resists H_2SO_4
588	Immadium I	M-179	Cu alloy	Cast	73000	63800	3.5	15	137		
				Cast	72400		19.5	12	152	Pump rods, valve spindles, stay bolts, propeller shafts	High strength and corrosion resistance
				Rolled	70000	35000	33		125		
589	Immadium II	M-179	Cu alloy	Cast	68400		10	9	149	Pump rods, valve spindles, stay bolts, shafts, impellers	High strength and corrosion resistance
				Rolled	81000	40000	28		135		
590	Immadium V	M-179	Cu alloy	Cast	86000	44000	24	20	145	Pump rods, valve spindles, stay bolts, high pressure valves	High strength and corrosion resistance
				Rolled	94000	47000	22		170		
591	Ingot Iron		Very pure and refined basic open hearth iron		45000	23000	47	75	83	Boilers, tanks, enameled ware, sheets	Ductile and rust resisting
592	Insuluminum	M-60	Steel with a surface impregnation of Al							Chemical engineering equipment.	Discontinued
593	Invar	M-44 M-121 M-104	0.18 C, 35.5 Ni, 0.42 Mn, bal. Fe	Annealed	72500	24000	39	67		Measuring tapes and instruments, automobile and aircraft engine parts, thermostats	Low coef. of expansion
594	Ironac		13.2 Si, 84 Fe, 0.77 Mn, 1.1 C, 0.8 P							Pumps, valves, ejectors, nozzles, pipes, fans	Acid resisting
595	Ironite	M-174	Cr, Ni, V, bal. Fe		35000				230	Cams, gears	Wear resisting
					40000				390		(Discontinued)
596	Izett Steel No. 1	M-72	0.125 C, 0.56 Mn, 0.018 P, 0.15 S, 0.10 Si, bal. Fe	at 20 °C.	62600	39000	43	68		Boilers	Tough, Al deoxidized non-aging
				at 400 °C.	50300	22000	39	70			
597	Izett Steel No. 2	M-72	0.15 C, 0.54 Mn, 0.025 P, 0.039 S, 0.06 Si, 10.06 Al, bal. Fe	at 20 °C.	91800	44500				Boilers	Tough, Al deoxidized non-aging
				at 400 °C.	68000	23000					
598	Izett Steel No. 3	M-72	0.355 C, 0.49 Mn, 0.024 P, 0.024 S, 0.10 Si, bal. Fe	at 20 °C.	98500	51000				Boilers	Tough, Al deoxidized non-aging
				at 400 °C.	77000	29000					
599	Izett Steel No. 4	M-72	0.34 C, 0.48 Mn, 0.025 P, 0.025 S, 0.11 Si, bal. Fe	at 20 °C.	105000	54000				Boilers	Tough, Al deoxidized non-aging
				at 400 °C.	81000	30000					
600	Jalcase Steel No. 1	M-173	0.10-0.20 C, 1.3-1.6 Mn, bal. Fe	Water hard'd	138000	100000	10	30	315	Case-hardened parts, screw stock	Free cutting
				Hot rolled	57000	30000	30	50	100		
601	Jalcase Steel No. 2	M-173	0.25-0.35 C, 1.35-1.65 Mn, bal. Fe	Water hard'd	150000	135000	12	50	325	General	
				Hot rolled	75000	40000	20	40	140		
602	Jalcase Steel No. 3	M-173	0.30-0.40 C, 1.35-1.65 Mn, bal. Fe	Water hard'd	190000	167000	10	38	375	General	
				Hot rolled	80000	45000	18	32	160		
603	Jalcase Steel No. 4	M-173	0.25-0.35 C, 1.35-1.65 Mn, bal. Fe	Oil hardened	150000	128000	12	36	310	General	
604	Jalcase Steel No. 5	M-173	0.30-0.40 C, 1.35-1.65 Mn, bal. Fe	Oil hardened	166000	138000	10	39	380	General	
605	Jessop Steel No. 5	M-69	C, alloy, bal. Fe	Hot rolled	130500	107300	31	60	260	Furnace parts, recuperators, pumps, boiler baffles, annealing boxes, oil stills.	Heat and corrosion resisting Resists scaling to 2100 °F.
				at 1000 °C.	18000		26	42			
606	Jewell Alloy	M-171	1.25 Si, 1.6C, 0.4 Mn, 0.2-1.5 Ni, 0.1-0.5 Cr, bal. Fe		65000	47000	25		130	High strength and heat resisting castings, grate bars, furnaces, stoker parts, glass molds and dies	Heat resisting Resists scaling to 1450 °F.
					95000	70000	10		250		
607	Johnson Bronze	M-172	Sn, bal. Cu							Machine bearings and bushings	(Discontinued)
608	Kalif Metal	M-42 M-262	70 Cu, 30 Pb, Steel backed Pb-Cu mixture		10000		6		25	Bearings, wrist pin bushings	Steel backed bearings

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
609	Kanthal "A"	M–70 M–231	Bal. Fe, 23.4 Cr, 6.2 Al, 1.9 Co, .06 C		106000 114000			64	230	Heating elements	Resists oxidation. Brittle when cold. Tough when hot.
610	Karma	M–44	80 Ni, 20 Cr		110000	60000	25	35	183	Resistances	Similar to Nichrome IV. (Discontinued)
611	Kinite	M–174 M–345	0.55 Si, 1.5 C, 12.5-14.5 Cr, 1.1 Mo, 0.7 Co, 0.5 Mn, 0.4 Ni, bal. Fe, trace to 0.5 B	Cast Rolled	100000 200000					Dies, anvils, cutters, mandrels, press tools, blanking, forming & drawing dies, shear blades	Abrasion and compression resisting
612	Kiski	M–140	0.9-1.0 C, 1.0-1.2 Mn, 0.43-0.57 Cr, 0.15-0.25 V, 0.45-0.75 W, bal. Fe							Tools, dies, blanking and forming dies, thread gauges	Non-deforming
613	Konel	M–118	73.07 Ni, 17.16 Co, 8.8 Ti, 0.55 Si, 0.26 Al, 0.16 Mn		100000	40000	35	55	140	Lamp filaments, valves, valve stems. Substitute for platinum	Heat and corrosion resisting. Hot short above -1250°C.
614	Krom-aloy	M–147	Cr, Sn, Pb, Al, Cu, Fe, Mn, Ni, Zn		77210	54600	10	9	153	Marine hardware, propellers, pump valves and seats, trimmings	
615a	Kunheim Metal		Hydrides of Misch metal, 36 Ce, 49 La, 10 Di, 1 Mg							Cigarette lighters	
615b	Kunheim Metal		86 rare earths, 12Mg, 2 Al							Cigarette lighters	
616	Lanz Cast Iron	M–527	High C, Si, Mn, bal. Fe		56500		26			Housings, frames, gears, castings	High strength castings
617	Latrobe 9 T	M–115	0.9 C, 0.2 Si, 0.25 Mn, bal. Fe		220000	200000	1	4	450	Tools, dies, springs, hammers, punches	
618	Latrobe 10 T	M–115	1.0 C, 0.25 Si, 0.20 Mn, bal. Fe		230000	215000	0.5	2	465	Tools, dies, springs, hammers, punches	
619	Labrobe 11 T	M–115	1.1 C, 0.20 Si, 0.25 Mn, bal. Fe		221000	205000	0.5	3	460	Tools, dies, springs, hammers, punches	
620	Latrobe 12 T	M–115	1.2 C, 0.20 Si, 0.25 Mn, bal. Fe		218000	190000	0.3	1	460	Tools, dies, springs, hammers, punches	
621a	Latten (Laiton)		70-60 Cu, 27-40 Zn, 5.3-0 Pb, 0-1 Sn							Hardware, fixtures	Yellow brass
621b	Latten (Laiton)		71 Cu, 28.53 Zn, 0.25 Pb, 0 02 Sn. 0.20 Fe	Annealed	56000	45000	35	65		Hardware, fixtures	Yellow brass
622a	Lautal	M–116	4.5-5.5 Cu, 0.2-0.5 Si, bal. Al	Wrought	35000 63000	18000 40000	25 20		65 110	Aircraft construction	Age-hardening
622b	Lautal	M–116	4.5 Cu, 0.75 Si, 0.75 Mn, bal. Al	Annealed	23000 35000	7000 12000	20 12		45 55	Electric cables	Light alloy
623	Lead	M–88 M–558	99.93 Pb, 0.06 Cu	Rolled	1740	1000	50	98		Constituent of alloys, pipes, cable, chemicals	Non-corrosive in air or water
624a	Lead No. 1 Hard		90 Pb, 10Sb		8220		17		17	Type metal	M.P.-486°F.
624b	Lead No. 1 Hard		99.25 Pb, 0.25 Cd, 0.5 Sb							Valves, cocks, cable sheathing	
625a	Lead No. 2 Hard		85 Pb, 15 Sb		9000		11.7		17	Type metal	M.P.-476°F.
625b	Lead No. 2 Hard		98.25 Pb, 0.25 Cd, 1.5 Sn							Valves, cocks, tank lining	
626	Leantin	M–77	Pb, Sn							Machine bearings	Low pressure bearings. Discontinued
627	Ledrite Brass	M–141	61 Cu, 3.25 Pb, bal. Zn	Soft Hard	45000 80000		35 10			Screw machine parts	Free cutting
628	Lehigh Die and Tool	M–24	1.65 C, 12 Cr, 0.3 V, 0.75 Mo, bal. Fe							Dies, tools, thread rolling dies, blanking dies, punches	Non-warping, Non-shrinking
629	Lesco C. E. M.	M–73	C, Cr, W, bal. Fe							Tools, dies	For semi-severe service
630	Lesco E. H. W.	M–73	C, W, Cr, bal. Fe							Header, gripping and extrusion dies, shear blades	Hot die steel
631	Lesco E. S. A.	M–73	C, W, Cr, bal. Fe							Cutting tools, taps, threading dies, reamers	Fast machining, will not resist shock

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
632	Lesco E. V. S.	M–73	C, W, Cr, bal. Fe							Valves, dies	Semi-high speed steel
633	Lesco Extra	M–73	C, 0.20-0.35 Mn, bal. Fe							Taps, reamers, twist drills, shear blades, springs, tools	Water hardening steel
634	Lesco "H"	M–73	0.15 max. C, 18-20 Cr, bal. Fe.	Annealed	74000	50000	27	61	163	Restaurant equipment, table tops, hardware, chemical tanks, auto lamps	Corrosion resistant
				Heat treated	90000	65000	23	42	190		
					95000	70000	17	28			
635	Lesco "H. H."	M–73	0.20 max. C, 24-30 Cr, bal. Fe.	Annealed	70000	45000	30	60	163	Chemical tanks	Stainless, high corrosion resistance
				Rolled	70000	50000	20	40	163		
					80000	60000	25	50	196		
636	Lesco "L"	M–73	0.15 max. C, 11-13 Cr, bal. Fe.	Annealed	78000	65000	25	65	170	Turbine blades, pump rods, cutlery, valves	Stainless iron
				Heat treated	172000	155000	4	8	365		
					162000	150000	16	52			
637	Lesco "L. M."	M–73	0.10 max. C, 13-15 Cr, bal. Fe.	Heat treated	152000	142000	11	27	290	Turbine blades, pump rods, cutlery, valves	Stainless iron
					135000	125000	18	54	280		
638	Lesco "L. M. S."	M–73	0.12 max. C, 13-15 Cr, bal. Fe.	Treated	148000	135000	7	12	310	Turbine blades, cutlery	Stainless iron
					137000	120000	15	26	300		
639	Lesco "L. S."	M–73	0.15 max. C, 11-13 Cr, bal. Fe	Heat treated	182000	153000	8	17	340	Cutlery, pump shafts	Stainless iron, free machining
					170000	150000	15	40	320		
640	Lesco "M"	M–73	0.15 max. C, 15-18 Cr, bal. Fe	Annealed	66000	44000	65		163	Cutlery, surgical instruments, pump shafts, acid tanks	
				Heat treated	148000	118000	12	32	310		
					115000	80000	16	43	260		
641	Lesco Special	M–73	C, 0.20-0.35 Mn, bal. Fe							Lathe and planer tools, threading dies, taps, reamers, punches	Water hardening
642	Lesco Standard	M–73	C, 0.20-0.35 Mn, bal. Fe							Blacksmith tools, cold chisels	Cheap grade water hardening tool steel
643	Lesco W. W. S. H.	M–73	C, W, Cr, bal. Fe							Tools	
644	Lesco "12-1-¼"	M–73	0.07-0.25 C, 11.5-13.0 Cr, 1.25-1.75 Ni, bal. Fe	Heat treated	148000	135000	7	12	300	Cutlery	Stainless
					132000	120000	17	30	280		
645	Lesco "18-8"	M–73	17-20 Cr, 7-10 Ni, 0.07-0.25 C, bal. Fe	Annealed	87000	33000	58	70	143	Stainless steel parts	Corrosion and heat resisting
				Heat treated	100000	44000	48	62	179		
646	Lesco "21-12"	M–73	0.07-0.25 C, 20-23 Cr, 11-13 Ni, bal. Fe	Annealed	90000	40000	45	62	156	Chemical apparatus	Austenitic, stainless iron
647	Lesco "25-20"	M–73	0.07-0.25 C, 24-26 Cr, 18-20 Ni, bal. Fe	Annealed	110000	50000	40	54	217	Carburizing boxes, furnace parts	Stainless, heat resisting, Austenitic
					70000						
648	Alcoa A132	M–4	12 Si, 1 Cu, 1 Mg, 2.5 Ni, 0.6 Fe, bal. Al	Annealed	30000		0–1		90	Automotive engine pistons and sleeves, permanent mold castings	Low expansion alloy
				T-4	38000	30000	1		100		Similar to Lo-Ex
649	Logan Forging Brass	M–122	58.79 Cu, 2.1 Pb, 0.10 Fe, 0.07 Sn, 38.94 Zn	Heat treated	63700	32500	31	33	94	Brass forgings	Brass forgings
					71000	35300	25	29	96		
650	Lohmanit		W + Mo carbides (chiefly W_2C)							Hard cutting tools and dies	Cast alloy
651	Lotus	M–77	10 Sn, 15 Sb, 75 Pb							Bearings	Medium bearing loads
652	Lubalioy	M–279	90 Cu, 9.2 Zn, .8 Sn	Hard	69000		6			Babbitt Bullet jackets, bearings	Self-lubricating
653	Lubeco	M–77	Sn-Pb							Babbitt metal	(Discontinued)
654	Lubrico No. 1	M–256	75-70 Cu, 20-22 Pb, 5-10 Sn							Bearings and bushings	
655a	Lucero	M–44	70 Ni, 30 Cu		140000					Springs, electrical resistance wire, bolts, valves	Resists heat to 500 °C.
655b	Lucero		65 Ni, 30 Cu, 5 Mn		50000		35			Springs, electrical resistance wire, pump rods	Corrosion and heat resistant
					180000						
656	Lumen Alloy No. 00-A	M–77	80 Cu, 20 Sn	Cast	33000	21000	0.5	0.4	143	Bells and bearings	Alloy deoxidized with P
657	Lumen Alloy No. 00-C	M–77	84 Cu, 16 Sn	Cast	32000	27000	1	0.8	70	Bearing metal, washers, dies, trunnions	Alloy deoxidized with P
							1.5	1.2	80		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
658	Lumen Alloy No. 1	M–77	88 Cu, 8-10 Sn, 2-4 Zn	Cast	40000	20000	15 25	14 23	57 74	Machine parts, spur and bevel gears, air valves, pumps	Alloy deoxidized with Zn
659	Lumen Alloy No. 2	M–77	86 Cu, 9.5 Sn, 2.5 Pb, 2.0 Zn	Cast	40000	19000	15 25	12 23	52 65	Bearing bronze, worm gears	
660	Lumen Alloy No. 3	M–77	86 Cu, 12 Sn, 0.5 max. Pb, 1.5 Zn	Cast	43000	22000	10 16	9 13	57 65	Mine pumps and mining machinery, bearings	Resists corrosion
661	Lumen Alloy No. 4	M–77	80 Cu, 10 Sn, 10 Pb	Cast	30000	20000	6 8	5 7.4	46 50	Bearings, bushings, feed nuts	Adapted for high speeds deoxidized with P
662	Lumen Alloy No. 4 A	M–77	79.5 Cu, 12 Sn, 7.5 Pb, 1.0 P	Cast	32000	24000	1 3	1 3	57 65	Bearings, cam shaft, grinding machine bearings	Iz-1-2
663	Lumen Alloy No. 5	M–77	85 Cu, 5 Sn, 5 Pb, 5 Zn	Cast	37000	18600	15 20	15 20	45 50	Medium and low pressure valve bodies, carburetors, general brass castings	Iz-6-7
664	Lumen Alloy No. 6	M–77	78 Cu, 8 Sn, 14 Pb	Cast	32000	18000	12 15	11 15	48 54	Bushings, pumps, mine and acid machines	Iz-4-5
665	Lumen Alloy No. 7	M–77	93.5 Cu, 6.5 Sn	Cast	42100	19600	20 34	24 32	52 57	Bearings, springs, clips, trolley wheels	Iz-8-13
666	Lumen No. 9	M–77	57.5 Cu, 0.75 Sn, 40 Zn, 1.0 Fe, 0.50 Al, 0.25 Mn	Cast	75000	40000	10 35	9 30	109 120	Propeller blades and hubs, valves, pump bodies	Known as Manganese Bronze. Iz-20-40
667	Lumen No. 11 C	M–77	89 Cu, 1 Fe, 10 Al	Cast	75000	30000	15 25	15 25	140 114	Gears, stripper nuts	Shock resisting Al Bronze. Iz-30-36
668	Lumen No. 14	M–77	90 Cu, 6.5 Sn, 2.0 Zn, 1.5 Pb	Cast	40000	18000	15 33	14 33	44 48	Valve bodies, carburetors, oil pump	Known as Valve or SteamBronze.Iz-11-15
669	Lumen No. 15	M–77	88.75 Cu, 11 Sn, 0.25 Pb	Sand cast	40000	23000	5 10	5 10	63 70	Worm wheels, heavy duty bearings, spur gears	Deoxidized with P
670	Lumen No. 20	M–77	63.75 Cu, 23 Zn, 2.75 Fe, 3.75 Mn, 6.75 Al	Cast	120000	75000	5 10	4 8	240 270	Spur gears, gibs, cams	Known as Super Mn Bronze. Iz-7-11
671	Lumen No. 27	M–77	79.75 Cu, 6.0 Fe, 3.5 Mn, 10.75 Al	Cast	96000	38000	10 20	9 17	163 170	Valve seat rings	Resists heat to 800 °C. Iz-12-15
672	Lumen No. 48	M–77	84 Cu, 10 Sn, 2.5 Pb, 3.5 Ni	Sand cast	48700	28000	7 10	8 25	80 93	Bearings	Deoxidized with P Iz-2-4
673	Lumen No. 54	M–77	85 Cu, 10 Sn, 5 Pb	Sand cast	34000	22000	5 12	4 10	50 61	Elevator worm gears, feed nuts, general machine tool bearings	Iz-4-7
674	Lumdie	M–73	0.4-0.5C, 0.7-1.0 Si, 0.2-0.4 Mn, 4-6 W, 4-5-6.5 Cr, 0.5-0.8 Co, bal. Fe							Dies for Al die casting, header & gripper dies on bolt machines	
675	Lusterite	M–73	0.8-0.9 C, 16.5-18 Cr, bal. Fe .5 Mo							Surgical and dental instruments, knives	Stainless, capable of extreme hardness
676	L X X	M–76	74 C, 4 Cr, 18 W, 1 V, bal. Fe	Heat treated	79500 82570				512 713	Tools, dies, cutters, reamers, twist drills, broaches	High speed steel
677	Lynite	M–92	9-13.5 Cu, bal. Al							Castings, pistons, connecting rods	Piston alloy
678	Lynite 109	M–92	11.5-13.5 Cu, 1.7 Fe + Mn + Mg + Si, bal. Al		19000 28500	15000	0.5 1.0		70	Pressure castings, pistons, chill castings	Pressure castings Registered name
679	Lynite 122	M–92	9.25-10.75 Cu, 2 Fe + Mn + Mg + Si, bal. Al		28000 40000	20000	1.5 0.5		115	For castings to be used at high temperatures, pistons	Registered name
680	Lyonore	M–456	C, 0.20 Cu, bal. Fe, Cr, Ni							Structural parts	Copper open hearth steel
681	Macco Kromax	M–80	2.5 C, 0.6 Si, 0.5 Ni, 12-14 Cr, bal. Fe							Dies, tools	Does not possess red hardness
682	Macco Royal Crown	M–80	1.0 C, 1.0 Cr, 0.5 W, 0.5 Mn, bal. Fe							Dies punches, taps, drills, reamers, drawing dies	Non-deforming steel
683	Machine Bronze	M–77	50 Cu, 25 Ni, 25 Sn							Bearings	Wear resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
684	Machts Metal		57 Cu, 43 Zn							Brazing metal, hardware	
685	Mackenite Metal	M-177	Ni, Cr, bal. Fe							Annealing pots, furnace pots	Heat resistant
686	Magnalite	M-227	94.2 Al, 2.5 Cu, 1.5 Ni, 0.5 Zn, 1.3 Mg		26000		2.5			Airplane construction and engine pistons	Casting alloy
687a	Magnalium	M-118	0-2.5 Cu, 1-5.5 Mg,		41800		34	29		Light castings, ornamental,	Very brittle M. P.-
			0-1.2 Ni, 85-95 Al,		14900		31	69		commercial shapes	1110-1280°F.
			0-3 Sn, 0.2-0.6 Si								
			0-0.9 Fe, 0-0.03 Mn								
687b	Magnalium (original)	M-118	95-70 Al, 5-30 Mg							Light alloy castings	
687c	Magnalium (cast)	M-118	85 Al, 15 Mg							Light alloy castings	
687d	Magnalium (cast X)	M-118	95 Al, 1.8 Cu, 1.6 Mg, 1.2 Ni							Light alloy castings	
687e	Magnalium (cast Y)	M-118	97 Al, 1.8 Cu, 1.5 Mg, Sn + Pb							Light alloy castings	
687f	Magnalium (cast Z)	M-118	95 Al, 3.2 Sn, 1.6 Mg, 0.2 Cu, 0.7 Pb							Light alloy castings	
687g	Magnalium (sheet)	M-118	95 Al, 5 Mg							Pistons	
688	Magnel	M-89	Temper C and Silico ferrite	Annealed	52000	33000	13		120	Electrical and electromagnetic instruments, magnet cores	High permeability, low hysteresis loss
689	Magnesium	M-43	99.9 Mg	Cast	21000	3000	8		32	Constituent of light alloys, py-	Cannot be cold forged
		M-313		Wrought	33000	19000	10	5	42	rotechnics, chemicals	
690	Magnesium Alloy A. M. 3S	M-4	1.3-2.0 Mn, bal. Mg	Annealed	32000	15000	16			Rolled sheet, extruded rods	Corrosion resisting
				Extruded	35000	26000	7		44		
691	Republic Double Strength, Grade 1	M-97	0.12 max. C, 0.5-1.0 Mn, 0.5-1.5 Cu, 0.5-1.5 Ni, 0.20 max. Mo, bal. Fe	Normalized	65000	50000	45			Sheets, strips, plates for transportation equipment	Resists atmospheric corrosion
692	Republic Double Strength, Grade 1-A	M-97	0.30 max. C, 0.5-1.0 Mn, 0.5-1.5 Cu, 0.5-1.5 Ni, 0.20 max. Mo, bal. Fe.	Normalized	85000	70000	40			Sheets, strips, plates for transportation equipment	Resists atmospheric corrosion
693	Magnesium Alloy-242	M-4	8 Al, 0.2-0.4 Mn, bal. Mg	Sand cast	23000				44	Sand and permanent mold cast-	Fair resistance to cor-
		M-313			25000	12000	2–5	2.0	53	ings	rosion formerly A. M.
				Heat treated	29000	10000	5	6	46		8.4. (Discontinued)
694	Rekord Eminent	M-336	C, Mn, Cr, W, V, Mo, Co, bal. Fe.							*Tools, dies*	
695	Magnesium Alloy A. M. 61 S	M-4	0.9-1.5 Mn, 6 Sn, bal. Mg	Extruded	42000	26000	12		54	Forgings and extruded shapes	Excellent corrosion resistance
		M-313					15				
				Forged	38000	24000	5				
							10		45		
696	Magnesium Alloy A. M. 112	M-4	12 Cu, bal. Mg							Castings, pistons	Obsolete
697	Magnesium Alloy A. M. 764	M-4	0.7-1.0 Mn, 5 Sn, 4 Zn, bal. Mg	Sand cast	25000	10000	5–6		45	Sand castings	Aged alloy. Excellent corrosion resistance
				Heat treased	36000	24000	3–5		60		
698	Dowmetal A	M-43	8 Al, 0.2 Mn, bal. Mg	Sand cast	24000	10000	4		48	High strength heat treated	
					27000	12500	7		52	light castings. Max. strength	
				Forged	42000	28000	8		54	wrought parts	
					48000	32000	12		58		
				Heat treated	35000	10000	9–12		52		
699	Dowmetal D	M-43	8.5 Al, 0.15 Mn, 2 Cu, 1 Cd, 0.5 Zn, bal. Mg	Sand cast	22000	14000	2		58	Light alloy castings	Obsolete
				Forged	47000	33000	7		62	Pistons	
700	Dowmetal E	M-43	6 Al, 0.3 Mn, bal. Mg	Sand cast	26000	7000	7		46	Castings requiring good	Obsolete
					31000	11000	12		52	strength without heat treat-	
				Forged	40000	27000	10		50	ment. High strength and duc-	
					44000	32000	15		58	tile wrought parts	
701	Dowmetal F	M-43	4 Al, 0.3 Mn, bal. Mg	Cast	24000	9000	8		48	Forging, rolling and extrusion,	
				Forged	38000	26000	12		45	where max. ductility is re-	
					41000	30000	16		54	quired	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
702	Dowmetal M	M-43	1.5 Mn, bal. Mg	Cast	20000	17000	3–6		42	Primarily for cast and fabricated parts not subjected to max. stresses	Max. corrosion resistance
					38000	22000			38		
				Forged	42000	25000	5–8		42		
703	Dowmetal T	M-43	2 Al, 0.2 Mn, 2 Cd, 4 Cu, bal. Mg	Sand cast	22000	6000	4		43	Pistons and other parts requiring max. thermal properties	Obsolete
					25000	7000	7		48		
				Forged	38000	27000	5		45		
					42000	31000	9		50		
704	Magno (Elalco)		95 Ni, 5 Mn	Hard drawn	140000					Electrical resistance wire, electromagnetic uses	Resistance alloy
				Soft	65000		22				
705	Magnolia Bearing Bronze	M-178	80 Cu, 10 Sn, 10 Pb		25000	12000	8		60	Bearings, bushings	High speed, pressures and temperatures
706	Magnolia Metal		84-78 Pb, 15-16 Sb, 0.6 Sn, 0-0.3 Fe		15000	3400			21	Antifriction bearing metal	For bearings subjected to moderate loads
707	Magno-Nickel	M-68	2-6 Mn, bal. Ni		50900	28400	50			Tools	
					69600	34100	39				
708	Malleable Cast Iron "Black Heart"		1.5-2.5 carbon 0.1-0.35 Mn, 0.1 S, 0.2 P, 0.5-1.2 Si, bal. Fe		35000		10			Railway and automotive castings	Machines easily Iz-3-10
					45000		5				
709	Malleable Cast Iron "White Heart"		<0.4 combined C, <0.8 total C, 0.1-0.4 Mn, 0.25 S, 0.1 P, 0.5-1.1 Si, bal. Fe		40000		5			Railway and automotive castings	Iz-3
					55000		3				
710	Manganese Bronze 937	M-8.	57-62 Cu, 36-40 Zn, 0.5-1.5 Sn, 0.5-1.0 Fe		70000		30	30		Hydraulic rams, propeller blades, condenser tubes, marine and automobile engine parts	High strength and toughness. Resists action of salt water
					80000		20	15			
711	Manganese Casting Brass	M-165	58.5 Cu, 40 Zn, 0.85 Sn, 0.5 Al, 1.5 max. Pb, 0.15 Mn		70000		20			A substitute for malleable iron	
712	Manganese Nickel	M-68	98.5-95 Ni, 1.5-5 Mn		52100	16500	51			Fittings	
					59100	23100	36				
713	Mangonic	M-121	3 Mn, bal. Ni		76000					Spark plug electrodes, connections for heating elements. Thermo-couples	Can be stamped, spun or machined
714	Manganin	M-61	*84 Cu, 12 Mn, 4 Ni*	*Annealed*	*70000*					*Electrical instruments*	*High resistivity* and low temp. coef. of resistance
715	Mangano	M-73	0.95 C, 1.65 Mn, 0.2 Cr, 0.25 Si, bal. Fe							Dies, gages, tools, blanking dies	Non-deforming, non-shrinking
716a	Mannheim Gold	M-314	83 Cu, 10 Zn, 7 Sn		25200		25		69	Cheap jewelry	Moderately corrosion resistant
716b	Mannheim Gold	M-314	89-80 Cu, 7-20 Zn, 0-9 Sn		25200		25		69	Cheap jewelry	
717	Marine Alloy		2 Cu, 40 Sn, 48 Pb, 10 Sb							Bearings	Submerged bearings
718	Marine Bronze		57.5 Cu, 0.8 Ni, 0.15 Sn, 0.50 Al, bal. Zn		83500		15			Marine parts	
719	Martin	M-157	1.4-1.6 C, 12-14 Cr, 0.6-0.8 Co, 0.8-0.9 Mo, 0.35-0.40 V, bal. Fe							Dies, rotary shears, gages, punches, shear blades, liners for dust mills	Castings. Cast to shape. Air hardening
720	Martinel	M-348	C, 0.6-0.9 Mn, 2.75 min. Ni, bal. Fe		85000	50000	20	40		Shipbuilding purposes in strength members, flat plate keel, bilge, deck and slide plating	Special method of rolling
721	Marvel	M-115	0.33 C, 10.25 W, 3.5 Cr, 0.45 V, bal. Fe							Cutting tools, forming dies, punches, shears	Hot die steel
722	Matrix	M-60	48 Bi, 14.5 Sn, 28.5 Pb, 9 Sb		19000		1		19	Fusible alloy for die mounting, dental models	Slight expansion in cooling. Discontinued

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
723a	Maxel No 1	M-235	0.2 C, 1-1.2 Mn, bal. Fe	Rolled	75000	45000	30	55	156	Shafts, gears, pinions, bolts, studs	
					80000	55000	40	65			
				Heat treated	185000	150000	7	24	392		
723b	Maxel No. 2	M-235	0.4 C, 1-1.2 Mn, bal. Fe	Rolled	90000	50000	35	60		Shafts, gears, pinions	
					110000	65000	23	50			
				Heat treated		95000	20	50	250		
						110000					
723c	Maxel No. 3	M-235	0.45 C, 1-1.2 Mn, 0.4-0.6 Cr, bal. Fe	Rolled	130000	100000	22	62.5	260	Screws, racks, shafts, gears, pinions	
				Heat treated	280000	190000	7.5	29	550		
724	Maxhete	M-210	Ni, Cr, W, Cu, Si, bal. Fe	Cast	137000		34.8			Burner tubes, pipe unions to withstand superheated steam at 900 °C and 35 lbs. pressure	Resists heat to 1000° C. Cast alloy. Cannot be drawn
				at 900 °C.	38000		47.2				
725	Maxite	M-35	14 W, 3.85 Co, 4 Cr, 0.70 C, 2V, 0.15 Mn, .6 Mo bal. Fe,	Annealed					228	Cutting tools, super high speed steel tools	High red hardness
726	Maxtensile	M-163	Cr, Ni, bal. Fe							Hydraulic castings, sliding parts, spindles, couplings sprockets, mill rolls	Discontinued. Alloy cast iron
727	Mayari Iron	M-24	4.0-4.5 C, 1 Mn, .5-3.0 Si, 2 Ni, 2 Cr, bal. Fe							Heat, acid, wear, or hard castings	Pig iron
728	Mayar iSteel	M-24	1.25 Ni, 0.6 Cr, varying C, bal. Fe							Automotive, oil well, refinery machinery parts	For high temp. service up to 800°F.
729	Mayari "B" Bolts	M-24	0.34 C, 0.6 Mn, 0.8 Ni, 0.3 Cr, bal. Fe							Bolts and studs for reaction chambers and superheaters	For moderate high temp. service up to 800°F.
730	McGill Metal	M-181	89 Cu, 9 Al, 2 Fe		70000	30000	20		180	Gears, bushings, bearings	Resists corrosion and wear
					80000	40000	10				
731	M.V. "C" Alloy	M-83	7.5-13 Si, bal. Al	Sand cast	18000	10000	15		50	Airplane and automobile parts, marine parts, tubes	Great resistance to atmospheric and sea water corrosion. Modified Al-Si alloy
					27000	11000	5				
				Chill cast	22000		10				
					30000						
732a	Meehanite	M-82	3.0 C, 0.8-1.0 Si, 1.4 Mn,	As cast	50000	45000			357	Mills, crushers, stamp mills, gears, wheels	High resistance to corrosion,
		M-312	0.1 S, bal. Fe		65000	60000					
732b	Meehanite	M-82	3.0 T.C., 0.8-1.4 Si, 1.0 Mn,	Heat treated	70000	60000			290	Cylinders, dies, cams	Heat and abrasion resistant
		M-312	0.1 S, bal. Fe		80000	70000			310		
732c	Meehanite	M-312	0.84 C.C., 2.16 graphite, 0.75 Si, 1.0 Cr, bal. Fe		30000	25000				Heat and abrasion resistant parts	
					40000	35000					
733	Mesmeric	M-56	0.2 C, 0.3 Si, 0.4-1.0 Mn, bal. Fe		72000	39600	25	50		General engineering purposes	Case-hardening steel "Firth Brown F-100" "Atlas C. C. H."
734	Metite	M-60	79.5 Cu, 9 Sn, 7.5 Pb, 4 graphite		5000					Brush and current collector on electric machines	Slow wearing and high conductivity. Synthetic bronze
					8000						
735	Midvaloy ATV-1	M-85	36 Ni, 11 Cr, 1.4 Mn, 0.25-0.35 C, bal. Fe	Cast	65000	40000	10	10		Turbine blades, valve stems	Austenitic
				Wrought	90000	50000	28	35	170	Parts for superheated steam	Heat resisting
736	Midvaloy ATV-3	M-85	26 Ni, 14.5 Cr, 1.2 Mn, 0.45 C, 4 W, bal. Fe	Cast	80000	43000	20	20		Exhaust valves, gas turbine rotors	Austenitic
				Wrought	100000	50000	33	45	185		Heat resisting
737	Midvaloy BTG	M-85	60 Ni, 12 Cr, 1.2 Mn,	Cast	70000	27000	25	24	140	Autovalves, cast vessels for chemical industries	Austenitic
		M-104	0.3 C, 3.0 W, bal. Fe	Wrought	106000	50000	37	50			Heat resisting
738	Midvaloy 1808 C	M-85	.07 C, 18 Cr, 8 Ni, Cb = 10 × C, bal. Fe							Stainless parts	Stabilized

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
739	Midvaloy V-2-A	M–85	8 Ni, 18 Cr, 0.5 Mn, 0.1 C, bal. Fe	Rolled	107000	55000	45	62		Stainless steel parts	Superseded by "Midvaloy 18-08"
740	Heppenstall "2-C-30"	M–64	0.30 C, Ni, Cr, Mo, V, bal. Fe		88500	34500	39	74		Piston rods, crankshafts	
741	Rycase	M–240	0.10-0.20 C, 1.0-1.3 Mn, bal. Fe	Heat treated	82000	64000	19	38	154	Screw stock, carburized parts	Free cutting, carburizing steel
742	Titanit (Cutanit)	M–459 M459a M–276	Mo-Ti-W-carbides		119000	99000	22	62	198	Cutting tools, high speed cutters	"Cutanit" High resistance to wear and abrasion
743	Midvaloy 2700	M–85	.35-1.0 C, 27-30 Cr, 3 max. Ni, bal Fe							Stainless parts	Stainless iron, Austenitic
744	Millard	M–8	90.48 Cu, 0.10 Zn, 0.07 Sn, 0.55 Fe, 8.8 Al		97100	44900	29	35	156	Valve seats, spark plug bushings in aircraft engines	Same as "Avialite"
745	Minargent		57-46 Cu, 40-32 Ni, 28-0 W, 0.2-0.5 Al							Silver solder, substitute for silver in silverware	
746	Min-Ox-Grade A	M–25	80 Cu, 7 Al, 5 Zn, 3 Fe, 3 Mn		55000		13	12	96	Glass molds, slides, bearings	Heat & wear resistant
747	Min-Ox-Grade D-V	M–25	62 Cu, 7 Al, 7 Zn, 22 Ni		80000		0.5			Glass molds, cams, machine parts	Heat & wear resistant
748	Min-Ox-Grade 51 C	M–25	2.5 C, 3 Si, 3 Al, 0.2 V, 2.5 Cr, 0.15 Mn, bal. Fe	Natural	45000		2.0	0		Glass molds, dies for tile pressing, oven enameling racks	Heat & wear resistant
749	Miraculoy	M–288	0.35 C, 1.25 Mn, 0.40 Si, 0.65 Cr, 1.5 Ni, 0.30 Mo, bal. Fe	Heat treated Normalized Heat treated	115000 125000	85000 90000	18 20	40 50	320 600 275 250	Heavy duty castings	
750	Mira Metal		75 Cu, 16.3 Pb, 6.8 Sb, 0.24 Ni, 0.43 Fe, 0.62 Zn, 0.91 Sn		245000	190000	8	10	650	Valves, pipes	Acid and corrosion resisting
751	Miramint		Tungsten carbide								Cast alloy
752	U. H. B. Carbon Tool Steel	M111a	1.05 C, .3 Mn .25 Si, bal. Fe							Hard cutting tools and dies	Water Hardening
753	M. M. M.	M–230 M–636	57.5 min. Ni, 26.0 min. Cu, 9.25 max. Sn, bal. Fe, Si, Mn		70000	45000	17.5			Cold heading dies, punches, gauges Valves for superheated steam	Modified "Monel" Metal
754	Mohawk Hot Die	M–76	0.45 C, 14 W, 3.5 Cr, 0.60 V, bal. Fe	Oil hardened	310000 268700		1 23	5 79	600 321	High speed steel tools, hot punches, extrusion dies, shearing dies	Hot work steel Iz-13.8-67.4
755	Molybdenum	M–53	100 Mo	Cold drawn	260000				147	Constituent of alloy steels furnace elements	High strength at high temp.
756	Molybdie	M–55	0.3-0.6 C, 0.5-0.8 Mn, 0.8-1.1 Cr, 1.2-1.7 Ni, 0.2-0.9 Mo, bal. Fe		106500	86500	21	64	208	Gears, dies, heavy forged parts, crankshafts, piston rods	Tough
757	Mond Nickel	M–86	70 Ni, 4 Mn, 26 Cu							Resistance wires, chemical and mining machinery	
758	Monel Metal	M–68	23 min. Cu, 60 min. Ni, 3.5 max. Fe, 3.5 max. Mn, 0.30 max. C, 0.5 max. Al, 0.5 max. Si	Cast Hot rolled Cold drawn	65000 95000 125000	30000 65000 95000	35 35 15	35 50 50	105 175 260	Turbine blading, airplane parts, pump rods, valve stems, valve seats, fittings	Resists corrosion High impact resistance
759	Mo-Steel No. 1	M–151	0.7-1.0 Cr, 0.25-1.0 Mo, 0.15-0.23 C, 0.4-0.7 Mn, bal. Fe	Hardened	200000	182000	25	65	360	Gears, shafts	Case-hardening steel. Tough, shock resistant
760	Mo-Steel No. 2	M–151	0.8-1.1 Cr, 0.25-0.40 Mo, 0.23-0.30 C, 0.5-0.8 Mn, bal. Fe	Heat treated	144000 230000	133000 218000	18 12	61 48	300 450	Crankshafts, connecting rods, steering knuckles, front axles, propeller shafts, bolts	Water hardening
761	Mo-Steel No. 3	M–151	0.8-1.1 Cr, 0.25-0.40 Mo, 0.3-0.4 C, 0.5-0.8 Mn, bal. Fe	Water hardened Oil hardened	225000 145000 145000 130000	200000 140000 135000 112000	11 20 15 22	47 64 55 64	400 275 300 255	Gears, heavy crankshafts, driving axles, connecting rods, crank pins, piston rods	Tough, shock resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
762	Mo-Tung	M–114 M–39	0.65-0.85 C, 0.2-0.35 Mn, 7.5-8.5 Mo, 1.5 W, 3.75-4.5 Cr, 1.0-1.25 V, bal. Fe							High speed steel cutting tools, reamers, broaches, drills, lathe tools	High duty cutting steel
763	*M.P.M.-3 C-Steel*	M–235	*0.3-0.4 C, 1.6-1.9 Mn,* bal. Fe	Annealed As rolled	100000 113000	60000 77000	19 22	50 57	250 228	Gears, wheels, castings, axles, drive shafts, steering arms	*Tough, Pearlitic*
764a	Mu-Metal	M–108	76 Ni, 17 Fe, 5 Cu, 2 Cr		87000	43000				Submarine cable, current transformer	Magnetic alloy high permeability
764b	Mu-Metal	M–108	74 Ni, 20 Fe, 5.3 Cu, 0.7 Mn		87000	43000				Submarine cable, current transformer	Magnetic alloy
765	Muntz Metal	M–188	60 Cu, 40 Zn	Cast Hard sheet	48200 80000		54 9.5	52	93	Bolts, pins, spindles, wire, condenser tubes	High corrosion resistance
766	Mushet Steel		1.5-2.0 C, 4-6 W, 0.25-0.30 Cr, 0.3-0.5 Mn, bal. Fe							Tools, dies	Cannot be cold worked
767	N. A.	M–189	0.30 C, 27 Cr, 10 Ni, bal. Fe							For high temperature service	Resistant to oxidation, corrosion and abrasion
768	*Naco Steel*	*M–89*	*0.3-0.4 C, 1.5 Mn, bal. Fe*		110000	70000	8	15	250	Car coupler knuckles, car wheels, anchor chains	
769	Naval Brass	M–33	60 Cu, 0.75 Sn, bal. Zn	Cast Hot rolled Cold rolled	39000 50000 44000	19000 39000 19000	15 20 35	25 30 40		Condenser tubes, bolts, spindles	Resists sea water corrosion
770	Naval Bronze		88 Cu, 8 Sn, 4 Zn		40000		20			Steam and structural bronze, *expansion joints*, gears, valves, bearings	
771	Navalium		96.6 Al, 0.1 Cu, 0.7 Sn, 0.6 Fe, 2.3 Mn, 0.24 Si							Light alloy parts	
772a	Naval Journal Bearing, Spec. "H"		83 Cu, 14 Sn, 3.5 Pb		50000		9.5			Bearings	
772b	Naval Journal Bearing, Spec. "Hx"		83 Cu, 14 Sn, 3.5 Pb							Bearings	
773a	Naval Phosphor Bronze (P-c) cast		88 Cu, 8 Sn, 4.0 Zn, 0.5 P		57000 35000	31000	 18			Bearings, gears, marine parts	Resists sea water corrosion U. S. N.-46 B5f
773b	Naval Phosphor Bronze (P-r) rolled		94 Cu, 3.5 Sn, 0.5 P		80000	60000	12			Pump parts, valve stems, bolts	Resists sea water corrosion U. S. N.-46 B14d
774	Naval Valve Bronze		88 Cu, 6.5 Sn, 4 Zn, 1.5 Pb		58000 32000	29000	9 17		80	Valve stems, valve seats, valve bodies	"Composition M" U. S. N.-46 B 8d
775	Navy Antifriction Metal Grade 1	M–561	90-93 Sn, 3.5-5 Sb, 0.5 Pb, 3.5-5 Cu		10770				18 30	Antifriction metal, bearings, Babbitt metal, aircraft engine bearings	
776	Navy Antifriction Metal Grade 2	M–561	87.5-89.5 Sn, 7-8 Sb, 0.35 Pb, 3.5-4.5 Cu, 0.10 As							Antifriction metal, genuine Babbitt, automotive engine bearings	For moderately severe service
777	Navy Antifriction Metal Grade 3	M–561	83-85 Sn, 7.5-8.5 Sb, 0.35 Pb, 7.5-8.5 Cu, 0.10 As							Hard Babbitt, bearings	For moderately heavy pressures
778	Navy Antifriction Metal Grade 4	M–561	80.5-82.5 Sn, 12-14 Sb, 0.25 Pb, 5-6 Cu, 0.10 As							Hard bearings	For heavy pressure and high speeds
779	Navy Antifriction Metal Grade 5	M–561	61-63 Sn, 9.5-10.5 Sb, 24-26 Pb, 2.5-3.5 Cu, 0.15 As							Electric motor bearings	For low pressures and high speeds
780	Navy Antifriction Metal Grade 6	M–561	4.5-5.5 Sn, 14-16 Sb 79-81 Pb, 0.50 Cu, 0.20 As							Cheap Babbitt bearing	For light service
781	Navy Antifriction Metal Grade 7	M–561	9-10 Sn, 14-16 Sb, 74-76 Pb, 0.50 Cu, 0.20 As							Cheap Babbitt bearing	For light service
782	Navy Gear Bronze		84-86 Cu, 13-15 Sn, *1.5 Zn*, 0.5 P		30000		1 8			Gears and worm wheels	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
783	Navy "N" Alloy		3 Mn, 6 Cu, bal. Al		20000		8			General castings	Corrosion resisting
784	Navy No. 4 Alloy		96 Al, 4 Cu		15000		5			Light alloy parts, boxes, covers, face plates	
785	Necroni Steel	M–232	0.30-0.35 C, 3.5 max. Si, 0.5 Ni, 1.0 Cr, bal. Fe	Oil treated	110000	80000	18	46	200	Gears	(Discontinued)
					220000	185000	6	10	555		
786	Neloy	M–232	0.3-0.4 C, 1.0-1.25 Mn, bal. Fe	Heat treated	190000	175000	14	45	364	Gears	Tough-hard after heat treatment
				H_2O quench	220000	195000	8	25	477		
787	Neonalium	M–283	86-94 Al, 6-14 Cu, 0.4-1.0 other elements	Heat treated	22800	11000		1.0	80	Light alloy parts	Good heat resistance
					34000	16000		0	120		
788	Neor	M–40	2.3 C, 13 Cr, 0.6 Si, 0.6 Ni							Press tools, punches, dies, reamers, broaches, gages	Remarkable resistance to abrasion
		M–289	0.4 Mn, bal. Fe								
789	Nergandin	M–188	70 Cu, 28 Zn, 2 Pb		89000		10		135	Condenser tubes	Resistant to sea water corrosion
		M–282									
790	Nevastain, Grade A	M–15	0.3-0.35 C, 12.5-13.5 Cr, bal. Fe	Annealed	90000	40000	20	40	195	Stainless cutlery, tanks	Corrosion resisting
		M–76			105000	50000	25	50	210		See Silcrome L-12
				Hardened	225000	185000	9	25	420		
791	Nevastain, Grade B	M–15	0.65-0.70 C, 16.5-17.5 Cr, bal. Fe	Annealed	90000	40000	26	50	180	Stainless cutlery	Corrosion resisting
		M–76			95000	45000		45	210		See Silcrome M-17
792	Nevastain, Grade RA	M–15	0.10 max. C, 16 Cr, 1.0 Cu, 1.0 Si, 0.40 Mn, bal. Fe	Annealed	75000	40000	40	75	150	General fabricated products (stainless)	Stainless
		M–76		Oil treated	90000	50000	30	60	170		See Silcrome R.A.
					103000	98000	25	63.5	217		
793	Newloy	M–310	64 Cu, 35 Ni, 1 Sn							Base metal for table ware, resistance wire	Good corrosion and acid resisting
794	N. G. F. Alloy		1-1.5 Cu, 0.75-2.0 Mn, bal. Al		25000	18000	4.7			Light alloy castings	Naval Gun Factory alloy
795a	Nichroloy I		1V, 23 Ni, 20 Cr, 1 Mn, 0.5 Al, bal. Fe		60000					Heat treating boxes, resistance wire	High heat resistance
795b	Nichroloy II		40 Ni, 7 Cr, 3 Mn, bal. Fe							Heat treating boxes, resistance wire	
795c	Nichroloy III		75 Ni, 16 Cr, 3 Mn, bal. Fe		112000	80000	25	50	210	Heat treating boxes, resistance wire	
796a	Nichrome I	M–44	65 Ni, 11.18 Cr, 22.36 Fe, 0.70 Mn, 0.26 Si		100000				157	Electrical resistance units, annealing pots, heating elements	Heat and corrosion resisting
									187		Discontinued
796b	Nichrome II	M–44	66 Ni, 22 Cr, bal. Fe,		100000					Electrical resistance units, annealing pots, heating elements	Heat and corrosion resisting
											Discontinued
796c	Nichrome III	M–44	85 Ni, 15 Cr		110000					Electrical resistance units, annealing pots, heating elements	Heat and corrosion resisting
796d	Nichrome IV	M–44	82.36 Ni, 15.9 Cr, 0.84 Fe, 0.48 Mn, 0.16 Si		120000	60000	25	35	183	Electrical resistance units, annealing pots, heating elements	Heat and corrosion resisting
											Discontinued
797	Nichro-Zink	M–158	Zn, Cu		16000		2		40		Easily soldered
					18000						Discontinued
798	Nickel	M–68	99 min. Ni + Co, 0.25 max. Cu, 0.5 max. Fe, 0.05 max. Si, 0.02 max. C, 0.25 max. Al, 0.35 max. Mn							Coinage, constituent of alloys, utensils, electrical resistance wires	Malleable, ductile, corrosion resisting
		M–121		Annealed	65000	20000	50	75	115		
				Hot rolled	85000	30000	35	50	140		
799	Nickel Alloy, Grade A	M–8	65 Cu, 17 Zn, 18 Ni	Plates	58000		32		77	Silver plated ware, plumbing pipes, resistance wire	High resistance
		M–33			95000		2		158		
800	Nickel Cast Iron No. 1	M–68	3.0 Ni, 1.5 Si, 0.8-1.0 Cr, C, bal. Fe		50000				385	Cast gears	Wear resisting casting
801	Nickel-Chrome-Copper		80-85 Ni, 20-25 Cr, 15-20 Cu							Electric irons, percolators	
802a	Nickelene		5-30 Ni, 52-80 Cu, 10-35 Zn							Electrical instruments, resistance wires, thermocouples	German silver

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
802b	Nickelene		13 Ni, 55 Cu, 21 Zn, 2 Sn, 10 Pb							Resistant wires	
803	Nickeloid	M-182	Ternary Cu, Ni, bal.		36000				180	Valves for severe steam	
					50000				200	services, valve seats	
804	Nickeloy		93.8 Al, 4.15 Cu, 1.41 Ni		20000			5		Automotive engine parts	
805a	Nickel Silver Grade A	M-98	65 Cu, 18 Ni, 17 Zn		55000		50		50	Cutlery, cheap jewelry,	Corrosion
					110000		2		175	resistance wire, auto fittings, plumbing	resisting
805b	Nickel Silver Grade B	M-98	55 Cu, 18 Ni, 27 Zn				40		50	Cutlery, cheap jewelry,	Corrosion
							1		175	resistance wire, auto fittings, plumbing	resisting
806	Nickel Uranium Steel		0.3-0.4 Ni, 0.2-0.4 U, 0.2-0.8 C, bal. Fe		183000	159000	8.5	34		General engineering applications	
					209000	175000	9.0	31			
807	Nico No. 1		Up to 23 Sb, 4-5 Sn, 2-3 Ni, bal. Pb						36	Bearings	White Metal
808	Nico No. 2		10 Sb, 10 Sn, 1 Ni, bal. Pb						29	Bearings	White Metal
809	Nicral "A"	M-93	9.1 Ni, 0.5 Cr, 0.5 Cu, 0.5 Mg, bal. Al	Annealed	20000	10000	24		40	Light Al alloy parts	High strength and workability
				Heat treated	46000	41000	8		120		
810	Nicral "B"	M-93	0.5 Ni, 0.25 Cr, 0.25 Cu, 0.25 Mg, bal. Al	Annealed	17000	6000	27			Light Al alloy parts	For stamping and forming
				Heat treated	38000	32000	12				
811	Nicral "C"	M-85	0.30 C, 1.5 Mn, 1.5 Si, 26.5 Ni, 11.0 Cr, bal. Fe							Carburizing boxes, lead pots, salt baths, crucibles, pyrometer tubes	
812	Nicral "X"	M-93	1.0 Ni, 0.5 Cr, 1.0 Cu, 0.5 Mg, bal. Al	Extruded	35000	24000	16			Light Al alloy parts, extruded structural shapes	Formerly known as Super-Hyblum
				Heat treated	53000	43000	15.5				
813	Nika									Bearings	Tough and non-corrosive
814	Nikrome	M-240	0.40 C, 0.8 Cr, 1.5 Ni, bal. Fe	Hot rolled	125000	105000	16	50	300	Drive shafts, axles, spindles, roll mandrels, pins	
815	Nimol	M-68	75 cast iron, up to 14 Cr,		20000		2.5		120	Retorts for fuel carbonization,	Superseded by Ni-Resist
		M-86	14 Ni, 6 Cu		27000		1.5		240	pump and engine liners, pans for fusing caustic alkalis	
816	Ni-Resist	M-68	1.5-4.5 Cr, 1.25-2.5 Si,	Casting	20000		2	0	130	Pipes, valves, pumps, propellers, hydraulic turbines, oil burners, automotive engine pistons and sleeves	Non-magnetic,
		M-271	1-1.5 Mn, 13-17 Ni, 5-7 Cu, 2.25-3.00 total C, bal. Fe		35000				170		Corrosion and heat resisting Austenitic cast iron
817	Nirosta KA2	M-15	0.16 max. C, 0.50 max. Mn,		85000	30000	60	75	135	Cutlery, stainless articles	Non-magnetic, austenitic
		M-72	0.50 Si, 17-20 Cr, 7-10 Ni, bal. Fe		95000	40000	55	50	150		Scaling point—1700° F.
818	Nirosta K A 4	M-105	0.25 C, 0.50 Mn, 0.5-0.75 Si 17-20 Cr, 8-10 Ni, 2-4 Mo, bal. Fe	at 70°F.	105000	49000	55	62		Pipe fittings, pump casings, impellers, shafts	High corrosion resistance. Austenitic Same as "Standard alloy K A 4."
				at 1110°F.	70000	22000	30				
				at 1830°F.	9000	4500	47				
819	Nirosta 18-8	M-184	0.6-1.25 Si, 8-10 Ni, 16-19 Cr, 0.35 max. C, bal. Fe							Corrosion resisting articles	Now Michiana No. 49
820	Nirosta 19-9-4	M-184	0.6-1.25 Si, 8-12 Ni, 18-20 Cr, 0.35 C, 2-4 Mo, bal. Fe							Hot sulfuric acid tanks	Corrosion resistant & hot H_2SO_4 under pressure
821	Nirosta 25-20	M-184	1.5 max. Si, 18-22 Ni, 24-27 Cr, 0.35 max. C, bal. Fe							Applicable to temperature and corrosion work where temperature exceeds 1400°F.	Heat & corrosion resistant up to 1400°F.
822	"Ni" Stainless Steel	M-73	0.3-0.4 C, 13-15 Cr, 1.5-2.0 Ni, bal. Fe							Pump rods, pistons, valves, cutlery	Corrosion resistant. Resists heat up to 1000°F.
823	Ni-Tensiliron	M-68	2.5-3.1 C, 0.5-0.9 Mn, 1.2-2.75 Si, 1-4 Ni, 0-1 Mo, 0-.5 Cr, bal. Fe		40000				220	Gears, turbines, casings and rotors, valves, bushings	"Ni-Tensile"
					100000				350		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
824	Nitralloy 135, Type G	M-76	.36 C, .4-.7 Mn, .2-.4 Si, .85-1.2 Al, 1.49 Cr, .18 Md, bal. Fe	Heat treated	224000 104000	180000 85000	11 18	36 59	445 200	Nitrided gears, shafts, cams, clutches rollers	Nitriding steel
825	Nitralloy 125, Type H	M-76	.23 C, 4-.7 Mn, .2-.4 Si, .85-1.2 Al, 1.58 Cr, .2 Mo, bal. Fe	Heat treated						Nitrided gears, shafts, cams, clutches, rollers	Nitriding steel
826	Nittany Free Turning Brass Rod	M-122	61.84 Cu, 3.0 Pb, bal. Zn	Cold drawn	66000	50000	37	45	124	Brass screw machine parts	Free turning brass
827	"N M" Steel	M-151 M-117	3-5 Ni, 0.3-0.7 Mo, 0.2-0.4 C, 0.3-0.5 Mn, bal. Fe		250000	210000	8	25	51	Aircraft and automobile parts	
828	Nogroth	M-162	Cr, Ni, white cast iron		86000 89000	50000 56000	10		200	Bearings, bushings, pump liner, piston, valves	Abrasive resisting Discontinued
829	Noheet	M-581	98 Pb, 1.4 Na, 0.11 Sb, 0.1 Sn							Bearings, metal or die cast	Anti-friction metal
830	Noil	M-134	20 Sn, 80 Cu						158	Piston rings	
831	Nomag	M-54 M-86	Cast iron +6Mn +10 Ni		18000 20000					Electrical construction, switch covers, resistance grids	Non-magnetic Austenitic
832	Non-Corrodite No. 25	M-186	22.2 Cr, 0.4 Ni, 1.57 Si, 1 Mn, 0.15 Cu, 0.34 C, bal. Fe							Castings, corrosion resisting parts	Non-corrosive Stainless
833	Nongram		87 Cu, 11 Sn, 2-3 Zn		35000		16		62	Bushings, bearings, valves	
834	Non-Pareil	M-562	78 Pb, 17 Sb, 5 Sn						24	Bearings, solders	Antifriction Metal M. P. 300 °C.
835	Novo Steel	M-345	C, 19 W, 2.9 Cr, 0.6 Co, bal. Fe		130000		5			Tools, high speed tools and cutters	High speed steel
836	N. P. L. "Y" Alloy	M-311 M-338	93 Al, 2 Ni, 1.5 Mg, 4 Cu	Chill cast Heat treated	29000 43000	25000 34000	1 3		80 105	Airplane castings, pistons, crankcases, cylinder heads	Corrosion resistant
837	Nuremberg Gold		90 Cu, 7.5 Al, 2.5 Au							Cheap jewelry	Gold color
838	O.B. Alloy No. 1 A	M-94	88.13 Cu, 8.08 Sn, 0.11 Pb, 3.72 Zn	Cast	41400	20300	25		70	In conjunction with non-ferrous catenary materials. Electric motor bearing	Iz-14.2
839	O. B. Alloy No. 3	M-94	88.62 Cu, 7.5 Sn, 1.48 Pb, 2.40 Zn	Cast	38600	11800	28		66	In conjunction with non-ferrous catenary materials. Electric motor bearing	
840	O. B. Alloy No. 4 B	M-94	82.17 Cu, 2.87 Sn, 7.05 Pb, 7.81 Zn	Cast	31200	13500	29		53	Valves	Iz-10.5
841	O. B. Alloy No. 5	M-94	84.42 Cu, 2.75 Sn, 2.98 Pb, 9.84 Zn	Cast	34300	13300	37		55	Electric railway appliances	Iz-15. Discontinued
842	O. B. Alloy No. 5-A	M-94	88.38 Cu, 5.09 Sn, 1.94 Pb, 4.58 Zn	Cast	36800	16300	37		58	Electric railway appliances	Iz-14.8 Discontinued
843	O. B. Alloy No. 16	M-94	95.05 Cu, 4.62 Sn, 0.11 Zn, 0.22 P	Cast	36300	16400	26		64	Trolley wheels	Iz-20
844	O. B. Alloy No. 17	M-94	85.77Cu,4.48Sn,3.43Pb,6.31Zn	Cast	36000	16600	38		63	High grade valves	Iz-13.2. Discontinue
845	O. B. Alloy No. 25	M-94	89.56 Cu, 7.12 Al, 3.22 Si, 0.08 Fe	Cast	74500	54600	68		163	In conjunction with catenary construction	Iz-9.7
846	Ohio Air Die	M-34 M-115	1.55 C, 12 Cr, 0.85 V, 0.80 Mo, 1.40 Co, bal. Fe							Dies	Non-deforming, air hardening
847	Ohio Die Steel	M-34 M-115	1.55 C, 12 Cr, 0.85 V, 0.4 Co, 0.8 Mo, bal. Fe		105000	60000	13	18	212	Dies, roller threading dies, punches, gages, shear blades	Non-warping, wear resisting
848	Ohmaloy	M-61	13 Cr, 0.6 C, bal. Fe, 4 Al	Cold rolled Annealed	128000 85700	103800 67640	5 33			Resistance wire, rheostats, resistors	Brittle above 1600 °F Superseded by "Fecraloy"
849	Oil Die	M-35	0.85 C, 1.6 Cr, 0.45 W, bal. Fe	Annealed					190	Dies, blanking, piercing, shaving, notching & trimming dies	Non-shrinking
850	Oil Hardening Steel		1.3-1.8 Mn, 0.8-1.0 C, bal. Fe						90 100	Reamers, punches, hobs, dies	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
851	Oilite	M–211	88.5 Cu, 10 Sn, 1.5 graphite		12500 40000				30 60	Bearings for auto, aero, electrical and farm industries	Self-oiling bearing material
852a	Oker—sheet		69 Cu, 30 Zn, 0.97 Pb		40000		35		37	Tubes, sheets	
852b	Oker—sheet		55 Cu, 45 Zn, 0.5 Sn							Sheets, architectural purposes	
852c	Oker—cast		72 Cu, 24 Zn, 1.1 Pb, 2.3 Fe		60000		33	30.6	86	Turbine parts	
853	Omega	M–24	0.6 C, 0.7 Mn, 2.15 Si, 0.2 V, 0.45 Mo, bal. Fe	Heat treated	340000 320000	310000 280000	5 6	.11 21		Pneumatic chisels, rivet sets, punches, blacksmith tools	Iz-7-15. Resists shock and fatigue
854	Omega Brand Nickel Silver, Alloy No. 3	M–98	65 Cu, 18 Ni, 17 Zn	Sheet	55000 90000		40 1			Plated silver ware, cutlery, hardware	Corrosion resisting
855	Omega Brand Nickel Silver, Alloy No. 7	M–98	55 Cu, 18 Ni, 27 Zn	Wire	60000 160000		50 1			Springs for electrical, radio and telephone equipment, resistance wire	Corrosion resisting
856	Omega Brand Phosphor Bronze No. 30	M–98	95.5 Cu, 4.3 Sn, 0.2 P	Wire	45000 160000		60 0.5			Springs and contacts in radio and electrical equipment, screen plates for paper manufacturing	El-Res.-11.6 M.E.-16,000,000
857	Omega Brand Phosphor Bronze No. 47	M–98	91.6 Cu, 8.0 Sn, 0.15 P	Sheet	51000 130000		75 1.0			Paper mill equipment	El. Res.-14.8
858	Omega Brand Phosphor Bronze No. 209	M–98	90 Cu, 10 Sn, trace P	Sheet	55000 130000		80 1.0			In sulfide solutions in paper mill machinery	El. Res.-16.1
859	Ontario	M–76	1.48 C, 11.58 Cr, 0.29 V, 0.75 Mo, 0.29 Mn, 0.34 Si, bal. Fe	Annealed Hardened	102250 171250 227000		18.5 1.5	29.7	217 600	Dies, punches, shear blades, blanking, stamping and cold forming dies	Resistant to abrasion Air hardening
860	Oranium Bronze "M"		95 Cu, 5 Al		100000		10			Hardware	Medium
861	Oranium Bronze "M.H."		92 Cu, 8 Al		130000		4			Hardware	Medium hard
862	Oranium Bronze "S"		97 Cu, 3 Al		30000		60			Hardware	Soft
863a	Oreide "A"		68 Cu, 32 Zn, 0.5 Sn		60000		30			Hardware	Tobin Bronze
863b	Oreide "B"		90-81 Cu, 10-18 Zn, 0-4.9 Sn							French gold, carriage and harness hardware, ornamental work	
864a	Ormulu, small	M–77	94 Cu, 5.9 Sn		33000 42100	19700 19600	34 20	32 24		Switches, contacts, electrical parts, springs	Discontinued
864b	Ormulu large	M–77	91 Cu, 6.5 Sn, 3 Zn		30000 40000		25 15	23 14		Instruments, utensils, bearings hardware	Discontinued
864c	Ormulu	M–77	58 Cu, 16.7 Sn, 25.3 Zn							Bushings, hardware	Discontinued
865	Otto's Speculum		69 Cu, 31 Sn		40000	10000	38			Telescope reflectors, mirrors	
866	Ounce Metal	M–126	85 Cu, 5 Sn, 5 Zn, 5 Pb		27000 33000		20 15	20 15	50 59	Bearing metal, casting valves carburetor and pump parts	Composition Brass also called "Std. Red Composition"
867	Packing, Piston	M–258	73-76 Pb, 12-14 Sn, 10-15 Sb		11000				26	Metallic packing	
868	Dowmetal G	M–43	89.9 Mg, 10 Al, 0.1 Mn	Sand cast Heat treated	22000 38000	12000 20000	1–3 1–4		55 80	Heat treated castings, requiring high yield point and hardness	
869	Packing, Valve Rod		82 Sn, 10 Pb, 8 Cu							Metallic valve packing	Pouring temp. 491 °C.
870	Paktong (Packfong)		32-41 Ni, 26-40 Cu, 16-37 Zn, 0-2.6 Fe		130000		2			Tableware and ornamental uses	Nickel Silver
871	Palau		60 Ni, 20 Pt, 10 Pd, 10 V							Jewelry, chemical apparatus	Pt substitute, White gold
872	Palau		20 Pd, 80 Au							Jewelry, chemical apparatus	Pt substitute, White gold
873	Palladium	M 558	100 Pd							Constituent of alloys, journal bearings, springs and balance wheels in watch making. For coated silvered vessels	Malleable, ductile, hard
874	"P" Alloy		0.11 Fe, 0.11 Si, bal. Al		8000		34			Light alloy parts	
875	Panther, Special	M–76	C, W, Cr, V, 5 Co, bal. Fe							High speed tools and cutters	Severe duty high speed steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
876	Panther, Super	M-76	.8 C, 18 W, 4 Cr, 2 V, 7 Co, bal. Fe							High speed tools	Super high speed steel
877	Para Steel (Cyclops)	M-39	0.66-1.35 C, 0.4 Cr, 1.6 W, 0.2 V, bal. Fe							Cutters, dies, taps, drills, shear blades, punches	Dense deep hardening steel
878	Par-Exc	M-115	0.50 C, 2 W, 1.65 Cr, 0.25 V, bal. Fe	Annealed	70000		30	64	165	Punches, chisels, shear blades	Extremely tough
				Heat treated	245000		5	18	525	cutters, dies, pneumatic tools, hot working dies	
879	Parision Alloy		69 Cu, 19.5 Ni, 6.5 Zn, 5 Cd							Cheap jewelry	Gilt finish
880a	Parr		80 Ni, 15 Cr, 5 Cu		73000			15	137	Chemical machinery parts	Stainless
880b	Parr		66.6 Ni, 18 Cr, 8.5 Cu, 3.3 W, 2 Al, 1 Mn, 0.2 Ti, 0.2 B							Chemical machinery parts	Corrosion resistant
881	Parson's Alloy	M-129	56 Cu, 41.5 Zn, 1.2 Fe, 0.7 Sn, 0.1 Mn, 0.46 Al		70000		25		119	Propeller blades, valve stems, engine frames, machine parts	
882	Parson's Manganese Bronze	M-179	Cu alloy	Forged	64000	28000	35		120	Pump and sluice valve spindles	Non-corrosive,
				Rolled	70000	32000	34		130	propellers, marine engine parts,	resists mild acids
				Extruded	70000	38000	28			condenser tubes, valves	
883a	Parson's White Brass	M-179	62 Sn, 35 Zn, 3 Cu		12250					Marine & automobile bearings	Hard, tough alloy
883b	Parson's White Brass	M-309	74 Sn, 5 Cu, 7 Sb, 14 Pb							Marine & automobile bearings	
883c	Parson's White Brass	M-179	65-70 Sn, 30-25 Zn, 5 Cu							Marine & automobile bearings	
883d	Parson's White Brass	M-309	81-76 Sn, 4.5-5 Cu, 6-11 Sb, 3.5-13 Pb		12200	10700	2.7	2.5	38	Marine & automobile bearings	
884a	Partinium		89 Al, 7.4 Cu, 1.7 Zn, 1.3 Fe 1.1 Si		19000	12000	2.5		50	Light aircraft and automobile parts	Similar to Alcoa No 113
884b	Partinium		96 Al, 2.4 Sb, 0.8 W, 0.6 Cu, 0.2 Sn						65	Light aircraft and automobile parts	
885	Patent Cobalt-Chrome Steel	M-40	1.27-1.43 C, 11.75-13.75 Cr, 2.7-3.3 Co, 0.60 max. Ni, 0.55-0.85 Mo, 0.35 max. Mn, 0.6 max. Si							Air cooled aeronautic engine valves, blanking, trimming, forming and shearing tools	Air hardening, non-deforming. Resists wear
886a	Pattern Alloy		90 Al, 8 Cu, 2 Sn		20000		6			Pistons	Similar to Alcoa
					29000		4				No. 12
886b	Pattern Alloy		87 Pb, 13 Sb		18000		11	10		Bearing	
887	Peerless "A"	M-38	0.3C, 9W, 3.25Cr, 0.25V, bal. Fe							Hot-heading and forging dies, gripping dies, swedges	
888a	Pen Metal		67 Au, 25 Cu, 8 Ag		145000					Pen points	
888b	Pen Metal		85 Cu, 13 Zn, 2 Sn							Pen points	
889	Perceit		55-80 Co, 20-35 Cr, 0-10 W		40000					High speed tools and dies	High speed steel
					130000				570		
890	Percy Aluminum Bronze		90-86 Cu, 7.5-13 Al, 0-2 Pb, 0-1.5 Mn	Rolled	53000		9			Bearings, stripper nuts	
				Cast	12000		30	30			
891	Perlit (Perlitguss)	M-160	2.4-3.5 C, 0.5-1.5 Si, 0.2-0.6		30000				200	Automotive engine blocks,	Nickel cast iron
		M-527	P, 0.6-1.0 Mn, Ni, Cr, bal. Fe							brake drums	Wear resistant, tough
892a	Permalloy	M-205	39-81 Ni, 61-19 Fe							Loading material for signaling conductors, audio frequency transformers	Greater magnetic qualities than iron
892b	Permalloy, Standard	M-22	78.5 Ni, 21.5 Fe, 0.04 C, 0.37 Co, 0.022 Mn							For loading submarine cables	High elec. res.
893	Permanite		Co, Cr, W, bal. Fe							Permanent magnet steel	High coercive force
894	Permant Steel (Firth)	M-56	C, 35 Ni, bal. Fe							Scientific instruments, scales, clocks	"Firth Brown N-270"
895	Perminvar (25-45)	M-269 M-22	45 Ni, 25 Co, 30 Fe							Electric communication circuits	B=1000
896	Permite	M-6	0.5 Si, 10 Cu, 1 Fe, 0.4 Mg, bal. Al		40000	38000	0.5		120	Internal combustion engine pistons	Coef. exp.-0.0000127
897	Petite Iron	M-153	Cr, Ni, Y, bal. Fe							Cams, forming and spinning rolls, machine slides, forming dies	Wear resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
898	Pewter		85-90 Sn, bal. Pb							Household utensils, dishes, ornamental articles	Soft, ductile, easily worked
899	Phenix	M-68	75 Fe, 25 Ni		104000	56000	45	68		Resistance alloy	Sc-21
900	Phoenix	M-35	0.95 C, 3.95 Cr, bal. Fe	Annealed					190	Hot grip dies	Resists shock, abrasion and heat
901	Phono Bronze	M-141	98.74 Cu, 1.25 Sn, 0.008 Fe		,90000		4	,70		Trolley wire, hardware	Resists air corrosion
902a	Phosphor Copper Grade A	M-165	14 min. P, 0.15 max. Fe, 99.75 min. P+Cu		25000		8			Bearings and machine castings	
902b	Phosphor Copper Grade B	M-165	10 min. P, 0.15 max. Fe, 99.75 min. P+Cu							Bearings and machine castings	
903	Piston Rings (Seraing)		89 Cu, 9 Zn, 2 Sn		35000		16			Piston Rings	
904	Pitaloy No. 90	M-236	0.3 C, 0.1 V, 0.9 Mn, 0.35 Si, 1.6 Ni, bal. Fe	Cast	90000	60000	25	50		General Castings, locomotive frames, roll mill machinery, cross-heads	
905	Pitaloy No. 100	M-236	0.35-0.40 C, 1.0 V, 0.9 Mn, 0.35 Mo, 0.35 Si, bal. Fe	Cast	100000	70000	22	40		General Castings, locomotive frames	
906	Placet		60 Ni, 20 Fe, 15 Cr, 5 Mn	Cast	50000		1		179	Resistance alloy	
907	Plastic Metal		81 Sn, 9.5 Cu, 8.6 Sb, 1.4 Fe						21 24	Bearings	
908a	Platina, Birmingham	Eng.	46.6 Cu, 53.15 Zn, 0.25 Fe							Hardware, ornaments	
908b	Platina, Birmingham	Eng.	20.25 Cu, 79.4 Zn, 0.33 Fe							Hardware, ornaments	
909	Platina, Plating		46.5 Cu, 53.5 Sn							Hardware, ornaments	
910	Platine		57 Zn, 43 Cu							Ornaments	Weak and brittle
911	Platinite	M-104	0.15 C, 46-42 Ni, 54-58 Fe		78000	48000	45			To replace Pt. in electric	Heat resistant
				Annealed	90000	60000	30			light bulbs	Coef. exp. of glass
912	Platinoid A		60 Cu, 24 Zn, 14 Ni, 2 W		57000		33			High resistance alloy, heating elements, thermocouples	Tungsten German Silver
913	Platinoid B		54 Cu, 20 Zn, 25 Ni, W 0.5 Fe, 0.2 Mn		72000		30		89	High resistance alloys, heating elements, thermocouples	Tungsten German Silver
914	Platinum	M-558	100 Pt	Annealed	35000				47	Jewelry, alloys	M.P.-1773°C.
				Hard	53000				97		
915	Plykrome	M-72 M-318	Composite steel plus welded stainless surface high Cr, high Ni ferrous alloy							Stainless steel parts, tanks, vessels	Stainless steel sheet welded onto steel surface
916	Plymite	M-193	W								Resistant to abrasion
917a	P.M.G. Alloy	M-117	95.5 Cu, 3 Si, 1.5 Fe	Sand cast	53000	22000	30		100	Pump parts, gears, shafts,	Substitute for
		M-319		Chill cast	53000	22000	30		150	trolley wheels, marine fittings	Admiralty Gun Metal
917b	P.M.G. Alloy	M-319	91.5 Cu, 3.5 Si, 1.5 Fe, 4 Zn	Forged	70000	28000	35		140	Spindles, stems, gears, shafts	
917c	P.M.G. Alloy	M-319 M-309	95.5 Cu, 3 Si, 1.5 Fe 1.5-1.8 Fe, bal. Zn	Cold drawn	95000	45000	30		150	Nuts, bolts, screws, valve stems, pump spindles, shafting	Corrosion resistant
918	Poldi, E.Z.H.	M-96 M-36	0.95-1.05 C, bal. Fe	Annealed	91000				180	Cold dies, punches, tools, short shear blades	Tool steel
919	Poldi No. 2002	M-96	2 C, 12 Cr, bal. Fe	Annealed	102000				205	Cutting dies, punches, milling cutters, reamers, broaches	For highly stressed parts
920	Poldi, Stabil	M-96 M-36	0.8 C, 2.0 Mn, bal. Fe, V	Annealed	107000				215	Blanking dies, threading tools, milling cutters, gages	Oil hardening, non-shrinking
921	Poldi, Tenax-N	M-96 M-36	0.45 C, 1.0 Cr, 2 W, bal. Fe		102000				205	Hard chisels, tools, punches, dies, hot shear blades	Special endurance steel
922	Pressure Die Casting	M-122	62 Cu, 0.75 Pb, 0.50 Sn, bal. Zn	Die cast	58000	36000	6	7	124	Plumbing fixtures, hardware	Pressure die casting
923	Presto	M-32	1.4 Cr, 1.05 C, bal. Fe							Ball and roller bearings	Obsolete

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
924	Projectile Steel		2.4 Cr, 0.8 C, 0.4 Mn, 0.2 Si, bal. Fe		110000 89000	80000 51000	18 20			Projectiles	
925	Promal	M–228	1.8 total C, 0.4 combined C, 1.0 Si, 0.3 Mn, bal. Fe	Cast	65000 70000	45000 50000	14 10		170 190	Cast chains, sprockets, gears, valve parts, wrench parts, brake drums	Malleable cast iron
926	Proplatinum		72 Ni, 23.6 Ag, 3.7 Bi, 0.7 Au							Substitute for Pt	White Alloy
927	Purple Cut Steel	M–76	1.2 C, 1.2 Cr, 1.2 Mo, 0.25 V 1.2 Si, 0.40 W, 0.3 Mn, bal. Fe							Taps, threading dies, broaches, milling cutters, drills and tools, punches	Retains cutting edge at purple heat
928a	Pyrasteel	M–146	.3 C, 4-8 Ni, 8 Cr, bal. Fe							Carburizing boxes, furnace linings and grids, heat resisting parts	Can be welded, deep drawn and riveted
928b	Pyrasteel	M–146	.3 C, 15 Ni, 14 Cr, bal. Fe								
928c	Pyrasteel	M–146	.3 C, 25 Ni, 20 Cr, bal. Fe								
928d	Pyrasteel	M–146	.3 C, 35 Ni, 25 Cr, bal. Fe								
929	Pyrocast	M–192	Ni, > 20 Cr, bal. Fe, C		65000	65000	0	0		Heat treating and carburizing boxes	Resistant to high temp.
930	Pyromic No. 1	M–108	Ni, Cr, bal. Fe							Electrical resistance	Obsolete
931	Pyromic	M–108	80 Ni, 20 Cr		121000					Electrical resistance	Formerly "Pyromic No. 2"
932	Calomic	M–108	65 Ni, 15 Cr, 20 Fe		115000					Electrical resistance	Formerly "Pyromic No. 3"
933	Pyrophoric Alloy		10 Mn, 10 Sb, 20 Cr, 15 Ti							Lighters for gas stoves, cigarette lighters	Produces violent sparks when abrased
934	Python	M–76 M–253	C, V, bal. Fe							Pneumatic tools, chisels, dies, shear blades	Shock resisting
935	Q-Alloy Chrome K-1	M–59	Ni, Cr, bal. Fe							Furnace parts not subject to high sulfur fumes	High heat resistance to 2200 °F.
936	Quality Steel	M–237	1.2-1.5 Cr, 4.5-5.0 Ni, 0.3-0.5 Mn, 0.3-0.35 C, bal. Fe		226000		15	45		Gears	Air hardening
937	Queen's Metal		88.5 Sn, 7.0 Sb, 3.5 Cu, 1.0 Zn							Utensils	Resists tarnishing
938	Radianite	M–73	0.7-0.8 C, 16.5-18.0 Cr, bal. Fe							Cutlery, stainless articles	Keen cutting edge
939	Radio Metal "A"	M–108	50 Fe, 45 Ni, 5 Cu							Magnetic alloy for the cores of small transformers	High permeability
940	Vascoloy Ramet Grade M	M–329	Ta C + WC + Ni		250000 30000					Tools, cutting tools, wire drawing dies	Hard cutting tool
941	R. C. F.	M–200	Cr, C, Ni, bal. Fe							Wear resistant cast steel parts	Discontinued
942	Helve	M–502	C, bal. Fe								
943a	Red Brass	M–8	85 Cu, 15 Zn	Tubes & sheets	42000 50000	20000 40000	43 4	68		Salt water pipes, plumbing, hardware	Corrosion resistant
943b	Red Brass	M–33	80 Cu, 20 Zn	Plates & sheets	43000 85000	18000 60000	50 4		53 150	Pipes, hardware	Corrosion resistant
944	Red Casting Brass	M–165	85 Cu, 5 Sn, 5 Pb, 5 Zn		27000		18			Castings, hardware	GM-No. 4041M
945	Red Cut Cobalt	M–115 M–34	0.72 C, 17.25 W, 4 Cr, 4.5 Co, 1.0 V, 0.5 Mo, bal. Fe							Cutting and forming tools, lathe tools, planer tools, reamers, taps	Applicable for deep cutting, scaly material
946	Red Cut Superior	M–115 M–34	0.56-0.75 C, 0.25-0.40 Si, 17.5-18.5 W, 3.75-4.25 Cr, 0.95-1.15 V, bal. Fe	Annealed	105000	75000	14	17	255	Tools, blanking dies, chasers, forming tools and dies, lathe and planer tools, taps	High speed steel Wear and abrasion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
947	Red Star Die	M-34	0.60-1.40 C, 0.20-0.35 Mn, bal. Fe							Tools, general purpose tools, dies	
948	Red Star Tungsten 10 Temper	M-115 M-34	0.90-1.0 C, 0.35-0.50 Cr, 1.5-1.7 W, 0.06-0.10 V, bal. Fe	Annealed	90000	65000	22	42	190	Taps, reamers, punches, dies, finished tools, gages	Water hardening steel
949	Red Star Tungsten 12 Temper	M-115 M-34	1.25-1.15 C, 0.35-0.5 Cr, 1.5-1.7 W, 0.10-0.25 V, bal. Fe, .25 Mo	Heat treated	180000 145000	154000 120000	1 13	5 36	420 302	Taps, reamers, punches, dies, finished tools, gages	Water or oil hardening steel
950	Regular	M-73	0.30-0.40 C, 13-14 Cr, 0.50 max. Mn, bal. Fe	Heat treated Annealed	232000 200000 90000	220000 180000 48000	0 10 28	0 20 60	505 400 170	Cutlery, bayonets, dies, gages, knives, swords, needles, clippers, pump rods, pistons, cold sets, granite points	Stainless when hardened and polished
951	Regulus		75 Pb, 25 Sb							Acid valves, cocks, flanges, chemical apparatus	Hard lead
952a	Renyx, Al base	M-125	91.5 Al, 4 Ni, 4 Cu, 0.5 Si							Die castings	Corrosion resisting
952b	Renyx, Zn base	M-125	4 Al, 3 Cu, 92 Zn, 0.1 Mn							Die castings	Corrosion resisting
953a	Resistac	M-129	90 Cu, 9 Al, 1 Fe	Cast	75000	37000	15	20	135	Acid resisting castings and forgings, chemical apparatus,	Abrasion resisting
953b	Resistac	M-129	88 Cu, 10 Al, 2 Fe								
953c	Resistac	M-129	89 Cu, 10 Al, 1 Fe	Hot rolled	100000	60000	6	6		equipment, chemical apparatus	
954	Rex "A"	M-38	18 W, 4 Cr, bal. Fe, .4C							Cutting tools, drills, broaches, dies	High speed steel
955	Rezistal K A 2 (Krupp V 2 A)		0.15 max. C, 0.40-0.65 Mn, 8-9.5 Ni, 17.5-19.0 Cr, bal. Fe	Heat treated	85000 95000	30000 40000	55 60	70 75	135 145	For all welded construction which cannot receive the Strauss heat treatment after welding. Radiators, lamps, food and cooking utensils	Non-magnetic, austenitic
956	Omega Brand Nickel Silver No. 6	M-98	70.5-73.5 Cu, 16.5-19.5 Ni, 8.5-11.5 Zn, 0.35 max. Fe	Hard sheet	50000 88000		35 1			Deep drawing purposes	Corrosion resistant
957	Riverside Nickel Silver No. 7	M-98	53.5-56.5 Cu, 16.5-19.5 Ni, 8.5-11.5 Zn	Soft Hard	63000 106500					Springs, silverware, cutlery	Corrosion resistant See Ser. No. 855
958	Riverside Nickel Silver No. 1	M-98	Ni, bal. Cu							Springs for telephone, radio and electrical equipment, silverware, cutlery, hardware	Corrosion resistant Discontinued
959	Riverside Phosphor Bronze No. 30	M-98	94.4 min. Cu, 3.8-4.8 Sn, 0.05-0.35 P, 0.30 Zn, 0.10 Fe	Soft Hard	40000 55000 71000 88000		40		100	Springs and contacts in radio and electrical equipment, ignition systems, worm wheels	Resists salt water corrosion See Ser. No. 856
960	Riverside Phosphor Bronze No. 47	M-98	91 min. Cu, 7.5-8.5 Sn, 0.05-0.25 P, 0.20 Zn, 0. 10Fe	Soft Hard	53000 67000 84000 101000		70			Spring contacts, gun fittings, fuse clips, screw propellers, worm wheels	Used where forming and endurance requirements are severe See Ser. No. 857
961	Rol-Man	M-180	11-14 Mn, 1-1.3 C, bal. Fe		130000 160000		35 50		180	Woven wire screens, wear plates, pins, bushings, stokers	Austenitic steel, non-magnetic
962	Romanium		0.25 Cu, 1.75 Ni, 0.15 Sn, 0.17 W, 97.43 Al	Hard Rolled Annealed	47500 34000		5 19.4			Light alloy parts	
963	Rosin		40 Ni, 30 Al, 20 Sn, 10 Ag							Jewelry and ornamental articles	
964	Rubel Bronze H-1	M-2	41 Cu, 48 Zn, 11 Mn+Ni+Fe+Al	Cast Hot pressed	99000 105000		8 12		160 190	Propellers, piston rings, valves, rotor covers, shrinking rings	High strength, non-corrosive
965	Rubel Bronze H-2	M-2	50 Cu, 42 Zn, 8 Mn+Ni+Fe+Al	Cast Hot pressed	82000 105000		8 15		150 170	Bearing bushings, piston rods, gears, valve stems	High strength, non-corrosive
966	Rubel Bronze W-1	M-2	50 Cu, 41 Zn, 9 Mn+Ni+Fe+Al	Cast Hot pressed	70000 85000		20 25		100 110	Construction material for turbines, marine engines and locomotives	High strength, non-corrosive
967	Rubel Bronze W-2	M-2	51 Cu, 43 Zn, 6 Mn+Ni+Fe+Al	Cast Hot pressed	70000 85000		18 22		110 120	Propellers, centrifugal drums, bearing bushings, steam and safety jackets	High strength, non-corrosive

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
968	Rubelit	M–2	40-55 Cu, 1-3 Mn, 3-15 Ni, 1-2 Fe, 0.5-3.0 Al, bal. Zn	Hot pressed	69000 76000		20 5		130 190	Bushings for bearings, piston bolts, valve guides	Corrosion resistant
969	Rubel Metal		50-55 Cu, 40 Zn, 4-5 Fe+Mn		60000					Fittings, hardware	Tough with high ductility
970	Ruselite	M–99	92 Al, 4 Cu, 2 Cr, 2 Mo	Die Cast Annealed	30000 40000		6 20			Hardware, fixtures	Corrosion resisting
971	Ry-Arm	M–240	C, alloy, bal. Fe		100000	65000	20	50	200	Armature shafts	Heat treated alloy steel
972	Ry-Ax	M–240	C, alloy, bal. Fe		125000	75000	20	50	225	Axles, shafts	Heat treated alloy steel
973	Ryco	M–240	C, alloy, bal. Fe	Hot rolled	90000	70000	20	50	225	Spindles, gears, axles, arbors, tie-rods, studs, shafts	Tough
974	Ryolite "B.F.D."	M–240	C, bal. Fe, Cr, W, V							Forming dies, blanking dies, plug gages, drill bushings	Oil hardening Discontinued
975	Ryolite 4-Point	M–240	C, bal. Fe, Si, Mn							Hand tools, chisels, caulking tools, pneumatic tools	Discontinued
976	Ryolite, Diamond B	M–240	C, bal. Fe							Hammers, chisels, crowbars, wedges, sledges, drills, tools, wrenches	Tough and strong Discontinued
977	Ryolite X	M–240	C, V, bal. Fe							Hand tools, punches, bushings, hammers, arbors, drills	Discontinued
978	Ryolite XX	M–240	C, V, bal. Fe							Punches, dies, hand chisels, shear blades, turning tools, drills	Discontinued
979	Ryolite XXX	M–240	C, V, bal. Fe							Dies, tools, punches, drills, reamers, taps	Discontinued
980	Sabeco Metal	M–221	70 Cu, 9 Sn, 21 Pb							Machine bearings	Discontinued
981	Samson	M–32	0.40 C, 0.60 Cr, 1.25 Ni, bal. Fe	Heat treated	240000 110000	210000 90000	8 22	25 60	440 230	Tempered set screws, shanks for high speed tools	Obsolete
982	Sanderson	M–38	Low C, 3.5 Ni, bal. Fe							Case-hardened parts, gears, pinions	Forging steel Discontinued
983	Sandvik 2 M F	M–101	0.05 C, bal. Fe		39600	30700	51			Magnetic parts	Magnetic iron
984	Sandvik 12 W 12-C 1	M–101	0.65 C, 5.5-6.0 W, bal. Fe							Magnetic parts	Magnetic steel
985	Sandvik 13 W 12-C 1	M–101	0.55-0.75 C, 5.5-6.0 W, 0.2-0.7 Cr, bal. Fe							Magnetic parts	Magnetic steel
986	Sandvik 16 C 6	M–101	0.95 C, 2.0 Cr, bal. Fe							Magnetic parts	Magnetic steel
987	Saturn (Cyclops)	M–39	1.25 C, 3.5 W, bal. Fe							Wire drawing plates, dies, cutting tools, chasers, drills	Fast finishing steel
988	Scleron No. 1	M–320 M–116	0.1 Li, 4 Cu, bal. Al		42500		15 20			Connecting rods, machine construction	Similar to "Aeron"
989	Scovills Hardware Bronze	M–102	84-86 Cu, 1.2-2.5 Pb, bal. Zn	Annealed Drawn	35000 45000	19000	25 10	71 60		Hardware parts, screw machine parts	"Scovill No. 197 Alloy". Free from season cracking
990	Scovills Leaded Nickel Silver	M–102	46 Cu, 2.5 Pb, 11 Ni, bal. Zn	Annealed Drawn	65000 85000					General	Free cutting Hardens with cold working
991	K.S. Seewasser alloy	M–196 M–116	1.3 Mn, 2.2 Mg, 0.2 Sb, 0.7 Si, bal. Al	Sand cast Die cast Rolled	26000 32720 45500	12800 12800 36000	2.5 1.6 2	5 35	60 81 83	Furniture, interior light fixtures, wire castings, ship parts, chemical industry	Light alloy. Resists sea water corrosion
992	Self-Hardening	M–35 M–345	1.6 C, 3.75 Cr, 9.5 W, bal. Fe							Tap dies	
993	Seminole Steel	M–76	2 W, 1.3 Cr, 0.2 V, 0.4 C, bal. Fe	Annealed Heat treated	79000 300000	250000	33 6	56 12	153 527	Axle, tools, chisels, punches, swages, dies	Shock resisting tool steel
994a	Semi-Plastic Bronze		78 Cu, 16 Pb, 6 Sn		20000		10			Light machine bearings, subject only to low speeds and light loads	Leaded bronze

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
994b	Semi-Plastic Bronze		79-75 Cu, 13.5-16.5 Pb, 7-9 Sn		20000		10			Machine bearings	Leaded bronze
995	Seymourite	M-103	64 Cu, 18Ni, 18 Zn							Ornaments, electrical equipment	High corrosion resisting. Now known as "18% Nickel Silver"
996	Sideraphite		62 Fe, 23 Ni, 5 Cu, 5 Al, 4 W							Acid resisting vessels and apparatus	Stainless and corrosion resistant
997	Sifbronze	M-243	60-70 Cu, 20-30 Zn, traces of Sn, Fe, Mn		64000		22		156	Welding rods	For welding cast iron or malleable iron
998	Silcrome	M-76	0.48 C, 8.5 Cr, 3.5 Si, bal. Fe							Poppet valves for automobile and aircraft engines, burglar proof safes	Heat resisting Max. operating temp. 1800°F.
999	Sil-Fos	M-63	15 Ag, 80 Cu, 5 P							Brazing alloy	Self-fluxing characteristics M.P.-1300°F.
1000	Silfram	M-202	Fe, Ni, Cr							Welding rod, hard facing agricultural equipment	Corrosion, abrasion and wear resisting
1001a	Silicon Bronze		95-97 Cu, 3-5 Si,		48000		60			Telephone, telegraph and trolley wires	Corrosion resisting
					72000		50				
1001b	Silicon Bronze		98.55 Cu, 0.05 Si, 1.40 Sn		92000					Telephone, telegraph and trolley wires	Corrosion resisting
1002a	Silumin	M-299	89-86 Al, 11-14 Si	Annealed	21000	8500	20		50	Automotive castings, bulkheads	Also known as "Alpax"
1002b	Silumin		95-86 Al, 5-14 Si	Hard	35000	18000	6		70	Steam cylinders, gas cylinders	
1003	Silvanite	M-35	1.25 C, 4 Cr, 8 W, bal. Fe							Wood working knives	High speed steel
1004a	Silvel		67.5 Cu, 16 Zn, 6.5 Ni, 2.2 Fe	Hard drawn	130000		2			Table ware, plumbing fixtures,	German Silver
1004b	Silvel		73 Cu, 12 Mn, 12 Sn, 1.8 Fe, 0.5 Pb, 0.3 Al	Annealed	73000		32			electric contact springs	
1005	Silver	M-558	100 Ag	Cast	41000					Coinage alloys, jewelry, photography, cutlery, plating	M.P.-960°C.
1006	Silveroid	M-121	54 Cu, 45 Ni, 1 Mn	Annealed	60000		48		90	Cutlery	Resists corrosion
1007	Simplex Hardening	M-38	1.25 Ni, 0.60 Cr, 0.4 C, bal. Fe	Heat treated	130000	110000	17	45	290	Gears, high strength machine parts	Forging steel
1008	Sivyer High Carbon Steel	M-288	C, bal. Fe	Annealed	80000	40000	20	30	175	Tools, springs	
				Heat treated	85000	55000	20	35	175		
					150000	90000	3	4	400		
1009	Sivyer Chrome-Electric Steel	M-288	0.22 C, 5.0 Cr, 0.75 Mn, 0.40 Si, bal. Fe	Annealed	95000	55000	18	25	200	Miscellaneous castings	
				Heat treated	100000	70000	19	35	200		
					200000	165000	3	4	550		
1010	Sivyer Chrome Nickel Electric Steel	M-288	0.40 C, 0.9 Cr, 3 Ni, bal. Fe	Annealed	100000	65000	20	35	200	Gears	
				Heat treated	115000	85000	18	43	200		
					210000	173000	6	10	600		
1011	Sivyer Manganese-Carbon Elec. Steel	M-283	0.32 C, 1.45 Mn, 0.40 Si, bal. Fe	Annealed	95000	55000	22	40	200	Gears, shafts	
				Heat treated	95000	65000	22	50	200		
							2.5	3.5	450		
1012	Sivyer Vanadium Electric Steel	M-288	0.45 C, 0.20 V, 0.75 Mn, 0.40 Si, bal. Fe	Annealed	85000	50000	22	40	180	Shafts, gears, pinions	
1013	Skefko No. 1	M-224	0.95-1.05 C, 1.4-1.65 Cr, 0.25-0.35 Mn, bal. Fe	Heat treated	90000	60000	20	45	190	Ball bearings	
					160000	140000	6	12	450		
1014	Skefko No. 2	M-224	1.01-1.1 C, 0.4-0.6 Cr, 0.30-0.40 Mo, bal. Fe							Ball bearings	
1015	Skefko No. 3	M-224	0.95-1.05 C, 1.0-1.25 Cr, 0.30-0.40 Mo, bal Fe							Ball Bearings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1016	Dynamo	M–200	C, Si, Mn, bal. Fe							Electrical purposes	High magnetic permeability
1017	High Chrome-Nickel	M–200	0.33-0.45 C, 0.40-0.75 Cr, 1.0-1.35 Mn, 0.90-1.20 Ni, 0.40-0.75 Si, bal. Fe	Annealed	85000 100000	60000	18	23		Gears, shafts	
1018	Low Chrome-Nickel	M–200	0.35-0.45 C, 0.25-0.50 Cr, 0.80-1.00 Mn, 0.50-0.75 Ni, 0.30-0.40 Si, bal. Fe	Annealed Heat treated	100000 120000 200000	60000 100000 175000	20 35 10	18 20 5	200	Gears, shafts, pinions	
1019	S.O.B.V. Alloy	M–233	4.5 Cr, 10 Co, 19 W, 1.2 V, 0.75 C, 0.75 Mo, 0.25 Si, 0.3 Mn, bal. Fe	Hardened	350000					Cutting tools for machining hard metals	Super high speed steel
1020	Solar	M–32	0.45-0.55 C, 0.8-1.1 Si, 0.4-0.6 Mo, 0.3-0.5 Mn, bal. Fe	Hardened	323000		4.5			Tools, chisels, punches, sledges, rock drills, pipe cutters	Strong and tough tool steel
1021a	Solder, Bismuth		33.3 Sn, 33.3 Pb, 33.3 Bi							Solder	
1021b	Solder, Bismuth		45 Sn, 27.5 Pb, 27.5 Bi							Solder	
1021c	Solder, Bismuth		50 Sn, 25 Pb, 25 Bi							Solder	
1022a	Solder, Cadmium		5Sn, 90 Pb, 5 Cd							Solder	M.P.-284 °F.
1022b	Solder, Cadmium		10 Sn, 80 Pb, 10 Cd							Solder	
1023	Solder, Silver, G.E.Co. No. 1	M–60	65 Ag, 20 Cu, 15 Zn		64800		34			Solder, brazing of stainless steels	Malleable, ductile, corrosion resistant Discontinued
1024	Solder, Silver, G.E.Co. No. 2	M–60	20 Ag, 45 Cu, 35 Zn							Solder, brazing of stainless steels	Malleable, ductile, corrosion resistant Discontinued
1025	Solder, Silver, G.E.Co. No. 3	M–60	55.5 Ag, 4.5 Cu, 40 Cd							Solder, brazing of stainless steels	Malleable, ductile, corrosion resistant Discontinued M.P.-725 °C.
1026	Solder, Slicker		66 Sn, 34 Pb							Commercial Lead Solder	M.P.-356 °F.
1027	Solder, Wiping		40 Sn, 60 Pb							Commercial Lead Solder	M.P.-446 °F.
1028	Spare's Manganese Bronze	M–129	Mn, bal. Cu		70000	35000	28	30		Propeller blades, gun mounts, gears, worm wheels	C.V.P.-28000 Obsolete
1029	Spark Plug Metal	M–68	94 Ni, 2-6 Mn, traces Fe+Cu		74000	24000	51	60		Spark plug wire	P.L.-20000, "D" Nickel
1030	Special 8 T	M–115	0.80 C, 0.12 V, bal. Fe	Annealed Heat treated	70000 258000	45000 240000	25	57 5	170 465	Tools for general purposes	
1031	Special 10 T	M–115	1.0 C, 0.12 V, bal. Fe	Annealed Heat treated	70000 258000	45000 240000	25	57 5	170 465	Tools	
1032	Speculum Metal		68-66 Cu, 32-34 Sn		4000 6000		0			Telescope reflectors, mirrors	Resists tarnish Approx. Cu_2Sn
1033	Speedicut	M–56	C, alloy, bal. Fe							Cutting tools	
1034	Speedicut Leda	M–56	C, 18 W, Co, bal. Fe	Hardened					600 700	High speed tools, cutters	Super high speed steel for severe service "Firth Brown K-203" "Browns Atlas AE1"
1035	Speedicut Maximum "22"	M–56	C, 22 W, bal. Fe, alloys	Hardened					600 700	High speed tools, cutters	For severe service "Firth Brown K-202"
1036	Spring brass	M–33	66-72 Cu, bal. Zn		95000 120000	70000 80000	4 2			Springs	Withstands drastic treatment
1037	Spring Oreide	M–102	92 Cu, 8 Sn	Soft Hard	55000 120000	25000 117000	75 1			Spring contacts, switches, diaphragms	"Scovill No. 151 Alloy"
1038a	Sta-Gloss "A"	M–69	0.3-0.4 C, 12-14 Cr, bal. Fe	Annealed Hardened	100000 270000	75000	25 30	55 65	175 525	Valves, airplane parts, arch supports, ball bearings, knives dies, gages	Stainless and corrosion resisting
1038b	Sta-Gloss "B"	M–69	0.55-0.60 C, 16-18 Cr, bal. Fe	Hardened	280000				600	Surgical and dental cutting instruments, cutlery	Stainless and corrosion resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1039	Stainless Iron "N" (Lesco)	M-73	0.10 C, 16.5 Cr, bal. Fe		66000 149000	44000 121000	25 11	65 32	165 315	Stainless iron parts	Stainless Iron Iz-20-80
1040	Stainless "X"	M-115	0.33 C, 14 Cr, bal. Fe		108000 231000		23 5	54 12	228 477	Cutlery, valves	Discontinued
1041	Stalinite	Russian	C, 9.5 Cr, 11.5 Mn, bal. Fe							Machine parts, dredging, oil drilling, agricultural and kindred equipment	Sintered Alloy
1042	Stalloy		C, 3-4 Si, bal. Fe							Telephone and loud speaker diaphragms, electrical machinery, instruments	Max. permeability —8000
1043	Standard H.R. Alloys	M-105	16-25 Cr, 20-60 Ni, C, bal. Fe							Furnace parts	Heat resisting See Serial Nos. 1624-1633
1044	Standard Cadmium		92.5 Ag, 5.75 Cu, 1.75 Cd							Solder	
1045	Standard Phosphor Bronze		80 Cu, 10 Sn, 10 Pb, up to 0.25 P		28000		6 9		55 65	High speed bearings	
1046	Stannum Metal	M-77	Sn base babbitt							Machine bearings	High tin Babbitt
1047	Star-Zenith	M-32	0.7 C, 3.75 Cr, 18.5 W, 1.1 V, bal. Fe							High speed tool steel, cutters	High speed steel
1048	Staybrite Steel	M-56	18 Cr, 8-9 Ni, C, bal. Fe		100000	35000	50	40	153	Stainless steel parts	Corrosion resisting. Iz-105
1049a	Steam Bronze		85 Cu, 5 Zn, 5 Pb, 5 Sn,		26000		16	20		Valves and fittings, automobile parts	
1049b	Steam Bronze		88 Cu, 2 Zn, 2 Pb, 8 Sn		32000		22	25		Valves, fittings, automobile parts	
1050a	Stellite	M-167	25 Cr, 65 Co, 10 Mo							Welding rod, metal cutting tools	Discontinued
1050b	Stellite	M-167	15 Cr, 60 Co, 25 W							Welding rod, dental and surgical instruments	Discontinued
1050c	Stellite	M-167	15 Cr, 55 Co, 25 W, 5 Mo							Welding rod, valves	Discontinued
1050d	Stellite	M-167	15-17 Cr, 75-80 Co, 2-5 Mo, 2-25 Fe, 0.9 S							Welding rod, cutlery	Discontinued
1050e	Stellite	M-167	10-35 Cr, 65-90 Co							Welding rod, gages	Discontinued
1050f	Stellite	M-167	20-35 Cr, 80-55 Co, 0-10 W		140000		3 0	0		Welding rod	
1050g	Stellite	M-167	34-40 Cr, 56 Co, 9.2 W, 0-1 Fe, 1.5-2 C							Welding rod	Discontinued
1050h	Stellite	M-167	20-23 Cr, 55 Co, 20-15 W, 5-3 Fe, 1.5-4 C							Welding rod	Discontinued
1050i	Stellite	M-167	26 Cr, 35-40 Co, 13 W 10 Mo, 10 Fe, 1.8 C							Welding rod	Discontinued
1050j	Stellite	M-167	15 Cr, 60-55 Co, 25 W, 0-5 Mo							Welding rod	Discontinued
1050k	Stellite	M-167	22 5 Cr, 59.5 Co, 10.8 Mo, 3.1 Fe, 0.9 C, 2.0 Mn, 0.8 Si							Welding rod	Discontinued
1050l	Stellite	M-167	20-35 Cr, 40-80 Co, 0-25 W, 0.75, 2.5 C							Welding rod	Discontinued
1051	Stentor	M-32	0 85-0.95 C, 1.5-1.8 Mn, bal. Fe							Tools, hobs, broaches, gages, dies, cutters	Oil hardening tool steel
1052a	Stephenson		84 Cu, 8.3 Zn, 2.9 Pb, 0.4 Fe		30000		17	19		Piston rings	*P.L.-16000 Sc.-7*
1052b	Stephenson		31 Sn, 31 Fe, 19 Cu, 19 Zn								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1053	Sterling Silver	M-63	92.5 Ag, 7.5 Cu	Sand cast	30000	18000	41	55		Silverware, coins, jewelry	
				Chill cast	24000	19000	7	16			
1054	Sterlite	M-201	53 Cu, 25 Ni, 20 Zn, Mn		53650	27250	33	35	99	Ship fittings, laundry and dairy machinery, surgical instruments	Tough and corrosion resisting
1055a	Sterro Metal		60-55 Cu, 38-42 Zn, 1.8-4.7 Fe	Forged	78200	27800	39			Hydraulic cylinders subjected to high pressures	
				Cast	60500						
1055b	Sterro Metal		60 Cu, 38.2 Zn, 1.8 Fe							Hydraulic cylinders	
1055c	Sterro Metal		55 Cu, 42.8 Zn, 0.83 Sn, 1.8 Fe							Hydraulic cylinders	
1055d	Sterro Metal		55.5 Cu, 42 Zn, 2.5 Fe							Hydraulic cylinders	
1055e	Sterro Metal		55.3 Cu, 41.8 Zn, 4.66 Fe							Hydraulic cylinders	
1056	Stones English Gear Bronze	M-452	89 Cu, 11 Sn, trace P	Cast	39000	21000	10	9		Gears	Used for severe service C.E.L.-16000
					42000	24000	6	7	80		
1057	Stoodite	M-202	32.8 Cr, 53.8 Fe, 1.2 Mn, 1.4 Co, 0.2 Ni, 4.05 C							Tipping tools, fish tails, core bits, gears, shafts, crusher blades	Corrosion, abrasion and heat resisting
1058	Stoody Self-Hardening Welding Rod	M-202	Mn, Cr, Si, Zr							Welding rod	Hard-facing, tough. Non-machinable
1059	Strauss Metal	M-76 M-289	Tungsten carbide W-C-Co							High speed cutting tools	Cemented alloy, discontinued
1060	Sumet Bronze SM-2	M-71	28-32 Pb, 0-1 Sn, 0.05 max. Ni, bal. Cu		10500		9		32	Light duty and high speed bearings, packing rings	
1061	Super-Ascoloy	M-1	<0.2 C, 17-20 Cr, 7-10 Ni, bal. Fe	Annealed	90000	45000	61	75	170	Used for all applications where exceptional resistance to most forms of corrosion must be coupled with high tensile properties	Austenitic alloy Max. operating temp. —1700°F.
				Hot rolled at 900°C.	110900	81970	43	66	223		
					13590		36	57			
1062	Superbronze		57-69 Cu, 21-38 Zn, 3-3.2 Mn, 1.3-2 Fe, 1.2-5 Al							Marine parts, propeller blades	Corrosion resisting
1063	Superdie	M-35	2.20 C, 10.50 Cr, 1.00 W, 1.0 Si, bal. Fe	Annealed					269	Blanking, trimming dies, burnishing tools, extrusion and drawing dies	Resistant to excessive abrasion
1064	Super Duralumin	M-338	4.3 Cu, 0.5 Mg, 0.78 Si, 0.49 Mn, bal. Al		59000		25			Airplane and dirigible parts	
					75500		13				
1065	Supermal	M-170	1.7 T.C., .3 Mn, 1.0 Si, bal. Fe	Heat treated	70000	60000	8		180	Chains, buckets, conveyor equipment	Can be drilled or punched. Malleable iron.
					60000	50000	6		200		
1066	Supertem	M-24	0.35 C, 0.8 Mn, 0.45 Cr, 1 W, bal. Fe	Heat treated at 1000°F.	140000	120000	18	50		Bolts, studs, forgings	Patented
					110000	90000	20	70			
1067	Chromium Permalloy	M-22	3.8 Cr, 78.5 Ni, 17.5 Fe							High frequency apparatus	Free from creep High permeability
1068	Tantalum	M-53	100 Ta	Cold drawn	130000				75	Radio tubes, rectifier electrodes	Corrosion resistant
									125	spark plug points	
1069	Tantiron	M-23	84.87 Fe, 13.5 Si, 1.0 C, 0.4 Mn							Chemical apparatus and corrosion resisting machine parts, vessels, kettles, pipes	Corrosion and acid resisting. Discontinued
1070	Tap Die	M-35	1.25 C, 1.0 W, 0.20 Cr, bal. Fe	Annealed					200	Tools, hobs, taps, reamers	Brass cutting
1071	Tempalloy	M-159	C, alloy, bal. Fe							Heat resisting parts	Now obsolete. Heat resisting
1072a	Tensilite	M-129	67-64 Cu, 24-29 Zn, 2.5-3.8 Mn, 3.1-4.4 Al, 0-1.2 Fe		103100	32500	19	23		Gears, worm wheels	
1072b	Tensilite	M-129	68.26 Cu, 21.04 Zn, 3.20 Mn, 0.04 Si, 0.14 Pb, 4.8 Al, 2.03 Fe							Gears, worm wheels	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1073	Tenaal No. 226	M–190	87 min. Al, 9.25-10.75 Cu, 0.90-1.50 Fe, 0.15-0.35 Mg	Cast	21000 24000				115 127	Pistons, valve tappets, camshaft bearings, guides	Same as SAE-34
1074a	Terne Metal	M–88	15-30 Sn, 85-70 Pb, up to 2 Sb							Terne plate, roofing, gasoline and oil tanks	Corrosion resisting
1074b	Terne Metal	M–88	18 Sn, 88 Pb, 1.8 Sb							Bearings	
1075	Thermalloy "A"	M–47	0.5 C, 64-66 Ni, 17-20 Cr, 1.5 Si, 1.5 Mn, bal. Fe	Cast	65000	50000	2–1	2–1	241	Carburizing boxes, retorts, cyanide pots	Max. operating temp. 2100°F. Heat and corrosion resisting
1076	Thermalloy "B"	M–47	38-40 Ni, 15-18 Cr, 1.5 Si, 0.4-0.6 C, bal. Fe	Cast at 850°C	65000 34000	50000	2–1 4	2–1 10	241	Furnace parts, rollers, furnace rails, grids, lead and cyanide pots	Max. operating temp. 2050°F. Heat and corrosion resisting
1077	Thermalloy "C"	M–47	0.6 C, 2. max. Ni, 25-30 Cr, 0.8 Mn, 1.0 Si, bal. Fe	Cast	50000	40000	1	2–1	196	Sulfur roasting furnace parts, rabble arms and blades	Heat and corrosion resisting
1078	Thermisilid	M–72	Special cast iron, 14-16 Si						350	Chemical equipment construction, acid plants	Acid proof and heat resisting to H_2SO_4
1079	Thermit	M–528	14-16 Sb, 5-7 Sn, 0.8-1.2 Cu, 0.7-1.5 Ni, 72-78.5 Pb, 0.3-0.8 As, 0.7-1.5 Cd						290 29	Bearings for pumps, railroads, engines	Standard German white metal. Cast alloy
1080	Thermo-Electric Nickel Babbitt	M–143	2.25 Cu, 90 Sn, 0.25 Ni, 7.5 Sb		10660		13		24	Babbitt service, bearings	C.E.L.-6300
1081	Thoran		Tungsten carbide plus molybdenium carbide, 95.85 W, 3.94 C, Mo							Hard cutting tools and dies, tips for high speed tools	Cast alloy W_2C+WC
1082	Timang (Tisco No. 4)	M–271	0.6-0.8 C, 12-15 Mn, 3.0 Ni, bal. Fe	Rolled Annealed	135000 155000 100000 115000	45000 55000	80 50	50 35	170 210	Welding rods for welding high Mn steels, woven screens, commercial castings, elevator buckets	Austenitic, wear resisting steel
1083	Tin		99.75 Sn		40000		79		15	Tin plate, tinning, roofing, tin foil, constituent of alloys	M.P.-232°C.
1084	Tunicosil No. 10	M–122	46.75 Cu, 1.5 Pb, 10 Ni, bal. Zn,	Cold drawn	85000	45000	25	20	150	Screw machine parts	White metal Corrosion resisting
1085	Tunicosil No. 15	M–122	42 Cu, 15 Ni, bal. Zn	Hard drawn Annealed	105000 101000	80000 62000	20 26	15 25	158 130	Forgings, hardware, valve parts, plumbing fixtures	White metal Corrosion resisting
1086a	Tissiers Metal		97 Cu, 2 Zn, 1 As							Hardware	
1086b	Tissiers Metal		97 Cu, 2 Zn, 0.5 Sn							Hardware	
1087	Titanium Aluminum Bronze No. 1	M–58	90 Cu, 10 Al		65000 80000	22000 26000	25 15	24 16	90 100	Gears	C.Y.P.-19000
1088	Titanium Aluminum Bronze No. 5	M–58	89 Cu, 10 Al, 1 Fe		65000 80000	23000 28000	30 15	29 21	92 100	Gears	C.Y.P.-19000
1089a	Titan Bronze "A"		53.5 Cu, 46 Zn, 0.3 Fe, 0.3Al	Hot rolled Cast	75000 85000 50000 55000	40000 48000 30000 35000	25 30 15 20	45 50		Gears, pinions, roller bearings, pump rods,	Non-corrosive
1089b	Titan Bronze "B"		60.5 Cu, 1.02 Sn, 36.48 Zn	Annealed Hard drawn	74740 73560	40277 52443	34.37 31.25	37.41 44.76	109	Marine shafts, underwater fittings.	Non-corrosive
1090	Titan Manganese Bronze	M–122	59 Cu, 1.1 Fe, 0.71 Sn, 0.40 Mn, 38.79 Zn	Annealed	83350	58750	31.25	40.5		High tensile strength bolts	Corrosion resisting bronze
1091	Titan Muntz	M–122	60.21 Cu, 39.79 Zn		60350	52500	42.15	61.0	109	For severe bending operations	
1092	Tizit		40-80 W, 3-40 Fe, 4–15 Ti, 2-4 C, 1-5 Ce, 4 Cr							Hard cutting tools and dies	Cast alloy
1093	Tobin Bronze	M–8	59-62 Cu, 0.5-1.5 Sn, 0.1 max. Fe, 0.3 max. Pb, bal. Zn	Hard Soft	75000 54000	60000 40000	25 50		100 59	Welding wire, seamless tubes, condenser tubes, pump rods, piston rods, steam and seawater valves	Good resistance to corrosion
1094	Tombac, Common		28 Zn, 72 Cu		42000	25000	35	30	45	Cartridge cases, condenser tubes, brazing	Corrosion resistant, very ductile

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1095a	Tombac, French		20 Zn, 80 Cu		38000		30			Jewelry, bearings	Corrosion resistant
1095b	Tombac, French		17-20 Zn, 0-3 Sn, 80 Cu							Jewelry, bearings	Corrosion resistant
1096	Tombac, Red Vienna		2 Zn, 98 Cu							Jewelry, bearings	Corrosion resistant
1097	Tombasil	M–123	81.5 Cu, 13.7 Zn, 4.8 Si	Cast	65000		15	25	135	Machine parts	Wear resistant
1098	Toncan Iron	M–97	99.45 Fe, 0.45 Cu, 0.07 Mo, 0.03 C	Rolled	45000	30000	32	56		Roofing and siding, pipes, locomotive boiler tubes	Corrosion resisting
					50000	33000	30	50	90		
1099	Topal	M–2	80 Cu, 20 Mn+Fe+Al	Chill cast	90000		5		170	Shafts, bearings, dies, pump rods, steering nuts, gears	Non-corrosive
				Hot pressed	114000		5		200		
1100	Tophet "A"	M–61	77-79 Ni, 19-20.5 Cr, .15 max. C, 2 Mn	Hard	160000	90000	3	45		Resistance wire, heating elements, percolators, toasters, rheostats	Tough to machine
				Soft	120000	70000	30	45	190		Max. operating temp. 2100°F.
1101	Tophet "C"	M–61	57-6 Ni, 14-18 Cr, .15 max. C, *bal. Fe*	Hard	100000		100	16		*Resistance wire, heating elements, percolators, toasters,* rheostats	Resists some common *acids, Max. operating* temp.-1850°F.
					140000	*85000*	*3*				
				Soft	100000	60000	25	45	165		
1102	Tournay Metal	French	82.5 Cu, 17.5 Zn							Cheap jewelry	Brass
1103	Trabuk		87.5 Sn, 5.5 Ni, 5 Sb, 2 Bi							Food utensils, substitute for nickel silver	
1104	Truform	M–69	0.90 C, 1.2 Mn, 0.50 W, 0.50 Cr, bal. Fe	Oil hardened						Dies, gages, tools, taps, reamers screw dies	Non-deforming tool steel
1105	Tube Brass	M–8	70-60 Cu, 30-40 Zn	Annealed	74400	61000	19	65		Condenser tubes	
					44000	11000	76	77			
1106a	Tuc-Tur		63 Cu, 15 Ni, 22 Zn							Machine parts, hardware	Close grained
1106b	Tuc-Tur		61-59 Cu, 13-18 Sn, 21-29 Zn, 0.3 Fe							Fittings, machine parts	
1107	Tufaloy	M–164	0.22-0.32 C, 1.25-1.35 Mn, bal. Fe	Normalized	95000	60000	20	35	180	Gears, shafts	Pearlitic Mn steel
				Oil hardened	140000	115000	10	20	350		
1108	Tungsten	M–53	100 W	Drawn wire	590000		0	65		Filaments in light and radio tubes, constituent of alloys	High M.P.
		M–60		Swaged	215000		4	28			
1109	Tungsten Magnet	M–115	0.65-0.76 C, 0.15-0.25 Si, 5.25-5.75 W, bal. Fe							Permanent magnets	Br-12500 Hc-62
1110	Tungum	M–110	0.99 Al, 82.48 Cu, 0.3 Fe, 0.72 Ni, 14.6 Zn, 0.76 Si	Sand cast	46600	23000	51		98	Compressor parts, pumps, centrifugal driers, chemical apparatus	Resists acid corrosion and fatigue
				Chill cast	49300	22000	67		112		
				Forged hard	114700	104800	11		218		
1111a	Turbadium Bronze	M–179	48 Cu, 0.5 Sn, 0.1 Pb, 0.2 Al, 1.75 Mn, 2.0 Ni, 46.5 Zn	Cast	84000	50000	18		150	Propellers, turbine runners, impellers	Non-corrosive, high Resists erosion strength casting alloy
1111b	Turbadium Bronze	M–309	50.96 Cu, 0.47 Sn, 0.30 Pb, 2.21 Mn, 1.75 Ni, 43 Zn, 1.36 Fe							Propellers	
1112	Turbiston Bronze		55 Cu, 41 Zn, 2 Ni, 1 Al, 0.84 Fe, 0.16 Mn							Pistons	Highly resistant to sea-water. Also called a Brass
1113	Turbo	M–2	77 Cu, 10 Al, 1 Ni	Cast	78000		15		140	Worm wheels, pumps, spindles, worm shafts	White alloy Resists acid corrosion
					98000		8		170		
				Hot pressed	98000		20		170		
					121000		10		190		
1114a	Type Metal		90 Pb, 10 Sb							Type casting	
1114b	Type Metal		75 Pb, 25 Sb							Type casting	
1114c	Type Metal		50 Pb, 28 Sb, 22 Bi							Type casting	
1115	Type Metal, Monotype		76 Pb, 16 Sb, 8 Sn							Type casting	
1116a	Type Metal, Standard		79 Pb, 16 Sb, 5 Sn,							Type casting	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1116b	Type Metal, Standard		58 Pb, 15 Sb, 26 Sn, 1 Cu							Type casting	
1117	Type Metal, Stereotype		83.75 Pb, 11.75 Sb, 4 Sn, 0.4 Cu							Type casting	
1118	Tyseley Alloy		3.5 Cu, 8.7 Al, 87 Zn, 0.3 Si							Castings, ornaments	
1119	Ulcometal (Frary)	M-88	1-2 Ba+Ca, bal. Pb		14000		5	1		Bearings	Discontinued
1120	Ultradie No. 1	M-39	2.35 C, 13 Cr, bal. Fe 0.20 V, 0.25 Si, 0.30 Mn							Dies for punching hard, brittle material, drills, reamers, shear blades	Non-deforming
1121	Ultralumin	M-272	4.7 Cu, 0.75 Mn, 0.20 Ni, bal. Al traces Th+Ce	Heat treated	54000 60000	37000 43000	14 24			Light alloy parts, forgings	Discontinued
1122	U.M.A. (Agathon) No. 1	M-97	0.10-0.20 C, 0.35-0.65 Mn, 0.55-0.75 Cr, bal. Fe	Heat treated Rolled	150000 85000 65000 75000	120000 60000	10 30	47 72	275 149 179	Case-hardened parts	For carburized work. Discontinued
1123	U.M.A. (Agathon) No. 2	M-97	0.28-0.33 C, 0.60-0.80 Mn, 0.80-1.00 Cr, bal. Fe	Heat treated	215000 110000	195000 90000	42 12	64 26	430 225	Axles, steering knuckles and arms, crank-shafts, connecting rods	For general forgings Discontinued
1124	U.M.A. (Agathon) No. 3	M-97	0.33-0.38 C, 0.70-0.90 Mn, 0.80-1.10 Cr, bal. Fe	Heat treated	230000 125000	210000 95000	12 27	47 63	460 230	Axles, steering arms, steering knuckles	Oil hardening Discontinued
1125	U.M.A. (Agathon) No. 4	M-97	0.42-0.47 C, 0.70-0.90 Mn, 0.85-1.10 Cr, bal. Fe	Heat treated	245000 115000	215000 90000	10 29	30 63	500 255	Gears, machine parts, agricultural implements	Oil hardening Discontinued
1126	U.M.A. (Agathon) No. 5	M-97	0.47-0.52 C, 0.70-0.90 Mn, 0.85-1.10 Cr, bal. Fe	Heat treated	265000 150000	235000 130000	12 25	31 62	515 290	Tools, dies, shear blades, rolls	Deep hardening. Discontinued
1127	Uniloy No. 1	M-39 M-114	0.20 C, 18 Cr, 8 Ni, bal. Fe	Rolled Heat treated	125000 115000		35 40	50 50	228 207	Acid pumps, beer barrels, pickling tanks, bolts, nuts	Stainless, corrosion and heat resisting
1128	Uniloy No. 2	M-39 M-114	0.20 C, 21 Cr, 12 Ni, bal. Fe	At 70°F. At 1200°F.	112500 67500		33 22		236	Stainless and heat resisting parts where some strength is required	Stainless, corrosion and heat resisting
1129	Uniloy No. 1809	*M-39* M-114	*0.07-0.12 C, 18-16.5 Cr,* bal. Fe		*90000* 80000	*63000*	*20* 25	*50* 60	*210* 180	*Gun parts, golf clubs,* hardware, marine equipment, keys, dental equipment	*Stainless, corrosion* and heat resisting
1130	Uniloy No. 2825	M-39 M-114	0.20-0.35 C, 27-30 Cr, bal. Fe	Rolled Cast	90000 55000	65000 40000	20 1	30 2	220 187	Used for heat resisting purposes only, annealing boxes, retorts, recuperators	Stainless, corrosion and heat resisting
1131	Unionaloy	M-112	High C, Si, Mn, bal. Fe							Mill guides, tube mill plugs, hopper liners	Resistant to abrasion. Cast iron
1132	Univan	M-112	0.28-0.32 C, 1.5 Ni, 0.12 V, 0.90-1.10 Mn, bal. Fe		90000	60000	25	50	175	Locomotive frames, wheel centers, cross-heads, coupling boxes, spindles, gears, pinions	Castings to resist severe shocks and stresses
1133	U.S.S. 12	M-12	12-14 Cr, 0.12 Max. C, bal. Fe, 0.5 max. Mn, 0.5 Si	Heat treated Cold drawn	180000 200000 190000 220000	140000 160000 140000 160000	25 15 7.5 5	65 55 55 50	360 400	Turbine blades, pump rods, golf clubs, valve stems and seats, mine pumps	Highest corrosion resistance developed after heat treatment
1134	U.S.S. 17	M-90	16-18 Cr, 0.10 max. C, bal. Fe, 0.5 max. Mn, 0.5 max. Si.	Annealed Cold worked	75000 100000 190000	40000	27	55 40 20	175 185 270	Oil refinery equip., preheaters, kitchen equipment, nitric acid tanks	High resistance to corrosion Stainless
1135	U.S.S. 12 Turbine	M-604	.15 max. C, 11.5-13 Cr, bal. Fe	Annealed	70000	40000	26			Turbine blading	Type 403
1136	U.S.S. 12 Al	M-604	.08 max. C, 11.5-13.5 Cr, .10-.30 Al, bal. Fe	Annealed						Petroleum industry	Non-air hardening in welding. Type 405

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1137	U.S.S. 27	M-90	23-27 Cr, 0.20 max. C, 2.0 max. Mn, 1.0, max. Si, bal. Fe	Annealed	75000 95000	30000 60000	30 20		160 190	Furnace linings, air and gas preheaters, annealing boxes, valves	Heat resistant 1500-2100° F Scaling temp.-2100°F.
1138	Utica	M-76	1.25 C, 1.5 W, 0.4 Cr, 0.20 V, bal. Fe	Heat treated					444 740	Taps, reamers, tools, drills, broaches, punches, dies	Non-deforming, non-shrinking steel
1139	Valve Copper	M-234	88 Cu, 4 Sn, 3 Zn, 3 Pb, 3 Ni		30000	15000	15			Valves and pipe fittings	
1140	Vanadium	M-394	100 V							Constituent in alloy steels, steel deoxidizer	M.P.-1720°C.
1141	Molybdenum Permalloy	M-22 M-205	3.8 Mo, 78.5 Ni, 17.5 Fe							High frequency and electrical apparatus	High permeability and resistivity
1142	Vanalium		80.2 Al, 5.1 Cu, 13.7 Zn, 0.72 Fe, 0.20 V	Cast	22000	16000	8			Cast parts, for aircraft and automotive engines	Resists corrosion and erosion
1143	Van Die Car	M-289	1.1-1.15 C, 0.25-0.35 V, 0.2-0.4 Cr, bal. Fe							Dies, hobs, knives, punches, tools	High wear resistance
1144	Vanick	M-79	2.5 C, 2.5 Si, 0.5 Ni, 0.50 Mn, trace V, bal. Fe		50000					General castings	High test gray iron
1145	Vasco	M-115	0.96 C, 1.3 Mn, 0.70 Cr, 0.50 W, 0.11 V, bal. Fe							Tools, dies, cutters	Discontinued
1146	Vasco-Non-Shrinkable Die	M-115	0.95 C, 0.50 Cr, 0.50 W, 1.3 Mn, 0.10 V, bal. Fe	Annealed Heat treated	82000 280000	60000 275000	27 2	55 2	187 535	Taps, reamers, broaches, gages, hobs, dies, tools	Non-shrinking
1147	Vasco Vanadium Type "BB"	M-115	0.95-1.10 C, 0.15-0.25 V, 1.30-1.50 Cr, bal. Fe		213000 178000	190000	3 8	13 28	400 337	Tools, gages, rolls, ball bearings	
1148	Vasco Vanadium Type "D"	M-115	0.45-0.55 C, 0.15-0.25 V, 0.70-0.90 Cr, bal. Fe	Annealed Heat treated	60000 70000 240000	190000	34 5	70 10	390	Spindles, gears, arbors, sprockets, wrenches, springs, tools, shear blades, jack screws	
1149	Vasco Vanadium Type "G"	M-115	0.56-0.65 C, 0.15-0.25 V, 0.70-0.90 Cr, bal. Fe		220000	180000	5	8	412	Rivet sets, chisels, springs, piston rods, drive shafts, wrist pins, screws	
1150	Vasco Vanadium Type "H"	M-115	0.66-0.75 C, 0.15-0.25 V, 0.70-0.90 Cr, bal. Fe	Oil treated	255000	222000	6	8	460	Punches, dies, tools, axes, hatchets, caulking tools, cold cutters, swedges	
1151	Vasco Vanadium Type "K"	M-115	0.76-0.85 C, 0.15-0.25 V, 0.70-0.90 Cr, bal. Fe	Oil treated	220000	200000	5	5	450	Cold heading dies, blanking, forming and trimming dies, shear knives, broaches, punches	
1152	Vasco Vanadium Type "N"	M-115	0.86-1.0 C, 0.15-0.25 V, bal. Fe	Oil treated	195000	180000	10	15	395	Broaches, drills, knives, files, cutlery	
1153a	Verilite	M-274	96.1 Al, 0.3 Ni, 2.5 Cu, 0.7 Fe, 0.4 Si		16000		4	4		Light alloy parts	Coef. exp.-0.0000232
1153b	Verilite		95.5 Al, 1.5 Ni, 1.0 Cu, 1.5 Cr, 0.5 Mn							Light alloy parts	
1154	"V" High Speed Steel	M-81	0.5-0.9 C, 18 W, 4 Cr, 1.5 V, bal. Fe							Turning and boring tools, special dies, reamers	Tough high speed tool steel
1155	Vibrac V-30	M-117 M-50	0.3 C, 0.60 Cr, 2.5 Ni, 0.60 Mo, bal. Fe	Oil treated	230000 123000	195000	22 12	60 40	477	Tool holders, engine parts, die blocks, crank shafts	Shock resisting. Free from temper brittleness
1156	Vibrac V-45	M-117 M-50	0.45 C, 0.60 Cr, 2.5 Ni, 0.60 Mo, bal. Fe	Oil treated	270000 130000	225000	11 22	37 60	514	Tool holders, gear wheels, axles, die blocks, shafts	Shock resisting Iz-70
1157	Vickers B.C.T.	M-117	0.55-0.65 C, 0.20-0.30 Si, 0.5-0.8 Mn, 0.43-0.70 Cr, bal. Fe	Annealed Hardened	55000 100000 120000 140000	80000	15 7 15	40	255 341	Gear wheels, gun barrels, dies, drop stamps and springs	
1158	Victor Metal		50 Cu, 35 Zn, 15 Ni							Cast fittings	Corrosion resisting
1159	Firth-Vickers" Vikro"	M-50 M-521	60-65 Ni, 15-25 Cr, 1.0 max. C, 0.5-1.0 Si, 1.0 max. Mn, bal. Fe	Normalized At 1000°C.	102000 134000 17600	65000 78000	25 15	35 25	180 240	Case hardening boxes, gas or oil burners, furnace muffles, boiler stay bolts	Heat resisting, Stainless

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1160	Vinco	M–140	0.65-0.73 C, 0.15-0.30 Mn, 3.75-4.25 Cr, 0.85-1.0 V, 17.5-18.5 W, bal. Fe							Milling cutters, reamers, twist drills	High speed steel
1161	Volumit		Tungsten carbide plus molybdenum							Hard cutting tools and dies	Sintered alloy
1162	Vulcan	M–275	C, V, bal. Fe							Tags, milling cutters, reamers, drills, priming tools	
1163	Vulcan "Extra"	M–275	C, bal. Fe							Lathe tools, milling cutters, twist drills, taps, reamers, punches, dies, shear blades	Water harden
1164	Vulcan "Extra Drill"	M–275	C, bal. Fe							Miners drills	
1165	Vulcan "Fort Pitt"	M–275	C, bal. Fe							Tools, cutters, die blocks	Water harden
1166	Vulcan "Special"	M–275	C, bal. Fe							Milling cutters, lathe and planer tools, dies and punches	For excessive requirements
1167	Vulcan "Superior"	M–275	C, bal. Fe							Chisels, cutters, shop tools, rock drills	For general tool purposes
1168	Wando Steel (Cyclops)	M–39	0.95 C, 1.05 Mn, 0.50 Cr, 0.50 W, bal. Fe							Dies, gages, tools, taps, broaches, reamers, slitting saws	Non-shrinking
1169	War Bronze	Germ.	2.19 Al, 4.85 Cu, 0.92 Pb, 0.15 Sn, 0.03 Fe, bal. Zn							Shell fuses	Cast alloy
1170	Warne's Metal		37 Sn, 26 Ni, 26 Bi, 11 Co							Substitute for Ag in making ornamental articles	
1171	Washconite	M–246	2.90-2.97 total C, 1.55-1.67 Si, 1.54-1.45 Ni, 0.23-0.28 Cr, bal. Fe		44600				240	Gas and diesel engine cylinders, liners, bull rings, piston valve liners, pistons	Resists wear at elevated temp.
1172	Water Die	M–35	1.0 C, 0.45 Cr, bal. Fe	Annealed					170	Large forming and drawing dies, rolls, bearing	Deep hardening
1173	White Cast Iron		2.5 combined C, 0.20 Mn, 0.75 Si, bal. Fe		29000					Cylinders, housings	Very hard and brittle
1174a	Widia	M–371	84 W, 3 C, 13 Co		215000					Tools, dies, tool bits, lathe and planer tool cutters, shaper tools, reamers, twist drills	Sintered alloy
1174b	Widia	M–72	87.4 W, 5.68 C, 6.1 Co		250000						Sintered Alloy
1175	Wiegold	Germ.	67-68 Cu, 33-32 Zn, 0.28 Al, 0-0.5 Pb							Dental alloy	High resistance to corrosion
1176	Wig Metal	M–270	Tungsten carbide							Hard tools, dies, drill bits	High wear resistance
1177	Wilmil	M–187	10-13 Si, bal. Al	Sand cast	28000 26000		5 14			Ship construction	High resistance to corrosion
1178	Wissco No. 1	M–120	0.12 max. C, 12-14 Cr, bal. Fe		130000 233000					Stainless wires	Stainless, can be forged and gas welded
1179	Wissco No. 2	M–120	0.12 min. C, 12-15 Cr, bal. Fe							Stainless wires	Stainless, oil hardened
1180	Wissco No. 3	M–120	0.12 max. C, 16-18 Cr, bal. Fe							Stainless wires	
1181	Wissco No. 4	M–120	18 Cr, 8 Ni, 0.20 C, bal. Fe		170000 300000					Stainless wires	Stainless, can be forged and welded
1182	Wissco No. 4 H T	M–120	18 Cr, 8 Ni, 0.07 C, bal. Fe							High strength hard drawn wires	Stainless Discontinued
1183	Wissco No. 4 S	M–120	0.11 max. C, 17-19 Cr, 7-9 Ni, bal. Fe							Welding rods	Stainless
1184	Wissco No. 5 C	M–120	27 Cr, 0.30 C, bal. Fe							High heat resistant wires	Stainless
1185	Wissco No. 5 C N	M–120	0.25 max. C, 19-21 Cr, 24-26 Ni, Mn, Si, bal. Fe							High heat resistant wires, springs for high temperature service	Stainless
1186	Wolfram	M–275	.65 C, 18 W, 4 Cr, 1 V, bal. Fe							Tools, high speed cutters	High speed steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1187	Wolframinium		98 Al, 1.4 Sb, 0.36 Cu, 1.0 Sn, 0.05 W	Cast	20000		6			Motor car body work	Non-tarnishing
				Rolled	48000		6				
				Annealed	24000		16				
1188	Genuine Wrought Iron, Unalloyed	M–292	0.05 max. C, 0.05 max. Mn, 0.10-0.15 P, 0.03 max. S, 0.10-0.15 Si, bal. Fe		45000	25000	35			Staybolts, rivets, roofing sheets, water and steam pipes, boiler tubes	Ductile, easily welded
					50000	30000					
1189	X-ite	M–59	1.12 Mn, 38 Ni, 18 Cr, 2.0 Si, 0.5 C, bal. Fe		65000	53000	2.5	4.0		Furnace parts, hearth plates, skid and roller rails	Heat, corrosion and abrasion resistance
					75000	56000					
1190	XL-Steel	M–73	0.45 C, 0.20 Si, 2.25 W, 1.30 Cr, 0.25 V, bal. Fe							Chisel steel, pneumatic hammers, shock tools	Heavy duty, Tough
1191	B. A./"Y" Alloy	M–28	4 Cu, 2 Ni, 1.5 Mg, bal. Al, 0-0.7 Si, 0-0.75 Fe	Hot rolled	39400	26900	20	30		Pistons in gasoline engines, reciprocating parts in aero engines, air cooled cylinder heads	Similar to Duralumin, High strength at elevated temperatures
				Cold rolled	54000	34000	23	33			
				Heat treated	35000	30000	1.5		90		
					50000	36000	6.5		110		
				Chill cast	27000	22000	3.3		105		
							1.0		85		
1192a	Yellow Gold		53 Au, 25 Ag, 22 Cu	Cast					205	Jewelry	
1192b	Yellow Gold		50 Au, 25 Ag, 25 Cu	Heat treated					159	Jewelry	
1193	Zamak No. 2	M–91	4 Al, 3 Cu, 0.03 Mg, bal. Zn	Die cast	50000		4		82	Gears, motor frames, carburetors, hardware, pumps	U.S.P.-1,596,761
							8		87		
1194	Zamak No. 3	M–91	4 Al, 0.04 Mg, bal. Zn	Die cast	37000		4		60	Gears, frames, hardware, pumps, die casting	U.S.P.-1,779,525
							6		65		
1195	Zamak No. 5	M–91	4 Al, 1.0 Cu, 0.3 Mg, bal. Zn	Die cast	42000		3		65	Die castings, gears	U.S.P.-1,852,441
							5		75		
1196	Zamak No. 6	M–91	4 Al, 1.25 Cu, bal. Zn	Die cast	42000		5		65	Die castings for max. fluidity and exceptional toughness	U.S.P.-Reissue 18,600
							7		75		
1197	Zilloy	M–91	1.0 Cu, 0.01 Mg, bal. Zn		35000		12			Corrugated roofing and siding	U.S.P.-1,716,599
					45000		25				
1198a	Zimalium	Germ.	<10 Mg, <20 Zn, bal. Al							Aircraft	(Zirmalium?)
1198b	Zimalium	Germ.	3.7-7.1 Mg, 2.8-4.5 Zn, bal. Al								
1199	Zinc	M–91	0.003 max. Pb, 0.001 max. Cd, 0.004 max. Fe, bal. Zn	Cast	65000	49000	1			Galvanizing, paints, constituent of alloys	M.P.-419.4°C. brittle as cast. Sc.-14
				Wrought	23300						
				Hot rolled	18000	0	45				
1200	Zinnal	M–204	Al sheet coated on both sides with Sn and rolled so as to form a firmly welded whole								
1201	Zirconium		100 Zr							Substitute for Pt, electrodes, constituent in alloys	Occurs as amorphous or as sintered form
1202	Z-Metal	M–223	2.2-2.3 total C, 1.60-1.80		75000	50000	18		170	Gears, sprockets, wrenches, bolts, pipe clamps, tool bits, brake drums, air drills	A malleable cast iron.
		M–209	tempered C, 0.6-0.8 com-		85000	55000	12		190		Resistance to wear and corrosion.
		M–400	bined C, 0.85-1.0 Si, bal. Fe, varying Mn								Spheroidized
1203	Zodiac	M–121	20 Ni, 64 Cu, 16 Zn		84000					Shunts, rheostats, resistance wire	Nickel silver
1204	Zorite	M–184	35 Ni, 17-15 Cr, 1.75 Mn, 0.5 C, 1.0 Si, bal. Fe		65000	45000	2	4	190	Furnaces, heaters, electrical resistances	Heat and corrosion resisting. Max. working temp. 1900°F.
					55000	40000	5	6	180		
1205	Zurco No. 18	M–290	16-18 Cr, 0.1 C, bal. Fe	Annealed	80000	55000				Non-corrosive parts	Rustless steel. For continuous heat up to 1200°F.
1206	Zurco No. 25	M–290	25-30 Cr, 0.1 C, bal. Fe							Non-corrosive parts	Rustless steel. For continuous heat up to 2200°F.
1207	Zurco Rustless Iron	M–290	16-18 Cr, C, bal. Fe							Non-corrosive parts	Rustless

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1208	Zurco Steel "A"	M-290	0.08-0.12 C, bal. Fe							Cold rolled or annealed pickled sheets	Deep drawing
1209	Zurco Steel "AAA"	M-290	0.08-0.12 C, bal. Fe							Annealed pickled sheets for Ni and Cr plating	Extra deep drawing
1210	Zurco Steel "B"	M-290	0.08-0.12 C, bal. Fe							Furniture sheets, filing cabinets, lockers	Deep drawing
1211	Zurco Steel "C"	M-290	0.08-0.12 C, bal. Fe							Sheets	Deep drawing
1212	Inland Copper Alloy Steel	M-67	0.05-0.15 C, 0.2-0.3 Cu, bal. Fe							Corrosion resistance applications, roofing	Corrosion resistant
1213	Birmidium "Y"	M-137	3.5-4.5 Cu, 1.8-2.3 Ni, 1.2-1.7 Mg, bal. Al	Sand cast Heat treated	25000 32000	20000	0.5 1.0		85 100	Pistons, piston heads, high duty crankcases, heavy oil engine parts	Good resistance to corrosion
1214	Midvaloy 1300	M-85	.07-.40 C, 13 Cr, bal. Fe	Wrought	70000 200000	40000 165000	28 13	70 53	130 400	Corrosion resisting parts engineering construction	Corrosion and abrasion resisting
1215	Midvaloy 1225	M-85	C, 12 Cr, 25 Ni, bal. Fe	Cast	55000 65000	40000 45000	5 12	10 20	150	Furnace and heat resisting parts, carburizing and annealing boxes	Corrosion and abrasion resisting
1216	Midvaloy 2512-10	M-85	25 Cr, 0.10 C, 12 Ni, bal. Fe	Forged Cast Water treated	75000 115000 65000 85000 113000	45000 65000 40000 50000 62700	25 45 30 35 43	30 50 30 40 49.7	150 240 130 195 196	Apparatus to resist nitric and acetic acids, sulfite liquors and sulfurous acids	Corrosion and heat resisting
1217	Midvaloy 2520	M-85	25 Cr, 0.25 max. C, 20 Ni, 0.18 Mo, bal. Fe	Cast Wrought	70000 80000 75000 165000	30000 36000 30000 120000	25 50 48 5	20 50 55 30	145 160	Corrosion resisting apparatus	Corrosion resisting
1218	Midvaloy 26-02	M-85	26.5 Cr, 0.25 C, 1.5 Ni, bal. Fe	Cast	75000 100000	60000 80000	20 30	40 60	165 200	Furnace parts	Heat and corrosion resisting
1219	Midvaloy 3030	M-85	27 Cr, 30 Ni, 0.50 C, bal Fe	Cast	75000	42500				Heat resisting and furnace parts	Corrosion and abrasion resisting
1220	Warman Calmar 13-2	M-277	0.20 C, 12.5-15 Cr, 1.5-2.5 Ni, bal. Fe	Cast	80000 110000	60000 90000	25 10	40 30		Corrosion resisting parts	Corrosion and abrasion resisting. Formerly "Nirosta Calduro KM-1"
1221	Warman Calmar 18-8	M-277	0.16 C, 17-20 Cr, 7-10 Ni, bal. Fe	Cast	70000	30000	50		180	Stainless parts	Corrosion resisting. Formerly "Nirosta Calmar KA2"
1222	Warman Caloxo 25-20	M-277	0.25 C, 23-27 Cr, 19-21 Ni, bal. Fe	Cast	75000	35000	25		200	Furnace and heat resisting parts	Corrosion and abrasion resisting. Formerly "Nirosta Caloxo KNC-3"
1223a	Premier Nickel Chrome	M-248	60-62 Ni, 25 Fe, 14-16 Cr, 0.10 C	Wire	100000	60000	25	50	182	Rheostats, dipping baskets, heating units, wire cloth	Corrosion resisting
1223b	Premier Nickel Chrome	M-248	25 Fe, 11 Cr, 3 Mn, bal. Ni	Rod	100000		25		182	Rheostats, dipping baskets, heating units, wire cloth	Corrosion resisting
1224	Diamite	M-278	3-5 Ni, 1-2 Cr, 3-3½ C, 1.1-1.5 Si, 0.6-0.9 Mn, bal. Fe						600 725	Liners for chutes, pulverizer hammers, sand pump parts, welding rod for hard facing	Alloy white iron. Resistant to abrasion
1225	Borium	M-202	Tungsten carbide ($WC+W_2C$)							Welding rod for hard facing	Hard and abrasion resisting
1226	Borod	M-202	Tungsten carbide							Welding rod for hard facing	Hard and abrasion resisting
1227	Baush Duralumin Grade A	M-254	3 Cu, 0.3 Mg, Fe, Si, bal. Al	Annealed Heat treated	22000 28000 50000 55000	 25000 30000	14 10 18 15		54 60 83 93	Light alloy parts for airplanes, dirigibles and automobiles	Age-hardening

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1228	B. & W. Alloy No. 1000	M-17 M-447	2.35 Cu, 1.50 Mn, 2 Si, 18 Cr, 9 W, bal. Fe	Cast and treated					600 680	Abrasion resisting parts, ceramic and cold drawn dies	Not shock resisting
1229	B. & W. Alloy No. 1100	M-17 M-447	0.25 C, 0.50 Mn, 1.85 Si, 25 Cr, 20 Ni, bal. Fe	Cast	60000	40000	75 10			Furnace rolls, grates, retorts, skid rails, chains	Rockwell "B"—83-89
1230	Chromium Steel 4-6% (B. & W.)	M-17 M-447	4-6 Cr, 0.4-0.65 Mo, 0.2 max. C, 0.5 max. Mn, bal. Fe, 0.5 max. Si	Tube	65000	30000	35		170	Corrosion resisting parts	Corrosion resisting
1231	Chromium Iron (B. & W.)	M-17 M-447	16.5-18.5 Cr, 1.25 max. Si, 0.5 max. Mn, 0.12 max. C, bal. Fe	Tube	70000	45000	25		175	Corrosion resisting parts	Corrosion resisting
1232	Warmans Caloxo-18	M-277	0.16 C, 16-20 Cr, bal. Fe	Cast	90000	45000	15	30		Corrosion resisting parts	Corrosion resisting. Formerly "Warman Chrome Stainless"
1233a	La-Bour R-50	M-263	55 Ni, 23-25 Cr, 5-6 Cu, 4 W, 2 Mo, 10 Fe							Valves, pump parts	Corrosion and heat resistant
1233b	La-Bour R-50 (Modified)		8-9 Ni, 23 Cr, 6 Cu, 4 Mo, 2 W, 0.75 Si, C, 53-54 Fe							Valves, pump parts	Modified "G-60"
1234	Tuf-Stuf	M-266	85-89 Cu, 8-14 Al, 2-4 Fe	Forged Annealed	60000 107000 75000 90000	35000 82000 40000 52000	35 15 25 15	 30	140 225 150	Pickling equipment, piston rods, valve stems, gears, pumps, nuts, impellers, screws, valve seats in oil refineries	Corrosion resisting
1235	Nickel Chrome Cast Iron		1.5-1.75 Ni, 0.6-0.8 Cr, 3-3.4 C, 0.9-1.75 Si, 0.5-0.7 Mn, bal. Fe	Cast	35000 48000		0	0	170 230	Grids	Corrosion and abrasion resisting
1236	Lesco 18-8 S	M-73	18.5 Cr, 8.5 Ni, 0.40 Mn, 0.07 max. C, bal. Fe	Annealed	87000	33000	58	70	143	Stainless parts	Corrosion resisting
1237	Nickel-Clad Steel	M-176	Pure nickel on steel base 10% Ni, bal. steel	Plate	55000 65000	40000 50000	41 29	62 52		Vessels, tanks, tank cars, digesters, retorts, piping, stills	Corrosion resisting
1238	Ni-Hard	M-176 M-68	4.4-4.6 Ni, 2.75-3.60 C, 1.4-1.6 Cr, 0.5-1.5 Si, 0.3-0.7 Mn, bal. Fe	Cast Chilled	30000 40000 80000				575 750 700	Die casting pots, pump plungers, roller bearing races, chilled rolls	Corrosion resisting Tough
1239	Ni-Resist, Copper Free	M-68	18-22 Ni, 2-4 Cr, 2.2-3.0 C, 1-1.5 Mn, 0.6-2.0 Si, bal. Fe	Cast	20000 35000		2	0	120 170	Heat resistant parts, grids, furnace parts, pumps	Corrosion resisting and heat resisting
1240	Iralite	M-229	High C, Cr, Mo, bal. Fe		36000 52000				150 179	Sheaves and sprockets, plungers, glass rolls, racks, brake-drums, conveyor parts, balls and shells	Pearlitic alloy cast iron. Wear resistant
1241	S.K.F. No. 711	M-267	.5 C, 2.5 W, 1.2 Cr, .7 Si, 2 V, bal. Fe							Tools, shear blades, dies, cutters, chisels	Good wear resistant
1242	Aluminum Alloy No. 119	M-249	0.4 Si, 1.9 Fe, 4.0 Cu, bal. Al		28000 32000	11000 20000	22 16			Machine parts	Wrought alloy Obsolete
1243	Aluminum Alloy No. 119 M	M-249	0.4 Si, 1.9 Fe, 0.5 Mg, 4.0 Cu, bal. Al	Hard Spring hard	47000 60000	22000 58000	18 2			Machine parts	Wrought alloy Obsolete
1244	S K F Steel No. 1	M-267	1.0 C, 1.05 Mn, 0.45 Si, 1.05 Cr, bal. Fe							Ball bearings, races and balls	Wear resistant
1245	S K F Steel No. 3	M-267	1.0 C, 1.50 Cr, bal. Fe							Ball bearings, races and balls	Wear resistant
1246	S K F Steel No. 22	M-267	1.0 C, 0.35 Mo, 1.1 Cr, bal. Fe							Trimming and stamping dies, drills	Wear resistant
1247	S K F Steel No. 36	M-267	2.25 C, 11.5-12.5 Cr, 0.15 V, 1.2 Mn, 0.20 Si, bal. Fe							Cold trimming, drawing, punching, blanking dies, gages	Formerly known as "VH-63 Steel"
1248a	C.S.M. Steel (a)	M-259	0.15 C, 0.30-0.40 Cr, bal. Fe	Oil treated	110000		25	68	219	Springs, gears, axles, shafts	
1248b	C.S.M. Steel (b)	M-259	0.15 C, 0.70-0.75 Cr, bal. Fe	Oil treated	220000		12	48	434	Springs, gears, axles, shafts	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1249	Warman 6	M-277	0.15 C, 5-7 Cr, bal. Fe	Cast	90000	65000	15	35		Corrosion resisting parts	Corrosion resisting
1250	Standard Alloy Co. H R-5 M	M-105	50 Fe, 25 Cr, 20 Ni, 2.5-4.0 Mo, 0.40 Mn, 0.3 C	Cast	62000	51000	18	13	190 210	Furnace parts	Heat and corrosion resistant
1251	Heat-resisting Steels, No. 4 (Jessop)	M-69	0.30 max. C, 8-9 Cr, 21-22 Ni, bal. Fe	Annealed	90000 110000	30000 40000	25 35	45 60	160	Furnace parts	Corrosion, heat and abrasion resistant Scaling temp.—1800°F.
1252	Durco-KA2S	M-46	19-17 Cr, 9-7 Ni, 0.50 Mn, 1.0 Si <0.07 C, bal. Fe	Cast	70000	30000	40 50	40 50	150	Food handling and chemical plant equipment	Corrosion resisting to HNO_3
1253	Nickel Silver 18% (Chase)	M-33	65 Cu, 18 Ni, 17 Zn	Plates	58000 95000		2 35		70 160	For spinning, stamping	Corrosion resisting Obsolete
1254	Nickel Silver 18% A (Chase)	M-33	64 Cu, 18 Ni, 18 Zn	Sheet, soft Hard	50000 105000	25000 70000	50 4		77 158	For spinning and stamping	Corrosion resisting
1255	Nickel Silver 18% B (Chase)	M-33	60-62 Cu, 18 Ni, 30-32 Zn	Sheet, wire	60000 113000	25000 70000	43 2			For stamping, drawing and forming	Corrosion resisting Discontinued
1256	Sandusky I N	M-295	85-87 Cu, 4-6 Sn, 3-5 Zn, 4-6 Pb, 0.5-1.0 Ni		35000 45000	15000	20 25		60 70	Rolls, cylinders, liners, shaft sleeves, bushings	Centrifugal castings
1257	E.C.N. Alloy	M-107	C, Ni, Cr, bal. Fe	At 20°C. At 1000°C.	67000 78000 33000					Case-hardening boxes, glass molds, retorts, stills, fire boxes, muffles, crucibles, pumps	Highly resistant to heat and corrosion
1258	Ticrank	M-294	C, alloy, bal. Fe	Normalized Treated	94800 88950		22 27	48 58		Crankshafts	
1259	Colonial C-2	M-34 M-115	17 Cr, 0.12 max. C, bal. Fe	Annealed	75000	50000	32	55	170	Structural parts, chemical and paper industry machines	Corrosion resisting
1260	Colonial C-2 F	M-34 M-115	17 Cr, 0.12 max. C, 0.25 S, bal. Fe	Annealed	75000	50000	30	52	180	Structural parts, chemical and paper machines	Corrosion resisting
1261	Colonial No. 410	M-34 M-115	13.5 Cr, 1 Ni, 0.12 max. C, bal. Fe, 0.025 max. S	Heat treated	128000	113000	21	55	269	Valve parts, golf club heads	Corrosion resisting
1262	Colonial No. 410 F	M-34 M-115	13.5 Cr, 1 Ni, 0.12 max. C, 0.25 S, bal. Fe	Heat treated	130000	110000	18	50	261	Valve parts, golf club heads	Corrosion resisting
1263	Colonial No. 430	M-34 M-115	13.5 Cr, 1 Ni, 0.35 C, 0.60 Mo, bal. Fe	Heat treated	235000	205000	9	23	437	Corrosion resisting parts	Corrosion resisting
1264	Colonial No. 610	M-34 M-115	17 Cr, 1 Ni, 0.12 C, bal. Fe 0.025 max. S	Annealed	78000	57000	32	61	176	Structural parts for chemical and paper industries	Corrosion resisting
1265	Colonial No. 610 F	M-34 M-115	17 Cr, 1 Ni, 0.12 max. C, 0.25 S, bal. Fe	Rolled	76000	49000	28	49	169	Structural parts for chemical and paper industries	Corrosion resisting
1266	Colonial No. 795	M-34 M-115	17.25 Cr, 1 Ni, 0.95 C, bal. Fe	Heat treated	210000	180000	5	9	444	Corrosion resisting parts	Corrosion resisting
1267	Standard Misco	M-84	46 Fe, 35 Ni, 15 Cr, 0.50 Mn, 0.60 C	Cast Rolled	75000 100000	70000 81000	3 42	6 52	180 190	Heat treating boxes, furnace parts, valves, stills	Heat resisting Wear and corrosion resisting
1268	Stainless Steel A.S.S.	M-293	8-60 Cr, 0.40 Mn, > 0.12 C, bal. Fe	Rolled	80000 250000	24000 150000	10 15	30 35	150 250	Cutlery, surgical instruments, valve seats, pump shafts	Corrosion and abrasion resisting
1269	Stainless Iron 2 FM	M-38	14-15 Cr, 0.55 Mo, 0.11 max. C, bal. Fe		90000 140000	55000 100000	28 19	62 46	160 300	Stainless parts	Corrosion resisting Discontinued
1270	Acorn Brand Aluminum Babbitt	M-214	88.9 Sn, 3.7 Cu, 7.4 Sb, Special hardener		12500		22.5		24	Bearings, main and crankpin bearings for steam, gas or diesel engine	Low coef. friction, high ductility
1271a	MacHempite Grade A	M-229	1.5-3.5 Ni, 0.7-4 Mn, 0-1.25 Cr, 0-0.75 Mo, 0.4-3.0 C, bal. Fe	Soft Hard	100000	65000	25	45	600	Jaws, rollers, tires, balls, liners, impellers	Heavy crusher grade. Resists wear and spalling
1271b	MacHempite Grade B	M-229	1.5-3.5 Ni, 0.7-4 Mn, 0-1.25 Cr, 0-0.75 Mo, 0.4-3.0 C, bal. Fe	Soft	90000	65000	25	45	200	Heavy duty gears, pinions	Medium hardened grade. Shock resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1271c	MacHempite Grade C	M–229	1.5-3.5 Ni, 0.7-4 Mn, 0-1.25 Cr, 0-0.75 Mo, 0.4-3.0 C, bal. Fe							Gears, pinions, hammers, beaters, conveyer parts, brake-drums	Hardened grade
1272	Rezistal 3	M–38	25 Cr, 12 Ni, 2.25 Si, 0.2 max. C, bal. Fe	Annealed	105000 95000	65000 40000	30 40	45 50	160 200	Furnace parts	Corrosion resisting
1273	Rezistal 2600	M–38	9 Cr, 22.5 Ni, 0.30 C, 1.25 Cu, bal. Fe	Annealed	95000 85000	55000 45000	30 40	50 55	165 200	Furnace parts, oil pump parts, acid tanks	Corrosion resisting
1274	Rezistal K A 2 Mo	M–38	18 Cr, 8 Ni, 0.15 max. C, 3 Mo, bal. Fe	Annealed	95000	45000	55	70	170 200	Stainless parts	Corrosion resisting
1275	Sivyer No. 60	M–288	18 Cr, 8 Ni, 0.50 Mn, 0.10 C, bal. Fe	Cast	70000 80000	30000 40000	50 60	50 70	135 150	Stainless parts	Corrosion resisting
1276	Sivyer No. 62	M–288	23-25 Cr, 11-13 Ni, 1.0 Si, 0.5 Mn, 0.18 C, bal. Fe	Cast	75000 85000	30000 40000	35 45	35 45		Furnace parts, heat and corrosion resisting parts	Heat and corrosion resisting
1277	Sivyer No. 66	M–288	12-14 Cr, 0.5 Mn, 1.0 Si, 0.10 C, bal. Fe	Cast	75000 170000	45000 130000	8 25	15 50	175 350	Furnace parts, corrosion resisting parts	Corrosion resisting
1278	Sivyer No. 67	M–288	16-18 Cr, 0.25 C, bal. Fe, 0.50 Mn, 1.0 Si	Cast	85000 105000	55000 70000	10 20	15 35	160 190	Furnace parts, corrosion resisting parts	Corrosion resisting
1279	Sivyer No. 70	M–288	15-17 Cr, 35-37 Ni, 1.0 Si, 0.45 C, bal. Fe, 0.50 Mn	Cast	60000 70000		1 7	1 8	200 225	Furnace parts, heat and corrosion resisting parts	Corrosion and heat resisting
1280	Cooper Stainless Steel S-16	M–36	14-18 Cr, 0.35 max. C, bal. Fe							Oil refinery pump valves	Stainless iron used where Ni content is undesirable
1281	Cooper Stainless Steel S-17	M–36	18 Cr, 0.20 max. C, 8 Ni, bal. Fe							Oil refineries, canneries, pumps, valves, cocks	Excellent acid and abrasion resistance
1282	Cooper Stainless Steel S-18	M–36	10 Cr, 22 Ni, 0.25 max. C, bal. Fe							Thermocouple wells, electric resistance grids, oil refineries, cracking coil plugs	Heat resistant
1283	Cooper Stainless Steel S-19	M–36	28 Cr, 0.50 max. C, bal. Fe							Used in making nitro-cellulose products	Excellent abrasion resistance
1284	Cooper Stainless Steel S-20	M–36	18 Cr, 36 Ni, 0.50 max. C, bal. Fe							Furnace parts, enameling racks, tube supports	Greatest high temp. strength
1285	Cooper Stainless Steel S-21	M–36	15 Cr, 65 Ni, 0.50 max. C, bal. Fe							For high temperature use, carburizing boxes, pots, retorts	Heat resisting
1286	Cooper Stainless Steel S-22	M–36	24-28 Cr, 10 Ni, 0.50 max. C, bal. Fe							Pumps, valves and piping in sulfite pulp mill digesters, rabble arms in metal roasting furnaces	Heat resisting
1287	Cooper C A-5	M–36	4-6 Cr, 0.30 max. C, 0.4-0.65 Mo, or 0.8-1.25 W, 0.50 Mn, bal. Fe							Oil refineries, valves, fittings	Highly resistant to corrosion and heat
1288	Cooper 18-8	M–36	C, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Stainless, corrosion resistant
1289	Anticorodal—Wrought Alloy	M–249 M–624	1.0 Si, <0.3 Fe, 0.7 Mn, 0.65 Mg, <0.1 Cu, bal. Al	Soft Hard Spring hard Forged	15000 45000 55000 50000 60000 40000 50000	9000 35000 45000 30000 40000 35000 45000	25 18 11 10 2 15 10			Architecture, window frames, furniture, ship-building, chemical industry	High corrosion resistance
1290	Anticorodal—Casting Alloy	M–249	2.25 Si, 0.45 Fe, 0.70 Mn, 0.70 Mg, 0.15 Ti, bal. Al	Chill cast Heat treated	20000 28000 28000 40000	16000 22000 22000 30000	1.5 5.0 1.0 5.0			Window frames, chemical industry, architectural	High corrosion resistance
1291	Sabeco No. 5	M–221	69-71 Cu, 4.5-5.5 Sn, 24-26 Pb		22600		10	9.5	52	Light or medium load bearings, or water lubricated bearings	Bearing bronze
1292	Sabeco No. 9	M–221	69-71 Cu, 8.5-9.5 Sn, 20-22 Pb		25100		9.5	8.3	60	Heavy load bearings	Bearing bronze

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1293	Sabeco No. 11	M-221	69-71 Cu, 10.5-11.5 Sn, 18-20 Pb		26500		6	6.5	66	Extra heavy pressure bearings	Bearing bronze
1294	Sabeco No. 11 H G	M-221	69-71 Cu, 10.5-11.5 Sn, 18-20 Pb		27300		4.3	3.5	78	Worm wheels, clutch shifter shoes, heavy bearings	Bearing bronze
1295	Bofors Non-shrinking steel RT-1733	M-267	0.85-0.95 C, 1.0-1.25 Mn, 0.5-0.6 Cr, 0.5-0.6 W, bal. Fe							Blanking dies, broaches, cutters, tools, drills, plugs, gages	Non-shrinking tool steel
1296	Steam Metal, Ajax	M-123	87 Cu, 6 Sn, 5 Zn, 2 Pb		37000	16000	51			Valves	
					42000	17000	27				
1297	V H-63 Steel	M-267	C, bal. Fe							Cold trimming, blanking, punching, forming dies, gages, broaches, tools	Superseded by S.K.F. No. 36
1298	Aluman	M-249	<0.25 Si, <0.30 Fe,	Soft	11000	6000	30			Marine construction, chemical apparatus	Corrosion resisting
		M-624	1.5 Mn, <0.1 Cu, bal. Al	Hard	28000	24000	10				
				Extruded	17000	7000	24				
1299	Alufont "H"	M-249	<0.4 Si, 1.4 Fe, 0.15 Mg, 2.0 Cu, 12 Zn, bal. Al	Sand cast	43000	36000	0.5			Large castings for general purposes	Corrosion resisting
				Chill cast	44000	42000	1.5				
1300	Avional D	M-249	3.8 Cu, 0.55 Mg, 0.5 Mn,	Normal	55000	35000	22			Aviation and automobile parts	Corrosion resisting
		M-624	<0.3 Fe, <0.3 Si, bal. Al		65000	43000	16				
				Hard	78000		4				
					87000		2				
1301	Avional "Z"	M-249	0.4 Si, 0.3 Fe, 0.75 Mn, 0.80 Mg, 4.5 Cu, bal. Al	Wrought	62700	37000	15			Aviation and automobile parts	Similar to "Duralumin"
					71500	46000	12				
1302	Aluminum Alloy G-97	M-249	0.5 Si, 0.85 Fe, 1.4 Mn, 0.25 Mg, 12.75 Cu, bal. Al	Cast	24000	21000	1.0			Pistons	Cast alloy
					32000	26000	0.5				
1303	Super Nickel-701	M-8	70 Cu, 30 Ni	Tube	70000	60000	10			Condenser tubes	Corrosion resisting
1304	Olympic Bronze "A" (Taurex Bronze)	M-33	96.5 Cu, 1.0 Zn, 2.75 Si	Rolled	45000	25000	50	60	50	Sheet, rod, wire, tubes, bolts, nuts, hardware, cable, welding rod	Corrosion resisting
					90000	65000	2	14	140		
1305	Michiana No. 48	M-184	28 Cr, 8 Ni, 0.50 max. C, bal. Fe	Cast	75000	55000	1	1	220	For resistance to sulfurous gases at elevated temperatures	Corrosion and heat resisting
1306	Michiana No. 100	M-184	25 Cr, 12 Ni, 0.50 max. C, bal. Fe	Cast	63000		2.5	3		Grids, furnace parts	Corrosion and heat resisting
					65000	45000	3.5	5	210		
1307	Empire No. 18	M-162	0.2 C, 18 Cr, bal. Fe		80000	65000	25	40	170	Corrosion resisting parts	Corrosion resistant
					100000	75000	15	30	200		
1308	Empire No. 18-8	M-162	0.15 C, 18 Cr, 8 Ni, bal. Fe		80000	35000	15	20		Stainless and corrosion resisting parts	Stainless, corrosion resistant
					100000	50000	5	10			
1309	Empire No. 24-12	M-162	0.25 C, 24 Cr, 12 Ni, bal. Fe		70000	30000	15	20		Heat and corrosion resisting parts	Heat and corrosion resisting
					90000	45000	5	10			
1310	Empire No. 25-5	M-162	0.2 C, 25 Cr, 5 Ni, bal. Fe				0	0		Heat and corrosion resisting parts	Heat and corrosion resisting
1311	Empire No. 30	M-162	0.3 C, 30 Cr, bal. Fe		40000	30000	1	2		Heat and corrosion resisting parts	Heat and corrosion resistant
					50000	40000	0	0			
1312	Empire No. 35-15	M-162	0.35 C, 15 Cr, 35 Ni, bal. Fe		60000		8	3	180	Heat and corrosion resisting parts	Heat and corrosion resistant
					70000		2	1			
1313	Empire No. 60-20	M-162	0.50 C, 20 Cr, 60 Ni, bal. Fe		80000	50000	25	50		Heat and corrosion resisting parts	Heat and corrosion resistant
					90000	60000	20	40			
1314	Empire "D"	M-162	C, 26 Cr, 4 Mo, 25 Ni, 1V, bal. Fe							Engineering applications	Heat and corrosion resistant
1315	La Bour G-60	M-263	65-63 Ni, 23-25 Cr, 5-6 Cu, 2-4 Mo, 4-2 W, 0.8 Si, 1 Fe, 0.2 Mn, 0.06 C							Valves, pump parts	Corrosion resisting Similar to "Illium"
1316	Mueller-600 Metal	M-266	58 Cu, 37 Zn, 5 Si+Mn	Annealed	75000	35000	20	30	150	Bearings, connecting rods, worms and worm wheels, bushings	Corrosion resisting
				Forged	90000	45000	10	20	175		

Discontinued

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1317	Alloyed Genuine Wrought Iron	M-292	5 max. Ni, 0.05 Mn, 0.10-0.15 P, 0.05 C, 0-0.75 Cu, bal. Fe		50000 60000	30000 45000				Pipes hull plates	
1318	Genuine Wrought Iron, Reading	M-291	0.03 C, 0.02 Mn, 0.06-0.25 P, 0.025 S, 0.15 Si, bal. Fe		45000 52000	25000 30000		50 25	120	Pipes, stay bolts, chains	Resists shock, corrosion and fatigue
1319	Fine Silver	M-63	99.9 Ag	Hard Annealed	41000 23000	30000 10000	3 35	38		Jewelry, alloys	M. P.-1761°F.
1320	Alufont "W"	M-249	2.0 Si, 0.6 Fe, 0.5 Mn, 2.0 Cu, 12 Zn, bal. Al	Sand cast Chill cast	35000 40000	20000 35000	3.5 3.5			Large castings, light alloy parts	
1321	Arzon Metal	M-14	0.90 Si, 0.85 Mn, 2.30 C, 0.09 S, 0.16 P, bal. Fe	Cast Treated	90000 100000	65000 80000	6 5		200	Malleable iron castings, fittings, plumbing	Close grain, white fracture
1322	Carpenter No. 3-317	M-32	C, Cr, Ni, bal. Fe	Hardened Toughened	195000 125000	170000 95000	10 35	39 65	430 235	Case-hardened parts, gears, *pinions, crane wheels*	Case-hardening steel, *discontinued*
1323	Carpenter No. 5-317	M-32	0.50 C, 1.0 Cr, 1.75 Ni, bal. Fe	Annealed Heat treated	91000 305000 125000	65000 266000 100000	27 5.2 22	64 16 60	187 495 240	Gears, clutches, shafts, crankshafts, propellers	Shock resisting
1324	Carpenter No. 478	M-32	0.10-0.65 C, bal. Fe	Treated	87000 65000	60000 35000	23 29	56 54	217 146	General automobile parts	Now obsolete
1325	Carpenter No. 492	M-32	C, bal. Fe	Untreated Treated	80000 95000		20 22	38 47	156 228	For steel parts that must be welded, axles	Now obsolete
1326	Carpenter "D.D."	M-32	C, Cr, Ni, bal. Fe	Heat treated	165000 195000	145000 165000	18 16	60 52	302 332	Axles	For extra high duty service. Obsolete
1327	Carpenter No. 500 Extra Special	M-32	0.12 C, 5 Ni, bal. Fe	Hardened	175000	150000	11	40	332	Bevel gears and pinions for transmission	Case-hardening steel. Obsolete
1328	Carpenter Type A	M-32	Low C, Cr, V, bal. Fe	Refined Toughened	90000 128000	63000 105000	22 18	60 58		Light axles, connecting rods, bolts, studs	Superseded by No. 2-720
1329	Carpenter Type D	M-32	0.5 C, 0.9 Cr, 0.2 V, bal. Fe		218000	195000	10	35		Automobile springs	Superseded by No. 5-720
1330	Trojan Steel	M-32	C, 1 Cr, 2 Ni, bal. Fe	Tempered Annealed	225000 85000	220000 60000	10 26	35 62	444 163	Transmission gears	Now obsolete
1331	Midvaloy Stainless Steel, A	M-85	0.12 min. C, 9-16 Cr, bal. Fe	Wrought Heat treated	86000 230000 116000	42000 200000 94700	30 9 21	65 20 44	175 200 241	Cutlery and similar objects	Stainless, now called Midvaloy 13-00A
1332	Midvaloy Stainless Steel "B"	M-85	0.65 C, 17.5 Cr, bal. Fe	Wrought Heat treated	70000 230000 78400	35000 200000 40100	30 8 31	50 20 57	180 550	Cutlery and similar objects	Corrosion resisting, stainless
1333	Midvaloy Stainless Iron, C-1	M-85	0.12 max. C, 15 max. Cr, bal. Fe	Wrought Treated	65000 200000 111500	37000 185000 88500	35 15 22.7	65 45 68.5	135 425 229	Material for engineering construction	Corrosion resisting, now called Midvaloy 13-00
1334	Midvaloy Stainless Iron, C-2	M-85	0.12 max. C, 15-18 Cr, bal. Fe	Treated	69000	48400	32	62	166	Storage structures for nitric acid	Corrosion resisting, now called Midvaloy 17-00
1335	Midvaloy Stainless Iron, C-3	M-85	0.12 max. C, 18-23 Cr, bal. Fe	Wrought Treated	65000 85000	45000 55000	40 20	60 25		Structures for storage of nitric acid	Corrosion resisting, now called Midvaloy 21-00
1336	Midvaloy Stainless Iron, C-4	M-85	0.12 max. C, 23-30 Cr, bal. Fe	Cast Wrought	90000 100000	55000 80000	3 15	3 40	200	Burner parts	Corrosion resisting, now called Midvaloy 26-00
1337	Midvaloy H. C.	M-85	0.20-0.25 C, 26 Cr, 1.5 Ni, bal. Fe	Wrought Cast	55000 85000 55000 75000	30000 60000 40000 60000	30 10 5 1	55 20 5 1		Furnace parts	Heat and corrosion resistant, see Midvaloy 26-02
1338	Hack Saw	M-38	C, W, bal. Fe							General Tools	
1339	Cycloid Gear Steel	M-32	Si, Mn, C, bal. Fe	Tempered Annealed	235000 85000	185000 57000	7.2 24	26 58	444 166	Gears	Silico-manganese tempering steel. Now obsolete

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1340	Babbitt, Soft, (Tin base)		Sn alloy							Bearings	
1341	Babbitt, Hard, (Tinbase)		Sn alloy							Bearings	
1342	Babbitt, Lead, (Tin base)		Sn-Pb							Bearings	
1343	Babbitt, Zinc, (Tin base)		Sn-Zn							Bearings	
1344	Ascoloy No. 44	M–1	0.20 max. C, 1.0 max. Mn, 22-25 Cr, 10-13 Ni, bal. Fe		75000 100000	45000 60000	35 25	65 45	160 200	Furnace and pump parts	Corrosion and heat resistant. Changed to "Allegheny No. 44"
1345	Ascoloy No. 55	M–1	0.25 max. C, 1.0 max. Mn, 26-30 Cr, 0.60 max. Ni, bal. Fe		75000 100000	45000 60000	35 25	65 45		Oil stills and tubes, boiler baffles, furnace parts	Corrosion and heat resistant. Changed to "Allegheny No. 55"
1346	Alcoa 4 S	M–4	1.25 Mn, 1.0 Mg, bal. Al	4 SO 4 SH	26000 42000	10000 38000	20 5		45 79	Fuel lines, fan blades, sheeting for roofs, light sockets, underground cable sheeting	High resistance to weather corrosion Discontinued
1347	Delta Bronze II	M–156 M–450	55-65 Cu, 30-44. 9 Zn, 0.1-5.0 Fe	Cast Extruded	76000 84000		10 14			Tubes, ornamental and sanitary fittings, automobile parts	Corrosion resistant
1348	Delta Bronze III	M–156 M–450	40-98 Cu, 1.8-45 Zn, 0.1-5.0 Fe, 0.1-10.0 Sn	Cast Extruded	49000 72000		30 29			Solid drawn tubes for hydraulic purposes, condensers, gears, valves, pump parts	Corrosion resistant
1349	Chromal	Swed.	2-4 Cr, Ni, Mn, bal. Al		55000 60000					Airplane parts, propellers, cooking utensils, milk and oil separators	
1350	Calite B-18	M–30	C, 18-20 Cr, 8-10 Ni, 1 Mo, bal. Fe	Cast	80000	35000	9	3		Beams supporting loads at elevated temperatures, oil still tube supports	Heat resisting up to 1800 °F. Resists sulfur. Formerly Calite B
1351	Hipernick		50 Ni, 50 Fe							Electric equipment, cores for transformers	High permeability when heat treated
1352	Darwin No. 1 & 6	M–40	0.70 C, 4.5 Cr, 18 W, 2 V, 15 Co, bal. Fe							Cutting tools	Super high speed steel
1353	Oranium Bronze	M–141	90 Cu, 10 Al	Cast Rolled	65000 80000		20			Castings	
1354	Optical Bronze		89 Cu, 6.5 Zn, 4.5 Sn		40000		20			Optical instruments	
1355	Optical Wire		54 Cu, 28 Zn, 18 Ni		33000	20000	33	38	50	Optical instruments	German Silver
1356	O. B. Alloy No. 11	M–94	94 Cu, 2 Sn, 3 Pb, 4 Zn	Cast	31000	11000	35		49	Electric apparatus	
1357a	British Navy Antifriction Metals	M–561	5 Cu, 85 Sn, 10 Sb							Admiralty lining, plastic bearings	
1357b	Antifriction Metals	M–561	8 Cu, 83 Sn, 9 Sb							Special Admiralty bearings for heavy loads	
1357c	Antifriction Metals	M–561	1.4 Cu, 69 Sn, 29.6 Sb							Special Admiralty bearings for under water	
1358	French Navy Antifriction Metals	French	7 Cu, 7.5 Sn, 78.5 Zn							Bearings	
1359	German Navy Antifriction Metals	Ger.	7.5 Cu, 85 Sn, 7.5 Sb							Bearings	
1360a	Lumen Metal	M–77	85 Sn, 10 Cu, 5 Al	Cast	40000		4			Bearings for electric motors	Discontinued
1360b	Lumen Metal	M–77	88 Sn, 4 Cu, 8 Al	Heat treated	45000		30			Bearings	Discontinued
1361	Lumen Bronze	M–77	10 Cu, 86 Zn, 4 Al	Cast	36000	36000	0	0	119	Bearings for electric motors and lathes	Will not resist excessive heat or live steam
1362	Super Manganese Bronze		69 Cu, 20 Zn, 6.5 Al, 2.5 Fe, 2 Mn		110000					Propeller blades, marine parts	Corrosion resistant
1363a	Valve Bronze		89-85 Cu, 2.5-10 Sn, 0-9 Zn, 0-6 Pb							Valves	
1363b	Valve Bronze		89 Cu, 5 Sn, 3 Zn, 3 Pb							Valves	
1363c	Valve Bronze		83 Cu, 4 Sn, 7 Zn, 6 Pb							Valves	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1364	Navy Brass "Scovill Naval Brass"	M–102	59-61 Cu, 0.5-1.0 Sn, 0.06 max. Fe, 0.20 max. Pb, bal. Zn	Soft	54000	25000	40			Boat shafting, turn buckles, welding rod	"Scovill No. 16 Alloy." Resists salt water corrosion
				Hard	65000	27000	25				
					105000	99000	7				
1365	Simplex "CH"	M–38	0.20 C, 1.25 Ni, 0.6 Cr, bal. Fe	Heat treated	90000	80000	16	45	260	Gears, pinions, shafts	Carburizing steel
1366	Carpaloy No. 2	M–32	0.30 C, 13 Cr, bal. Fe	Hardened	260000		11	32	512	Tools, cutlery, scissors, check valves, surgical instruments	Superseded by "Carpenter Stainless Steel No. 2"
1367	Bethadur No. 430	M–24	0.12 C, 17 Cr, bal. Fe	Annealed	75000	58000	28	62	170	Exterior trim, ornaments, cold rivets, tanks, retorts, nitric acid equipment	Ductile, corrosion resistant
1368	Bethadur No. 420	M–24	0.12 C, 14 Cr, bal. Fe	Annealed	118000	73000	21	54	235	Airplane parts, ball bearings, surgical and dental instruments, table cutlery	Corrosion resistant after hardening
				Oil treated	254000	203000	12	36	495		
1369	Bethadur No. 440	M–24	1.15 C, 17 Cr, bal. Fe, 0.3 Mn	Annealed	118000	78000	16	19	241	Ball bearings, cutlery, hard stainless parts	Corrosion and abrasion resistant
1370	Hardite "C"	M–166	93 Ni, 5 Si, 2 Mn							Heating elements, retorts	High heat resistant
1371	Baush A-5 Casting Metal	M–254	Al-Ni-Cu	Cast	24000		0.5		100	Heat treating castings	Highly resistant to corrosion
				Heat treated	30000						
1372	Basch Metal	M–92	91 Al, 7 Cu, 0.8 Mg, 0.2 Mn, 1.4 Ni	Chill cast	23000		2		90	Heat treated chill castings	
1373	Lynite No. 145	M–92	87.7 Al, 3 Cu, 8 Zn, 1.25 Fe		27500		4.5		65	Light alloy castings	Casting, shock resistant
1374	Lynite No. 146	M–92	91-93 Al, 7-8.5 Cu, 1.3 Fe 0.1-1.7 other elements		26000		1.4			Light alloy castings	Casting
1375	Macadamite	M–92	74 Al, 3 Cu, 23 Zn		34500		1.0				Sand casting
1376a	M.K.Steel	Japan	10-40 Ni, 1-20 Al, bal. Fe								Not forged readily
1376b	M.K.Steel	Japan	25 Ni, 10 Al, bal. Fe								Must be cast to shape
1377	Genalloy	M–59	37-40 Ni, 17-21 Cr, C, Si, bal. Fe	Cast	67000	38000	6		207	Furnace parts	High resistance to heat and corrosion
1378	Allegheny Metalclad Steel	M–1	20% of 18-8 stainless steel rolled out 80% of plain C steel							Sheet or plate to resist corrosion	
1379	Aluminum Alloy British L-5	M–92	85 Al, 13-15 Zn, 2.5-3.0 Cu, traces Fe, Si	Sand cast	24500		3		80	Light alloy, parts, regular and intricate castings	Sand castings
1380	Aluminum Alloy British L-8	M–92	89 Al, 10 Cu, 1 Sn		20000					Light alloys, parts	
1381	Cathermalite	M–69	C, alloy, bal. Fe							Annealing and carburizing boxes, flue dampers, furnace parts, acid containers	Heat and acid resisting, casting (Discontinued)
1382	Jessop Tool Steel No. 5	M–69	0.56-0.65 C, 0.1-0.2 Si, 0.25-0.6 Mn, bal. Fe							Tools	
1383	Jessop Tool Steel No. 7	M–69	0.66-0.75 C, 0.1-0.2 Si, 0.25-0.6 Mn, bal. Fe							Coal cutters, rock drills, tools, hammers, swages, chisels, press tools, picks, cams	
1384	Jessop Tool Steel No. 8	M–69	0.76-0.85 C, 0.1-0.2 Si, 0.25-0.6 Mn, bal. Fe							Tools	
1385	Jessop Tool Steel No. 9	M–69	0.86-0.95 C, 0.1-0.2 Si, 0.25-0.6 Mn, bal. Fe							Gages, cold chisels, reamers, tools, screw dies, drills, milling cutters, valve tappets	
1386	Jessop Tool Steel No. 10	M–69	1.0-1.1 C, 0.1-0.2 Si, 0.25-0.6 Mn, bal. Fe							Large drills, punches, broaches, tools, cutting tools, knives, jigs, gages, mandrels	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1387	Jessop Tool Steel No. 11	M-69	1.1-1.2C, 0.1-0.2 Si, 0.25-0.6 Mn, bal. Fe							Small drills, punches, press tools, tools, heading dies, mandrels, pipe cutters, punches, scrapers	
1388	Jessop Tool Steel No. 12	M-69	1.2-1.3 C, 0.1-0.2 Si, 0.25-0.6 Mn, ba Fe							Very small tools, engraving tools, tools, gages, planing tools	
1389	Jessop Tool Steel No. 14	M-69	0.55-0.65 C, 0.1-0.25 Si, 0.3-0.5 Mn, 3.5-4 Cr, 0.5 min. V, 13-14 W, bal. Fe							Tools, high speed cutters	High speed
1390	Jessop Tool Steel No. 18	M-69	0.65-0.75 C, 0.1-0.25 Si, 0.3-0.5 Mn, 4-5 Cr, 17-18.5 W, bal. Fe							Tools, high speed cutters	High speed
1391	Jessop Tool Steel H-4	M-69	0.8-0.9 C, 0.1-0.2 Si, 1.75-2.0 Mn, Cr, bal. Fe							Tools, taps	
1392	Jessop Tool Steel H-9	M-69	2.0-2.25 C, 0.1-0.15 Si, 0.3-0.5 Mn, 13-13.5 Cr, bal. Fe							Tools, dies	Alloy "C"
1393	Jessop Tool Steel K-2	M-69	1.3-1.5 C, 0.1-0.15 Si, 0.3-0.5 Mn, 0.75-0.85 Cr, bal. Fe, 4-5 W							Tools, form cutters	Alloy "B"
1394	Jessop Tool Steel K-6	M-69	1.15-1.25 C, 0.1-0.2 Si, 0.3-0.5 Mn, 0-0.5 Cr, 1.25-1.5 W, bal. Fe							Tools, Hack-saws	
1395	Jessco	M-69	C, bal. Fe							Hot and cold dies, heading and forging dies, shear blades, punches	High speed steel (Discontinued)
1396	Jessop No. 3 C—Die Steel	M-69	2.2 C, 12.5 Cr, bal. Fe Co, V	Annealed					228	Dies, blanking dies, punches, taps, reamers	Resists corrosion and oxidation
1397	Jessop No. 2 B Hot Die Steel	M-69	0.30-0.55 C, 8-15 W, trace Cr, 0.50 V, bal. Fe							Header dies, rivets and bolt dies, forging, machines, bull dozing tools, punches	Hot die Steel Semi-high speed
1398	Jessop J.J.Work Steel	M-69	0.60-0.95 C, 3.5 Cr, V, Mo, bal. Fe							Hot work tools, hot pressed nut dies, hot piercing punches, upsetting dies	Hot work steel
1399	Jessop [illegible]57 Die Steel	M-69	C, Cr, Ni, bal. Fe							Dies for hot stamping	Hot stamping die steel. (Discontinued)
1400	Jessop M.D. Drill Steel	M-69	0.80 C, bal. Fe							Drills, mining and rock drills	Drill steel
1401	Jessop Oil Bit Drill Steel	M-69	0.70 C, bal. Fe							Oil bit drills	
1402	Jessop Dril-it Drill Steel	M-69	0.80 C, 0.25 V, bal. Fe							Drills for rock mining	Alloy drill steel
1403	Jessop Coal and Mine Bit Steel	M-69	0.75 C, bal. Fe						350	Coal and mine bits	
1404	Jessop Armat	M-69	0.85 C, 3 Cr, bal. Fe						300	Magnets, electrical apparatus	Magnet Steel
1405	Jessop Chrome Magnet Steel	M-69	0.8-0.95 C, 3.0-3.3 Cr, 0.4-0.6 Mn, bal. Fe						300 350	Magnetos, Instruments where high permeability and permanency are required	Magnet Steel
1406	Jessop Tungsten Magnet Steel	M-69	0.8-0.95 C, 5.0-5.5 W, 0.4-0.5 Cr, 0.4-0.6 Mn, bal. Fe						300 350	Magnets, Electrical apparatus	Magnet Steel
1407	Jessop Cobalt Magnet Steel	M-69	0.87-0.95 C, 35-37 Co, 4-4.5 Cr, 2.0-2.5 W, bal. Fe						350	Magnets, Electrical apparatus	Magnet Steel
1408	J. Metal (Stellite J-Metal)	M-167	Cr, Co, W	Cast					627	Tool bits, milling cutter blades, boring and reaming blades	Hard alloy. Possesses high red hardness
1409	Chippaway	M-69	0.6-1.4 C, bal. Fe							Pneumatic hammers, chisels, vise jaws, rock drills, punches	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1410	Lion	M-69	0.6-1.4 C, bal. Fe							Tools, general tools, broaches, chisels, dies, knives, files	
1411	Nickahl Steel	M-69	C, 35-42 Ni, bal. Fe							Valves, thermostatic elements	
1412	Purple Label High Speed Steel	M-69	C, 5 Co, 18.5 W, 4.3 Cr, 1.5 V, bal. Fe							High speed cutting tools, lathe and planer tools	High speed steel
1413	Special "H.M." Oil Hardening Steel	M-69	0.90 C, 1.7 Mn, 0.20 V, bal. Fe							Cutting tools, drawing and blanking dies, punches, form cutters	For max. hardness and superior cutting qualities
1414	Special High Carbon 51-V	M-69	1.1 C, 20 Cr, 1.25 W, 0.20 V, bal. Fe							Twist drills, taps, dies, milling cutters	
1415	Sterling Nitrard No. 1	M-57	1.5 C, 0.2 Mn, 12 Cr, 1 Mo, 1 V, bal. Fe							Drawing dies, hot working dies	Nitriding steel
1416	Super-High Speed		0.75-0.90 C, 17-22 W, 4.5-6 Cr, 1-2.5 V, 0.75-1.5 Mo, 8-15 Co, bal. Fe							High speed tools	High speed steel. Has great red hardness
1417	Supremus	M-69	C, 18 W, 4 Cr, 1.5 V, bal. Fe							High speed tools, cutters, planer tools, broaches, drills	High speed steel
1418	Supremus Extra	M-69	C, 18.5 W, 4 Cr, 1.5 V, 1.0 Mo, bal. Fe							High speed tools, cutters, drills, broaches, lathe centers	For delicate tools. High speed steel
1419	Top Notch	M-69	0.50 C, 2.5 W, 1.25 Cr, 0.25 V, bal. Fe							Tools, chisels, track tools	Shock resisting
1420	Hardite "X"	M-166	82-86 Ni, 10-13 Cr, 2-4 Si, 2 Mn							Heating elements, retorts	Heat resisting
1421	Utilitas	M-166 M-69	0.6-1.4 C, bal. Fe							Tools	
1422	Washington	M-166 M-69	0.6-1.4 C, bal. Fe							Tools, general tools, broaches, cold heading dies, cutters	
1423	Zip Zip	M-166 M-69	0.6 C, 0.75 Cr, 1.8 W, bal. Fe							Tools, chisels, screw drivers, pneumatic tools	
1424	Admiro V	M-2	43 Cu, 15 Ni, 35 Zn, 2 Al, 3 Mn, 2 Fe	Cast Pressed			18-5 20-8		160 185	Turbine bearings	
1425	Colonial No. 6	M-34 M-115	0.95 C, 1.3 Mn, 0.5 Cr, 0.15 V, 0.5 W, bal. Fe		140000	120000	8	30	302	Blanking dies, chasers, gages, hobs, master tools	Non-shrinking, oil hardening
1426	Bonney-Floyd N.C.M.	M-139	0.25-0.35 C, 0.15-0.25 Mo, 1.75-2.25 Ni, 0.75-1.0 Cr, bal. Fe	Heat treated	220000 100000	182000 80000	2 22	14 55	460 220	Dipper teeth, gears, rollers, wheels	Resists abrasion and shock
1427	Bonney-Floyd H.T. Low Carbon	M-139	0.30 C, 0.6-0.8 Mn, bal. Fe	Heat treated	128000 80000	98000 53000	10 30	18 65	250 165	General structural parts	Cast Metal Iz-14-18
1428	Circle "L" No. 6	M-74	0.15 C, 1.75 Ni, 0.25 Mo, bal. Fe	Cast	103250	67000	20	40	207	Carburized parts requiring tough core and hard surface	Carburizing steel castings
1429	Circle "L" No. 8	M-74	0.2 C, 2.75 Cr, 0.4 Mo, 0.2 V, bal. Fe	Cast Oil treated	90000 200000 125000	60000 150000 100000	20 6 16	50 10 35	 270	For nitrided parts	Nitriding steel
1430	Circle "L" No. 10	M-74	0.20 C, 5 Cr, 0.5 Mo, bal. Fe	Cast	120000 110000	90000 75000	17 20	45 30	240 215	Oil still parts, for high temp. and high pressure oil still valves and fittings	Corrosion resistant
1431	Cobaltcrom Stainless	M-40	3.3 Co, 18 Cr, 0.75 Mo, 1.10 C, 0.25 V, 0.30 Mn, bal. Fe							Special cutlery and corrosion resisting parts	Air hardening steel. Non-deforming
1432	Carpenter Stainless No. N-1	M-32	0.10 C, 13 Cr, 2 Ni, bal. Fe	Hard rolled	220000					Mild springs, cutlery, spatulas, rules, tapes	Stainless, magnetic, Rockwell "C"—43-48
1433	Carpenter Stainless No. 2-B	M-32	1.0 C, 17 Cr, bal. Fe							Cutlery, scissors, surgical instruments, ball bearings	Used only in full hardened condition
1434	Carpenter Stainless No. 6	M-32	0.10 C, 17 Cr, bal. Fe	Normalized	90000		27		187	For making stampings, moldings, etc.	Used in cold rolled strips. Will not harden

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1435	Carpenter Stainless No. 8	M-32	0.10 C, 18 Cr, 8 Ni, 0.25 Se, bal. Fe	Rolled	115000		53		250	Stainless parts	Great corrosion resistance. Hardens only by cold working
				Annealed	85000		35		140		
1436	Hardite "Z"	M-166	6-12 Ni, 15-25 Cr, C 0.4 Si, 1-3 Mn, bal. Fe							Heat treating boxes, furnace parts	Stainless
1437	Helbimphy Special	M-104	C, bal. Fe							Tools	Extra-superior quality
1438	Helbimphy	M-104	C, bal. Fe							Tools	Superior quality
1439	Nymphe	M-104	C, bal. Fe							Tools	Discontinued
1440	Imphysta	M-104	C, bal. Fe							Airplane construction	Class of Imphy alloys
1441	Nicral A	M-104	C, bal. Fe, 13 Cr		125000	101000	18	1		Carburizing boxes, heat-treating equipment	Series of alloys for resistance to oxidation at elevated temp.
					150000	114000	12				
1442	Fixinvar	M-104	36 Ni, bal. Fe							Clocks	
1443	Anibal	M-104	C, 42 Ni, 2 Cr, bal. Fe							Clocks, balance wheels	Corrosion resistant
1444	Imphy N.C.M.	M-104	C, 2 Ni, bal. Fe	Heat treated	78000	50000	25			Case-hardened parts	
					100000	71000	15				
1445	Imphy N.F.	M-104	C, 3 Ni, bal. Fe	Heat treated	100000	78000	16			Case-hardened parts	
					114000	100000	8				
1446	Imphy N.7 C.M.	M-104	C, 7 Ni, bal. Fe	Heat treated	140000	100000	10			Case-hardened parts	Special Ni Steel
					164000	114000	7				
1447	Imphy N.F.C. No. 1	M-104	C, 3.5 Ni, 1 Cr, bal. Fe	Annealed	81000	61000	25			Case-hardened parts, axles, shafts, steering parts	
					91000	71000	18				
				Oil quenched	171000	156000	10				
					200000	192000	7				
1448	Imphy N.A.	M-104	C, 2 Ni, bal. Fe	Annealed	78000	50000	26			Crankshafts, transmission shafts, forged parts	
				Heat treated	143000	116000	11				
1449	Imphy N.D.	M-104	C, 5 Ni, bal. Fe	Annealed	81000	55000	25			Turbine buckets	Resists fatigue stresses
				Heat treated	177000	143000	10				
1450	Imphy N.C. 3 H.-1	M-104	C, 3 Ni, 1 Cr, bal. Fe	Annealed	81000	55000	25			Crankshafts, machine parts, dies	
				Heat treated	164000	150000	10				
1451	Doblinsche Alloy	Ger.	50 max. Si, Co, bal.							Chemical construction	Corrosion resistant
1452	Imphy B.V.-1	M-104	0.25 C, 4 Ni, 1 Cr, bal. Fe	Heat treated	107000	85000	15			Shafts	Air hardening
					228000	213000	8				
1453	Imphy A.T.V.	M-104	0.30 C, 35 Ni, 11 Cr, bal. Fe	Forged	107000	78000	20			Turbines, exhaust valves for internal combustion engines	Corrosion and heat resistant
				Annealed	88000	46000	25				
1454	Baros	M-104	90 Ni, 10 Cr							Pen points, balance weights	Heat resisting
1455	Imphy A.T.G.	M-104	60 Ni, 26 Fe, 10 Cr, 4 W	Forged	121000	91000	20			Gas turbines, internal combustion engines	Heat resisting, corrosion resisting
				Annealed	100000	52000	30				
1456	Neo-Baros	M-104	90 Ni, 10 Cr							Weights, pen points	Similar to "Baros," non-magnetic
1457	Pyros	M-104	82 Ni, 7 Cr, 3 Fe, 5 W, 3 Mn							Dilatometric temperature indicating or control devices	Heat resisting alloy
1458	Imphy A.F.T.	M-104	Ni alloy								Discontinued
1459	Imphy A.T.E.	M-104	Ni alloy							Thermocouple element to be used with Imphy B.T.E.	Max. operating temp.—950°C.
1460	Imphy B.T.E.	M-104	Ni alloy							Thermocouple element to be used with Imphy A.T.E., C.T.E. or nickel	
1461	Imphy C.T.E.	M-104	Ni alloy							Thermocouple element to be used with Imphy B.T.E.	Useful range (—220 to +700°C)
1462	Imphy N.C.-4	M-104	C, 25 Cr, bal. Fe	Forged	121000	85000	25			Rotor housings, naval compass construction	Non-magnetic
				Annealed	92000	39000	40				
1463	Sonderlegierung	M-116			19000	14000	30			For deep drawing parts	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1464	Reinaluminium	M-116	99 Al or 99.5 Al	Annealed	9000		40			Chemical apparatus, tanks, dairy industry, electrical parts	Commercially pure Al.
					16000		30				
				Hard	29000	25000	4				
1465	Pantal	M-116	0.5-1.0 Mg, 0.4-1.4 Mn, 0.8-2 Si, 0.3 Ti, bal. Al	Annealed	16000	14000	25			Sheet metal sheathing, body work, architectural	Corrosion resistant, age-hardening
				Heat treated	60000	50000	10				
1466	Nicorros	M-303	67 Ni, 33 Cu	Soft	63000		42			Chemical and oil apparatus ship construction	Highly corrosion resistant
				Hard	101000		3				
1467	Reinnickel	M-303	Ni	Annealed	65000	18000	50			Chemical and food-handling equipment	Pure Ni corrosion resistant
				Hard rolled							
1468	V.L.W. Leichtmetalle	M-116	Al alloys							Light alloy parts for airplanes, dirigible and automobiles	Formerly known as "Leichtstahl"
1469	Allautal	M-116	Surface of pure Al on base of "Lautal"	Annealed	20000		25			Light alloy parts	Similar to "Alclad"
				Normalized	60000		18				
1470	Albondur	M-116	"Bondur" with Al coating, integrally bonded							Light alloy parts	Good corrosion resistance
1471	Bondur	M-116	3.5-5.5 Cu, 0.3-0.5 Si, 0.25-1.0Mn,0.2-0.7Mg,bal.Al	Annealed	31000		15			Light alloy parts, aircraft parts	Age-hardening. Duralumin type alloy
				Heat treated	65000	43000	16		125		
1472	M.O.S.	M-104	1.5 Si, Mn, C, bal. Fe	Annealed	105000	65000	20			Gears, springs	Silico-manganese steel
				Heat treated	186000	163000	7				
1473	M.G.N.	M-104	C, Si, Mn, 5 W, bal. Fe							Permanent magnets, electrical equipment	Retains magnetization
1474	N.M.H.G.	M-104	C, 29 Ni, 3 Cr, bal. Fe							Thermal compensation of permanent magnets, electric meters	
1475	R.N.C.-1	M-104	C, 36 Ni, 10 Cr, bal. Fe							Rheostats, electrical heating units, metallic heat screens	Heat resistant
1476	C.V.C.	M-104	C, 1.5 Cr, 0.25 V, bal. Fe	Annealed	64000	50000	28			Piston pins	Case-hardening steel
					73000	58000	22				
				Water quenched	163000	156000	10				
					186000	177000	17				
1477	A.R.C.	M-104	C, Cr, Ni, bal. Fe							Chemical apparatus, nitrogen fixation and synthetic ammonia apparatus, valves, pumps	Resists chemical attack. Stainless
1478	Etiral	M-104	C, 10 Cr, bal. Fe							Wire drawing dies	Tough and hard
1479	C.C.R.	M-104	Ni, 12 Cr, C, bal. Fe	Annealed	100000	58000	20			Gages, mirrors	Abrasion resistant
					121000	78000	15				
				Heat treated	192000	163000	5				
1480	Cromimphy No. 1	M-104	C, 12-14 Cr, bal. Fe		92000	71000	25			Food handling equipment, cooking utensils, reflectors, turbine blades	Corrosion and oxidation resistant
					114000	91000	13				
1481	Imphy "T"	M-104	0.5 C, Si, Mn, bal. Fe	Annealed	100000	55000	19			Hammers, punches, dies, cutlery	Oil hardening
					107000	64000	14				
1482	Imphy "T.T."	M-104	0.65 C, Si, Mn, bal. Fe	Annealed	107000	56000	15			Files, saws, dies, ball mills	
					120000	71000	10				
1483	Imphy "T.T.T."	M-104	0.70 C, Si, Mn, bal. Fe	Annealed	120000	64000	12			Files, saws	
					143000	78000	7				
1484	Imphy "M.T."	M-104	0.45 C, Si, Mn, bal. Fe	Annealed	91000	52000	22			Paper cutters, sledges, wedges, mining bars	
					100000	60000	17				
1485	Imphy "D.T."	M-104	0.40 C, Si, Mn, bal. Fe	Annealed	85000	50000	24			Fire arms, cutlery, edge tools	
					92000	56000	20				
1486	Imphy "M.D."	M-104	0.30 C, Si, Mn, bal. Fe	Annealed	78000	46000	26			Fire arms, edge tools	
					85000	52000	23				
1487	Imphy "D"	M-104	0.25 C, Si, Mn, bal. Fe	Annealed	70000	43000	28			Machine parts, locomotive axles	
					78000	52000	25				
1488	Imphy "D.D."	M-104	0.20 C, Si, Mn, bal. Fe	Annealed	64000	38000	31			Wagon axles, marine forgings	
					71000	46000	28				

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1489	Imphy "D.D.D."	M–104	0.15 C, Si, Mn, bal. Fe	Annealed	58000 64000	39000 45000	33 28			Rivets, stamped pieces	
1490	Imphy "F.F."	M–104	0.10 C, Si, Mn, bal. Fe	Annealed	52000 58000	32500 38000	39 42			Welding	Replaces Swedish Iron
1491	Contracid B 2.5 M	M–296	19.5 Fe, 61 Ni, 15 Cr, 2.5 Mo, 2 Mn							Chemical apparatus, surgical instruments	Heat and corrosion resisting
1492	Contracid B 4 M	M–296	18 Fe, 61 Ni, 15 Cr, 4 Mo, 2 Mn							Chemical apparatus, surgical instruments	Heat and corrosion resisting
1493	Contracid B 6 W	M–296	16 Fe, 61 Ni, 15 Cr, 6 W, 2 Mn							Chemical apparatus, surgical instruments	Heat and corrosion resisting
1494	Contracid B 7 M	M–296	16 Fe, 60 Ni, 15 Cr, 7 Mo, 2 Mn	At 20 °C. At 500 °C.	136000 107000	120000 91000	23 28			Chemical apparatus, surgical instruments	Heat and corrosion resisting
1495	Contracid B 10 W	M–296	12 Fe, 61 Ni, 15 Cr, 10 W, 2 Mn	At 25 °C. At 500 °C.	125000 109000	112000 100000	22 18			Chemical apparatus, surgical instruments	Heat and corrosion resisting
1496	Contracid B W M C	M–296	14 Fe, 58 Ni, 3 Co, 15 Cr, 3 Mo, 5 W, 2 Mn							Chemical apparatus, surgical instruments	Heat and corrosion resisting
1497	Krupp V-5 M	M–72	85 Fe, 0.7 Ni, 15 Cr, 0.5 Mn, 0.8 Si, 0.2 C		114000					Shaft axles, valves	Heat and corrosion resistant
1498	Chroman Alloys	M–296	Fe, Ni, Cr, Mn							Heating elements	Acid resisting
1499	Chroman "Ao"	M–296	88 Ni, 11 Cr, 1 Mn							Heating elements	Acid resisting
1500	Chroman "B"	M–296	20 Fe, 64 Ni, 15 Cr, 1 Mn	At 20 °C. At 500 °C.	87000 73000		48 46			Heating elements	Acid and heat resisting
1501	Chroman "Bo"	M–296	84 Ni, 15 Cr, 1 Mn							Heating elements	Acid resisting
1502	Chroman "C"	M–296	10 Fe, 69 Ni, 20 Cr, 1 Mn							Heating elements	Acid resisting
1503	Chroman "Co"	M–296	79 Ni, 20 Cr, 1 Mn							Heating elements	Acid resisting
1504	Chroman "D"	M–296	9 Fe, 65 Ni, 25 Cr, 1 Mn							Heating elements	Acid resisting
1505	Chroman "E"	M–296	16 Fe, 50 Ni, 33 Cr, 1 Mn							Heating elements	Acid resisting
1506	Imperial Manganese Steel	M–210	12 Mn, 1.2 C, bal. Fe		123000				200	Tracks, dredger buckets, dipper teeth, gears, sheave wheels, sprockets, tube mill liners	Wear resistant. Difficult to machine
1507	Satco	M–88	97.5 Pb, bal. Ca, Sn, etc.						27	Bearings, crosshead gibs, trailer and driving boxes	White metal, for high speeds and heavy loads
1508	Ascoloy No. 66	M–1	0.12 C, 0.43 Si, 0.40 Mn, 18.5 Cr, bal. Fe	Hot rolled	65000 85000	45000 55000	35 25	60	150 160	Furnace parts	Changed to "Allegheny No. 66" Corrosion and heat resistant
1509	Vascoloy	M–115	Tantalum carbide, cemented with metallic W.							Tools for cutting hard materials	Hard cutting material
1510	Ferron		50 Fe, 35 Ni, 15 Cr							Heating elements, heat and corrosion resisting parts	Heat and corrosion resistant
1511	Berrydur	M–296	15 Cr, 60 Ni, 16 Fe, 2 Mn, 7 Mo, 0.5 Be							Heat and corrosion resisting parts	Heat and corrosion resistant
1512	Krupp V-1 M	M–72	82 Fe, 2 Ni, 15 Cr, 0.4 Mn, 0.5 Si, 0.15 C		213000				450	Stainless parts	Stainless and corrosion resistant
1513	Imphychrome	M–104	C, 2.5 Cr, bal. Fe							Turning tools, planers, drills, punches, cold dies, files	Extremely hard Discontinued
1514	Imphram	M–104	C, 2-3 W, 0.5-1.0 Mn, bal. Fe							Turning tools, planers, borers, gages, fine cutlery, hard hammers, chisels, razors	Non-deforming Discontinued
1515	Imphynusable	M–104	C, Cr, bal. Fe							Tools, gages, saws, turning tools, planers	Resistance to wear and shock. Discon.
1516	Imphycorroye	M–104	C, alloy, bal. Fe							Axles, hooks, cutlery, carpenter tools	Discontinued
1517	Imphyrapide Ultra	M–104	C, Mn, 6 Cr, V, 16-20 V, bal. Fe							High speed tools	Discontinued
1518	Imphynaturel	M–104	C, bal. Fe							Cutlery, picks, axes, wood tools, pistols	Discontinued

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1519	Imphyrapide	M-104	C, Mn, Si, 5.5 Cr, 10-12 W, bal. Fe							*Turning tools, high speed* planers	Discontinued
1520	Imphytungstene	M-104	C, 0.5 Cr, 6-8 W, bal. Fe							Tools, planers, circular saws, borers	Discontinued
1521	Nickrotherm "N.C.T."	M-72	Cr, Ni, C, bal. Fe							Heating muffles, autoclaves, roasting furnaces, rabbles, boilers, grates, recuperators, dampers	Heat and corrosion resistant
1522	Nickrotherm "F.F."	M-72	Cr, Si, C, bal. Fe							Heating muffles, autoclaves, roasting furnaces, rabbles, boilers, grates, recuperators, dampers	Heat and corrosion resistant
1523	Platinit		46 Ni, bal. Fe							Chemical apparatus	Corrosion resistant
1524	Thermisilid Extra		14-18 Si, bal. Fe						250	Acid plants, explosives mfg.	Corrosion and acid resistant
1525	Acidur	M-323	16-17 Si, bal. Fe							Chemical apparatus	Corrosion resistant
1526	Duracid	M-323	16 Si, cast iron							Chemical apparatus	Corrosion resistant
1527	Nickelin	M-297	50-90 Cu, 3-40 Ni, 0-10 Al, 0-40 Zn							Chemical equipment	Corrosion resistant
1528	Rotoxit		<4 Si, bal. Cu							Chemical apparatus	Corrosion resistant
1529	Silverin "Blancadur"	M-303	67-70 Ni, 1-3 Mn and Fe, bal. Cu	Annealed	74000		40			Chemical apparatus, dye	Similar to "Monel"
				Heat treated	146000		20			vats, plating rolls, table ware	Corrosion resistant
1530	Alva Duplex Forging	M-38	0.40 C, 1.2 Cr, 0.2 V, bal. Fe	Heat treated	130000	112000	20	52	290	Axles, pins, shafts	
1531	Duraloy "N"	M-45	0.25-0.50 C, 20-30 Cr, 8-14 Ni, bal. Fe	Rolled	95000	60000	55	65	160	Furnace parts	Resists heat to 2100°F. Can be rolled or forged
					130000	105000	45	50	260		
				Cast	85000		40				
					110000		30				
1532	Duraloy No. 15-35	M-45	C, 35 Ni, 15 Cr, bal. Fe	Cast	69000		2			Furnace parts	Resists heat to 2100°F. Can be forged or rolled only at high temperatures.
1533	Duraloy "C"	M-45	C, 12-14 Cr, bal. Fe	Cast	100000	75000				Furnace parts	Heat resisting up to 1350°F.
					110000	85000					
1534	Duraloy "H"	M-45	2.75 C, 27-30 Cr, bal. Fe	Cast	50000				450	Abrasion resisting castings,	Heat resisting,
					60000		0		500	hard surface welding rods	abrasion resisting
1535	Duraloy "X"	M-45	Cr-Ni-W	Cast	75000		5			Chains in furnaces	Discontinued
					80000		3				
1536	Emetco No. 6 "Imperial"	M-49								Armature bearings	Hard, smooth, adaptable
1537	Emetco No. 7 "Copper hardened"	M-49								Main bearings of high speed internal combustion engines	Tough, malleable
1538	Emetco No. 8 "Extra"	M-49								Bearings	
1539	Emetco No. 9 "Triumph"	M-49								Bearings for punches, shears, rollers, cranes	
1540	Emetco No. 10 "Electric"	M-49								Bearings	
1541	Emetco No. 11 "Rock Crusher"	M-49								Bearings	
1542	Emetco No. 12 "Matchless"	M-49								Bearings	
1543	Emetco No. 13 "Rolling Mill"	M-49								Bearings	
1544	Emetco No. 14 "Car Box"	M-49								Bearings	
1545	Emetco No. 15 "Standard"	M-49								Bearings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1546	Emetco No. 16 "Special"	M-49								Bearings	
1547	Emetco No. 17 "Alaska-White Brass"	M-49								Bearings	
1548	Hy-Ten "A" No. 1	M-119	0.20 C, high Mn, high Cr, bal. Fe	Hot rolled Heat treated	80000 134000	50000 116000	30 11	58 36	163 302	Parts to be carburized, pins, cams, gears, gages, bolts, shafts	Case-hardening steel
1549	Hy-Ten "B" No. 2	M-119	0.40 C, Mn, Cr, bal. Fe	Hot rolled Heat treated	90000 160000	55000 122000	18 11	45 33	201 321	Shafts, spindles, tap shanks, sleeves, worms, arbors, gears	Free machining. Tough.
1550	Hy-Ten "B" No. 4	M-119	0.50 C, high Mn, High Cr, Mo bal. Fe	Annealed Oil treated	95000 232000	55000 218000	28 9.5	60 33	179 435	Gears, clutches, shafts, pins, springs	Oil hardening steel
1551	Hy-Ten "B" No. 5	M-119	0.95 C, low Cr, bal. Fe	Heat treated						Cams, arbors, springs, hammers, reamers, piston rings, tools	Water hardening steel. Sc.-80-90
1552	Hy-Ten "M"	M-119	0.70 C, Cr, Ni, bal. Fe, Mo	Annealed Oil treated	95000 230000	55000 200000	25 10	55 35	179 444	Cams, arbors, gages, springs, clutches, forming and trimming dies	Shock and wear resistant
1553	Everbrite No. 82	M-154	30.5 Ni, 62 Cu, 7 Fe, 0.5 Mn							Steam applications	High corrosion resistance
1554	Enduro "A.A."	M-97	0.12 max. C, 16-18 Cr, 0.3-0.5 Mn, bal. Fe	Annealed	80000	50000	25	60	163	Valves, heat transfer parts, condenser tubes, nitrogen fixation apparatus	Non-hardening, corrosion resistant. Resists heat to 1800°F.
1555	Enduro "H.C."	M-97	0.35 max. C, 23-30 Cr, 0.3-0.5 Mn, bal. Fe	Annealed	80000	45000	25	45	179	Annealing boxes, glass molds, valves, fittings, rabble arms, furnace parts	Stainless, corrosion resistant. Resists heat to 2000°F.
1556	Enduro "H.C.N."	M-97	0.12-0.20 C, 1.0-1.5 Mn, 0.75-1.0 Si, 24-26 Cr, 11-13 Ni, bal. Fe	Annealed	90000	45000	50	60	170	Furnace parts, oil refining and chemical plant equipment, skid rails	Stainless, corrosion and heat resistant. Resists heat to 1950°F.
1557	Enduro "K.N.C.-3"	M-97	0.20 max. C, 23-27 Cr, 17-21 Ni, 1.5 max. Mn, 2.0 max. Si, bal. Fe	Annealed	100000	50000	45	50	179	Corrosion and heat resistant parts	Stainless. Resists heat to 2100°F. Superseded
1558	Enduro "S-F.C."	M-97	0.12 C, 12.5-15 Cr, bal. Fe	Annealed	75000	40000	25	55	159	Corrosion resisting parts	Stainless. Superseded
1559	Enduro "K.A.2 S"	M-97	>0.07 C, 16.5-20 Cr, 0.6 Mn, 7-10.5 Ni, bal. Fe, 0.75 Si		90000	45000	60	65	140	Used in oil industries for combination of high temp. and high pressures and where severe acid corrosion is encountered	Stainless. Used for temp. of 1000-1350°F. Superseded
1560	Enduro "N.C.T.-3"	M-97	>0.20 C, 23-27 Cr, 17-21 Ni, bal. Fe							Furnace parts, retorts, grates, heat treating boxes	Stainless. Superseded
1561	Enduro "F.C."	M-97	0.05-0.12 C, 12.5-15 Cr, 0.25-0.50 Mn, 0.50 Si, 0.25 Ni, bal. Fe, S, Se or Mo	Hot rolled Oil treated	137900 150000	106000 110000	2.5 7	2.0 9.8	286 302	Turbine blades, valve stems, Chemical engineering equipment, pump shafts, bushings	Stainless, corrosion and heat resisting. Free-machining
1562	Magnesium Alloy A.M. 240	M-4 M-313	10 Al, 0.1-0.2 Mn, bal. Mg	Sand cast Heat treated	24000 38000	12000 20000	1 1		60 76	Sand, permanent mold and die casting	Fair corrosion resistance
1563	Magnesium Alloy A.M. 57 S	M-4 M-313	6.5 Al, 0.4 Mn, 1.0 Zn, bal. Mg	Extruded	38000 42000	22000 28000	14 8	24 15	55	Extrusion and hot pressings	Good corrosion resistance
1564	Midvaloy 2512 B	M-85	1.0 C, 25 Cr, 12 Ni, bal. Fe	Cast	70000	50000	8	10		Furnace parts, heat treating boxes, retorts	Corrosion and abrasion resisting
1565	Midvaloy "Hy-X"	M-85	0.50 C, 8 Cr, 22 Ni, 1 Cu, bal. Fe	Wrought	100000 120000	60000 85000	34 18	58 30	200 215	Plugs in oil still heater tubes	Resists corrosion by H_2SO_4
1566	Midvaloy Aero-Valve	M-85	0.60 C, 12.5 Cr, 20 Ni, 2 W, bal. Fe	Wrought	130000 160000	120000 130000	20 14	35 25	260 340	Poppet valves for aeronautic engines, heavy trucks, etc.	Austenitic Alloy
1567	Midvaloy "N" Metal	M-85	0.45 C, 19 Cr, 60 Ni, bal. Fe	Cast Air cooled	60000 75000 73000	34000 40000 37000	11 5 11.2	15 5 14.8	156	Castings for chemical industries and parts subjected to rapid changes of temperature	Corrosion resisting, now called Midvaloy 20-60

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1568	Midvaloy "A.M.F." Alloy	M-85	0.15 C, 48 Ni, bal. Fe 1.5 Mn	Wrought	87000	42000	40	70	175	Parts of refrigeration machines operating at low temperatures	Corrosion resisting
					149000	152000	10	50	310		
				Untreated	87500	52000	20.5	25.8	175		
1569	Midvaloy "K.A.2"	M-85	>0.16 C, 18-19 Cr, 8-9 Ni, bal. Fe	Cast	70000	35000	60	60	130	Stainless parts	Corrosion resisting, now called Midvaloy 18-08
					80000	40000	35	30	150		
				Air cooled	75500	37000	47.7	41.6	130		
1570	Midvaloy "K.A.2 S"	M-85	0.07 max. C, 18-20 Cr, 8-9 Ni, bal. Fe							Stainless parts	Corrosion resisting, now called Midvaloy 18-08
1571	Midvaloy "K.A.2 Mo"	M-85	0.16 max. C, 18-20 Cr, 8-9 Ni, 3 Mo, bal. Fe	Cast	90000	50000	25	25		Stainless parts, paper industry	Resists sulfurous acid
				Air cooled	92500	50000	25	25.2			
1572	Nevastain "S"	M-15	11.5-13 Cr, 0.12 max. C, bal. Fe	Rolled	125000		8	25	280	Turbine blading, pump rods, machine parts, valves, spoons and forks	Corrosion resisting
		M-76			150000		10	35	320		High resistant to shock and impact
				Heat treated	130000		21	68	237		See Silcrome 12
				Annealed	50000		35	60	140		
1573	Nevastain "E.Z."	M-15	13.5-15 Cr, 0.12 max. C, bal. Fe							Corrosion resisting parts	Corrosion resisting See Silcrome 12-EZ
		M-76									
1574	Nevastain "C.A."	M-15	12.5-13.5 Cr, 0.30-0.35 C, bal. Fe	Annealed	90000		20	40	195	Cutlery	Corrosion resisting See Silcrome L-12
		M-76			105000		25	50	210		
				Heat treated	225000		9	25	420		
					145000		14	47	270		
1575	Nevastain "C.B."	M-15	16.5-17.5 Cr, 0.65-0.70 C, bal. Fe							Cutlery	Corrosion resisting See Silcrome M-17
		M-76									
1576	Nevastain "K.A.2"	M-15	17-18.5 Cr, 8.25-10 Ni, 0.08-0.16 C, bal. Fe	Heat treated	112000	90000	41	64		Stainless parts	Corrosion resisting See Silcrome KA2
		M-76			86000	37000	75	82			
1577	Nevastain "K.A.2 S"	M-15	17-18.5 Cr, 8.25-10 Ni, 0.07 max. C, bal. Fe	Heat treated At 1600°F.	132000	42000	50	76		Stainless parts	Corrosion resisting See Silcrome KA2S
		M-76			20000	7000	28	26			
1578	Nevastain "K.N.C-3"	M-15	24-26 Cr, 19-21 Ni, 0.15 max. C, bal. Fe							Furnace parts	Heat&corrosion resisting. See Silcrome 25-20
		M-76									
1579	Nevastain "D"	M-15	>0.15 C, 1.0 Si, 20-21 Cr, bal. Fe	At 70°F.	65000	40000	32	63		Furnace linings, conveyors	Heat resisting. See Silcrome 21
		M-76			75000	45000					
				At 1500°F.	10000	8000	90	98			
1580	Nevastain "H"	M-15	1.0-1.1 C, 16-18 Cr, <0.60 Si, bal. Fe	Annealed	115000	40000	12	17	195	Furnace parts	See Silcrome H-17
		M-76				50000		18	240		
				Air cooled	140000	140000	0	0			
					240000	220000	2.8	13.5			
1581	Nitralloy No. 115	M-115	0.11-19 C, 1.3-1.5 Cr, 0.15-0.25 Mo, .85-1.2 Al bal. Fe	Water quenched and drawn	142000	130000	18	63	300	Nitrided parts	Discontinued
		M-386			90000	65000	32	77	175		
1582	Nitralloy No. 125	M-115	0.20-0.29 C, 0.9-1.4 Cr, 0.15-0.25 Mo, .85-1.2 Al bal. Fe	Oil quenched and drawn	180000	152000	12	47	400	Nitrided parts	Nitralloy H
		M-386			92000	75000	32	73	190		
1583	Nitralloy No. 135	M-115	0.30-0.40 C, 0.9-1.4 Cr, 0.15-0.25 Mo, 1.0-1.4 Al, bal. Fe	Oil quenched and drawn	225000	180000	10	37	440	Nitrided parts	Nitralloy G
		M-386			105000	90000	27	62	175		
1584	Nitralloy No. 225	M-115	0.20-0.30 C, 0.6-1.0 Mo, 1.0-1.4 Al, bal. Fe	Oil quenched and drawn	210000	202000	12	45	395	Nitrided parts	
		M-386			102000	78000	27	63	225		
1585	Piston Rings, Stephenson		84 Cu, 8.3 Zn, 2.9 Sn, 4.3 Pb, 0.4 Fe							Piston rings	
1586	Q-Alloy "B"	M-59	59-62 Ni, 10-14 Cr, bal. Fe	Cast	66000	34000	4		179	Furnace parts, carburizing and heat treating boxes	Heatresisting. Max. operating temp. 2000°F.
1587	Q-Alloy "C.N.-1"	M-59	24-26 Cr, 11-13 Ni, bal. Fe	Cast	65000	40000	10	15	180	For furnace parts where temp. is not excessive, heat treating boxes	Heat and corrosion resisting. Max. operating temp.—2100°F.
					85000		27	45	220		
				Heat treated	50000	35000	0	0			
				Casting	65000	50000	11	12			

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1588	Q-Alloy "C.N.-2"	M-59	18-20 Cr, 8-10 Ni, bal. Fe	Cast	60000	35000	10	10	160	Heat treating boxes, furnace parts	Corrosion and heat resisting. Max. operating temp.—2000°F.
					80000	40000	50	40	210		
				Heat treated	80000	35000	5	10			
				Casting	100000	50000	15	20			
1589	Q-Alloy—"C-1"	M-59	26-30 Cr, bal. Fe	Cast	80000	40000	3	4	180	Suited for acid mine water, nitric acid and bad sulfuric acid furnace conditions, heat treating boxes	Corrosion and heat resisting
				Heat treated	40000	30000	0	0	160		
				Casting	55000	45000	1	2	550		
1590	Q-Alloy—"C-2"	M-59	16-18 Cr, bal. Fe	Cast	60000	55000	12	17	205	Suited for acid mine water and nitric acid corrosion resisting parts. Heat treating boxes	Corrosion resisting Heat resisting
				Heat treated	80000	60000	20	35			
1591	Q-Alloy—"C-3"	M-59	28-30 Cr, high C, bal. Fe 3 max. Ni	Cast	30000		0	0	300	Rolling mill guides, wear plates for crusher parts, chute plates	Heat and wear resisting
					45000				600		
1592	Rezistal "K.A.2 S"	M-38	0.07 max. C, 8-9.5 Ni,	Annealed	85000	30000	60	75	170	Tanks, shafts, spokes, lamps, trim	Corrosion resisting, welding required
		M-260	17.5-19.0 Cr, bal. Fe		95000	40000	65	65			
1593	Rezistal "K.A.2 H"	M-38	0.25 max. C, 8-9.5 Ni, 17.5-19.0 Cr, bal. Fe	Annealed	85000	30000	60	75	130	Welded construction which cannot receive Strauss heat treatment	Corrosion resisting, austenitic
					95000	40000	55	65	170		
1594	Rezistal "K.A.2 M"	M-38	0.15 max. C, 8-10 Ni, 18-20 Cr, 2.5-3.5 Mo, bal. Fe	Heat treated (Strauss)	90000	45000	55	70	170	In pulp industry exposed to hot sulfite liquors and bleaches	Corrosion resisting Krupp V 4A
					100000	50000	60	75	185		
1595	Rezistal 2 C	M-38	0.20 max. C, 2-2.5 Si,	Annealed	90000	45000	55	50	150	Stainless parts, piston rods, shafts, valves, acid pumps annealing boxes	Corrosion and scale resisting. Non-magnetic
		M-260	8-9.5 Ni, 17.5-19 Cr, bal. Fe		100000	55000	65	70	180		
1596	Rezistal 4	M-38	0.20 max. C, 2.25-3.0 Si,	Softened	90000	45000	30	35	160	Furnace parts, carburizing boxes, Diesel engine valves	Corrosion and heat resisting
		M-260	25-26 Ni, 17-20 Cr, bal. Fe		110000	50000	35	45	185		
1597	Rezistal 7	M-38	0.25 max. C, 0.7-1.5 Si,	Annealed	100000	45000	45	50	155	Furnace doors, skids, heat exchangers, pump parts, piston rods, retorts, valve parts	High heat and corrosion resistance
		M-260	19-21 Ni, 24-26 Cr, bal. Fe		110000	55000	55	60	175		
1598	Rubel Bronze "W-3"	M-2	40-55 Cu, 3-15 Ni, 1-3 Mn, 1-2 Fe, 0.5-3.0 Al, bal. Zn	Cast	65000		15		105	Die forgings, rods, tubes, propellers	
				Hot pressed	75000		20		115		
1599	Rubel Bronze "H-2 W"	M-2	40-55 Cu, 3-15 Ni, 1-3 Mn, 1-2 Fe, 0.5-3.0 Al, bal. Zn	Cast	70000		10		140	Bearings, bushings	
				Hot pressed	90000		25		160		
1600	Rubel Bronze "L"	M-2	40-55 Cu, 3-15 Ni, 1-3 Mn, 1-2 Fe, 0.5-3.0 Al, bal. Zn	Cast	60000		30		90	Bearings	
				Hot pressed	80000		35		115		
1601	Rubel Bronze "L.W."	M-2	40-55 Cu, 3-15 Ni, 1-3 Mn, 1-2 Fe, 0.5-3.0 Al, bal. Zn	Cast	60000		25		100	Bearings	
				Hot pressed	80000		30		120		
1602	Rubel Bronze "D.W"	M-2	40-55 Cu, 3-15 Ni, 1-3 Mn, 1-2 Fe, 0.5-3.0 Al, bal. Zn	Cast	60000		30		90	Printing rolls	
				Hot pressed	75000		30		100		
1603	Omega Brand Phosphor Bronze No. 41	M-98	94.8 Cu, 5 Sn, 0.2 P	Wire	105000					Hardware, springs, wire rope	Corrosion resistant
					135000						
1604	Carpenter Samson No. 1	M-32	0.10 C, 0.60 Cr, 1.25 Ni, bal. Fe							Tools and dies of intricate shape	Case-hardening steel
1605	Carpenter Samson No. 2	M-32	0.15 C, 0.60 Cr, 1.25 Ni, bal. Fe.							For general case-hardened parts, gears, studs, bolts, roller bearings, set screws	Case-hardening steel
1606	Carpenter Samson No. 3	M-32	0.30 C, 0.60 Cr, 1.25 Ni, bal. Fe	Untreated	85000	55000	24	58	166	Hot rolled axles, shafts, bolts, set screws	
				Heat treated	120000	95000	20	56	241		
1607	Carpenter Samson No. 4 A	M-32	0.4 C, 0.6 Cr, 1.25 Ni, bal. Fe	Heat treated	132000	108000	21	57	286	Axles, steering knuckles, crank shafts	Formerly "Samson 3 A"
					115000	90000	18	50	269		
1608	Carpenter Samson No. 4 B	M-32	0.4 C, 0.6 Cr, 1.25 Ni, bal. Fe	Heat treated	140000	115000	19	52	302	Cold drawn parts	Formerly "Samson 3 B"
					115000	95000	16	45	269		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1609	Carpenter Samson No. 4 C	M-32	0.4 C, 0.6 Cr, 1.25 Ni, bal. Fe	Heat treated	115000	91000	19	54	207	Cold drawn parts	Formerly "Samson 3 C"
					90000	80000	16	45	241		
1610	Sandvik No. 2 M.F.X.	M-101	0.05 C, bal. Fe		37000	14300	44			Magnetic parts	Br.-6600 c.g.s. Hc.—0.61
1611	Festel Stellite	M-167	Co-Cr-W	Cast	101000		1			Welding rod, fabrication of cutlery	Discontinued
				Hammered	154000		5.5				
1612	Stellite No. 1	M-167	43 Co, 34 Cr, 14 W, 9 max. bal.	Cast	47000				512	Tools, hard facing metal parts, ploughs, grinding and crushing equipment	Heat and corrosion resistant
1613	Stellite No. 2	M-167	Co-Cr-W-C		67050					Tools for metal cutting	Heat and corrosion resistant. Discontinued
1614	Stellite No. 3	M-167	48-53 Co, 28-32 Cr, 12-16 W, 2.5 C	Cast	38000				600	Tools, cutting tools, lathe tools, wear resisting castings	Heat, wear and corrosion resistant
1615	Stellite No. 4	M-167	C-Cr-Co-W	Cast	39100	39000	>1.0	>1.0	444	Tools, special castings for wear and corrosion resistance	Heat and corrosion resistant
1616	Stellite No. 6	M-167	55 Co, 33 Cr, 6 W, 7.5 max. bal.	Cast	105000		1	1	402	Tools, welding rod for hard facing wearing parts	Heat and corrosion resistant
1617	Stellite No. 8	M-167	C-Cr-Co-W	Cast					387	Welding rod	Discontinued
1618	Stellite No. 12	M-167	47 Co. 34 Cr, 10 W, 9 max. bal.	Welded	76000				444	Tools, hard facing metal parts, ploughs, blades, milling cutters	Heat and corrosion resistant
1619	Stellite, Malleable	M-167	Co-Cr-W							Welding rod for hard facing wearing parts, valves, bushings	Discontinued
1620	Thermalloy "D"	M-47	0.3-0.6 C, 2-5 Ni, 25-30 Cr, 0.8 Mn, 1.0 Si, bal. Fe	Casting	50000	40000	1	2-1	196	Annealing boxes, lead pots, rabble arms, pyrometer tubes	Heat resistant
1621	Tombac, Red Brass		6 Zn, 85 Cu, 9 Sn,	Hard	75000	18000	4		135	Hardware, ornaments, tubing, marine parts	Corrosion resistant
				Soft	42000	7000	43		52		
1622	Topal "W"	M-2	Cu, Mn, Fe, Al	Cast	50000		30		130	Shafts, bearings, dies, gears	Resists steam at 550°F.
					60000		15		150		
				Hot Pressed	60000		30		150		
					80000		15		170		
1623	Turbo "S"	M-2	80 Cu, bal. Al+Ni	Cast	86000		8		150	Worm wheels, pumps, spindles, worm shafts	White alloy, resists acid corrosion. Resists steam at 550°F.
					69000		15		130		
				Hot Pressed	100800		15		180		
					127700		5		220		
1624	Standard Alloy K.A.4	M-105	17-20 Cr, 8-10 Ni, 0.25 C, 2-4 Mo, bal. Fe	Annealed	105000	49000	55	62		Pipe fittings, pump casings, impellers, shafts	Austenitic. Will not respond to heat treatment
1625	Standard Alloy, Special	M-105	20 Cr, 25 Ni, 0.40 C, bal. Fe		62100		3		177	Furnace parts	Heat and corrosion resistant
1626	Standard Alloy "H.R.-1"	M-105	20 Ni, 20 Cr, bal. Fe, 0.4 C, 1.5 Si, 0.7 Mn							Furnace parts	Heat and corrosion resistant
1627	Standard Alloy "H.R.-2"	M-105	25 Ni, 20 Cr, bal. Fe, 1.5 Si, 0.4 C, 0.7 Mn							Furnace parts	Heat and corrosion resistant
1628	Standard Alloy H.R.-3	M-105	36 Ni, 15 Cr, .4 C, .7 Mn, 1.5 Si, bal. Fe	Cast	62000	35000	10	11	190	Lead pots, carburizing boxes, trays	Heat resistant
1629	Standard Alloy "H.R.-4"	M-105	62 Ni, 14 Cr, .4 C, .7 Mn, 1.5 Si, bal. Fe	Cast	65000	35000	5	5	180	Carburizing boxes, retorts	Heat resistant
1630	Standard Alloy "H.R.-5"	M-105	20 Ni, 25 Cr, .4 C, .7 Mn, 1.7 Si, bal. Fe	Cast	73000	46000	17			Furnace parts	Heat resistant
1631	Standard Alloy "H.R.-6"	M-105	13 Ni, 25 Cr, .4 C, .7 Mn, 1.7 Si, bal. Fe	Cast	85000	50000	15	15	170	Furnace rails, stack dampers	Heat resistant
1632	Standard Alloy "H.R.-7"	M-105	8 Ni, 18 Cr, .3 C, 1.0 Mn, 1.0 Si, bal. Fe	Cast	97000	45000	25	20		Stainless castings	Stainless

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1633	Standard Alloy "H.R.-8"	M–105	28-30 Cr, Mn, 3 Ni, .4 C, 1.8 Si, bal. Fe	Cast	50000	40000	1	0	196	Acid resisting equipment	Acid and corrosion resistant
1634	Speedicut "18%W"	M–56	18 W, C, bal. Fe							High speed tools, cutters	High speed steel "Firth Brown K-201" "Browns Atlas Extra"
1635	Speedicut "14%W"	M–56	14 W, C, bal. Fe, 4 Cr, 1 V	Hardened					600 700	High speed tools, cutters	"Firth Brown K-200" "Browns Atlas" High speed steel
1636	Vasco Special 7 T	M–115	0.66-0.75C, bal. Fe							Tools	
1637	Vasco Special 9 T	M–115	0.86-0.95 C, bal. Fe							Tools	
1638	Vasco Special 11 T	M–115	1.06-1.15 C, bal. Fe							Tools	
1639	Vasco Special 12 T	M–115	1.16-1.25 C, bal. Fe							Tools	
1640	Vasco Special 13 T	M–115	1.26-1.35 C, bal Fe							Tools	
1641	Vasco Special 14T	M–115	1.36-1.45 C, bal. Fe							Tools	
1642	Uniloy Special No. 1 (18-8)	M–39	0.20 max. C, 0.30-0.60 Si, 17-19 Cr, 8-10 Ni, bal. Fe	Rolled Heat treated	105000 115000		45 40	70 50	207 207	Equipment to resist fruit juices strong and weak acids	Cannot be hardened by heat treatment. Super non-corrosive alloy
1643	Uniloy Special No. 2 (21-12)	M–39	0.15-0.30 C, 0.90-1.2 Si, 20-22 Cr, 10-12 Ni, bal. Fe	At 70°F. At 1200°F.	112500 67500		33 22		236	Heat resisting purposes	Heat resisting. Cannot be hardened by heat treatment
1644	Uniloy No. 1409	M–39	0.06-0.13 C, 0.35 max. Si, 11-13 Cr, 0.50 max. Ni, bal. Fe	Annealed Rolled Heat treated	70000 105000 186000	40000 78000 165000	40 25 10	75 72 30	241 390	Stainless articles, airplane parts, pumps, hospital and dairy equipment	Stainless iron, non-corrosive, can be hardened by heat treatment
1645	Uniloy No. 1409M	M–39	0.06-0.13 C, 11-13 Cr, 0.50 max. Ni, MoS, bal. Fe							Stainless articles, pumps	Free machining
1646	Uniloy No. 1435 ("A" Stainless)	M–39	0.30-0.40 C, 11-14 Cr, 0.50 max. Ni, bal. Fe	Annealed At. 600°F. At 1400°F.	94000 226000 115000	65000 180000 80000	30 2.3 23	59 2.5 56	228 477 241	Cutlery	Stainless. Must be heat treated to obtain max. stainless qualities
1647	Volco No. 80	M–998	80 Cu, 20 Zn	Hard Soft	73000 43000		5 8			Flexible hose, stampings	32.5% conductivity
1648	Uniloy Special No. 18-8 S	M–39	0.07 C, 17.75-18.75 Cr, 7.75-9.0 Ni, 0.40-0.70 Si, bal. Fe							Stainless parts	Stainless
1649	Uniloy Special No. 12-12	M–39	11-13 Cr, 11-12 Ni, 0.20 C, 0.25-0.50 Si, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
1650	Type Metal, Common		60-56 Pb, 4.5-30 Sb, 10-40 Sn							Type metal	
1651	Type Metal, German	Ger.	78-55 Pb, 5-30 Sb, 2-35 Sn, 0-1 Cu							Type metal	
1652	Type Metal, French	French	78-55 Pb, 5-30 Sb, 2-35 Sn, 0-1 Cu							Type metal	
1653	Type Metal, English	Eng.	78-55 Pb, 5-30 Sb, 2-35 Sn, 0-1 Cu							Type metal	
1654	Birmabright	M–325 M–137	2-6 Mg, 0.25-0.75 Mn, bal. Al	Sand cast Drawn	20000 22000 34000 43000	11000 15000 20000 27000	5.5 3.0 25.0 15.0		54 58 70 80	Tubes, rivets, bolts, nuts, screws, architectural metal work	Corrosion resisting Brit. Pat. 337,558
1655	Baush Duralumin Grade B	M–254	4.0 Cu. 0.6 Mn. 0.5 Mg, Fe, Si, 0.10 Cr, bal. Al	Annealed Heat treated	25000 55000 62000	30000 36000	14 25 18		60 93 100	Light alloy parts for automobiles, airplanes, dirigibles	Age-hardening—Sheet grade
1656	Krupp V.M. Steel	M–72	11-15 Cr, low Ni, bal. Fe							Chemical equipment	Corrosion resistant
1657	Krupp V-4 A Steel	M–72	20 Cr, 7 Ni, bal. Fe, 0.2 C, 2.5 Mo	Sheets	85000 108000	36000	50 45		150 185	Chemical equipment, textile industries	Corrosion resistant, resists sulfurous acid

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1658	Krupp V-6 A Steel	M-72	20 Cr, 7 Ni, bal. Fe 0.2 C, 2.5 Cu							Chemical equipment	Corrosion resistant Resists NH_4Cl
1659	Bosch (Me-1)	M-304	58 Cu, 1.8 Pb, bal. Zn	Annealed	67000		27	30	115	Hot pressed parts for machines, apparatus and equipment	Easily workable
				Pressed	62500		18	20	105		
1660	Bosch (Me-2)	M-304	58 Cu, 2.2 Pb, bal. Zn	Annealed	67000		30	35	110	Automatic parts, spring boxes, ornamental and hot pressed parts	Easily workable
				Soft drawn	72000		20	40	130		
1661	Bosch (Me-3)	M-304	59 Cu, 2.5 Pb, bal. Zn	Pressed	65000		30	38		Screws and turned parts for fine work, clock manufacture	Somewhat cold workable
				Soft drawn	72000		20	25	120		
1662	Bosch (Me-4)	M-304	59 Cu, 1 Pb, bal. Zn	Pressed	65000		30	45		Wire, hot pressed and forged parts	Can be cold drawn
				Soft drawn	72000		20	25	100		
1663	Bosch (Me-5) Rivet Brass	M-304	62 Cu, 0.5 Pb, bal. Zn	Pressed	58000		40	60		Clock manufacture and fine mechanical work, rivets, tubes	Cold workable
				Soft drawn	65000		30				
1664	Bosch (Me-6) (Bosch Special)	M-304	57 Cu, some Ni and Mn, bal. Zn	Pressed	72000		30	40		Piston rods, screws, valve spindles, condenser shells	Corrosion resistant to sea water
				Soft drawn	78500		20				
1665	Bosch (Me-16)	M-304	61.5 Cu, 2 Pb, bal. Zn	Pressed	50000		35	40	80	Rods, bars, and shapes handled by automatic machinery	Cold workable
				Soft drawn	58000		30	40	90		
1666	Bosch (Me-17)	M-304	63 Cu, bal. Zn	Pressed	46000		>40	55	75	Cold formed rods and shapes, rivets	Excellent cold forming
				Soft drawn	55000		>35	50	85		
1667	Bosch (Me-25) (Bosch Metal)	M-304	57 Cu, Mn, Al, Ni, bal. Zn	Pressed	86000		15	20	135	Bushings, bars, shapes	Resists sea water corrosion and wear
				Soft drawn	94000		12	15	155		
1668	Bosch (Br-6)	M-304	66 Cu, 6 Sn, bal. Zn	Pressed	50000		0.5		140	Bearings subject to heavy loads and wear	Hard, dense bronze
1669	Bosch (Br-14)	M-304	86 Cu, 10 Sn, 2 Zn, 2 Pb	Sand cast	36000		6		80	Bearings, phosphor bronze castings	Corrosion and high wear resistant, tough hard
1670	Bosch (Br-32)	M-304	76 Cu, Al, Ni, Fe, Mn	Pressed	120000	72000	0.5	20	250	Gears, forged parts	Special bronze. Wear resistant
1671	Bosch (Cu-11)	M-304	90 plus Cu	Annealed	35000		40			Bars, shapes, tubes	Corrosion resistant discontinued
				Soft drawn	38000		30				
1672	Bosch (Cu-28)	M-304	99.9 Cu	Annealed	40300		40			Bars, shapes, tubes, pressed parts	Electrolytic copper Corrosion resistant
				Pressed	33000		40	60	50		
1673	Bosch (Al-5	M-304	6 Cu, 3 Si, bal. Al	Sand cast	21200		1–2			Al castings	Very good machinability
				Chill cast	24400		1–2		80		
				Die cast	28000		1–2				
1674	Bosch (Al-7)	M-304	89 Al, bal. Zn + modifying agent	Annealed	36000		20			Parts for machinery and apparatus, pressed, forged and drawn parts	Ages at room temp.
				Soft drawn	42500		12	30	85		
1675	Bosch (Al-9)	M-304	4 Cu, 2 Si, 1.5 Ni, bal. Al	Die cast	28000		2		80	Ordinary die cast parts	Good fluidity
1676	Bosch (Al-20)	M-304	88 Al, 11 Zn, 0.5 Mg	Annealed	46000	36000	18	25		High quality parts for fine mechanism	Good hot working properties
				Pressed	50000		18	20	100		
1677	Bosch (Al-34)	M-304	89 Al, 11 Cu	Chill cast	21000		1–2		80	Automobile pistons, sand and permanent mold parts	Good machinability
				Sand cast	20000		1–2		75		
1678	Bosch (Al-36)	M-304	89 Al, 6.5 Cu, 3.5 Ni	Annealed	19000		1–2			Die castings	Good fluidity and machinability
				Die cast	27000		2		80		
1679	Bosch (Zn-4)	M-304	4 Al, 3 Cu, balance Al plus modifying agent	Die cast	50100		2		110	Die castings	High tensile and bending strength
1680	Ostermann Red Brass No. 4	M-330	93 Cu, 4 Sn, 2 Zn, 1 Pb		29100		25			Pipe flanges	Known as "Flange Bronze"
1681	Ostermann Lead Bronze No. 10	M-330	86 Cu, 10 Sn, 4 Pb		28000		15			Bearings for hot rolling works and electrical machinery	
1682	Ostermann Lead Tin Bronze No. 8	M-330	80 Cu, 8 Sn, 12 Pb		23000		8			Bearings with high compressive loading and cold rolling mills	
1683	Ostermann Red Brass No. 9	M-330	85 Cu, 9 Sn, 6 Zn		29000		12			Railroad bearings, fittings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1684	Ostermann Red Brass No. 8	M-330	82 Cu, 8 Sn, 7 Zn, 3 Pb		21500		6			Machine fittings to be bright finished or polished	
1685	Ostermann Red Brass No. 5	M-330	85 Cu, 5 Sn, 7 Zn, 3 Pb		21500		10			Railroad machinery fittings to be bright finished or polished	
1686	Ostermann Cast Bronze No. 10	M-330	90 Cu, 10 Sn		29000		15			General construction of machinery fittings, apparatus	
1687	Ostermann Wrought Bronze No. 6	M-330	94 Cu, 6 Sn				*			Wire, sheet strip	
1688	Ostermann Red Brass No. 10	M-330	86 Cu, 10 Sn, 4 Zn		29000		10			Pipe lines and fittings, general machinery construction	Also called "Machine Bronze"
1689	Ostermann Cast Bronze No. 20	M-330	80 Cu, 20 Sn		21200					Step-bearings, slide valves, wearing plates, bells	For parts with high friction loading
1690	Ostermann Cast Bronze No. 14	M-330	86 Cu, 14 Sn		29000		3			Bearings, gears, high pressure hydraulic apparatus	Wear resistant
1691	Birmasil Special	M-137	11-13 Si, 2-4 Ni, bal. Al	Chill cast	42000	22000	3		70	Automotive engine water	Brit. Pat.-342152.
					36000	16000	6		80	cooled cylinder blocks, cylin-	Good corrosion
		M-325		Sand cast	28000	14000	4		52	der heads, fire brick molds,	resistance
					29000	16000	2		60	motor car fittings	
1692	Beryllium Bronze 1.0% Be	M-198 M-296	1.0 Be, bal. Cu	Untempered	67000	62000	7.5			Corrosion resistant parts	Corrosion resistant
1693	Beryllium Bronze 1.5% Be	M-198 M-296	1.5 Be, bal. Cu	Untempered	68000		45			Corrosion resistant parts	Corrosion resistant
				Tempered	94000		8				
1694	Beryllium Bronze 2.0% Be	M-198 M-296	2.0 Be, bal. Cu	Untempered	72000	15500	40			Corrosion resistant parts	Corrosion resistant
				Tempered	121000	100000	1				
1695	Beryllium Manganese Bronze 1.0% Be	M-198 M-296	1.0 Be, 10 Mn, bal. Cu	Untempered	74000	38000	22			Corrosion resistant parts	Corrosion resistant
				Tempered	146000	127700	2.3				
1696	Beryllium Manganese Bronze 1.5% Be	M-198 M-296	1.5 Be, 3 Mn, bal. Cu	Untempered	78000	38000	25			Corrosion resistant parts	Corrosion resistant
				Tempered	150000	135000	4.5				
1697	Krupp Analysis	M-72 M-68	0.08-0.16 C, 1.2-1.7 Cr, 3.8-4.3 Ni, bal. Fe							Armor plate, gears	Tough case-hardening alloy steel
1698	B-Metal (Bahn-Metall)	M-315 M-316 M-402	0.03-0.05 Li, 0.68-0.76 Ca, 0.62-0.72 Na, 0.02-0.04 K, <0.2 Al, bal. Pb							Locomotive bearings and journal bearings in railroad cars	Retains high hardness at high temp.
1699	Firth-Vickers Pyrista	M-50 M-521	2.5 max. C, 2.5 max. Si, 1.5 max. Mn, 2.0 Ni, 26-30 Cr, bal. Fe		67000 89600	45000 58000	30 20	50 40	150 200	Used to resist sulfurous atmospheres, furnace parts, grids, rabble arms	Brittle, stainless and heat resistant
1700	Sahib	M-502	C, bal. Fe							Tools	
1701	Alcunic "G"	M-102	70 Cu, 1 Ni, 2 Al, bal. Zn	Soft	59000	20000	56			Condenser tubes, belt buckles	Corrosion resistant
				Hard	100000	95000	3				
1702	Ajax Plastic Bronze Grade A	M-123	70 Cu, 25 Pb, 5 Sn, 1 Ni		23000	18000	14		40	Car and locomotive bearings, bushing	
1703	Ajax Plastic Bronze Grade B	M-123	72 Cu, 20 Pb, 7 Sn, 1 Zn		30000	21000	15		45	Bearings and bushings	To resist severe loads and shocks
1704	Ajax Plastic Bronze Grade C	M-123	69 Cu, 25 Pb, 5 Sn, 1 Ni		24000	18000	14		40	Bearings and bushings operating at elevated temperatures	
1705	Ambrac "B"	M-8	65 Cu, 5 Zn, 30 Ni	Hard	120000		2			Laundry and paper	Corrosion resistant
				Soft	65000		30			machinery	
1706	Aludur No. 533D	M-284	0.8 Mg, 0.7 Si, bal. Al	Heat treated	45000		10		90	Overhead transmission lines	Corrosion resistant
					50000		8		100		
1707	Aludur No. 570D	M-284	0.8 Mg, 1.0 Si, bal. Al	Heat treated	60000		17		90 100	Overhead transmission lines	Corrosion resistant. Self-aging alloy
1708	Allegheny No. 33	M-1 M-240	0.12 max. C, 0.5 max. Mn, 0.5 max. Si, 12-15 Cr, bal. Fe	Annealed	77300	40600	37	78.7	153	Automotive parts, interval	Corrosion resistant
				Heat treated	178750	161500	15	51	364	engine and steam engine	
					109000	91000	23	70	228	parts, tanks, fans, blowers	
				At 1000°C.	70000		56.5	92.5			

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No	Uses	Remarks
1709	Allegheny No. 44	M-1	0.20 max. C, 1.25 max. Mn,	Hot rolled	130500	107300	31	59.8	262	Furnace and pump parts,	High heat resistance.
		M-240	0.5 max. Si, 22-26 Cr, 11-13 Ni, bal. Fe	Annealed	96000	45000	62	69	143	boiler baffles, carburizing boxes, recuperators	Easy to fabricate
1710	Allegheny No. 55	M-1	0.35 max. C, 1.0 max. Mn,	Annealed	75000	45000	25	45	160	Furnace parts, boiler	Heat resistant.
		M-240	0.6 max. Si, 23-30 Cr, 0.6 max. Ni, bal. Fe	forgings	100000	60000	35	65	200	baffles, furnace dampers,	Corrosion resistant to
				Annealed	40000	30000	2	2	170	recuperators	acid mine waters
				castings	80000	70000	5	6	190		
1711	Ansaldo	M-606									
1712	Sigeron	M-506	High C, Ni, bal. Fe							Castings	Nickel cast iron
1713	Vedal		Al alloy							Light alloy parts	
1714	Durance Bearing	Ger.	44.5 Sb, 33.3 Sn, 22.2 Cu							Bearings	
1715	F. C. C. No. 1	M-439 M-76	0.5 C, 0.7 Cr, 1.6 Ni, bal. Fe	Oil harden						Backing blocks, gripper dies	
1716	F. C. C. No. 3½	M-439 M-76	C, 12 Cr+W+Mo, bal. Fe							Heavy duty hot work dies	Resists wear at high temp. discon.
1717	F. C. C. No. 14	M-439 M-76	0.35 C, 4 Cr, 9-10.5 W, 0.25 V, bal. Fe	Oil harden						Hot die inserts and dummy blocks, press forging dies	Maintains form and hardness at high temp.
1718	F. C. C. No. 19	M-439 M-76	0.35 C, 5 Cr, 0.8-1.75 Si, 4 W, bal. Fe	Oil harden						Upset form punches, container liners, press forging dies	
1719	F. C. C. No. 22	M-439 M-76	0.5 C, 1.0-1.5 Cr, 2.5-3.25 W, 0.15-0.30 V, bal. Fe	Oil harden						Liners, press forging dies, upset form dies	
1720	Calite "C"	M-30	40 Ni, 5.5 Cr, 60 Fe, 4.1 Al							Temperature resisting alloys	Heat resisting up to 1800 °F. discon.
1721	Calite "E"	M-30	7.8 Ni, 17.28 Cr, 73.62 Fe, 0.45 Mn, 0.14 C, 0.18 Al, 0.14 Cu	Rolled, annealed	85000		50	60	165	Stainless parts, bolts, nuts forged and rolled parts, furnace parts	Resists oxidation up to 1800 °F.
1722	Calite "B-28"	M-30	9 Ni, 26 Cr, 0.50 C, bal. Fe		70000		8	10	240	Furnace parts, beams, tube supports	To sustain loads at high temperatures
1723	Calite "N"	M-30	0.49 C, 64.39 Ni, 19.77 Cr, 1.25 Si, 0.22 Al, bal. Fe	At 100 °F.	50000		2	1	190	Furnace parts, heat treatment equipment, carburizing boxes	Resists heat up to 2100 °F.
				At 2100 °F.	8000		12	13			
1724	Calite "S"	M-30	0.04 C, 17.04 Cr, 81.74 Fe, 0.08 Al		75000	50000	35	55		Stainless parts, bolts, rivets	Resists oxidation up to 1650 °F.
1725	Calite Nirosta K A 2	M-30	0.20 C, 0.74 Si, 0.27 Mn, 18.5 Cr, 10.5 Ni, bal. Fe		65000	28000	60	65		Stainless parts, valves, pipe	Scaling temp.—
					75000	32000	55	60	155	fittings	1650 °F. discontinued
1726	Carpaloy No. 3	M-32	0.19 C, 20.94 Cr, 0.17 Ni, 0.92 Cu, bal. Fe		87000	40000	23	52		Heat and corrosion resisting parts	Superseded by "Carpenter Stainless Steel No. 3"
1727	Delhi Iron	M-15	11.5-14 Cr, 0.12 max. C,	Annealed	45000	30000	30	60	130	Turbine blades, pump rods,	See Silcrome 12
	Grade "S"	M-76	0.5 Si, 0.5 Mn, bal. Fe	Heat treated	130000	100000	21	68	235	valves, cutlery, machine parts	
1728	Delhi Hard	M-15	17.5 Cr, 1.0 C, 0.12 Ni,	Annealed	90000	40000	25	50	195	Structures	See Silcrome 17
		M-76	1.13 Si, bal. Fe	Heat treated	225000	185000	9	25	420		
1729	Duro Gloss "C-2"	M-69	0.10 C, 16-18 Cr, bal. Fe	Annealed	80000	50000	27	70	150	Turbine blades, pump rods,	Heat and corrosion
				Hard rolled	90000	65000	25	55	190	gate valves, fireplace tools, steam fittings	resistant
1730	Duro Gloss "C-3"	M-69	0.10-0.15 C, 20-22 Cr, bal. Fe	Annealed	80000	50000	30	55	160	Turbine blades, pump rods, gate valves, fireplace tools, steam fittings	Heat and corrosion resistant
1731	Duro Gloss "C-4"	M-69	0.10-0.15 C, 25-29 Cr, bal. Fe	Annealed	80000	55000	35	60	170	Turbine blades, pump rods, gate valves, fireplace tools, steam fittings	Heat and corrosion resistant
1732	Elcomet "F"	M-263	20 Ni, 20 Cr, 5 Si, 4 Cu, 3 Mo, 0.30 Mn, 0.15 max. C, bal. Fe							Valves, pumps, for the rayon industry	Corrosion and abrasion resistant
1733	Elcomet "L"	M-263	10 Ni, 20 Cr, 0.15 max. C, bal. Fe							Valves, pumps	Corrosion and abrasion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1734	Elcomet "M"	M-263	20 Ni, 20 Cr, 1.0 Si, 4 Cu, 2-3 Mo, 0.30 max. Mn, 0.15 max. C, bal. Fe							Valves, pumps	Corrosion and abrasion resistant Discontinued
1735	Electrite Cobalt	M-73	.7 C, .6 Mo, 5 Co, 18 W, 4 Cr, 1 V, bal. Fe							Tools for heavy hogging cuts	High speed steel
1736	Speedaloy	M-987	W-Cr-Co	Cast						Cutters, tools	Cast alloy
1737	Electron "A.Z.D."	M-78 M-217	5 Al, 3 Zn, 0.2-0.5 Mn, 3 Cd, bal. Mg.	Extruded	42000	28000	11	20	53	Light alloy parts	Obsolete
1738	Electron "A.Z.F."	M-78 M-217	4 Al, 3 Zn, 0.2-0.5 Mn, 0.3 Si, bal. Mg	Cast	24000 30000	13000	9 5	9	45	Airplane wheels, castings to resist high impact stresses. Light alloy parts	
1739	Electron "A.Z.G."	M-78 M-217	6 Al, 3 Zn, 0.35 Mn, 0.3 Si, bal. Mg	Cast	23000 29000	14500 19000	6 3	7	55	Automobile and airplane engine crankshafts	High fatigue strength
1740	Electron "A.Z.M."	M-78 M-217 M-338	6 Al, 1 Zn, 0.2-0.5 Mn, 0.2 Si, bal. Mg	Rolled	45000	28000	14	27	55	Extruded and forged light alloy parts, airplane propellers, bus body frames	
1741	Electron No. 23	M-78	Mg alloy							Light alloy parts	Now obsolete
1742	Electron "V-1"	M-78	10 Al, 0.3-0.5 Mn, bal. Mg	Chill cast	20500	15000	2-3	1.2		Light alloy parts with highest possible hardness	
		M-302		Extruded	49000	35000	8	11	70		
1743	Electron "Z-3"	M-78	3 Zn, bal. Mg, 5 Al	Soft	28000 34000	18000 21000	10 12		42	Stampings	
				Hard	37000 46000		2 5		60		
1744	Fahrite "N-2"	M-95	0.15-0.25 C, 17-23 Cr, 7-10 Ni, 0.5 Mn, bal. Fe		60000 80000	22000 38000	20 30	20 30	140 180	Oil cracking units, furnace parts	Heat resistant to 1700°F.
1745	Fahrite "N-3"	M-95	0.48 C, 23-30 Cr, 8-13 Ni, 1.4 Si, 0.35-0.75 Mn, bal. Fe	At 70°F. At 1000°F. At 2000°F.	75000 62000 8500	40000 36000 6000	15 20 8	25 20 32		Oil cracking units, furnace parts, annealing boxes	Heat resistant
1746	Fahrite "N-4"	M-95	0.4 C, 0.50-0.75 Mn, 6-10 Cr, 17-20 Ni, bal. Fe		50000	37000	12	18	152	Furnace parts	Heat resistant
1747	Fahrite "C-S"	M-95	25-28 Cr, <2 Ni, bal. Fe							Furnace parts to resist high S atmospheres, sulfide ores and Zn or Pb oxides	Heat resistant. Resists high S atmospheres
1748	Firearmor "E"	M-184	15 Cr, 60 Ni, .5 C, 1.7 Mn, 1.2 Si, bal Fe		62000		1.5	3.0	200	Furnace parts, grates	Heat resistant
1749	Hiduminium "R.R.53"	M-239	2.2 Cu, 1.3 Ni, 1.6 Mg,	Die cast	31300	28000	3	4	80	Pistons for automobile and	Die cast. Rolls-
		M-426	1.4 Fe, 0.08 Ti, 1.2 Si, bal. Al	Heat treated	56000	50400	1	1.5	130	aircraft engines, cylinder heads	Royce automobile
1750	Hiduminium "R.R.56"	M-239	2 Cu, 1.25 Ni, 1.35 Fe,	Heat treated	60000	54000	10	14	120	Automobile forgings, connect-	Forgings. Rolls-
		M-426	0.8 Mg, 0.08 Ti, 0.6 Si, bal. Al		72000	58000	20	25	160	ing rods, supercharger rotors	Royce automobile
1751	Hiduminium "R.R.59"	M-239	2.2 Cu, 1.35 Ni, 1.25 Mg,	Heat treated	55000	47000	8	17	127	Pistons, cylinder heads	Forgings. Rolls-
		M-426	1.35 Fe, 0.08 Ti, 0.8 Si, bal. Al	Forged	52000 65000	50000 56000	6 10	10 20	120 150		Royce automobile, aero-engines
1752	Hi-Gloss "D.D."	M-69	0.10 C, 12 Cr, 12 Ni, 0.35 Mn, bal. Fe	Annealed	90000 100000	45000 55000	55 65	60 70	150 160	Stainless and corrosion resisting parts	Corrosion resistant
1753	Monarch	M-502	C, alloy, bal. Fe							Tools	
1754	Kanthal "A-1"	M-70 M-231	.06 C, 23 Cr, 2 Co, 5.7 Al, 69 Fe		106000 114000		13	65	230	Heating elements	Heat resistant, tough and plastic when hot
1755	Kanthal "D"	M-70 M-231	.09 C, 22.6 Cr, 2 Co, 4.5 Al, bal. Fe		106000 114000			65	200	Heating elements	Heat resistant, tough and plastic when hot
1756	"Alva Extra"	M-38	1.0 C, 0.25 V, bal. Fe							Blanking, threading, forming dies, taps	
1757	Alva Special	M-38	1.0 C, 0.25 V, bal. Fe							Blanking, threading, forming dies, taps	
1758	A.M.C.O.H. Special	M-365	C, Mn, Cr, W, bal. Fe							Die work	Non-deforming
1759	Andard	M-358	C, bal. Fe							Tools, drills	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1760	Apollo	M-39	0.45 C, 2.0 Cr, 0.20 V, bal. Fe							Die casting dies, flying shears	
1761	Arrestite		C, bal. Fe							General tools	Non-deforming
1762	Arrow High Speed	M-355	C, W, bal. Fe							Tools, dies	
1763	Arrow Oil hardening	M-336	C, W, Mn, Cr, V, bal. Fe		88800	55100	30		189	Tools, dies, perforated dies, taps, intricate shapes	Non-shrinking
1764	Arrow Special	M-355	C, bal. Fe							Tools, dies	
1765	Asco	M-351	C, bal. Fe							General tools	
1766	Atha Rim Roll	M-38	1.0 C, 0.5 Cr, bal. Fe							Forming rolls	
1767	Atlantic No. 33	M-353	.3 C, .7 Cr, .7 Mo, .6 Si, .6 Cu, bal. Fe							Shock tools	
1768	Atlas No. 93	M-76	0.65 Cr, 0.55 C, 0.35 Mo							Clicker die steel, dies	Shock resistant
1769	Black Diamond Tool	M-38	High C, bal. Fe							General tools	
1770	Balfosteel	M-350	C, bal. Fe							Punches, dies, reamers, saws	
1771	Baltoc	M-260 M-38	C, 18 W, 4 Cr, 1 V, 5 Co, bal. Fe							Hogging tools for heavy cuts	High speed steel
1772	Best	M-336	C, Mn, bal. Fe		78000	41600	28		167	Tools, taps, reamers, dies	"Soderfors Best" non-deforming
1773	Best	M-334	C, bal. Fe							Taps, chisels, cutters	
1774	Best	M-364	C, bal. Fe							General tools	
1775	Cindal Alloy "J-551"	M-298	Al alloy		22000 26000	11000 15500	17 15			Used to resist acetic acid, edible oils, acids, beer, cider, fruit juices	Stainless and non-corrosive in sea water
1776	"E.H.W." Steel	M-73	0.25-0.35 C, 8.9-9.5 W, 3-3.6 Cr, bal. Fe							Hot working dies, gripper and header dies for automatic bolt machines	
1777	Latrobe "Extra"	M-73	C, 0.2-0.35 Mn, bal. Fe							Taps, reamers, twist drills, shear blades, springs, tools	
1778	Latrobe "Special"	M-73	C, 0.20-0.35 Mn, bal. Fe							Lathe and planer tools, taps, threading dies, reamers, punch	
1779	Latrobe "Standard"	M-73	C, 0.20-0.35 Mn, bal. Fe							Blacksmith tools, cold chisels	
1780	"C.E.M."	M-73	C, Cr, W, bal. Fe							General tools	Deep hardening
1781	Hy-Ten "B" No. 3 X	M-119	0.5 C, Cr, Mn, Mo, bal. Fe	Rolled *Heat treated*	110000 *220000*	70000 *192000*	18 *11*	45 *40*	*477*	Clutches, gears, drive shafts, *pinions, connecting rods,* mandrels	Readily machined *at high hardness*
1782	Zurco Rustless Steel	M-290	0.10 C, 12-14 Cr, bal. Fe	Annealed	75000	44000				Corrosion resisting parts	Rustless. Max. operating temp.—1000 °F.
1783	Economo No. 50	M-119	.5 C, Mo, bal. Fe	Water quenched	168000 110000	150000 96000	16 24	51 61	293 217	Shafts, spindles, axles, worms, gears, pinions, bolts	Machinery steel
1784	Chrogo "U-42"		40 Au, 45 Cu, 14 Ni, 1 Cr, traces Pt							Dental alloy	Corrosion resistant
1785	Sandvik No. 2 C-27	M-101	0.10 C, 13.5 Cr, bal. Fe	Annealed Oil hardened At 800 °C.	80800 175600 6700	53800 145000	37 21 51	75 64 99	170 352	Superheater and recuperator tubes, condensers, evaporators, steam turbines	Corrosion resistant Not resistant to HCl and H_2SO_4. Stainless
1786	Sandvik No. 2 C-34	M-101	0.10 C, 17 Cr, bal. Fe	Annealed At 800 °C.	71700 6720	44800	39 90	67 99	152	Where material is to be subjected to hot bending or welding, superheater tubes	Resists corrosion of HNO_3, but not of HCl or H_2SO_4. Stainless
1787	Sandvik No. 2 C-40	M-101	0.10 C, 20 Cr, bal. Fe	Annealed At 800 °C.	67200 6700	40300	35 60	51 99		Recuperators and tubes for protection of pyrometers	Corrosion and heat resistant. Cannot be hardened
1788	Sandvik No. 2 N-3 C-1	M-101	0.08-0.13 C, 0.35-0.60 Mn, 0.5-0.8 Cr, 2.75-3.5 Ni, bal. Fe	Annealed Hardened	80000 95000 130000 156000	38000 55000 100000 130000	32 38 18 24	60 70 58 65	160 195 285 350	Gears, wheels, piston rods, cam shafts, steering arms, levers	Case-hardening steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1789	Sandvik No. 2 N-5	M-101	0.08-0.14 C, 0.50 max. Mn, 0.10 max. Cr, 4.6-5.2 Ni, bal. Fe	Heat treated	89000 135000		23 30	60 70	200 280	Gear wheels, shafts in gear boxes	Carburizing steel
1790	Sandvik No. 2 R-2	M-101	0.10 C, 18 Cr, 9 Ni, bal. Fe	Heat treated	97000	35500	60	65	160	Stainless and corrosion resistant parts	Stainless steel, acid resistant, formerly No. 2 N-8-C-36
1791	Sandvik No. 2 R-3	M-101	0.10 C, 17 Cr, 9 Ni, 1.3 Mo, bal. Fe	Heat treated	97000	37000	60	65	160	Stainless and corrosion resistant parts	Stainless steel, acid resistant, formerly No. 2 N-8C-36 Mo
1792	Sandvik No. 2 R-1	M-101	0.10 C, 15 Cr, 12 Ni, bal. Fe	Heat treated	82500	35500	70	75	140	Stainless and corrosion resistant parts	Formerly No. 2 N-12 C-30
1793	Sandvik No. 3 S	M-101	0.13-0.18 C, 0.45-0.90 Mn, bal. Fe	Heat treated	74000 85000	45000 55000	36 30	75 65	150 190	Bolts, pins, sleeves	Carburizing steel
1794	Sandvik No. 3 N-3	M-101	0.10-0.15 C, 0.3-0.6 Mn, 2.75-3.5 Ni, bal. Fe	Heat treated	100000 123000		25 32	60 70	230 280	Gear wheels, cam shafts, valve push rods	Carburizing steel
1795	Sandvik No. 3 N-4-C-2	M-101	0.08-0.12 C, 0.35-0.60 Mn, 0.9-1.4 Cr, 3.9-4.5 Ni, bal. Fe	Annealed Hardened	89000 103000 162000 193000	65000 78000 157000	25 31 15 20	60 70 55 65	175 215 340 390	Gear wheels, piston rods, cam shafts, crankshafts	Carburizing steel
1796	Sandvik No. 3 N-5	M-101	0.10-0.15 C, 0.50 max. Mn, 0.30 max. Cr, 4.5-5.5 Ni, bal. Fe	Heat treated	134000 154000		17 23	50 60	300 360	Gear wheels, shafts in gear boxes	Carburizing steel
1797	Sandvik No. 4 C-48	M-101	0.20 C, 24 Cr, bal. Fe	Annealed At 800 °C.	78400 7800	53800	34 65	59 98	161	For directly fired air or steam heaters, recuperators, heating elements in furnaces	*High heat and corrosion resistant*
1798	Sandvik No. 4 N-3 C-2	M-101	0.22-0.27 C, 0.70 max. Mn, 1.1-1.4 Cr, 2.75-3.25 Ni, 0.2-0.35 Mo, bal. Fe	Annealed Oil hardened	85000 101000 134400 168000	56000 69000 121000 156000	30 35 17 25	65 75 55 68	170 200 280 360	Crankshafts, connecting rods	Resists severe stresses
1799	Sandvik No. 6 N-3-C-2	M-101	0.28-0.34 C, 0.45-0.70 Mn, 0.5-1.0 Cr, 3.0-3.75 Ni, bal. Fe	Annealed	91800 107500	65000 78400	29 33	60 65	190 220	Crankshafts, driving shafts	
1800	Sandvik No. 6 N-4-C-2	M-101	0.27-0.33 C, 0.45-0.65 Mn, 1.1-1.4 Cr, 4.0-4.5 Ni, bal. Fe	Hardened Annealed	128000 143400 114000 127600	125000 134400 85000 107500	20 26 23 28	55 65 58 65	270 310 240 270	Gears subject to severe wear and stresses	
1801a	"A" Alloy	M-311	77 Al, 20 Zn, 3 Cu	Hot rolled	60000	41000	21	36		Light alloy wrought parts	
1801b	"A" Alloy		4.7 Cu, 1.34 Mg, 1.85 Ni, 1.5 Pb, 0.5 Fe, bal. Al							Light alloy parts	
1802	Abros		10 Cr, 88 Ni, 2 Mn							Electrical resistance, heating elements	Stainless and corrosion resistant
1803a	Abyssinian Gold		88 Cu, 11.5 Zn, 0.5 Au							Ornaments, jewelry	
1803b	Abyssinian Gold		90-92 Cu, 8-10 Zn, 1 plated Au							Ornaments, jewelry	Sheets plated with Au
1804	Accumulator Metal		90 Pb, 9.2 Sn, 0.8 Sb							Bearings, battery plates	
1805	Acid Bessemer Pig		3.5-4.0 C, 1-1.5 Si, 0.5 Mn, bal. Fe							For steel making	
1806a	Acid Bronze		88 Cu, 10 Sn, 2 Pb							Bearings, chemical equipment	Corrosion resistant
1806b	Acid Bronze		82 Cu, 8 Sn, 8 Pb, 2 Zn							Chemical equipment	Corrosion resistant
1806c	Acid Bronze		84 Cu, 9.5 Sn, 6.3 Pb, 0.2 P							Chemical equipment	Corrosion resistant
1806d	Acid Bronze		74 Cu, 8 Sn, 17 Pb, 1.5 Zn							Chemical equipment	Corrosion resistant
1807	Acid Metal		88 Cu, 10 Sn, 2 Pb							Chemical equipment	Corrosion resistant
1808a	Acid Resisting		10 Cr, 30 Ni, 40.8 Fe, 6.2 W, 1.55 Mn, 0.45 Si							Chemical apparatus, acid resisting vessels and tanks	Stainless and corrosion resistant
1808b	Acid Resisting		14.5 Cr, 20 Ni, 56 Fe, 5 Co, 4.5 Cu							Chemical apparatus	Resists attack of HNO_3

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1808c	Acid Resisting		15 Cr, 53 Ni, 23 Fe, 4 W, 1.25 Mn, 3.75 Si							Chemical apparatus	
1809	Acme Nickel Steel		30.5 Ni, 14.2 Cr, 0.3 C, bal. Fe							Tanks and vessels to resist corrosion	Stainless, corrosion resistant
1810	Admiralty White Metal		8-9 Sb, 2-7 Cu, bal. Sn							Bearings	
1811	Ark High Speed	M-261	0.84 C, 1.53 Mn, W, Cr, bal. Fe							Tools, high speed cutters	High speed steel
1812	Aircraft		10-11.5 Al, 4-6 Fe, 4-6 Ni, bal. Cu							Corrosion resisting parts, aircraft	Corrosion resistant
1813	Aircraft Aluminum Alloys		Cu-Al alloys							Airplane parts	
1814a	Air Service Aluminum Alloy No. 1		92 Al, 8 Cu							Light alloy parts, airplane construction	
1814b	Air Service Aluminum Alloy No. 2		88.5 Al, 10 Cu, 0.25 Mg 1.25 Fe							Aircraft parts	
1814c	Air Service Aluminum Alloy No. 3		95.75 Al, 2.5 Cu, 0.5 Mg 1.25 Fe							Aircraft parts	
1814d	Air Service Aluminum Alloy No. 4		94 Al, 5 Cu, 1 Si							Aircraft parts	
1814e	Air Service Aluminum Alloy No. 5		93 Al, 4 Cu, 3 Si							Aircraft parts	
1814f	Air Service Aluminum Alloy No. 6		4 Cu, 1-5 Mg, 2 Ni, bal. Al							Aircraft parts	
1815	Ajax Acid Resisting Bronze	M-123	15 Pb, 10 Sn, 75 Cu							Pump and pulp machinery	Acid resistant
1816	Ajax Gear Bronze Grade "X"	M-123	10 Sn, trace P, 90 Cu	Chill cast	42000	19000	30		80	Spurs and bevel gears	Hard and tough
1817	Ajax Golden Glow Brass	M-123	64.5 Cu, 2.5 Pb, 33 Zn	Chill cast	40000	18000	32		39	Hardware, ornamental fixtures	
1818	Ajax Nickalloy Bronze Grade 12	M-123	62 Cu, 2 Pb, 1 Sn, 21 Zn, 13 Ni, 1 Al	Chill cast	61000	50000	5		100	Automobile trimmings, typewriter parts	Corrosion resistant
1819	Ajax Pressure Bronze Grade "M"	M-123	82 Cu, 5 Pb, 3 Sn, 10 Zn	Chill cast	37000	19000	25		50	Castings, hardware	For moderate pressure work
1820	Ajax Special Valve Stem Bronze	M-123	60 Cu, 1 Pb, 37 Zn, 2 special hardeners	Chill cast	65000	30000	20		90	Valve stems	
1821	Ajax Structural Bronze, Grade "X"	M-123	57 Cu, 40 Zn, 3 specia lhardeners	Chill cast	75000	33000	25		100	Structural work	Corrosion resistant
1822	Akrit		38 Co, 30 Cr, 16 W, 10 Ni, 4 Mo, 25 C							Tools, high speed cutting tips on lathe tools	Corrosion and heat resistant
1823	Alargan		Ag-Al							Bearings	
1824	Alaska White Brass		Cu alloy							Automobile trimmings, hardware, fittings	(Albata)
1825	Albatra Metal		57.5 Cu, 22.5 Zn, 18.75 Ni, 1.25 Pb							Light alloy parts	
1826	Albidur-Aluminum		Al alloy							Fixtures, hardware, fittings	White brass
1827	Albin		Cu Alloy							Tools, high speed cutters	High speed steel
1828	Albion High Speed	M-340	0.4 C, 0.05 Mn, 2.3 Cr, 15.54 W, bal. Fe							Tools, drills, reamers	
1829	Albion Tool	M-340	1.27 C, 0.33 Mn, bal. Fe							Dies for cold stamping white gold and all hard metals	
1830	Albor	M-261	C, Cr, bal. Fe							Ships forgings, propellers, skates, surgical instruments	Tough, hard corrosion resistant
1831	Alco Bronze	M-404	Cu-Ni							Ornaments, hardware, fittings	Nickel Silver
1832	Alfenide		59.1 Cu, 30.12 Zn, 9.7 Ni, 1.0 Fe								
1833	Alferium	M-533	3.5-4.5 Cu, 0.4-1.0 Mn, 0.3-0.75 Mg, bal. Al	Heat treated	55000	31000	16			Airplane and dirigible parts	Similar to "Duralumin"
1834a	Algiers (Algers) Metal		94.5 Sn, 0.5 Sb, 5 Cu							Bearings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A	Brin. No.	Uses	Remarks
1834b	Algiers Metal		90 Sn, 10 Sb							Bearings	
1834c	Algiers Metal		75 Sn, 25 Sb							Bearings	
1835	Alkali-Resisting Metal		95 Fe, 5 Ni							Corrosion resisting parts, chemical apparatus	
1836	Allan No. 2 Bronze		66 Cu, 9 Sn, 25 Pb							Bearings, hardware	
1837a	Allan Red Bronze		70-55 Cu, 20-40 Pb, 10-5 Sn, 1 S							Bearings, hardware	
1837b	Allan Red Bronze		62.5 Cu, 30 Pb, 7.5 Sn							Bearings, hardware	
1838	Allens Imperial Special		0.68 C, 0.29 Mn, 1.64 Cr, 19.1 W, 1.37 V, bal. Fe							Tools, cutters, dies, punches	High speed steel
1839	Allens Oil Hard		0.80 C, 1.64 Mn, bal. Fe							Tools, dies	
1840	Alloy No. 471	M–65	100 Ni (practically)		60000		40 50			Radio parts, electrical apparatus	High temp. coef. resistance (Discon.)
1841	Alloy No.484	M–65	2 Mn, bal. Ni		65000		30 40			Spark plug electrodes, lead wires, radio parts	Res.—80 Ohms Per C.M.F. Obsolete
1842	Hoskins 502	M–65	0.4 C, 35 Ni, 15-18 Cr, bal. Fe	Hot rolled Cast	110000 75000		50 10		160 180	Furnace fixtures, heat resistance applications	*Heat resistant* "Cromel No. 502"
1843	Aluminite		73 Al, 23 Zn, 2.7 Cu, 0.4 Fe, 0.2 Si							Light alloy castings	
1844	Angsburg		71.9 Cu, 27.6 Zn							*Tubes, fittings*	
1845	Alcoa 5 S	M–4	95 Al, 2 Cu, 2 Zn, 1.5 Mn							Light alloy parts	Wrought alloy (Discontinued)
1846	Alcoa 8	M–4	95 Al, 4 Cu, >0.5 Si, >0.5 Fe							Light alloy parts, heat treated castings	Discontinued
1847	Alcoa 8 S	M–4	67 Al, 33 Zn							Strong, tough light alloy parts	Wrought alloy Discontinued
1848	Alcoa 15 S	M–4	Al, Cu, Zn							Light alloy parts	Wrought alloy Discontinued
1849	Broo-Zinc	M–996	58-62 Zn, 2-4 Cu, 34-38 Al								
1850	Aluminum-Copper		7-7.6 Cu, 0.4-0.9 Fe, Si, Mn, Zn, bal. Al							Light alloy parts, castings	Cast
1851	Aluminum-Copper Strongalt		3.8 Cu, bal. Al							Light alloy parts	Wrought
1852	Aluminum-Copper-Magnesium		3.4-4 Cu, 0.5 Mg, Fe, Mn, Si, bal. Al							Light alloy parts, aircraft structures	Casting alloy Heat treated
1853	Aluminum-Copper-Nickel		2-4 Cu, 1.1-5.3 Ni, bal. Al							Light alloy parts, pistons	
1854	Arko		80 Cu, 20 Zn							Tubes, fittings, hardware	Drawn and spun
1855	Aluminum-Magnesium Bronze		95-90 Cu, 5-10 Al, 0.5 Mg							Strong corrosion resistant castings and wrought parts	Corrosion resistant
1856	Aluminum-Manganese Bronze		89 Cu, 9.6 Al, 1.2 Mn							Slides, gears	Corrosion resistant
1857	Aluminum Nickel		94 Ni, 6 Al, 76.4 Ni, 23.6 Al							*Corrosion resistant parts*	*Corrosion resistant*
1858	Aluminum-Nickel Bronze		85 Cu, 5-10 Al, 10-5 Ni							Corrosion resistant parts	Corrosion resistant
1859	Aluminum-Nickel Titanium		98 Al, 2 Ni, 0.5 Ti							Light alloy parts	
1860	Aluminum-Nickel Zinc		85 Al, 10 Ni, 5 Zn							Light alloy parts	
1861	Aluminum Silver		57 Cu, 20 Ni, 20 Zn, 3 Al							Ornaments, hardware	
1862	Aluminum Solders		78 Sn, 9 Al, 8 Zn, 5 Cd							Aluminum solder	
1863	Aluminum Solder		56.4 Sn, 3 Cu, 37.6 Zn, 3 Al							Aluminum solder	
1864	High Strength Aluminum Steel		>0.9 C, >0.2 Al, bal. Fe							Structural parts	Steel deoxidized with Al
1865	Aluminum-Tin Bronze		86 Cu, 10 Sn, 2.5 Al, 2 Zn							Bearings, wear resistant parts	Wear resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1866	Alunite		98.6 Al, 0.1 Cu, 0.5 Mn, 0.6 Fe, 0.2 Si							Light alloy parts	Corrosion resistant
1867	Alzen		66.6 Al, 33.4 Zn							Strong light alloy parts	
1868	Alzinc	French	20 Zn, 80 Al		21000		2		80	Light castings	Sibley casting alloy
1869a	Amaloy	M-524	97.5 Pb, 2.5 Sn							For protective coating against corrosion	Applied to ferrous & copper alloys
1869b	Amaloy	M-524	90-97.5 Pb, 2.5-10 Sn								
1870	Amaloy		Ni, Cr, W							Corrosion and heat resistant parts	Corrosion and heat resistant
1871	Amax Metal		81 Cu, 11 Sn, 7.4 Pb, 0.3 P							Bearings	
1872	American Alloy		95 Al, 3 Cu, 1 Mg, 1 Mn							Light alloy parts	Heat treated
1873a	American Silver		49.4 Cu, 20.7 Zn, 24.2 Ni, 1.3 Fe, 3.8 Mn, 0.5 Sn							Ornaments, hardware	
1873b	American Silver		59 Cu, 23 Zn, 11 Ni, 3 Pb, 1.5 Al, 5 P+Sn							Ornaments, hardware	
1873c	American Silver		58-49 Cu, 21-24 Zn, 15-24 Ni, <4 Mn+Sn+Fe+Al+Pb							Ornaments, hardware	
1874	Amervan		63.5 Fe, 35 V, 1.5 ?							For alloy steel making	
1875	Anaconda Bronze	M-8	90 Cu, 10 Sn							Hardware, tubes, bearings, bushings	
1876	Anatomical Alloy		54 Bi, 19 Sn, 17 Pb, 11 Hg, Cd							Fusible alloy for anatomical impressions and casts	Fusible
1877a	Anode Metal		94 Pb, 6 Sb							Batteries—plates	
1877b	Anode Metal		98.8 Pb, 1 Ag, 0.2 As							Lead storage battery parts	
1878a	Antifriction		88-79 Pb, 12-20 Sb, 0-10 Sn, Cu, Zn, Fe							Bearings	
1878b	Antifriction		88 Pb, 12 Sb							Bearings	
1878c	Antifriction		84 Pb, 16 Sb							Bearings	
1878d	Antifriction		78.8 Pb, 19.6 Sb, 1 Zn, 0.6 Fe							Bearings	
1878e	Antifriction		77 Pb, 12.5 Sb, 10 Sn, 0.5 Cu							Bearings	
1878f	Antifriction		60 Pb, 20 Sb, 20 Zn							Bearings	
1879	Anvil Brass		62.5 Cu, 37.5 Zn							Hardware, tubes	
1880	Apex No. 400	M-130	3.8 Mg, 1.0 Si+Fe, bal. Al		24000 26000	10000	8 6		50 60	Light alloy parts, cooking utensils, marine castings	Similar to "Permbrite"
1881	Apex Bronze	M-545	86 Cu, 9.5 Al, bal. Fe							Marine parts, hardware	Sillman Bronze
1882	Aphtit		75-70 Cu, 20-21 Ni, 2.4-5.5 Zn, 1.8-4.5 Cd							Corrosion resistant parts	(Aphit) Corrosion resistant
1883	Appolo Crom		Cr plated sheet Zn							Corrosion resistant parts	Stainless and corrosion resistant
1884	Argelite		90 Al, 6 Cu, 2 Si, 2 Bi							Light alloy parts	
1885a	Argental A		75-60 Al, 15-16 Ag, 7.5-20 Zn, 3.5-5.0 Cu								
1885b	Argental B		85 Cu, 10 Sn, 5 Co								
1886	Argentalium		<5 Ag, 0.1-1 Mg, bal. Al							Light alloy parts	
1887	Argentan, Chinese	Chi.	40.4 Cu, 25.4 Zn, 31.6 Ni, 2.6 Fe							Ornaments, jewelry, hardware	
1888	Argentan, Russian	Russ.	63.88 Cu, 17.58 Zn, 17.58 Ni, 0.33 Fe, 0.32 Pb							Ornaments, architectural purposes	
1889	Argentan, Russian (cast)	Russ.	57.52 Cu, 18.94 Zn, 20.35 Ni, 3.15 Fe							Ornaments, hardware	
1890	Argentan, Sheet		40-65 Cu, 17-32 Zn, 15-30 Ni							Ornaments, jewelry, hardware	
1891	Argentan, Vienna	Aus.	55.6 Cu, 21.8 Zn, 22.2 Ni, 0.38 Fe							Ornaments, jewelry, hardware	
1892	Argentan, Solder		35 Cu, 57 Zn, 8 Ni							Solder	
1893	Argent francais	French	Cu-Zn-Ni							Jewelry, ornaments	Moussets Silver
1894	Argentin		85 Sn, 14.5 Sb, 0.5 Cu							Bearings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1895	Argo High Speed		0.82 C, 0.17 Mn, 1.74 Cr, 4.87 W, 0.10 V, bal. Fe							Tools, cutters, dies, reamers, gages, punches	High speed steel
1896	Argozoil		54 Cu, 28-20 Zn, 14 Ni, 2 Sn, 2-10 Pb							Ornamental parts	
1897a	Armstrong, Patent		3-50 Cr, 0.5-8 Si, C, bal. Fe							Heat and corrosion resisting parts	Heat resisting
1897b	Armstrong, Patent		21.6 Cr, 3.4 Si, 2.35 C, 2.25 Mn, bal. Fe							Heat and corrosion resisting parts	Heat resistant cast iron
1897c	Armstrong, Patent		12 Cr, 5 Si, 0.45 C, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resistant
1898	Argyroid (Argiroide)		Cu, Ni, Zn							Resistances, ornaments	Nickel Silver
1899	Argyrolith		50-70 Cu, 10-20 Ni, 5-30 Zn							Resistances, ornaments	Nickel Silver
1900	Argyrophan		Cu, Ni, Zn							Resistances, ornaments	Nickel Silver
1901	Austrian Alloy (Spandau)	Austrian	4-6 Cu, 2-3.5 Al, bal. Zn							Die castings	Spandau Alloy
1902	Austrian Journal Box		92.5 Cu, 7.5 Zn							Bearing purposes	
1903	Awarnite (Natural)		75 Ni, 25 Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
1904	Antifriction Metal, Eel Brand	M-526	75 Pb, 6 Sn, 0.9 Cu, 1.5 Cd, 1 Ni, 0.1 P, 0.5 As							*Bearings, antifriction metal*	
1905	Argoid Metal		52.6 Cu, 25.8 Zn, 21.6 Ni							Ornamental parts	
1906	Babbitt, Richard Plastic		82.43 Sn, 9.77 Sb, 8.1 Cu							Babbitt, bearings	
1907	Back Case Metal		62 Cu, 20 Zn, 18 Ni							Heat and corrosion resistant parts	Heat and corrosion resistant
1908	Baily's Metal		81.1 Cu, 12.8 Sn, 5.1 Zn							Bearings, corrosion resistant castings	Corrosion resistant
1909	Bario		21.4 Cr, 57.4 Ni, 1 Fe, 15.4 W, 0.3 C							Resistor elements	Stainless and corrosion resisting
1910	Basic Bessemer Pig		3.5-4.0 C, 2-3 P, ⩾1 Si, ⩾0.5 Mn, ⩾0.05 S, bal. Fe							For steel making	
1911	Basic Low Phosphorous Pig		3.5-4.0 C, 1-2.5 Mn, ⩾1.25 Si, 0.1-1.0 P, ⩾0.05 S, bal. Fe							For steel making	
1912a	Bath Metal		83 Cu, 17 Zn							Plumbing, pipe	
1912b	Bath Metal		55 Cu, 45 Zn							Bath fixtures	
1913	Battery Copper		94 Cu, 6 Zn							Batteries	
1914	Battery Plates		94 Pb, 6 Sb							Storage battery plates	
1915	Baudrins Metal (Baudoins)		72 Cu, 7.10 Zn, 17 Ni, 2.5 Fe, 1.8 Co, 0-0.5 Al							Ornamental and corrosion resistant parts	Corrosion resistant
1916	"B" Alloy		25 Zn, 3 Cu, bal. Al							Light alloy parts	
1917	B.E. No. 4 Alloy (U.S.N.)		4 Cu, 0.25 Mg, ⩾0.5 Fe, ⩾0.1 Si, bal. Al							Boxes, covers, face-plates	U.S.N. Bureau of Engineering Alloy
1918	Darwin "Alni"	M-487	59 Fe, 4 Cu, 24 Ni, 13Al							Permanent magnets	Magnetic steel
1919	Monel Grade "S"	M-68	62-63 Ni, 32-33 Cu, 3.75 Si, 2.0 Fe	Cast	100000 120000	90000 110000	5 2	5 2	275 350	Valve seats, nozzles, power plant equipment	Can be hardened by heat treatment
1920	Bearing, Carriage Wheel		84 Cu, 16 Sn							Bearings	
1921	Atlas 20	M-13	75 Cu, 20 Pb, 5 Sn	Cast	25000 30000	14000 16000	18 14	14 12	50 60	Bearings for use under poor lubrication	Obsolete
1922	Bearing Metal, Daimler		76 Cu, 3 Sn, 20 Zn, 1 Pb							Bearings	
1923	Crasco Alloy Chisel Steel	M-337	C, W, Cr, bal. Fe							Tools, chisels	
1924	Bearing Metal No. 600		59.7 Cu, 35 Zn, 0.2 Sn, 0.33 Pb, 2.6 Mn, 1.38 Al, 0.7 Si							Bearings	
1925	Bearing, Moore-Jones		81.6 Cu, 5.2 Sn, 4.8 Zn, 8.5 Pb, 0.3 Ni							Bearings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1926	Bearing, Schmidt, Locomotive		86 Cu, 14 Sn							Bearings	
1927	Bearing, Searing		86 Cu, 14 Sn							Bearings	
1928	Bearing, Stephenson, Locomotive		79.5 Cu, 7.5 Sn, 5 Zn, 8 Pb							Bearings for locomotives	
1929	Bearings, Valves		71 Sn, 24 Sb, 5 Cu							Bearings, valve packing	
1930	Becket Alloy		25-30 Cr, 3 Si, 1.5-3.0 C, bal. Fe								
1931a	Belais White Gold		75-85 Au, 8-18 Ni, 4-14 Zn							Jewelry, ornaments	
1931b	Belais White Gold	M–237	75-85 Au, 10-18 Ni, 2-9 Zn, 0.05-0.5 Pt or 0.5-2.0 Mn							Jewelry, ornaments	
1932	Belgian Aluminum Piston Alloy		90.5 Al, 7 Cu, 2.5 Zn							Pistons	
1933	Bell Metal, Damstadt		74-72.5 Cu, 21.7-21.1 Sn, 2.12 Pb, 0.19-0.05 Fe, 2-2.6 Ni							Bells	
1934	Bell Metal, Herbohn		60-71.43 Cu, 35-26.4 Sn, 5-2.7 Zn							Bells	
1935a	Bell Metal, Japanese Karakane	Jap.	72-61 Cu, 14-25 Sn, 0.14 Pb, 0-9.4 Zn, 0-3 Fe							Bells	
1935b	Bell Metal, Japanese Karakane	Jap.	71.42 Cu, 14.2 Sn, 14.3 Pb							Bells	
1935c	Bell Metal, Japanese Karakane	Jap.	70 Cu, 19 Sn, 3 Zn, 8 Pb							Bells	
1935d	Bell Metal, Japanese Karakane	Jap.	65.95 Cu, 17.25 Sn, 3.45 Zn, 10.35 Pb							Bells	
1935e	Bell Metal, Japanese Karakane	Jap.	64 Cu, 24 Sn, 9 Zn, 3 Fe							Bells	
1935f	Bell Metal, Japanese Karakane	Jap.	61 Cu, 18 Sn, 6 Zn, 3 Fe							Bells	
1936	Bell Metal, Musical		84 Cu, 16 Sn							Bells	
1937	Belt Lace		62 Cu, 38 Zn							*Belt lacing, light alloy parts*	*High impact strength*
1938	Bemit	Ger.	96.91 Al, 2.0 Cu, 0.45 Mn, 0.27W							Light alloy welded, drawn or stamped parts	Also called "Benit" German alloy
1939	Benedict Nickel	M–8	79 Cu, 20 Ni, 0.36 Fe							Sheets, tubes, extruded parts	Corrosion resistant
1940	Benedict Plate		57 Cu, 28 Zn, 15 Ni							White metal for flat work	
1941	Benz Aviatek		80 Al, 6 Cu, 12 Zn, 1.5 Fe							Pistons	
1942a	Berlin No. 1		56 Cu, 29 Zn, 16 Ni							Electrical resistances, ornaments	
1942b	Berlin No. 2		48 Cu, 24 Zn, 24 Ni, 3.6 Fe							Ornamental parts	Spinning, drawing, stamping
1943a	Berthier's Alloy		68 Cu, 32 Ni							Evaporators, stills	
1943b	Berthier's Alloy		72 Cu, 25 Zn, 2 Pb, 1.2 Sn							Screw machine products	
1944	Beruda Alloy		Cu-Zn							Strong corrosion resistant parts	High tensile brass, corrosion resistant
1945	Best Bronze		90 Cu, 10 Zn							Jewelry trade as base for fire enameling, primers, bullet shells	
1946	Bethlehem Finishing	M–24	1.3 C, 4 W, 0.4 Mo, bal. Fe							Tools, cutters, finishing tools	Smooth finish
1947	Bethlehem Special High Speed	M–24	.7C 18 W, 4 Cr, 1 V, bal. Fe							Turning, planing, drilling, tapping, and reaming tools	High speed steel
1948	Binding Brass		63.25 Cu, 35 Zn, 1.75 Pb							Automatic screw machine products	
1949	Bidery (Biddery)		90.2 Zn, 6.3 Cu, 2.6 Pb, 0.8 Sn							Buttons, ornaments	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1950	Bierman Tungsten Bronze		95 Cu, 3.4 Sn, 1.6 W							Strong corrosion resistant parts	Corrosion resistant
1951	Bilgen Bronze		97 Cu, 1.9 Sn, 0.5 Fe, 0.2 Pb							Electrical bronze	
1952a	Bismuth Brass		52 Cu, 30 Ni, 12 Zn, 5 Pb, 1 Bi							Ornaments, hardware	
1952b	Bismuth Brass		47 Cu, 31 Ni, 21 Zn, 1 Bi, 1 Sn							Ornaments, hardware	
1953	Bismuth Bronze		45-53 Cu, 33-10 Ni, 20-22 Zn, 16-15 Sn, 1 Bi, 0-0.1 Al							Ornaments, hardware	
1954	Blanko-Blech		80 Cu, 20 Ni							Turbine blades, condenser tubes	Corrosion resistant
1955	Blatt (leaf) Gold		77 Cu, 23 Zn							Gold leaf substitute, signs	Corrosion resistant
1956	Blatt (leaf) Silver		91 Sn, 8.3 Zn, 0.4 Pb, 0.2 Fe							Bearings, tin foil for wrappers	
1957	Block Brass		66.5 Cu, 32 Zn, 1.5 Pb							Free machining brass parts	
1958	Block's Alloy		54 Co, 45 Ni, 0.9 Si							Tools	Corrosion and heat resisting
1959	Blue Chip Superior	M-57	0.67 C, 0.22 Mn, 4.12 Cr, 15.91 W, 0.71 V, bal. Fe							Tools, high speed cutters	High speed steel Discontinued
1960	Blue Gold		75 Au, 25 Fe							Ornaments, jewelry	
1961	Bobierre's Metal		66-58 Cu, 34-42 Zn							Bolts, nuts, sheathing	
1962	Bohler K.L. Speed	M-27	1.2 W, 1.0 Cr, 0.47 C, bal. Fe							Cold punches, clipping tools, wood carving knives	
1963	Bohler Magnet Steel	M-27	6.3 W, 0.7 C, bal. Fe							Magnets	
1964	Bohler Rapid Steel	M-27	14 W, 3.9 Cr, 0.7 C, bal. Fe							Cutters, tools	High speed steel
1965	Bohler Super Rapid	M-27	15 W, 3.7 Cr, 0.8 C, 0.2 V, 0.2 Mo, bal. Fe							High speed cutters, tools	High speed steel
1966	Bolster Silver		65.5 Cu, 16 Zn, 18 Ni, 0.5 P							Ornaments, hardware	Spun and drawn
1967	Boron Steel		0.06-0.4 B, 0.45-0.16 C, Al, Si, Mn, bal. Fe							Structural and machine parts	
1968	Bourbounes		51 Sn, 49 Al, 0.3 Fe, 0.3 Cu								
1969	Bow Wire		93 Cu, 2 Zn, 5 Sn							Corrosion resistant wire	
1970	Braeburn High Speed	M-140	0.76 C, 0.20 Mn, 2.85 Cr, 18.43 W, 0.87 V, bal. Fe							Tools, high speed cutters	High speed steel
1971	Silicon Monel Metal 2.5%	M-63	64-71 Ni, 28-30 Cu, 1-2 Fe, 2.5-3.0 Si, 0.5-0.75 Mn, 0.15-0.25 C	Cast	85000	50000	16		250	Valves, power plant equipment	Combines some hardness with moderate ductility
1972	Brass, Check		62 Cu, 38 Zn							Fixtures, name plates	
1973	Brass, Collet		61 Cu, 37 Zn, 2.5 Pb							Hot forged parts, collets	
1974	Brass, Commercial	M-8	65 Cu, 35 Zn	Hard Soft	76000 45000		4 60		153 52	Fixtures, radiators, ornaments	Must be annealed
1975	Brass, Commercial U.S.N. Spec. 46B 11e		62-67 Cu, 0-1 Sn, 1.5-3 Pb 0.75 max. Fe, 0.3 max. Al, bal. Zn							Fixtures, ornaments, structural purposes	Cast Composition B-c
1976	Brass, Commercial U.S.N. Spec. 47B 2f		59-68 Cu, 1.5 max. Sn, 3.5 max. Pb, 0.2 max. Fe, bal. Zn							Fixtures, ornaments, structural parts	Rolled Composition B-r
1977	Brass, Commercial Wire		64 Cu, 36 Zn, 0.2 Pb, trace Fe							Wires, rivets, pins, screws	
1978	Brass, Common		65 Cu, 35 Zn							Lamp fixtures, automobile radiators	
1979	Brass, Cowles High Manganese		80-67 Cu, 15-18 Mn, 5-13 Zn, 0-1 Al, Si							Strong corrosion resistant parts	Corrosion resistant
1980	Brass, Diaphragm		95 Cu, 3 Sn, 2 Zn							Diaphragms	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T. S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
1981	Brass, Dipping		67 Cu, 33 Zn							Deep drawn, spun or stamped parts	
1982a	Brass, Door Plate		65 Cu, 35 Zn							Hardware	
1982b	Brass, Door Plate		63 Cu, 35 Zn, 2 Pb							Hardware	
1983	Brass, Electrical (B.E.)		84 Cu, 13 Zn, 3 Sn							Electrical machinery	
1984	Brass, Emperor		60 Cu, 20 Al, 20 Zn							Corrosion resistant parts	Corrosion resistant
1985	Brass, Engravers		66 Cu, 33 Zn, 1 Pb							Engravings	
1986	Brass, Escutcheon Pin		64.5 Cu, 35.07 Zn, 0.43 Pb							Escutcheon pins	
1987	Brass, Eyelet		65-68 Cu, 32-35 Zn	Hard	85000	60000		4	156	Eyelets, drawn shells	
				Soft	46000	20000		58	53		
1988	Brass, Forging		60-53 Cu, 40-43 Zn, 0-4.5 Mn							Forged brass parts	
1989	Brass, Free Turning		62 Cu, 35 Zn, 2.6 Pb, Fe							Screw machine products	
1990	Brass, Grommet		70 Cu, 30 Zn							Grommets	
1991	Brass, Hard Drawing		62-59 Cu, 38 Zn, 0.06-3.4 Pb							Hard drawn parts	
1992	Brass, High Manganese		50-84 Cu, 12-24 Mn, 0-16 Fe, 4-15 Zn, 0-1 Al, 0.05 Si							Strong corrosion resistant parts	Corrosion resistant
1993	Brass, Hohenzollern		Cu, Zn							Gears, worm wheels	A high tensile brass
1994	Brass, Hooker		61 Cu, 37 Zn, 2 Pb							Hot forgings, free machining brass parts	
1995	B.A. 42	M–28	10-13 Si, 2-3 Ni, .7-1.2 Mg. .7-1.2 Cu, bal. Al	Cast	24000 36000		.5		140	Pistons	Low expansion
1996	Brass, Krupp Nickel	M–72	48.5 Cu, 24.3 Zn, 24.3 Ni, 2.9 Fe							Ornamental and corrosion resistant parts	Corrosion resistant
1997	Brass, Lancashire		73 Cu, 25 Zn, 2 Pb							Parts to be brazed or soldered	
1998	Brass, Leaded		88-62 Cu, 10-35 Zn, 1.7-2.6 Pb, Fe							Screw stock, hardware, fittings	
1999	Brass, Leaded Low		78 Cu, 20 Zn, 1.7 Pb, traces Fe	Hard Soft	80000 40000		5 35			Rivets, pins, wire	Free cutting
2000	Brass, Leaded Screen Wire		69 Cu, 30 Zn, 1.7 Pb, traces Fe							Screens, hardware	
2001	Brass, Manganese		85-54 Cu, 2-40 Zn, 1-25 Mn, 0-2.4 Fe, 0-2.5 Ni, Al, Pb							Propellers, marine parts, bolts, fittings	
2002	Brass, Manganese Nickel		66-53 Cu, 5-40 Zn, 2-18 Ni, 1.5-20 Mn, Al, Fe, Sn, Pb							Condenser tubes, pump parts, corrosion resisting fittings	
2003	Brass, Market		65 Cu, 35 Zn							Condenser tubes, hardware	
2004	Brass, Nickel		50-54 Cu, 35-44 Zn, 1.5 Ni, 0.5 Fe, Al							Condenser tubes, hardware	
2005	Brass, Oker (Harz)		64.25 Cu, 37.27 Zn, 0.59 Sn, 0.12 Pb							Hardware, bolts, fittings	
2006	Brass, One Ton		61 Cu, 38 Zn, 1 Sn							Marine parts, condenser tubes	
2007	Brass, Perking		76.2-80 Cu, 23.8-19.8 Sn, 0-0.14 Zn							Ornamental parts, reflectors	
2008	Brass, Pinkus		88.1 Cu, 6.9 Zn, 2.5 Sn, 1.8 Pb, 0.3 Ni, 0.32 Sb							Hardware, fittings	
2009	Brass, Pin Wire		61 Cu, 39 Zn	Wire	51000		20			Brass pins, condenser tubes, water pipes	
2010	Brass, Ponsard's High Manganese		75-50 Cu, 20-25 Mn, 2-15 Zn, 0-16 Fe							Corrosion resisting a marine parts	
2011	Brass, Red (Einheits)		89-83 Cu, 5-12 Zn, 3-10 Pb, 2-5 Sn	Hard Soft	80000 41000	71000 18000	4 47		135 52	Tubing, hardware	v. Tombac
2012	Brass, Reed		69 Cu, 30 Zn, 1.0 Sn							Pipes, tubes, fittings, condenser tubes	
2013	Brass, Rich Low		85 Cu, 15 Zn, traces Pb+Fe							Hardware, fittings	
2014	Brass, Rule–238	M–8	62.5 Cu, 35 Zn, 2.5 Pb	Soft Hard	45000 73000		50 7			Screw stock, automatic machine parts, rulers	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2015	Brass, Screw Wire		62 Cu, 38 Zn							Screws, hardware	
2016	Brass, Shell Head		75 Cu, 25 Zn							Shells, hardware, fittings	
2017	Brass, Sheet		72-55 Cu, 27-45 Zn, 0-2 Pb, 0-3.3 Sn, trace Fe							Sheet, hardware, fittings	
2018	Brass, Sheet (China)		56.6 Cu, 27-37 Zn, 0.2-1.0 Sn, 0-0.8 Pb							Sheet, hardware, fittings	
2019	Brass, Sheet (Hegermuhl)		62-72 Cu, 27-37 Zn, 0.2-1.0 Sn, 0-0.8 Pb							Sheet, hardware, fittings	
2020	Brass, Sheet (Iserlohn)		70 Cu, 30 Zn							Cartridge cases, tubing, condenser tubes	
2021	Brass, Sheet (Jamappes)		64.6 Cu, 33.7 Zn, 0.2 Sn, 1.4 Pb							Hardware, forgings, fittings	
2022	Brass, Sheet (Japan)		66.6 Cu, 33.4 Zn							Hardware, tubes, lamp fixtures, radiators	
2023	Brass, Sheet (Oker)		55 Cu, 44.5 Zn, 0.5 Sn							Sheet, architectural purposes	
2024	Brass, Sheet (Oker I)		69 Cu, 30 Zn, 1.0 Pb							Sheet, fittings, hardware	
2025	Brass, Sheet (Romilly)		70.1 Cu, 29.26 Zn, 0.17 Sn, 0.28 Pb							Sheet, fittings, hardware	
2026	Brass, Sheet (Rosthorn-Wiln)		68.1 Cu, 31.9 Zn							Condenser tubes, stampings, hardware	
2027	Brass, Sheet (Stollberg)		64.8 Cu, 32.8 Zn, 0.4 Sn, 2.0 Pb							Forgings, hardware, fittings	
2028	Brass, Shoe Nail		63 Cu, 37 Zn							Shoe nails, hardware	
2029	Brass, Silico-Manganese		40 Zn, 1-2 Mn, 0.2-0.3 Fe, 0.05-1.0 Si, bal. Cu							Marine parts, architectural applications	
2030a	Brass, Spring Wire		70-74 Cu, 30-36 Zn		100000					Springs, wire	
2030b	Brass, Spring Wire		64-68 Cu, 36-32 Zn							Springs, wire	
2031	Brass, Thurston		55 Cu, 44.5 Zn, 0.5 Sn							Sheet, architectural purposes	
2032a	Brass, Tungsten		60 Cu, 34 Zn, 2.8 Al, 2W, 0.75 Ni, 0.7 Mn, 0.2 Sn							High strength brass parts	
2032b	Brass, Tungsten		60 Cu, 22 Zn, 14 Ni, 4 W							High strength brass parts	
2033a	Brass, Turbine		75.77 Cu, 24.07 Zn							Turbine parts	
2033b	Brass, Turbine		67.35 Cu, 32.02 Zn, 0.23 Pb, 0.38 Fe							Turbine parts	
2034	Brass, Turbistons		55 Cu, 41 Zn, 0.48 Fe, 2 Ni, 1 Al, 0.16 Mn							Hardware, high strength brass parts	
2035	Brass, U.S. Navy		80-78 Cu, 13-16 Zn, 4 Sn, 3 Pb							Fittings, castings	
2036	Brass, Vanadium		70 Cu, 29.5 Zn, 0.5 V							Condenser tubes, sheets, hardware	
2037	Brass, Washer		62 Cu, 38 Zn							Washers, hardware	
2038	Brass, Wheel		68 Cu, 30 Zn, 2 Pb							Wheels, hardware	
2039a	Brass, White		66 Zn, 34 Cu							Ornamental parts, castings	
2039b	Brass, White		65 Sn, 32-33 Zn, 3-2 Cu							Ornamental parts	
2040	Brass, White Nickel		64-55 Cu, 18 Ni, 0.35 Fe, bal. Zn							Trimmings, control brackets, levers, fittings, plumbing	S.A.E. Spec. 42
2041	Brass, Yellow (Latten, Laiton)		70-60 Cu, 27-40 Zn, 5.3 Pb, 0-1 Sn							Plumbing, hardware, bolts, nuts	
2042	Brazing Metal "F"		85 Cu, 15 Zn							Brazing metal, water pipe, architectural purposes	
2043	Brearly		12-14 Cr, 0.5 max. Si, 0.3 C, bal. Fe							Cutlery, surgical instruments	Stainless and corrosion resisting
2044	Brearly Patent		9-16 Cr, 0.7 max. C, bal. Fe							Cutlery, surgical instruments	Stainless and corrosion resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2045	Bridgeport Bronze	M-141	60 Cu, 0.75 Sn, bal. Zn	Drawn	75000		15			Condenser tubes, water pipes, nuts, bolts	
2046	Bright Cap Gilding		90 Cu, 9.9 Zn, 0.4-0.1 Pb							Gilding, jewelry	
2047	Briston Alloy Buttons		57-61 Cu, 36-37 Zn, 2.7-5.3 Sn							Buttons, fixtures	
2048	Bristol Brass		76-61 Cu, 24-39 Zn							Condenser tubes, pipes, ornamental purposes	Same as "Princes Metal"
2049a	British Aluminum Piston Alloy	M-968	88 Al, 12 Cu							Pistons	
2049b	British Aluminum Piston Alloy	M-968	85 Al, 14 Cu, 1 Mn							Pistons	
2049c	British Aluminum Piston Alloy	M-968	94.5 Al, 5.5 Ni							Pistons	
2050	Brix		75-60 Ni, 15-20 Cr, 5 Cu, 4 Si, 3 Ti, 2 Al, 1-4 W, 1 B							Heating elements, heat and corrosion resisting parts	
2051	Brolunick		82 Cu, 7 Al, 5.5 Ni, 4 Fe, 2 Mn							Corrosion resisting parts	
2052	Bronze, Aluminum (Cowles)		88.4 Cu, 9.74 Al, 0.43 Fe, 1.36 Si							Gears, trolley wheels, worm wheels	
2053	Sivyer "Nuloy"	M-288	0.28 C, 1.25 Mn, 0.40 Si, bal. Fe							Castings, gears	
2054	Bronze, Aluminum (Special)		10.5-10.7 Al, 3.1-4.25 Fe, 3.6 Ni, 0-1.6 Mn, bal. Cu						200 300	Worm wheels, gears, trolley shoes	
2055	Bronze, Carbon		75 Cu, 15 Pb, 9.7 Sn		28000		6			Bearings	Sc.-15
2056	Bronze, Chain		95 Cu, 4.9 Sn, 0.1 P	Rolled	69000	40000	30			Chains	Sc.-37
2057	Bronze, Chinese		83-72 Cu, 10-20 Pb, 0.7-14 Zn, 1-13 Sn, bal. Fe							Bearings	
2058	Bronze, Cocks		88 Cu, 10-8 Sn, 2-6 Zn							Cocks, fittings	
2059	Bronze, Cog & Worm		85 Cu, 11 Sn, 4 Zn							Cogs and worms	
2060	Bronze, Coinage		95 Cu, 3-4 Sn, 1-2 Zn							Coins	
2061	Bronze, Cornish		78 Cu, 9.6 Sn, 0.8 P, 12.4 Pb							Bearings	
2062	Bronze, Damascus		77 Cu, 13 Pb, 10 Sn							Bearings, ornamental applications	
2063	Bronze, Diamond		88 Cu, 10 Al, 2 Si							High strength corrosion resisting castings	
2064	Bronze, Eislers		94 Cu, 6.0 Zn							Springs, electrical resistances	
2065	Bronze, Dicks Bearing		80 Cu, 10 Sn, 10 Pb							Bearings	
2066	Brass, Machinery		83 Cu, 16 Zn, 1 Sn							Machine parts	
2067	Bronze, Double (Wire)		6.5 Al, skin of pure Cu, bal. Cu							Wire	
2068	Bronze, Elephant	M-450	95.5 Cu, 3.9 Sn, 0.3 P, 0.16 Fe							Marine parts	
2069	Bronze, English Penny	Eng.	95.5 Cu, 3 Sn, 1.5 Zn							Coinage	
2070	Bronze, English Phosphor		79 Cu, 10 Sn, 9.6 Pb, 1.0 P							Bearings, gear wheels	
2071	Bronze, Ferro		90.7 Cu, 8 Fe, 0.72 Cr							Hardware	
2072	Bronze, File		73-51 Cu, 18-31 Sn, 8.5-7 Pb, 0-10 Zn							Plumbing, hardware	
2073	Bronze, Fontainmoreau		99-90 Zn, 0-8 Cu, 0-1 Fe, 0-1 Pb							Die castings, ornaments, fittings	
2074	Bronze, Free Cutting		89 Cu, 10 Zn, 1.5 Pb							Screw stock, bolts, automobile radiators	
2075	Bronze, French Aluminum (Brolunick)		82 Cu, 7 Al, 5.5 Ni, 4 Fe, 2 Mn							Strong corrosion resisting castings	
2076	Bronze, Gold		90.5 Cu, 6.5 Sn, 3 Zn							Jewelry, ornaments	
2077	Bronze, Gun Mount		80 Cu, 17 Zn, 3 Sn							Gun mounts	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2078	Bronze, Gurneys (Graney)		76 Cu, 15 Zn, 9 Sn							Machine parts	Also called "U.S. Government Bronze"
2079	Bronze, Hard Phosphor		93 Cu, 7 Sn, 0.2 P							Springs, electrical parts, bearings, gears	
2080	Bronze, Harmonia		57-55.7 Cu, 40-41.2 Zn, 0.4-0.46 Pb, 1.8-1.29 Fe, 0-0.5 Sn, 0-0.86 Al							Fittings, hardware	
2081	Bronze, Helment		70 Cu, 30 Zn							Water pipes, cartridges, shell cases, deep drawn parts	
2082a	Bronze, Hercules		86 Cu, 10 Sn, 2.5 Al, 2 Zn							Hardware, worm gears	
2082b	Bronze, Hercules		54 Cu, 36 Zn, 7.5 Fe, 2.5 Al							Hardware	
2083	Bronze, High Temperature		91 Cu, 6.3 Zn, 2.7 Sn, 1.3 Pb							Fittings, hardware	
2084a	Bronze, Hydraulic		72.5 Cu, 19.5 Zn, 1.75 Sn, 6.5 Pb							Pumps, cocks, valves	
2084b	Bronze, Hydraulic		83 Cu, 11 Sn, 6 Zn, 0.1 Ph							Pumps, cocks, valves	
2085	Bronze, Hytenal		60 Cu, 10 Al, 6 Fe, 19 Zn, 5 Mn		105000	65000	20			Staybolts, pump rods, valves, valve spindles	
2086	Immadium VI	M-179	Cu alloy	Cast	30000	20000	19		200	Staybolts, pump rods, turbine	Corrosion resistant, excellent wearing properties
				Extruded	110000	67000	15		200	rotors, shafts, bridge bearing plates	
2087	Bronze, Injector		84 Cu, 8.5 Sn, 5 Zn, 2.5 Pb							Injectors, fittings, hardware	
2088	Bronze, Instrument		82 Cu, 13 Sn, 5 Zn							Instruments, utensils	
2089	Bronze, Iron	M-2a	82.5 Cu, 8.6 Sn, 4.4 Zn, 4 Fe	Cast			35-20		70-85	Shafts, piston rods, screws,	Resists sea water corrosion
				Pressed			35-20		80-90	marine parts	
2090	Bronze, Ironiers		Cu, Sn, (1 Hg)								
2091	Bronze, Johnson Locomotive		87.5 Cu, 7.85 Sn, 5.07 Zn							Injectors, fittings, railroad hardware	
2092	Bronze, Kuhnes Phosphor		78 Cu, 11 Sn, 10 Pb, 0.3 Ni, 0.6 P							Hard bearings	
2093	Bronze, Lafonds Malleable		98 Cu, 2 Sn							Sheets, tubes, wire	
2094	Bronze, Lafonds Pump		88 Cu, 10 Sn, 2 Zn							Gears, worm wheels, pump parts	
2095	Bronze, Leaded		88-62 Cu, 10-35 Zn, 1.7-2.6 Pb, traces Fe							Hardware, fittings, screws, nuts, bolts	
2096	Bronze, Leaded Chamet		60 Cu, 38.5 Zn, 0.75 Sn, 0.75 Pb							Pipes, tubes, fittings	
2097	Bronze, Litinum		90 Cu, 4.7 Sn, 3.86 Zn, 1.6 Pb							Nuts, bushings, bearings, screw machine parts	
2098	Bronze, Lynux		89 Cu, 7.2 Fe, 3.8 Al							Corrosion resisting hardware and fittings	
2099	Bronze, McKechnie's		57 Cu, 41 Zn, 1 Sn, 0.5 Pb, 1 Fe							Rods, nuts, bolts	
2100	Bronze, Morins Chinese		83 Cu, 10 Pb, 5 Sn, 2 Zn							Ornaments	
2101	Bronze, Mueller Blue Tip		60.36 Cu, 38.6 Zn, 0.94 Sn							Nuts, bolts, condenser tubes, marine parts	
2102a	Bronze, Nickel Aluminum		88 Cu, 10 Ni, 2 Al, Sn							Heat and corrosion resisting parts	
2102b	Bronze, Nickel Aluminum		10 Cu, 40 Ni, 30 Al, 20 Sn								
2103a	Bronze, Nickel		83.5 Cu, 10 Sn, 3 Pb, 3.5 Ni		38000 47000		7			Ornamental and architectural parts, hardware	
2103b	Bronze, Nickel		60 Cu, 12 Zn, 20 Ni, 8 Sn								
2103c	Bronze, Nickel		47 Cu, 3 Ni, 10 Sn, 1 P, Sn								
2103d	Bronze, Nickel		47 Cu, 21 Zn, 30.9 Ni, 1 Sn, 0.1 Pb								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2103e	Bronze, Nickel		50 Cu, 18 Zn, 12 Ni, 2 Sn, 18 Pb								
2103f	Bronze, Nickel		61.5 Cu, 10.95 Zn, 15.35 Ni, 1.88 Sn, 10.15 Pb								
2104	Bronze, Phosphor (Charpy)		84.8-85.7 Cu, 12.2-13.4 Sn, 0.4-0.46 P							Bearings, gears	
2105	Bronze, Phosphor (Laws)		89-88 Cu, 9.5-11 Sn, 0.7-1.0 P							Bearings, gears	
2106a	Bronze, Phosphor Lowroff		70 Cu, 16 Pb, 13 Sn,							Bearings	
2106b	Bronze, Phosphor Lowroff		90 Cu, 5.5 Pb, 4 Sn, 0.5 P							Bearings	
2107	Bronze, Phosphor Sheet		94.5-95.0 Cu, 4-5 Sn, 0.5-1.0 P							Diaphragm, electrical parts, switches, springs, clips	
2108	Bronze, Phosphor "S" Pa. R.R.		79.7 Cu, 10 Sn, 9.5 Pb, 0.8 P							Heavy duty bearings	
2109	Bronze, Pinkus		72.4 Cu, 14.7 Sn, 1.5 Zn, 8.8 Pb, 2.5 Sb							Bearings	
2110	Bronze, Plumbic		69 Cu, 26 Pb, 1.7 Mn, 1.5 Sn, 1.2 Fe							Bearings	
2111	Bronze, Poro	M-525	80 Sn, 13 Sb, 7 Cu							Bearings	
2112	Bronze, Powder		84 Cu, 16 Zn							Bronze paint pigments	
2113	Bronze, Railroad "A"		73-89 Cu, 0-20 Sn, 0-22 Zn, 0-20 Pb, 0-0.5 P							Axle bearings, gears, piston rods, side valves	
2114	Bronze, Red (Rotguss)		93-82 Cu, 4-10 Sn, 3-10 Zn+Pb							Castings, hardware, fittings	
2115	Bronze, Richards		55 Cu, 42-43 Zn, 1.0 Fe, 2-1 Al							Marine parts	
2116	Bronze, Roman	M-238	60 Cu, 39.25 Zn, 0.75 Sn							Hardware, welding rod, engineering applications	
2117	Bronze, Screw		94 Cu, 5 Zn, 1 Sn, 0.5 Pb							Screws	
2118	Bronze, Screw Nut		86 Cu, 11 Sn, 2.3 Zn							Screws and nuts	
2119	Bronze, Sea Water		45 Cu, 33 Ni, 16 Sn, 5.5 Zn, 1 Bi							Marine parts	
2120	Bronze, Sheathing		45 Cu, 32.5 Ni, 16 Sn, 5.5 Zn, 1.5 Bi							Sheathing	
2121	Bronze, Sheet		90-100 Cu, 0-10 Zn							Jewelry, primers, bullet shells	
2122	Bronze, Sillman		86.4 Cu, 9.7 Al, 3.9 Fe							Strong corrosion resisting parts	
2123a	Bronze, Silver		58 Cu, 23 Zn, 16 Ni, 2 Pb, 1 Sn							Bearing	
2123b	Bronze, Silver		68 Cu, 13 Zn, 18 Ni, 1.3 Al, 0.3 Si							Bearing	
2123c	Bronze, Silver		77 Ag, 23 Cu							Bearing	
2124	Bronze, Slide Valve		88.5 Cu, 2.5 Sn, 9 Zn							Slide valves	
2125	Bronze, Statuary		95-88 Cu, 1.4-10 Sn, 9.5 Zn, 0-6 Pb, trace P							Statuary	
2126	Bronze, Steam Fitting		88 Cu, 8 Sn, 2 Zn, 2 Pb							Steam fittings	
2127	Bronze, Steam Valve		88 Cu, 10 Sn, 2 Zn							Steam valves	
2128	Bronze, Steel (Stahl)		52-59 Cu, 36-43 Zn, 1 Fe, 2.5-3.0 Mn, 1 Al							Propellers, marine parts, hardware	Same as "Uchatius Bronze"
2129a	Bronze, Sun		95 Cu, 5 Al							Pump rods, bushings, propeller blade bolts	
2129b	Bronze, Sun		60-40 Co, 30-50 Cu, 10 Al							High temperature fittings	
2130	Bronze, Telegraph		80 Cu, 7.5 Pb, 7.5 Zn, 5 Sn							Machine parts, switches	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2131	Bronze, Tetmajer Aluminum		93-86 Cu, 4.6-10 Al, 1-2.7 Si, 0.7-1.0 Fe							Bushings, fittings	
2132	Bronze, Tin		89 Cu, 11 Sn							Bearings, gears, worm wheels	
2133	Bronze, Torpedo		62-59 Cu, 0.5-1.5 Sn, bal. Zn							Torpedo parts	
2134	Bronze, Tungsten		90 Cu, 10 W								
2135	Bronze, Uchatius (Uchatin's)		92 Cu, 8 Sn							Bearings, gears, worm wheels	
2136	Bronze, U.S. Navy, Valve		87 Cu, 7 Sn, 5 Zn, 1 Pb							Valves	See Serial No. 4742
2137	Bronze, Vanadium		61 Cu, 38.5 Zn, 0.5 V							Pipes, tubes, fittings	
2138	Bronze, Victor		59 Cu, 39 Zn, 1.5 Al, 1.0 Fe, 0.03 V							Pipes, tubes, fittings	
2139	Bronze, Weatherstrip		89 Cu, 9.5 Zn, 1.5 Sn							Weather strips	
2140	Bronze, White		54 Cu, 42 Zn, 4 Ni, 0.3 Fe+Al							Ornamental and architectural parts	
2141	Bronze, Wire		98.75 Cu, 1.2 Sn, 0.05 Pb							Electrical purposes, roofing, gutters	
2142	Bronze, Yale		92.5-90 Cu, 7.5-8 Zn, 0.5-1.5 Sn, 0.7-1.5 Pb							Screw machine parts, bolts, nuts, bushings	
2143	Brush Wire		64.25 Cu, 35 Zn, 0.75 Sn							Wire	
2144	Buckeye Bronze		41.6 Sn, 0.6 Cu, 15.6 Pb, 37.8 Zn, 4.3 Al							Bearings	
2145a	Buckle Brass		90 Cu, 9 Zn, 1 Pb							Bullets, shells, tubes, cartridges	
2145b	Buckle Brass		65 Cu, 34 Zn, 1 Pb							Bullets	
2146	Bullet Brass		90 Cu, 9-10 Zn, 0-1 Pb							Bullets, shells, cartridges	
2147	Bureau of Standards (U.S.A.) Aluminum Solder		69-86 Sn, 2-9 Al, 8-26 Zn, 0-5 Cd, 0-2.4 P							Al solder	
2148	Burgess Aluminum Solder		76 Sn, 21 Zn, 3 Al							Aluminum solder	
2149a	Burr		62 Cu, 38 Zn							Pipes, tubes, hardware	
2149b	Burr		90 Cu, 10 Zn							Window screen wire, radiators	
2150	Bushings		85-86.2 Cu, 10.2-11.0 Sn, 3.6-4.0 Zn							Bushings	
2151	Bushing, Turbine		61.5 Cu, 10.95 Zn, 15.35 Ni, 1.9 Sn, 10.15 Pb							Turbine bushings	
2152	Butt Brass—229	M-8	63.5-65.5 Cu, 33.5-36.0 Zn, 1 Pb	Soft	45000	17000	57			Pipes, tubes, hardware	
2153	Button		80 Zn, 20 Cu							Die castings, ornaments	
2154a	Button Alloy		60-50 Cu, 30-45 Zn, 0-10 Sn							Buttons, ornaments	
2154b	Button Alloy		43 Cu, 57 Zn							Buttons, ornaments	
2155	Button Brass		90 Cu, 10 Zn, 0.5 Sn							Buttons, ornaments	
2156	Buttons, Gold		58.71 Cu, 33.03 Zn, 5.5 Sn, 2.75 Pb							Buttons, cheap jewelry	
2157	Buttons, Jackson's Alloy		63.88-63.01 Cu, 35.61-30.55 Zn, 1.39-5.55 Sb							Ornamental and architectural parts	
2158	Button Metal, Ludenscheidt		20 Cu, 80 Zn							Ornamental parts, die castings	
2159	Buttons, Thurston		58-64 Cu, 33-37 Zn, 1.5-6.1 Sn, 0-12.15 Pb							Ornamental and architectural parts	
2160	Sandvik No. 7 C-27	M-101	0.35 C, 13.5 Cr, bal. Fe	Oil hardened	251000 136000	208000 114000	19	55	477 292	Cutlery, valve parts, steam-turbine parts, surgical instruments	Resists scaling to 800 °C. Stainless steel. Heat resistant
2161	Sandvik No. 7N-3C-3	M-101	0.30-0.36 C, 0.3-0.6 Mn, 1.5-1.75 Cr, 3.4-3.8 Ni, bal. Fe	Annealed Air hardened	107000 260000	71600 201600	30 12	58 30	215 520	Pistons, pins, gear wheels	Air hardening Iz-50-80

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2162	Sandvik No. 8 M	M-101	0.35-0.45 C, 1.15-1.5 Mn, bal. Fe	Annealed	87400	56000	26	55	170	Axles, crankshafts, connecting rods, steering arms	
					96300	65000	32	62	190		
				Oil treated	107500	85100	23	60	230		
					121000	100800	27	68	270		
2163	Sandvik No. 8 N	M-101	0.35-0.43 C, 0.4-0.8 Mn, 0.5-1.0 Ni, bal. Fe	Oil treated	100800	67200	25	50	210	Small shafts, crankshafts, connecting rods	Not resistant to very high stresses
					116500	80600	19	48	250		
2164	Sandvik No. 8 N-1 C-2	M-101	0.35-0.42 C, 0.40-0.65 Mn, 0.65-0.95 Cr, 1.15-1.50 Ni, bal. Fe	Annealed	87000	54000	27	60	170	Crankshafts, connecting rods, steering arms, inlet valves, exhaust valves	
					96000	65000	32	62	190		
				Oil hardened	255000	235000	12	35	477		
					275000		15	45	534		
2165	Sandvik No. 8 N-3	M-101	0.39-0.46 C, 2.75-3.50 Ni, bal. Fe	Annealed	83000	58000	30	54	165	Axles, crankshafts, connecting rods, steering arms, inlet valves, exhaust valves	
				Oil hardened	157000	143400	18	50	250		
2166	Hymax 3% Cobalt Magnet	M-210	3 Co, bal. Fe, Cr, Mo	Cast						Magnet steel	Br-7000-6750 Hc-140-130 B.H.max.-410000
2167	Hymax 6% Cobalt Magnet	M-210	6 Co, bal. Fe, Cr, Mo	Cast						Magnet steel	Br-7250-7000 Hc-160-145 B.H.max.-460000
2168	Hymax 9% Cobalt Magnet	M-210	9 Co, bal. Fe, Cr, Mo	Cast						Magnet steel	Br-7550-7250 Hc-175-165 B.H.max.-527000
2169	Hymax 15% Cobalt Magnet	M-210	15 Co, bal. Fe, Cr, Mo	Cast						Magnet steel	Br-7850-7600 Hc-200-220 B.H.max.-648000
2170	Hymax 35% Cobalt Magnet	M-210	35 Co, bal. Fe, Cr, W	Cast						Magnet steel	Br-8800-8350 Hc-265-240 B.H.max.-980000
2171	Imperial Permanent Magnet	M-210	C, 6 W or 6 Cr, bal. Fe							Magnet steel	
2172	Maxilvry	M-210	C, Ni, Cr, Cu, bal. Fe	Annealed	83000	38000	48	60	143	Fittings, cutlery, tubes, valve plates, linings for chemical retorts, resistance grids	Malleable stainless steel. Max corrosion resistance. Austenitic
				Cold worked	139000	100000	21				
2173	Imperial Stainless Steel	M-210	0.25 min. C, Cr, Si, Mn, bal. Fe	Oil treated	235000		8	22	660	Knives, shafts, scissors, razors, gages, cutlery, ball races, pump rods, propeller shafts	Acid resisting. Resists ordinary abrasion and heat
					179200		16	48	460		
2174	Imperial Stainless Iron	M-210	0.10 max. C, Cr, Si, Mn, bal. Fe	Oil treated	161000		12	37	360	Dental mirrors, nitric acid equipment, dye vats, heat exchangers, stove fittings	Acid and heat resistant, malleable
					116500		20	67	220		
2175	Imperial Malleable Stainless Steel	M-210	Cr, Si, Cu, Ni, bal. Fe	At 700°C.	94100					Golf clubs, shears, discharge valves, pump rods, resistance grids, tanks, drying cylinders	Discontinued
2176	Stag Major	M-210	C, Cr, V, Co, Mo, bal. Fe	Air harden						High speed cutting tools	Imperial Stag Major
2177	Stag Extra Special	M-210	C, W, Cr, V, Co, Mo, bal. Fe	Air harden						High speed cutting tools	Imperial Stag Ex.Spec.
2178	Stag Special	M-210	C, 18 W, bal. Fe, Cr, V	Air harden						Turning, slotting, shaping, planing tools, drills, reamers, milling cutters	High speed steel Imperial Stag Special
2179	Stag Air-Hardening	M-210	C, W, bal. Fe, Cr, V							Twist drills, milling cutters, hot punches, reamers, chisels	High speed steel Imp. Stag Air Hard.
2180	Elastuf Media Steel	M-213 M-307	0.40-0.50 C, bal. Fe	Hot rolled	80000	45000	25	42	170	General purposes, machine parts	Tough, controlled quality
					90000	50000	16	32	210		
2181	Elastuf Media Precision Finish	M-213 M-307	0.35-0.45 C, bal. Fe	As rolled	70000	35000	30	50	140	General purposes, shafts, spindles	Tough
					90000	50000	20	35	153		
2182	Elastuf Penn Steel	M-213 M-307	0.35 0.45 C, bal. Fe 1.25 Mn	Hot rolled	100000	60000	25	40	179	Spindles, lead screws, shafts, chuck and jack screws, bolts, arbors	Tough, excellent machinability
					110000	70000	15	30	217		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2183	Air hardening	M-97	C, Cr, W, V, bal. Fe	Water hardened	214000	192000	20	57	415	Tools	Air hardening
2184	Airdi	M-38	2.25 C, 12 Cr, 1 Mo, 0.25 V, bal. Fe		120000	102000	12	38	255	Tools, forming and crimping rolls, perforating dies, plug gages	Now HYCC
2185	Ajax Tool Steel	M-39	0.9 C, 3.7 Cr, 0.3 V, bal. Fe							Tools, compression tools, dies, bolt and rivet headers, shear blades	Hot die steel
2186	Ajax Drill Rod	M-339	C, bal. Fe							Drills	
2187	Albion Special	M-340	C, W, bal. Fe							High speed cutting tools	High speed steel
2188	Albor Die	M-261	C, bal. Fe							Tools, die steel for hard metals	
2189	Alco	M-39	C, Cr, V, W, bal. Fe							Tools, chisels, punches	For hot and cold work
2190	Alloy "C"	M-261	2.2 C, 13 Cr, bal. Fe							Tools, dies	
2191	Alloy Finishing	M-140	1.4 C, 3 W, bal. Fe							Cutting and finishing tools	
2192	Cromimphy No. 2	M-104	C, 12-14 Cr, bal. Fe		107000	85000	22			Surgical instruments, pistons, pumps, valves	Corrosion and oxidation resistant
					143000	121000	10				
2193	Red Star Tungsten 9 Temper	M-34 M-115	0.85-0.95 C, 0.35-0.50 Cr, 1.5-1.7 W, 0.06-0.10 V, bal. Fe							Tools, dies, gages, forming tools	
2194	Duralumin, Vickers	M-338	3.5-4.5 Cu, 0.4-0.7 Mn, 0.4-0.7 Mg, 0.75 max. Fe, 94.5 Al	Sheet	56000	33500	8-15			Airplane and dirigible parts, crankcases, cylinder heads, pistons, airscrews	Light alloy, Age-hardening
				Bars	45000	22500	15	20			
					56000	33500					
2195	Crucible Stainless Steel	M-38	11-30 Cr, C, bal. Fe							Stainless articles	Corrosion resistant
2196	Midvale Stainless Iron	M-85	10-14 Cr, 0.5 max. Mn, 0.13 max. C, bal. Fe							Stainless articles	Cor. resist. now called Midvaloy 13-00
2197	Columbia Special	M-35	Any C, 0.25 Mn, 0.15 Cr, 0.02 V, 0.25 Si, bal. Fe	Annealed					170	Dies, punches, taps, cutting and forming dies	Carbon tool steel, Water hardening
2198	Columbia Standard	M-35	Any C, 0.25 Si, 0.3 Mn, bal. Fe	Annealed					163	Mandrels, forming rolls, machine parts, hammers	Carbon tool steel
2199	Columbia Extra	M-35	Any C, 0.25 Si, 0.25 Mn, bal. Fe	Annealed					163	Shear blades ,punches, dies, cold chisels	Carbon tool steel
2200	Colonial No. 14 Special	M-34	0.60-1.40 C, bal. Fe							Tools, general purposes	Carbon tool steel
2201	Bethlehem Finishing	M-24	1.3 C, 4 W, 4 Mo, bal. Fe							Tools, finishing tools	
2202	Firth Sterling Nirocta KA2	M-57	0.15-0.20 C, 18-20 Cr, 8-10 Ni, bal. Fe	Cold rolled	214000	169000	13		352	Sheets, tubes, cooking utensils	Stainless and corrosion resistant. Hardened by working
					140000	60000	47		190	pumps, valves, pistons	
				Water hardened	85000	30000	60	75	145		
					95000	35000	55	70	160		
2203	Bethlehem Tool Steel XXX Special	M-24	C, bal. Fe							Tools, finishing tools	Finishing tool steel
2204	"B-F" High Speed	M-97	High C, Cr, W, V, bal. Fe							High speed cutting tools	High speed steel
2205	"B-F" Tool	M-97	High C, bal. Fe							Tools	
2206	Black Diamond Drill	M-38	C, bal. Fe							Tools, cutters, drillers, dies, hammers	
2207	Black Label No. 14	M-341	1.0 C, 0.5 Cr, 0.1 V, bal. Fe							Tools and dies	
2208	Black Label Cast (Extra)	M-261	C, bal. Fe							Tools and dies	
2209	Blue Anchor Drill Rod	M-342	1.20-1.35 C, bal. Fe	Cold drawn	85000	60000	25	50		Tools, taps, drills, reamers	Carbon Tool Steel
2210	Blue Label No. 5	M-341	1.1 C, bal. Fe							Tools, dies	
2211	"B.M.S."	M-344	Cr, C, W, bal. Fe							Tools, chisels, hard punches, shear blades	Air hardening
2212	"B.N.D."	M-345	C, Cr, bal. Fe							Tools, gripper dies	
2213	Bonded Carbide	M-140	0.65 C, 4.5 Cr, 1.4 V, 18 W, 12 Co, 0.70 Mo, bal. Fe							High speed cutting tools	High speed steel
2214	Borite	M-333	C, bal. Fe							Tools, drills	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2215	Brown Label	M-343	0.85-1.0 C, 3-4 Cr, bal. Fe							Tools, hot work tools and dies hot shear blades, bull dies	"Hellers Hot Die Steel"
2216	Bush Hammer	M-38	C, V, bal. Fe							Tools	Discontinued
2217	Buster Brand	M-35	C, Cr, W, bal. Fe							Tools, chisels, shear blades	Shock resisting
2218	"B" No. 4	M-39	C, Cr, V, W, bal. Fe							High speed cutting tools, hot work dies	High speed steel
2219	Stedmetal	M-518	High C, Ni, Mn, Si, bal. Fe							Crushers, grinders, pulverizers	Ni-cast iron
2220	Buflokast	M-143	High C, Mn, Si, bal. Fe							Drums, dryers, kettles, chemical engineering equipment	Cast iron for chromium plating
2221	"B" No. 9	M-39	C, Cr, W, V, Mo, bal. Fe							High speed cutting tools, bits, drills, reamers	High speed steel
2222	C.C.S. Die	M-38	C, Cr, W, Si, bal. Fe							Tools, dies	Discontinued
2223	Calo Ferro (30)	M-275	.3 C, 9 W, 3.5 Cr, .2 V, bal. Fe							Tools, dies, hot piercing punches	Hot working dies, Mild high speed steel
2224	Carbo	M-334	C, bal. Fe							Tools, chisels	
2225	Carbon	M-44	C, bal. Fe							Tools, chisels	
2226	Cast Composite	M-210	C, bal. Fe							Tools, blanking dies	
2227	Checkno	M-334	C, Cr, V, W, bal. Fe							Tools, hot working dies, punches	
2228	Chiz Alloy	M-335	0.45 C, 0.70 Cr, W, Mo, bal. Fe							High speed cutting tools, hand and pneumatic chisels	High speed steel
2229	Chrome "B-15"	M-344	C, 15 Cr, bal. Fe							Tools, cold and threading dies, punch stamps	Non-deforming
2230	Class "P"	M-210	C, bal. Fe							Tools, punches, dies, engraved dies, trimming dies	
2231	Cobalt High Speed	M-81	C, Cr, W, Co, bal. Fe							High speed cutting tools, dies	High speed steel
2232	Colosso	M-344	C, W, Ni, Mo, bal. Fe							Tools, flogging and pneumatic tools, rivet sets	No drawing of temper
2233	Cindall Alloy "J-51"	M-298	Al alloy		20000 24000	9000 11000	28 24			Parts to resist sea water, fruit acids, beer and cider vats	Non-corrosive to sea water
2234	Cindall "J-12"	M-298	Al Alloy		15500 21200	11000 13000	11 9			For resistance to industrial waters and alkaline solutions, radiators, water meters	
2235	Cindall "E-11 A"	M-298	Al Alloy		31500	14000	5-8		66	Water pipes, carburetor parts. Sand or chill castings subjected to atmospheric, sea water, or other corrosive influences	Boron modified
2236	Cindall "E-11 B"	M-298	Al alloy		36000	18500	4-6		72	Propellers, water cooled cylinders, cylinder heads, pump impellers, stern tubes, water pump bodies	Sand castings Boron modified
2237	Cindall "L-316"	M-298	Al alloy		29000	16000	2-4		68	Exhaust manifolds, automobile parts	Sand and die castings
2238	Cindall "50 A"	M-298	Al alloy		36000	22500	1-1.5		140	Domestic castings, light gear wheels, light pulleys, bearings and bushings	To replace cast iron where lightness and corrosion resistance are required
2239	Aeral	M-623	3.5-4.5 Cu, 0.4-1.0 Mn, 0.3-0.75 Mg, bal. Al		56000 75000	30000 55000	20 10			Light alloys, airplane and dirigible parts	"Duralumin" type alloy. Age-hardening
2240	Cemented Tungsten Carbide	M-57	5.5 C, 86.5 W, 8 Co							Hard cutting tools, tool tips	W C + Co M.H.-9.8
2241	C.R.M.	M-162	1.25-1.50 Cr, 0.35-0.45 Mo, 0.3-1.0 C, bal. Fe							Gears, shafts, tools	Abrasion resistant Discontinued
2242	Composite	M-345	C, bal. Fe							Tools, dies	
2243	Composite Die	M-261	C, bal. Fe							Tools, dies	
2244	Constant	M-85	0.90 C, 1.2 Mn, 0.5 W, 0.5 Cr, bal. Fe							Tools, cutters, hobs, reamers, dies, taps, chasers	Non-deforming Oil hardening, tough

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2245	Crane	M-387	C, bal. Fe		78000	41000			150	Tools, cold chisels	Water-hardening
2246	Crasco Green Label	M-337	1.0 C, bal. Fe							Tools, dies	Water hardening
2247	Crasco White Label	M-337	1.0 C, bal. Fe							Tools, dies	Water hardening
2248	Crasco Red Label	M-337	C, Mn, W, Cr, bal. Fe							Tools, dies	Oil hardening Non-shrinking
2249	Crasco Black Label	M-337	High C, high Cr, bal. Fe							Tools, dies, hot working dies and long run dies	Air hardening Non-shrinking
2250	Crasco Special Vanadium	M-337	C, 0.15-0.25 V, bal. Fe							Tools, dies	
2251	Cromo	M-334	C, Cr, Mo, bal. Fe							Tools, chisels, bull-dozers	Shock tool steel
2252	Cromva	M-334	C, Cr, V, bal. Fe							Tools, die casting dies	
2253	Crescent Hot Work No. 2	M-38	0.95 C, 3.75 Cr, bal. Fe							Tools, gripper and header dies, bloom shears	Hot work steel
2254	Crescent Special Alloy	M-38	0.54 C, 1.25 Cr, 2.4 W, bal. Fe							High speed cutting tools	High s peed stee
2255	Crusca New Process Hollow Drill	M-38	.8 C, bal. Fe							Tools, hollow drills	
2256	Crusca "V.J." Special	M-38	C, W, bal. Fe							Tools, twist drills, cutters, cutting and blanking dies	Discontinued
2257	Crusca "V.J." Extra	M-38	C, W, bal. Fe							Tools, twist drills, cutting and blanking dies	Discontinued
2258	Carpenter "J.V." Steel No. 656	M-32	C, Cr, V, bal. Fe							Roller paths in turrets of battleships, roller bearings	Discontinued
2259	Carpenter Midas Steel No. 9-961	M-32	C, bal. Fe							Ball races	Discontinued
2260	Carpenter Jason Steel No. 12-324	M-32	C, bal. Fe							Balls	Obsolete
2261	Carpenter Chrome Steel No. 12 S	M-32	C, bal. Fe							Balls	Obsolete
2262	Clark's Alloy		75 Cu, 7.2 Zn, 14 Ni, 1.9 Co							Chemical equipment	Corrosion resistant
2263	Cowles		1.25-11 Al, bal. Cu							Strong corrosion resistant parts	Corrosion resistant
2264	Curtiss		95.2 Al, 2.5 Cu, 1.5 Mg							Pistons	
2265	Corbin		87.5 Al, 12.5 Cu							Pistons	
2266	Cooper		40-50 Au, 50-60 Pd							Dental Alloy	
2267	Carter White Gold		83.3 Au, 16.7 Ni							Jewelry, ornaments	
2268	Colonial High Service		0.90 C, 0.20 Mn, 0.14 V, bal. Fe							Tools	
2269	Geo. Label	M-344	0.6-0.7 C, 3-4 Cr, 18-20 W,							Cutting tools	High Speed Steel
		M-343	2-3 Co, 1.25-1.5 V, bal. Fe								"Hellers Peerless"
2270	Co-Co	M-34	Co, W, C, bal. Fe							High speed cutters and turning tools	High speed steel
2271	Chrome Nickel 0.8%C		0.71 Co, .42 Mn, 1.62 Ni, 1.15 Cr, 0.14 V, bal. Fe							Tools	
2272	Chrome Nickel 0.5%C		0.47 C, 0.42 Mn, 1.67 Ni, 1.10 Cr, bal. Fe							Tools	
2273	Champion Tool		0.77 C, 0.18 Mn, bal. Fe							Tools	
2274	Commell Special		1.20C, 0.21Mn, 2.92 W, bal. Fe							Tools	
2275	Champion Non-Changeable	M-38	0.85 C, 1.30 Mn, 0.41 Cr, 0.09 V, .5 W, bal. Fe							Tools, stamping dies, taps, reamers	Non-deforming
2276	Champion Double Special		1.22 C, 0.25 Mn, 7.53 W, bal. Fe							Tools	
2277	Carpenter No. 11 Extra Tool	M-32	1.1 C, bal. Fe							Tools, cutters	
2278	Crucible Stainless Iron	M-38	12-24 Cr, C, bal. Fe							Stainless articles	Stainless and corrosion resistant
2279	Copperoid		Cu alloy							Bearings	Copper bearing alloy
2280	Colville Stainless Iron	M-530	16-17 Cr, 0.4 Mn, 0.1 C, bal. Fe							Heat and corrosion resisting parts	Stainless and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2281	Cronite	M-37	63.5-67 Ni, 13.7-16 Cr, 12-20.3 Fe, 0.4 Si, 1 Mn, 0.8 Al							Burners and valves	Heat resistant
2282	Cekas		11.2 Cr, 59.7 Ni, 2 Mn, bal. Fe							Heat and corrosion resisting parts	Stainless and corrosion resistant
2283	Cymbal Metal		78 Cu, 22 Zn							Architectural and ornamental parts	
2284	Cupro-Silicon		55 Si, bal. Cu							Hardener for copper alloys	
2285	Cupror		94 Cu, 5.8 Al							Pump rods, valve stems	
2286	Cupro-Nickel, Sheet		81-79 Cu, 19-21 Ni							Condenser tubes, turbine blades	
2287	Cupro-Nickel No. 300 Alloy		89 Cu, 11 Ni							Corrosion resisting parts	
2288	Cupro-Nickel, Locomotive Tubes		97 Cu, 3 Ni							Locomotive tubes	
2289	Cupro-Nickel, Driving Bands		97.5-95 Cu, 2.5-5 Ni							Driving bands	
2290	Cupro-Nickel, Commercial		98-60 Cu, 2-40 Ni							Hardware	
2291	Cupro-Nickel Bullet Jackets		85 Cu, 15 Ni, less than 0.04 C							Bullet jackets	
2292	Cupromanganese Tubes		96 Cu, 4 Mn							Tubes	
2293	Cupromanganese		90 Cu, 10 Mn							Staybolts, heat resisting parts	
2294	Cupromagnesium		90 Cu, 10 Mg								
2295	Cupro-Aluminum		Al, bal. Cu							Worm wheels, gears	Aluminum Bronze
2296	Cupola Malleable Iron		3.0 C, traces only of combined carbon, 0.9 Si, 0.8 Mn, 0.2 P, bal. Fe							Pipes, pipe fittings, hardware, plumbing	Malleable cast iron
2297	Cuivriloy		25 Cu, 65 Ni, 3.8 Mn, 1 Pb							Pump rods, valve parts	
2298	Cuivre Poli		70 Cu, 30 Zn							Cartridges, shell cases, condenser tubes	
2299	Crucible Steel		0.65-1.55 C, Mn, Si, P, S, bal Fe							Tools, dies	Graded according to temper (i.e., carbon content)
2300	Crodon	M-980	Cr-Fe							Anodes in electrolytic copper cells	Electroplating alloy
2301	Crankcase Alloy		91-90 Al, 7-8 Cu, 1-1.8 Fe, 0-1.8 Zn							Light weight crankcases	
2302	Craig Gold		80 Cu, 10 Ni, 10 Zn							Jewelry, ornaments	
2303	Corrosion Resisting Alloy		91 Pb, 4.5 Cu, 4.5 Ni							Chemical equipment	
2304	Copper-Manganese		Mn, bal. Cu							Boiler stay bolts	
2305	Plumrite No. 67	M-141	67 Cu, 32.5 Zn, 0.5 Pb							Water pipes, plumbing	
2306a	Copper's Pen Metal		50 Cu, 25 Au, 25 Ag							Pen points	
2306b	Copper's Pen Metal		12 Cu, 38 Ag, 50 Pt							Pen points	
2307	Copper's Mirror		58 Cu, 28 Sn, 9.5 Pt, 3.5 Zn, 1.5 As							Reflectors, mirrors	
2308	Copper's Gold		81-67 Cu, 19-30 Pt, 0-4 Zn							Jewelry, ornaments	
2309	Cook's Alloy		56-69 Sb, 32-44 Zn								
2310	Condenser Foil		90 Pb, 9 Sn, 1 Sb							Accumulators	Accumulator metal
2311	Complex English Metal		87 Sn, 6 Sb, 2 Ni, 2 Cu, 1.5 W, 1 Zn, 0.5 Bi							Bearings	
2312	Common Silver Solder		62.5 Ag, 30 Cu, 7.5 Zn							Silver Solder	
2313	Colorado Metal		57 Cu, 25 Ni, 18 Zn							Electrical resistances, corrosion resisting parts	
2314	C.M.A. Bearing Metal		Pb, alkali earth metals							Bearings	
2315a	Clichier Metal		5 Pb, 80 Sn, 15 Bi							Bearings, fuses	
2315b	Clichier Metal		33 Pb, 48 Sn, 9 Bi, 11 Sb							Bearings, fuses	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2315c	Clichier Metal		50 Pb, 36 Sn, 14 Cd							Bearings, fuses	
2316	Clark's Patent		75 Cu, 14 Ni, 7.2 Zn, 1.9 Sn, 1.9 Co							Corrosion resisting parts	
2317	Chrysorin (Chrysarin)		72-63 Cu, 28-37 Zn		40000 56000	20000 35000	78 35	78 63		Tubes, pipes, plumbing	
2318	Chrysite		63 Cu, 37 Zn, 0.24 Pb							Dental alloy	
2319	Chrome-Vanadium Steel		0.7-1.4 Cr, 0.15-0.60 C, 0.12-0.30 V, 0.3-0.9 Mn, 0.2 Si, bal. Fe							Gears, shafts, tools, cutters	Shock resistant
2320	Chrome-Uranium Steel		0.8 Cr, 0.17-0.30 U, 0.3-0.4 C, Mn, Si, bal. Fe							Shafts	
2321	Chrome-Tungsten Steel		C, Cr, W, bal. Fe							Tools, dies, cutters	High speed
2322	Chrome Steel (Commercial, pearlitic)		2-5 Cr, 0.2-0.8 C, Mn, Si, bal. Fe							Tools, shafts, gears	
2323	Chrome-Nickel Steel Armor Plate (heavy)		4 Ni, 2 Cr, 0.33 C, 0.32 Mn, 0.06 Si, 0.03 S, 0.14 P, bal. Fe							Armor plate	
2324	Chrome-Nickel (ordinary) Steel		1.25-3.5 Ni, 0.6-1.5 Cr, 0.2-0.6 C, 0.7 Mn, bal. Fe							Gears, shafts	
2325	Chrome-Molybdenum Steel		0.5-1.0 Cr, 0.1-1.0 Mo, 0.1-0.5 C, bal. Fe							Gears, shafts, tools	
2326	Chrome Iron		13-14 Si, bal. Fe							Pumps, valves, corrosion resisting vessels	Similar to "Duriron"
2327	Chromaluminium		Al-Cr								
2328	Chromal Steel		0.8 Cr, 0.8 Mn, 0.8 Mo, 0.3 C, bal. Fe							Gears, pinions, shafts	
2329	Christofle Metal		Silver plated German Silver (2.0 Ag)							Cutlery, hardware	
2330a	Chinese Speculum		81 Cu, 11 Sn, 8.5 Sb							Mirrors, optical grading	
2330b	Chinese Speculum		81 Cu, 9 Pb, 8 Sb							Mirrors	(Elsner's)
2331	Chinese Silver		58 Cu, 17.5 Zn, 11.5 Ni, 2 Ag							Ornaments, electrical parts	Nickel Silver
2332	Chinese German Silver		40.4-41 Cu, 25.4-26.5 Zn, 30.8-31.6 Ni, 2.6-2.7 Fe							Electrical resistances, ornaments	
2333	Sivyer "Pole"	M-288	0.18 C, 0.55 Mn, 0.25 Si, bal. Fe							Case hardened parts	Carburizing steel
2334	Chilled Cast Iron Wheels, A.S.T.M. Spec. A-46-24		<3.25 total C, >0.85 combined C, 0.45-0.75 Si, 0.5-0.75 Mn, >0.4 P, >0.15 S							Cast iron wheels	Chilled
2335	Checo		89 Ag, 10 Sn, 1 Pt							Dental alloy applications	
2336	Charcoal Pig Iron (Lake Superior)		3-4 C, 0-2.6 Si, 0.15-0.25 P, 0.3-0.7 Mn, >0.02 S, bal. Fe							For steel making	
2337	B.A.-25	M-28	1.0 Mg, 1.0 Si, bal. Al		35000	23000	23		80	Light alloy parts	
2338	Chain Iron A.S.T.M. Spec. A-56-30		0.10 max. Mn, Si, bal. Fe							Chains for cranes, slings, hoists, steam shovels, marine uses	Wrought iron
2339	Cerium Steel		0.2-0.6 Ce, 0.4 C, 0.7 Mn, 0.4-0.8 Si, bal. Fe							Engineering applications	
2340	Celsit									Tools	Similar to "Stellite" Heat and corrosion resistant
2341	Cello-Vanadium	M-81	.9 C, 1.2 Mn, 5 Cr, .5 W, bal. Fe							Dies, taps, reamers, hobs, milling cutters, master tools, broaches, forming dies	Oil hardening, non-shrinking
2342	Ceco		62.5 Cu, 32 Pb, 4.6 Sn, 0.9 Ni		18000		3	0.35	52	Bearings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2343	Cartridge Gilding		93 Cu, 7 Zn							Cartridge shells, ornaments, base for fire enameling	
2344	Careco									Bearings	White bearing alloy
2345	Carburite		47-48 C, 28 Fe, 0.3 S, 0.2 P, plus a binder							Recarburizer	
2346	Carbondale Silver		66 Cu, 18 Ni, 16 Zn	Hard Soft	96000 58000		2 33		158 77	Spinning and drawing, flatware, spoons, forks, knives, etc., to be plated	German Silver
2347	Capsule Metal		92 Pb, 8 Sn								
2348	Cap Gilding		90 Cu, 10 Zn							Ornamental window screens	
2349	Camelia Metal		70 Cu, 15 Pb, 10 Zn, 4.2 Sn, 0.5 Fe							Hardware	
2350	Sivyer "Dynamo"	M-288	0.12 C, 0.10 Mn, 0.20 Si, bal. Fe	Normalized	55000	35000	30	60	120	Electrical parts	High magnetic permeability
2351	Cadmium Silver										Similar to "Stellite"
2352	Cadmium Amalgam		Cd+Hg							Modeling purposes, fusible plugs	Softens when moderately heated. Soft as wax
2353	Damar		76 Cu, 13 Pb, 11 Sn							Bearings	
2354	Dandelion Metal		72 Pb, 18 Sb, 10 Sn							Heavy duty machine bearings and locomotive cross-head linings	
2355	Dark Red Gold		50 Au, 50 Cu							Ornaments	
2356	Degussa Alloy		66 Cu, 34 Zn, traces Fe							Hardware, lamp fixtures, ornamental parts	
2357	Delhi Tough Iron	M-15 M-76	17 Cr, 1.25 Si, 0.3 Mn, 0.07 C, bal. Fe							Corrosion resisting parts	Corrosion resistant See Silcrome 17
2358	Die Casting Alloys		92-82 Al, 8-18 Cu, 0-3 Fe, Mg, Mn, Si, Zn							Die castings, ornamental parts	
2359	Dienett's German Silver		51 Cu, 32 Zn, 9.5 Pb, 6.4 Ni, 1.6 Sn							Ornamental, hardware, novelties	
2360	Diesel Bearings		80 Sn, 15 Sb, 5 Cu							Bearings for Diesel engines	
2361	Dirigold	M-594	9-10 Al, 1.1-2.0 Ni, 0-1.7 Sn, bal. Cu							Strong corrosion resistant parts, ornamental castings	Corrosion resistant
2362	Doctor Metal		88 Cu, 9.5 Zn, 2.5 Sn							Corrosion resistant brass parts	Corrosion resistant
2363	Dudleys Bearing Metals		98 Sn, 1.6 Cu, 0.3 Pb							Bearings	
2364	Duke's Metal		81 Fe, 12 Cr, 1.5 C, 4 Co, 0.6 Si, 0.4 W, 0.2 Mn							Tools, dies, corrosion and heat resisting parts	
2365a	Dunnlevic & Jones Antifriction Metal		60 Pb, 20 Sb, 20 Zn							Bearings	
2365b	D.& J. Antifriction Metal		10 Sb, 80-85 Zn, 5-8 Sn							Bearings	
2365c	D. & J. Antifriction Metal		1.6 Cu, 0.4 Sb, 52 Zn, 46 Sn							Bearings	
2366	Durand's Alloy		67 Al, 33 Zn							Strong and tough light weight parts	
2367	Dynamo Sheets		3-4 Si, <0.1 C, <0.3 Mn, <0.03 P+S, bal. Fe							Laminated sheets for dynamos, electrical equipment	Hadfields silicon steel type
2368	Dysoid		62 Cu, 18 Pb, 10 Sn, 10 Zn							Hardware	
2369	Dialoy	M-349	50 Bi, bal. Pb, Sn, Cd							For dental tooth impressions, dental bridge work	Expands on solidifying
2370	Drill Rod		62 Cu, 35.5 Zn, 2.5 Pb							Automatic screw machine parts	Drills and turns easily
2371	Delta, Krupp	M-72	54-56 Cu, 41-42 Zn, 0.7-1.8 Pb, 0.86-1.28 Fe, 0.8-1.4 Mn							High strength structural castings	
2372	Everbrite	M-642	29.5-31.5 Ni, 59-65 Cu, 5-8 Fe, 0.6 max. Mn, 0.25 max. C, 0.6 max. Si	Cast	75000	50000	14	20	200	Valve disks, valve seat rings, steam turbine nozzle blocks and valves	Machinable. Resists action of steam

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2373	Champion Extra	M-38	1.2 C, 1.25 W, .3 Cr, bal. Fe							Cutters, broaches, drills	
2374	Silferal	M-302	Si, bal. Al	Chill cast	25000		3		65	Cylinder heads, motorcycle cylinders	
					29000		2				
					20000		4				
				Sand cast	28000		2		60		
2375	Constantin		44-46 Ni, 54 Cu, 0-0.4 Fe, 0-1.34 Mn							Resistance alloy	
2376	Diamonite	M-355	95.65 W, 3.91 C, bal. Fe							Cutting tools, dies	$W_2C+W C$
2377	Deloro No. 4		45-50 Co, 25-30 Cr, 15-20 W, 2.5-2.75 C							Tools	Corrosion and heat resistant
2378	Die Castings Aluminum Alloy		82-92 Al, 8-18 Cu, 0.24 Zn, 0.32 Mg, 2.81 Fe, 0.3 Si							Light alloy parts, die castings	
2379	Dural	M-4	91.7-93.9 Al, 6-4 Cu, 0.63-0.59 Mn, 0.46 Mg, 0.8 Fe, 0.2 Si, 0.11 Cr							Light alloy parts, aircraft structures	
2380	Diamond Brand	M-85	1.7 C, 0.45 Mn, 18.57 Cr, 0.55 V, bal. Fe							Tools, dies, valves, punches	Rust and abrasion resisting
2381	Dollar Blue Chip		0.62 C, 4.33 Cr, 17.82 W, 1.66 V, 3.93 Co, bal. Fe							Tools	
2382	Dreadnought	M-260	0.80 C, 0.28 Mn, 4.0 Cr, 18 W, 1.03 V, bal. Fe	Oil or air						Tools, dies, punches, general purpose tools	High speed steel R.H.C. 64 min.
2383	Dupont Metal	M-308	96 Cu, 3 Si, 1 Mn, 0.1 Fe							Bolts, screws, turnbuckles for airplanes	Same as "Everdur" Non-corrosive
2384	Danish Mint		92 Cu, 6 Al, 2 Ni							Coinage	
2385	Decobra		74.4 Cu, 5.4 Zn, 19 Ni, 0.8 Fe, 0.4 Mn							Ornamental parts, hardware	
2386	Dynamo Steel	M-331	0.09 C, bal. Fe							Dynamo parts	
2387	Davignon		58 Au, 37 Cu, 5 Al							Jewelry, ornaments	
2388	Dippit	M-565	94.5 Pb, 5 Sn, 0.5 Cu							High melting solder	
2389	Dufour White Gold		75 Au, 21.5 Pb, 4.5 Pt							Ornaments	
2390	Durnlevic & Jones Russian	Russ.	80 Zn, 8 Cu, 12 Sb							Bearings	
2391	Dutch White Metal		81.5 Sn, 8.8 Sb, 9.6 Cu							Bearings, antifriction purposes	
2392	Dewrance Metal (Dewrance Metal)		33.3 Sn, 44.5 Sb, 22.2 Cu							Locomotive bearing	
2393	Elastic No. 4	M-349	81 Au-Pt, bal. Cu, Ag, Zn	Soft	117500	86500	15			Wire clasps, cribs, tooth crowns, pinlays	M.P.-1925 °F.
				Heat treated	173000	131500	7				
2394	Elastic No. 3	M-349	84 Au-Pt, bal. Cu, Ag, Zn	Soft	109500	70500	17			Wire clasps, cribs, tooth crowns, pinlays	M.P.-1865 °F.
				Heat treated	146000	113500	11				
2395	Ney Oro Elastic No. 2	M-349	78 Au-Pt, bal. Cu, Ag, Zn	Soft	100000	60000	22			Dental alloy applications	M.P.-1835 °F.
				Heat treated	152000	113500	9			Wire clasps and bars	
2396	Ney Oro Elastic No. 1	M-349	73 Au-Pt, bal. Cu, Ag, Zn	Soft	92500	62000	26			Dental alloy applications	M.P.-1700 °F.
				Heat treated	147500	113000	4			Wire clasps and bars	
2397	Tech-Aloy	M-349	67 Ag, bal. Sn, Cu, Zn							Tooth model alloy	
2398	Ney Oro "A"	M-349	93 Au-Pt, bal. Cu, Ag		31300	7800	25		46	Dental inlays	Soft
2399	Ney Oro "A-1"	M-349	80 Au-Pt, bal. Cu, Ag, Zn		45000	20000	25		85	Dental inlays	Soft
2400	Ney Oro "A-W"	M-349	95 Au-Pt, bal. Zn		33800	14500	12		70	Dental inlays	Soft
2401	Ney Oro "G-W"	M-349	74 Au-Pt, bal. Cu, Ag, Zn	Soft	67500	41000	13		132	Dental inlays	Extra hard
				Heat treated	117000	76500	3		228	Dental inlays, partial dentures	
2402	Ney Oro "E"	M-349	79 Au-Pt, bal. Cu, Ag, Zn	Soft	75000	45500	6		150	Dental inlays	Extra Hard
				Heat treated	112000	82500	1		235	Dental inlays, partial dentures	
2403	Ney Oro "G-3"	M-349	75 Au-Pt, bal. Cu, Ag, Zn	Soft	73500	39500	20		140	Dental inlays	Extra Hard
				Heat treated	111000	72000	4		225	Dental inlays, partial dentures	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2404	Ney-Oro-G	M-349	72 Au, 8.5 Pt, 4 Ag, 14.5 Cu	Heat treated	185000	165000	1		280	Pivots in instrument bearings	Corrosion and wear resistant
2405	Ney Oro "B-W"	M-349	81 Au-Pt, bal. Cu, Ag, Zn	Soft	57000	27000	17		102	Dental inlays	Hard
				Heat treated	60700	31000	15		113		
2406	Ney Oro "B-2"	M-349	78 Au-Pt, bal. Cu, Ag, Zn	Soft	57000	26000	19		105	Dental inlays	Hard
				Heat treated	60000	29000	17		120		
2407	Ney Oro "B"	M-349	85 Au-Pt, bal. Cu, Ag, Zn	Soft	52000	25000	20		105	Dental inlays	Hard
				Heat treated	60000	30500	12		115		
2408	E.S.C. "Si-Mn"	M-50	0.50-0.60 C, 1.5-2.0 Si, 0.6-1.0 Mn, bal. Fe		179000 224000	145600	7		364 460	Spring plates, laminated automobile springs	
2409	E.S.C. "Nilex"	M-50	C, 36 Ni, bal. Fe	Rolled	89000 112000		40	55		Where minimum coef. exp. is required	
2410	E.S.C. "B.C.T.B."	M-50	0.55-0.65 C, 0.45-0.70 Cr, 0.5-0.8 Mn, bal. Fe	Normalized	144000	67200	15		277	Mandrels, gear wheels	
				Oil treated	168000				341		
2411	Plumrite No. 85	M-141	85 Cu, 15 Zn	Annealed	40000		40			Water pipes, plumbing	
2412	E.S.C. Super "S.H.N.C."	M-50	0.25-0.32 C, 3.75-4.5 Ni, 1.0-1.5 Cr, 0.15-0.25 Mo, bal. Fe	Air hardened	224000 280000	179000	12	25	450 555	Forgings, tubes, shafts	Air hardening steel. Iz-15-35
				Hardened & tempered	134400 168000	100800	18	50	250 311		
2413	E.S.C. "S.H.N.C."	M-50	0.25-0.32 C, 3.75-4.5 Ni, 1.0-1.5 Cr, bal. Fe	Air hardened	224000 280000	168000	12	25	444 555	Highly stressed shafts, gears, tubes, turnbuckles	Air hardening steel. Iz-15-35
				Hardened & tempered	134400 156800	98500	18	50	240 311		
2414	E.S.C. "V.N.C.G."	M-50	0.28-0.32 C, 3.0-3.75 Ni, 0.55-0.70 Cr, bal. Fe	Oil treated	224000 280000	179200	10	25	429 555	Shock resisting gears	Iz-10
2415	E.S.C. "V.A.65"	M-50	0.22-0.28 C, 2.75-3.50 Ni, 1.0-1.4 Cr, 0.15-0.25 Mo, bal. Fe	Oil treated	145600 157000	125400	17	40	293 321	Highly stressed aero engine connecting rods	Also known as "Non-Brit." Iz-35
2416	E.S.C. Super "V.N.C.A."	M-50	0.25-0.35 C, 3.0-3.75 Ni, 0.5-0.8 Cr, 0.15-0.25 Mo, bal. Fe	Oil treated	132000 156000	112000	18	45	269 341	Aero and automotive engine crankshafts, propellers, shafts, gear shafts, pressure vessels	Great toughness. Iz-40
2417	E.S.C. "Y.N.C.A."	M-50	0.25-0.35 C, 3.0-3.75 Ni, 0.5-0.8 Cr, bal. Fe	Oil treated	123000 145600	100800	18	50	240 341	Aero and automotive engine crankshafts, propellers, shafts, gear shafts, pressure vessels	Great toughness. Iz-40
2418	E.S.C. "N.C."	M-50	0.18-0.25 C, 3.0-3.75 Ni, 0.4-0.8 Cr, bal. Fe	Oil treated	112000 134400	89600	19	55	217 285	Bolts, studs, shafts, axles, crankshafts	For highly stressed parts. Iz-40
2419	E.S.C. No. 3½ N S	M-50	0.35-0.45 C, 3.25-3.75 Ni, 0.30 Cr, bal. Fe	Oil treated	123000 145600		18	50	241 293	Crankshafts, axles, connecting rods, forgings	Iz-35
2420	E.S.C. No. 3 N S	M-50	0.25-0.37 C, 2.75-3.75 Ni, 0.30 Cr, bal. Fe	Normalized	76000 112000	44800	24	45	152 229	Crankshafts, axles, connecting rods, forgings	Iz-35
				Oil treated	100800 132200	71000	22	50	201 277		
2421	E.S.C. "V.C.M."	M-50	0.25-0.35 C, 0.5-0.7 Ni, 0.7-1.0 Cr, 1.0-1.25 Mo, bal. Fe	Oil treated	123000 145600	112000	18	50	248 293	Studs, bolts, used in high temperature and high pressure steam generating plant	High creep limit. Iz-40
2422	E.S.C. "C.O.M.O."	M-50	0.07-0.15 C, 0.20-0.35 Cu, 0.20 Mo, bal. Fe	Normalized	58000 78400	33000	25	50	111 152	Boiler and superheater tubes, boiler drums	High creep limit
2423	E.S.C. "Si-Cr"	M-50	0.4-0.5 C, 3.5-4.25 Si, 0.4-0.6 Mn, 7.5-8.5 Cr, bal. Fe	Oil treated	123200 156800	100800	18	45	255 320	Exhaust valves for high duty	Non-scaling steel, notch-brittle when cold
2424	E.S.C. Immaculate No. 1	M-50	0.15 max. C, 0.50 max. Si, 1.0 max. Ni, 12.0 min. Cr, bal. Fe	Air, oil, or water treated	78400 100800		25	50	152 207	Valves, golf clubs, ships fittings, pipes, turbine blades, general fittings	Stainless steel. Iz-25-45
2425	E.S.C. Immaculate No. 2	M-50	0.16-0.35 C, 0.50 max. Si, 1.0 max. Ni, 12.0 min. Cr, bal. Fe	Air, oil or water treated	103000 116500		20	45	207 235	Cutlery, tools, valves, ball and roller bearings, ships propellers	Stainless steel. Iz-25-35

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A	Brin. No.	Uses	Remarks
2426	E.S.C. Immaculate No. 3	M-50	0.10-0.15 C, 1.0 max. Si, 9.5-10.5 Ni, 15-17 Cr, bal. Fe	Normalized	76000 100000	27000	50	55	150 180	For resisting atmospheric corrosion and certain dilute acids, tubes, sheets	Stainless steel, can be deep pressed. Iz-75
				Water treated	76000 100000	32000	50	55	150 180		
2427	E.S.C. Immaculate No. 4	M-50	0.15-0.30 C, 1.0 max. Si, 6-8 Ni, 18-22 Cr, bal. Fe	Normalized	100800 123000	45000	40	50	170 200	For resisting atmospheric corrosion and certain dilute acids, tubes, sheets	Stainless steel. Iz-30-50
				Treated	112000 134400	60000	30	30	200 250		
2428	(E.S.C. Immaculate No. 5). Firth-Vickers Immaculate No. 5	M-50 M-521	0.35-0.45 C, 2-3 Si, 1-1.5 Mn, 20-25 Ni, 20-25 Cr, bal. Fe	Normalized	100800 123000	56000 67000	35 25	55 45	190 240	For high temp. service, resistance to furnace gases, atmospheric corrosion, weak and certain strong acids	Stainless and heat resisting. Also known as "Hardot." Iz-40
2429	E.S.C. Immaculate No. 6. Firth-Vickers Immaculate No. 6	M-50 M-521	0.35-0.45 C, 1.5-2.5 Si, 1.0-1.5 Mn, 25-30 Ni, 14-16 Cr, 4.0 W, bal. Fe	Normalized	112000 145600	78400 101000	30 20	50 40	230 300	For use at high temperatures, turbine blades, exhaust valves, fans, grids	Stainless and heat resisting
2430	E.S.C. Immaculate No. 7	M-50	0.15-0.25 C, 0.3-0.6 Si, 0.4-1.0 Mn, 1.5-2.5 Ni, 17-19 Cr, bal. Fe	Air or oil treated	112000 168000	78400	23	55	220 350	Propeller, shafts	Non-corrosive steel
2431	(E.S.C. Immaculate No. 9). Firth-Vickers Immaculate No. 9	M-50 M-521	0.40-0.50 C, 1.2-1.5 Si, 0.5-0.6 Mn, 10-12 Ni, 12-14 Cr, 2.0-2.5 W, bal. Fe	Normalized	134400 152200	78400 96000	30 22	45 30	277 311	Exhaust valves for gasoline and oil engines	Heat resisting. Iz-35
2432	*E.S.C. Supertough "A"*	*M-50*	*0.10-0.15 C, 1.4-1.8 Mn,* bal. Fe	*Normalized*	*76000* 98600	*50000*	*25*	*55*	*143* 207	*Gear wheels, cam shafts, pins,* levers, spindles, railway work	*Tough core.* Iz-50-80
				Oil hardened	76000 98600	56000	30	60	174 217		
				Case-hardened	89600 100800	44800	28	50	143 174		
2433	E.S.C. Supertough "B"	M-50	0.25-0.30 C, 1.4-1.8 Mn, bal. Fe	Oil hardened	98500 123200	71700	20	50	196 255	Crankshafts, connecting rods, railway axles, armature spindles	Tough core. Iz-50
2434	E.S.C. Supertough "C"	M-50	0.25-0.30 C, 1.4-1.8 Mn, 0.20-0.30 Mo, bal. Fe	Oil hardened	112000 134400	89600	20	50	223 286	Crankshafts, connecting rods, railway axles, armature spindles	Iz-50
2435	E.S.C. Supertough "C-20"	M-50	0.15-0.20 C, 1.5-1.8 Mn, 0.5-0.7 Ni, 0.25-0.30 Mo, bal. Fe	Oil hardened	89600 112000	67200	20	50	183 235	For general work	Iz-70
2436	E.S.C. "V.H.R.D."	M-50	0.7-1.0 C, 0.15-0.20 Si, 0.3-0.5 Mn, bal. Fe							Mandrels drills, dies, wear resisting parts	Suitable for surface hardening
2437	E.S.C. "A"	M-50	0.45-0.55 C, 0.50 max. Ni, bal. Fe	Normalized	89600 112000	44800	20	35	163 212	Gun and other mechanism parts, keys, shafts, gears, cylinders	
				Oil treated	100800 134000	62700	18	40	197 285		
2438	E.S.C. "A-31"	M-50	0.50-0.60 C, 0.40-0.75 Mn, bal. Fe	Normalized	100800		18	40	197 241	Cylinders, gears, cams, mechanism parts	Suitable for surface hardening
				Oil treated	123200		15	35	235 285		
2439	E.S.C. "H.T.C.N."	M-50	0.35-0.45 C, 0.8-1.2 Mn, 0.5-1.0 Ni, bal. Fe	Oil treated	89600 112000		22	45	174 223	Crankshafts, spindles, aero engine cylinders, connecting rods	Iz-35
2440	E.S.C. "H.T.C."	M-50	0.35-0.45 C, 0.5-0.8 Mn, 0.5 max. Ni, bal. Fe	Normalized	78400 100800	40200	23	40	140 197	Crankshafts, shafts, spindles, aero engine cylinders, axles, connecting rods	
				Oil treated	89600 112000	53000	22	45	170 241		
2441	E.S.C. Med. "C"	M-50	0.25-0.35 C, 0.80-0.40 Mn, 0.5 max. Ni, bal. Fe	Normalized	58200 78400	36000	25	50	109 163	Locomotive and automobile axles, armature shafts, lathe and other spindles, marine shafting	
				Oil treated	78400	47000	24	48	152		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2442	E.S.C. "C.H.N.M."	M-50	0.15-0.20 C, 1.75-2.1 Ni, 0.20-0.35 Mo, bal. Fe	Normalized	74000 85200	52000	25	50	143 166	Ball and roller races	Iz-50
				Hardened	112000 123200	89600	17	40	228 255		Iz-50
2443	E.S.C. Super "C.H.N.C."	M-50	0.14-0.18 C, 4-4.5 Ni, 1-1.3 Cr, 0.30 max. Mo, bal. Fe	Hardened	190400	145600	12	35		For exceedingly high strength core	Iz-25
2444	E.S.C. "C.H.N.C."	M-50	0.09-0.13 C, 3.0-3.75 Ni, 0.8-1.1 Cr, bal. Fe	Hardened	100800 207000	78500 123200	20 12	55 35	192 277	Heavily loaded gears, shafts	Iz-18-45
2445	E.S.C. "C.H.-5 N"	M-50	0.09-0.15 C, 4.6-5.50 Ni, 0.10 max. Cr, bal. Fe	Normalized Hardened	71700 190000	50000 112000	28 13	55 40	-	Gear wheels	
2446	E.S.C. "C.H.-3 N"	M-50	0.10-0.15 C, 2.75-3.50 Ni, 0.30 max. Cr, bal. Fe	Normalized Hardened	67200 104400	36000 67200	28 18	55 45	137	For general case-hardened objects	Iz-40
2447	E.S.C. "C.H.-2 N"	M-50	0.10-0.15 C, 2.0-2.5 Ni, bal. Fe	Normalized Hardened	56000 78400	30200 47000	30 25	55 55	103	For general case-hardened objects	Iz-50 Discontinued
2448	E.S.C. "C.H.M.S."	M-50	0.10-0.18 C, 0.6-0.9 Mn, bal. Fe	Normalized Hardened	58300 69400	36500 50000	28 20	50 50	111	For wheels, cam shafts, pins, levers, spindles	Iz-50
2449	Rita Vanadium Drill Rod	M-354	C, Cr, V, bal. Fe	Oil treated	230000	205000	10	40	444	Tools	
2450	Rita Three Point	M-354	C, W, Cr, Ni, bal. Fe							Tools, dies	Non deforming
2451	Rita Standard Tool	M-354	C, bal. Fe							Tools, rock drills, die blocks	
2452	Rita Standard Drill Rod	M-354	C, bal. Fe							Tools, drills, taps, reamers, punches, pins	
2453	Rita Special Tool	M-354	C, V, bal. Fe							Tools, dies, punches, taps	
2454	Rita Nochange Oil Hardening	M-354	C, Mn, Cr, bal. Fe							Tools, dies	Non-deforming
2455	Rita Hot-Forging Die No. 1	M-354	C, Cr, W, bal. Fe							Hot forging dies	
2456	Rita Hot-Forging Die No. 2	M-354	C, V, W, bal. Fe							Hot forging dies	
2457	Rita High Speed	M-354	C, W, Cr, V, bal. Fe							Tools, high speed cutters	High speed stee
2458	Rita Extra Tool	M-354	C, bal. Fe							Tools, taps, dies, punches	
2459	Rita Extra Special	M-354	C, W, Cr, V, bal. Fe							Tools	
2460	Rita Electric Tool	M-354	C, bal. Fe							Tools, rock drills, chisels	
2461	Rita Cobalt High Speed	M-354	C, Co, bal. Fe, Cr, W, V							Tools, high speed cutters	High speed steel
2462	Rita Chrome Vanadium	M-354	C, Cr, V, bal. Fe							Tools	
2463	Rita Alloy No. 7	M-354	C, Mn, Cr, Ni, bal. Fe	Oil treated	230000	200000	10	35	650	Tools	
2464	Jessop Steel "H-2"	M-261	0.95-1.05 C, 0.3 max. Si, 0.25-0.40 Mn, 1.3-1.5 Cr, bal. Fe							Balls	
2465	Jessop Steel "H-3"	M-261	0.55-0.65 C, 1.4-1.6 Si, 0.3-0.6 Mn, 6-7 Cr, bal. Fe	Heat treated	118700 130000	69000 80500	24 28	50 60	230	Valves	Air hardening
2466	Jessop Stee "G-1"	M-261	0.28-0.35 C, 4-5 Ni, 1-1.5 Cr, bal. Fe	Heat treated	123000	100800	20	45	260 270	Gears, shafts, pinions, clutches, jaws	Air hardening
2467	Jessop Steel "G"	M-261	0.28-0.35 C, 0.45-0.60 Mn, 2.5-3.5 Ni, 0.75-1.0 Cr, bal. Fe	Heat treated	112000	78400	20 25	50	240	Gears, pinions, shafts	
2468	Jessop Steel "F"	M-261	0.5-0.6 C, 0.7-0.8 Mn, 0.6-0.8 Cr, 0.25 V, bal. Fe	Heat treated	132200	91800	25 30	62	240	Tools, wheels, jaws, clutches, springs	
2469	Jessop Steel "E-1"	M-261	0.4-0.45 C, 0.4-0.85 Mn, 3-3.5 Ni, bal. Fe	Heat treated	112000 125000	71700 85200	22 27	47	225	Gears, pinions, crankshafts, structural parts	
2470	Jessop Steel "E"	M-261	0.10-0.15 C, 0.2-0.6 Mn, 3-3.5 Ni, bal. Fe	Case-hardened core	100800 136700	71700 85200	15 20	40	280 300	Case-hardened parts, gears	Case-hardening steel
2471	Jessop Steel "A-2"	M-261	0.10-0.18 C, 0.6-0.9 Mn, bal. Fe	Case-hardened core	85000	56000	25	60	180	Case-hardened parts	Case-hardening steel
2472	Jessop Steel "A-4" (S.M.-30)	M-261	0.25-0.35 C, 0.6-0.8 Mn, bal. Fe		76200 80100	45000 51500	30 35	55 60	150 160	Shafts, axles, machinery parts	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2473	Jessop Steel "A-5" (S.M.-40)	M-261	0.35-0.45 C, 0.6-0.8 Mn, bal. Fe		85200 89600	49000 65000	26	55	170	Gears, pinions, shafts, machinery parts	
2474	Jessop Steel "B" (S.M.-50)	M-261	0.5-0.6 C, 0.5-0.7 Mn, bal. Fe		89600 112000	51500 56000	20 25	45 50	187 217	Axles, shafts, wheels, shock resistant tools	
2475	Jessop Steel "C-1" (S.M.-60)	M-261	0.6-0.7 C, 0.4-0.6 Mn, bal. Fe		98600	51500	21	40	200	Blanking, drawing and trimming dies, punches, hobs, gages	Abrasive resistance. Non-deforming
2476	Jessop Steel "C-2" (S.M.-80)	M-261	0.75-0.85 C, 0.4-0.6 Mn, bal. Fe	Heat treated	134000 156800	100800 123200	12 18	40	320	Blanking, drawing and trimming dies, punches, hobs, gages	Resists scaling, corrosion and abrasion
2477a	Hitem Iron No. 5	M-23	Cast iron, high Mn							Chemical plant apparatus	Corrosion resistant Discontinued
2477b	Hitem Iron No. 7	M-23	Cast iron							Dye and paint equipment, retorts	Corrosion and heat resistant. (Hi-Tem) Discontinued
2478	Midvaloy Stainless Steel 7	M-85	0.25 C, 20 Cr, 1 Cu, bal. Fe	Annealed Hard rolled						Stainless steel castings	Now called Midvaloy 21-00 Cu
2479	Poldi M.K.	M-36 M-96	C, W, V, Co, bal. Fe							Turning, planing, drilling and milling tools, flat drills, twist drills, boring and milling cutters	High speed steel
2480	Poldimaximum Special No. 55	M-36 M-96	C, W, V, Co, bal. Fe							Turning, planing and slotting tools, flat drills, twist drills, milling cutters, boring and milling tools	
2481	Poldimaximum Special No. 30	M-96	C, W, V, Co, bal. Fe							Turning, planing and slotting tools, twist drills, milling cutters, boring and milling tools	High speed steel
2482	Poldimaximum Special	M-96	C, W, V, bal. Fe							Turning and planing tools, twist drills, milling cutters, boring and milling tools, screwing dies	High speed steel
2483	Poldimaximum	M-96 M-36	C, W, V, bal. Fe							Plain and profiled turning, planing, and slotting tools, milling and boring tools, milling cutters, reamers, taps, screw dies	High speed steel
2484	Poldi "000" Extra	M-96	C, W, V, bal. Fe							Turning, planing and slotting tools, saws, milling cutters, boring tools, chisels, scrapers	High speed steel
2485	German Duralumin Group K	Ger.	0.25-2.0 Mg, with or without Mn, no Cu, bal. Al							Light alloy parts	German alloy
2486	German Duralumin Group 681	Ger.	0.5 Mg, 3.5-6.5 Cu, 0.5-1.0 Mn, bal. Al							Light alloy parts	German alloy
2487	Duralplat	M-457	Base metal of Cu containing Duralumin coated with a Cu free Duralumin							Light alloy parts	Brit. Pat. 318999. High corrosion resistance
2488	Inconel (Inco Chrome Nickel)	M-68	11-15 Cr, 70 min. Ni, 1.0 max. Mn, 10 max. Fe, 0.5 max. Si, 0.15 max. C	Annealed Cold drawn	80000 95000 100000 115000	30000 40000 80000 95000	55 45 30 20	75 65	140 180 270 280	Dairy equipment, food handling equipment, airplane exhaust manifolds, utensils	Corrosion resistant. Heat and oxidation resistant
2489	Rex No. 95	M-38	C, 14 W, 4 Cr, 5 Co, 2 V, 0.5 Mo, bal. Fe							Cutters, drills, broaches, dies	High speed steel
2490	Renown	M-73	.1 C, .1 Cr, .2V, bal. Fe							Stamping dies, fine edged tools	
2491	Reliance	M-370	0.95-1.05 C, 0.20-0.35 Mn, 0.10-0.25 Si, bal. Fe						230	Helical springs, drills, small tools	
2492	Record Superior	M-336	0.8 C, 18 W, 4 Cr, 1 V, bal. Fe							Tools, dies for boring, planing and slotting, taps, reamers, punches	High speed steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2493	Record Extra	M-336	.8 C, 18 W, 3.75 Cr, 1.25 V, 2.25 Co, bal. Fe						260	Dies, tools for high speed production for turning and heavy cutting scaly material	High speed steel
2494	Red Shadow	M-289	C, Cr, W, V, bal. Fe							Cutting tools	High speed steel
2495	West No. 7 (Duracast)	M-465	0.3-0.4 C, 0.6-0.8 Mn, 0.3-0.4 Si, 0.15-0.20 Mo, bal. Fe	Annealed	50000 80000				170 277	Tools, dies	Tough
2496	Regular	M-85	0.6-1.4 C, bal. Fe							Tools, dies, machine parts, axes, chisels, rock drills, hammers	Strong and tough
2497	Regular Bolt Die	M-85	1.0 C, 4 Cr, bal. Fe							Hot work dies	
2498	Allan No. 2 Red Metal	M-124	60 Cu, 40 Pb							High speed bearings, piston wearing rings	
2499	Red Anchor Drill Rod	M-342	0.95-1.10 C, bal. Fe		80000	60000	25	50		Anvils, dental tools, spindles, precision shafts for motors	
2500	Red Anchor	M-342	C, bal. Fe							General tools	
2501	Rex "A A"	M-38	0.65 C, 0.17 Mn, 3.27 Cr, 16.67 W, 0.83 V, bal. Fe							Tools, cutters, drills, broaches, dies	High speed steel
2502	Rex "A A A"	M-38	0.65-0.70 C, 17-19 W, 0.5 Mo, 0.9-1.1 V, 4-4.25 Co, bal. Fe							Cutting tools, reamers, drills broaches	High speed steel
2503	B.S. Seewasser	M-116	5-10 Mg, bal. Al	Soft Hard	47000 78000	22000 65000	25 3			Light alloy parts, ship and sea-plane parts	Corrosion resistant to sea water
2504	K.S. No. 245	M-196	14 Si, 4.5 Cu, 1.5 Ni, 0.7 Mg, 1.0 Mn, bal. Al		29000	25000	0.2		130	Pistons for small diesel motors and motorcycles	High wear resistance coef. exp.-0.00002
2505	K.S. Alusil	M-196	20 Si, 1.5-2.0 Cu, 0.5 Ni, bal. Al		23000	21000	0.25		100	Pistons for general use	Low temp. coef. Coef. exp.-0.000018
2506	K.S. No. 280	M-196	21 Si, 1.5 Cu, 0.7 Mn, 1.5 Ni, 0.5 Mg, 1.2 Co, bal. Al		27000	2600 0	0.25		120	Pistons for air-cooled motors	Coef. exp -0.000018
2507	Nelson-Bohnalite	M-196	10 Cu, 0.2 Si. 0.3 Mg, 0.3 Ni, bal. Al		25500	23400	0.2		110	Pistons for motor vehicles	Coef. exp.-0.000024
2508	K.S. Special Piston Alloy	M-196	15 Cu, 0.6 Si, 0.6 Fe, 0.6 Ni, 0.3 Mg, bal. Al		26000		0.2		120	Pistons for Zeppelin motors and diesel engines	Coef. exp.-0.000024
2509	K.S. "Y" Alloy	M-196	4 Cu, 0.4 Si, 2 Ni, 0.4 Fe, 1.5 Mg, bal. Al		35000	28500	1.0		90	Pistons for steam engines	Coef. exp.-0.0000245.
2510	Misco "H.N."	M-84	0.6-0.7 C, 15-18 Cr, 60-65 Ni, bal. Fe							Heat treating boxes, furnace parts, valves, stills	Resists H_2SO_4. Heat, wear and corrosion resistant
2511	U.S.S. No. 18-8 Stabilized	M-604	17-19 Cr, 8-10 Ni, 0.05-0.15 C, 0.3-0.9 Ti, bal. Fe	Stabilized	85000 95000	40000 45000	55	 55	150 185	Stainless and heat resisting parts	Stainless and heat resistant. Complete freedom from intercrystalline corrosion
2512	Rezistal Stainless Iron 12	M-38 M-260	0.15 max. C, 0.35-0.60 Mn, 0.50 max. Si, 15-18 Cr, bal. Fe	Oil treated	182000 106000	179000 86000	18 24	 63 72	363 228	Turbine blading, golf clubs, pump rods, gate valves, cutlery, machine parts	Resists atmosphere, salt water, fruit and vegetable acid corrosion
2513	Stainless Iron No. 16	M-38	0.10 max. C, 0.35-0.60 Mn, 15-18 Cr, bal. Fe	Annealed	75000 85000	45000 55000	45 35	 70	155 170	To resist nitric acid and gunpowder	Austenitic, corrosion resistant, (Discont.)
2514	Stainless Iron No. 18	M-38	0.10 max. C, 0.35-0.60 Mn, 18-23 Cr, bal. Fe	Annealed	70000 80000	45000 55000	40 30	60 60 50	165 185	To resist mixed acid conditions as HNO_3-H_2SO_4 and high temperatures	Austenitic, corrosion resistant. (Discont.)
2515	Stainless Iron No. 24	M-38	0.25 C, 0.35-0.60 Mn, 24-26 Cr, bal. Fe	Rolled	80000 90000	55000 65000	30 20	 50	170 200	To resist mixed acids and high temperatures	Stainless. Austenitic Discontinued
2516	Cromaloy	M-85	Low C, 21 min. Cr, 1.5-3.0 Si, bal. Fe					40		Corrosion and heat resisting parts	Corrosion and heat resistant
2517	Cooper No. 16	M-36	<0.35 C, 14-18 Cr, bal. Fe		75000	50000	10	 15	200	Valve trim for high pressure steam, pumps valve	Stainless steel. Formerly Sweetaloy No. 16

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2518	Cooper No. 17	M-36	<0.20 C, 18 Cr,8 Ni, bal. Fe		84200	42100	47	42	165	Oil refineries, canneries, dairies, pump valves, cocks	Best general acid resisting base iron "Sweetaloy No. 17"
2519	Cooper No. 18	M-36	<0.25 C, 22 Ni, 10 Cr, bal. Fe		79000	46500	23	24	150	Cracking coil plugs, in oil refineries, thermocouple wells, electric resistance grids	Erosion, heat and corrosion resistant "Sweetaloy No. 18"
2520	Cooper No. 19	M-36	<0.50 C, 28 Cr, bal. Fe		50000	35000	2	3	170	For equipment to resist S gases at high temp., corrosive acids, molten metals	Excellent abrasion resistance "Sweetaloy No. 19"
2521	Cooper No. 20	M-36	<0.50 C, 36 Ni, 18 Cr, bal. Fe		64000	42100	7	8	165	Furnace parts, enameling racks tube supports	Resists heat and flue gases at high temp. "Sweetaloy No. 20"
2522	Cooper No. 21	M-36	<0.50 C, 65 Ni, 15 Cr, bal. Fe		62000	48000	4	3	170	Carburizing boxes, pots, retorts	Heat resisting alloy "Sweetaloy No. 21"
2523	Cooper No. 22	M-36	<0.50 C, 28 Cr, 10 Ni, bal. Fe		70000	59000	3	2.5	200	Primarily for the sulfite pulp mills, for digester fittings, pump valves	Resists sulfurous acids and ammonia "Sweetaloy No. 22"
2524	Svea Metal	M-602	Pure Fe		44000	23000	40	65	86	Radio tubes, X-ray equipment neon lights, mercury tubes	For magnetic and electronic application Obsolete
2525	English Stereotype (Standard)	Eng.	82.5 Pb, 4.5 Sn, 13 Sb							Type metal	
2526	Ehrhards Type		89 Zn, 3 Cu, 6 Sn, 2 Pb							Type metal	
2527	Eccentric Ring		84 Cu, 14 Sn, 2 Zn							Bearings, bells	
2528	Electrical Gold Alloy		70 Au, 25 Ag, 5 Ni							Contacts	
2529	English Linotype		83 Pb, 5 Sn, 12 Sb							Type metal for linotype machines	
2530	English Pewter		81.2Sn, 5.7 Sb,1.6Cu, 1.15 Pb							Bearings, ornaments, household utensils	
2531	Esthonia 5 Mark		70 Cu, 20 Zn, 10 Ni							Coinage	
2532	Eighteen Per Cent		65 Cu, 17 Zn, 18 Ni							Base for silver plated flat ware	
2533	Emperor	M-107	C, Cr-Ni, bal. Fe							Hardening boxes, carburizing pans, furnaces, crucibles, glass molds	Heat and corrosion resistant
2534	Extra Special	M-73	1.50-1.30 C, 0.20-0.40 Mn, 0.15-0.40 Cr, 3.5-4.5 W, bal. Fe, 0.35 V							Tools, form cutters, reamers	
2535	Eugene Vaders		57.5 Cu, 0.3 Fe, 2.5 Mn, 1.5 Al, 0.5 Si, bal. Zn							Propellers, gear, high strength castings	
2536a	English		61.3 Cu, 19.1 Zn, 19.1 Ni							Knives, forks, etc. for silver plating	
2536b	English		70.3 Cu, 29.3 Zn, 0.17 Sn, 0.26 Pb								
2537	Eagle "A" Babbitt Metal	M-317	Sn, Sb, Pb	At 70°F. At 212°F.					23.5 11.9	Bearings	M.P.-469.4°F.
2538	Electric Railway Babbitt Metal	M-317	Sn, Sb, Pb	At 70°F. At 212°F.					29.2 14	Bearings	M.P.-460°F.
2539	Electro High Speed		0.76 C, 0.45 Mn, 2.95 Cr, 13.24 W, 1.51 V, bal. Fe							Tools	
2540	Expanding Alloy		67 Pb, 25 Sn, 8.3 Bi							Type metal, mounting purposes	
2541	Excelsior	M-248	53 Cu, 45 Ni, 0.3 Fe							Resistance alloy	
2542	Ex. "K" Metal		77 Cu, 12.5 Pb, 10.5 Sn, P							Bearings	
2543	Ex. "B" Metal		77 Cu, 15 Pb, 8 Sn, P							Bearings	
2544a	Eutectic Alloys		50 Bi, 27 Pb, 13 Sn, 10 Cd							Fusible alloys, fuses	
2544b			52 Bi, 40 Pb, 8 Cd								
2544c			53 Bi, 32 Pb, 15 Sn								
2544d			54 Bi, 26 Sn, 20 Cd								
2544e			50 Sn, 18 Cd, 32 Pb								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2545	European "Reamur"		2.8-3.5 C, graphite, 0.6-0.8 Si, bal. Fe							Castings	
2546	English Speculum		67 Cu, 33 Zn							Deep drawing, spinning, stamping	
2547	Sivyer "Nitro"	M-288	0.30 C, 0.75 Mn, 0.40 Si, 1.5 Cr, 0.6 V, bal. Fe							Nitriding parts	Nitriding steel
2548	English German Silver		57.4 Cu, 25 Zn, 13 Ni, 3 Fe							Ornamental parts	
2549	English Brass		70 Cu, 29 Zn, 0.3 Pb, 0.2 Sn							Hardware, novelties	
2550	English Alloy		53 Sn, 33 Pb, 11 Sb, 2.4 Cu, 1 Zn							Bearings	
2551	Elners German Silver		57.4 Cu, 26.6 Zn, 13 Ni, 3 Fe							Ornaments	
2552	Electrum		52 Cu, 26 Ni, 23 Zn							Corrosion resisting parts	
2553	Electrotype (Standard)		93 Pb, 4 Sb, 3 Sn							Electrotype	
2554	Electroplate		50-70 Cu, 10-20 Ni, 5-30 Zn							Base for silver plate, tableware	
2555a	Eisenbronze		57.5 Cu, 39.5 Zn, 1 Sn, 0.3 Pb, 1.3 Fe, 0.3 Al							Marine parts, hardware	Iron bronze
2555b	Eisenbronze		82.5 Cu, 4.45 Zn, 8.55 Sn, 3.95 Fe							Marine parts, hardware	Iron bronze
2556	Einheitsmetall		79 Pb, 14 Sb, 5.3 Sn, 1.5 Cu							Bearings	
2557	Ehrhardt's Metal		89 Zn, 4 Cu, 4 Sn, 3 Pb							Bearings	
2558	Edwards Speculum		70-63 Cu, 25-32 Sn, 2.4-1.6 As, 2.6-0 Zn							Reflectors, mirrors	
2559	Edelstahl		C, alloy, bal. Fe							Machine parts, corrosion resisting parts	Corrosion resistant
2560	Edelmessing		Zn, alloy, bal. Cu							Ornamental hardware	High tensile brass
2561	"E.B.D." Bearing		90-88 Cu, 10 Sn, 5 P+Sn, 2 Zn							Bearings	
2562	"E" Alloy	M-311	20 Zn, 2.5-3 Cu, 0.2-1 Si, 0.5 Mg, 0.5 Mn, Fe, bal. Al	Hot rolled	67000	53000	15			Light weight structures	
2563	Fob Metal		87.50 Cu, 12.0 Zn, 0.50 Sn							Fobs, ornaments	
2564	Flush Plate		65.75 Cu, 32.75 Zn, 1.50 Pb							Hardware	
2565	Fan Blades		61.5 Cu, 37.0 Zn, 1.5 Pb							Fan blades	
2566	Fifteen Per Cent		56.66 Cu, 28.33 Zn, 15 Ni							Ornamental parts	
2567	Forgings, Russian		53.5 Cu, 42 Zn, 4.5 Mn							Corrosion resisting forgings	
2568	Forgings		60-57 Cu, 40-43 Zn							Corrosion resisting forgings	
2569	Fuchs Acid Resisting Alloy		73-80 Ag, 13-15 Ni, 13.5-15 Au							Chemical equipment, corrosion resisting parts	Acid resistant
2570	Fuchs Acid Resisting Gold Alloy		75 Au, 10-15 Ni, 10-15 W							Chemical equipment	Acid resistant
2571	Fourteen Per Cent		60-58 Cu, 26-28 Zn, 14 Ni							Ornamental flat war	
2572	Frismuth Aluminum Solder		67 Sn, 27 Pb, 3 Al							Aluminum solder	
2573	French Auto		75 Pb, 10 Sn, 15 Sb							Automobile bearings	
2574	Firth "A.W."		1.20 C, 0.25 Mn, bal. Fe							Tools	
2575	Firth "R.T."		1.01 C, 0.28 Mn, 2.89 W, bal. Fe							Tools	
2576	Fahrenwald Resisting Gold Alloy		90-60 Au, 10-40 Pd							Chemical equipment	White gold, high acid resistant
2577	Fibrite		C, 17 Cr, 35 Ni, bal. Fe							Heat and corrosion resisting parts	Stainless and corrosion resistant
2578	Field		10 Si, 3 Cu, 1.5-2 Al, bal. Ni							Corrosion resisting parts	Stainless and corrosion resistant
2579	Faultless "A" Babbitt Metal	M-317	Sn, Sb, Pb	At 70°F. At 212°F.					21.8 8.2	Babbitt, bearings	M.P.-364°F.

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2580	Friction Alloy (Standard)		50 Pb, 40 Sn, 10 Sb							Antifriction metal	
2581	Fricks Alloys		69-50 Cu, 18-39 Zn, 5.5-31 Ni							Ornamental, base for plated ware	
2582	Freund Steel	Ger.	0.7-1.3 Si, 0.3-0.6 Mn, 0.1-0.15 C, Cr, bal. Fe							Highly stressed structural members	High elastic steel
2583	French Silver Solder		66 Ag, 23 Cu, 10 Zn							Silver solder	
2584	French Alloy		58-50 Cu, 25-30 Zn, 17-20 Ni							Electrical resistors, ornamental parts	
2585	Fourdrinier Wire		85-80 Cu, 15-20 Zn, 0-0.4 Sn, 0.01 Pb							Wire for Fourdrinier screens used in paper manufacture	
2586	Foundry Pig Iron		3 4 C, 1.5-3 Si, >1 Mn, 0.5-1.0 P, bal. Fe, >0.04-0.06 S							Machine bed plates, supports, also for steel making	
2587	Forbes Metal		54 Zn, 46 Cu							Ornamental castings	
2588	Folder Die Steel	M-81	C, bal. Fe							Forming dies, brakes	
2589	Flint Alloy		83 Fe, 12.5 Cr, 0.5 Si, 0.3 C							Cutlery, stainless parts, corrosion resisting parts	Corrosion resistant
2590	Fletchers Alloy		96 Al, 3 Cu, 1 Sn, 0.5 Sb, 5 Sn+P							Aircraft and light weight parts	
2591	Fletcher & Emperer Bearing		92 Al, 7.5 Cu, 0.3 Sn							Bearings	
2592	Flange Metal, German	Ger.	92 Cu, 5 Zn, 2.5 Sn							Pipes, fittings, flanges	
2593	Flange Metal, French	French	94 Cu, 5.6 Sn, 0.05 Pb							Bushings, fittings, flanges	
2594	Flame Resisting Alloy		14 Cr, 9.7 Ni, 0.8 Mn, 0.2 Si, 0.2 C, bal. Fe							Heat resisting alloy parts	Corrosion and heat resistant
2595	Festel Metal	M-167	55 Fe, 23 Co, 21 Cr, 0.7 C							Weld metal	Discontinued
2596	Ferrozoid	M-121	33-35 Ni, 3-5 Cr, bal. Fe							Electrical resistances	Resistance alloy. Now known as "Dullray"
2597	Fermet		4 Cr, 18 Ni, 2.2 Mn, 1 W, 0.3 Cu, 0.35 C, bal. Fe							Corrosion resisting parts	Stainless and corrosion resistant
2598a	Fenton's Alloy		80 Zn, 14 Sn, 6 Cu							Bearings	
2598b	Fenton's Alloy		80 Zn, 8.5 Cu, 11.5 Sb							Bearings	
2599	Fahrig Antifriction Metal		90 Sn, 10 Cu							Bearings	Antifriction
2600	Fahlun Brilliants (Faluner Diamanten)		60 Sn, 40 Pb							Ornaments	
2601	Gold Leaf Metal		84 Cu, 16 Zn							Gold leaf substitute, signs	
2602	Gold Leaf		66-80 Cu, 34-20 Zn							Gold leaf substitute, signs	
2603	Gold Leaf, Jemmapes		64.6 Cu, 33.7 Zn, 1.4 Sn, 0.2 Pb							Gold leaf substitute, signs	
2604	Gold Leaf, Aix		64.8 Cu, 32.8 Zn, 2.0 Sn, 0.4 Pb							Gold leaf substitute, signs	
2605	Gong Metal		78 Cu, 22 Zn							Gongs	
2606a	Guettieres Button		56 Cu, 44 Zn							Buttons	
2606	Guettieres Button		61.5 Cu, 29-32 Zn, 6.5-9.7 Sn							Buttons	
2607	Midvale Extra Tool	M-85	0.6-1.4 C, bal. Fe							Milling cutters, reamers, dies, taps, mill picks, cold heading dies	
2608a	Grimm's Aluminum Solder		69.1 Sn, 28.8 Pb, 1.44 Zn, 0.72 Ag							Aluminum solder	
2608b	Grimm's Aluminum Solder		50 Sn, 25 Pb, 25 Zn							Aluminum solder	
2609a	German Silver Solder		20 Ag, 30 Cu, 30 Zn, 20 Cd							Silver solder	
2609b	German Silver Solder		10 Ag, 40 Cu, 40 Zn, 20 Cd							Silver solder	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2609c	German Silver Solder		10 Ag, 3 Cu, 2 Zn, 75 Sn							Silver solder	
2610	German Aluminum Alloy		93 Al, 7 Mg							Pistons	
2611	Gray Label Styrian	M-651	0.88 C, 0.19 Mn, bal. Fe							Tools	
2612	Genuine "A" Babbitt Metal	M-317	Sn, Sb, Pb	At 70°F. At 212°F.					28.6 12.8	Bearings	M.P.-437°F.
2613	Gas Engine Babbitt Metal	M-317	Sn, Sb, Pb	At 70°F. At 212°F.					24.1 11.7	Bearings for gas engines	M.P.-464°F.
2614	Gearing Bronze		91.3 Cu, 8.7 Sn							Gears	
2615	Gears (Bronze)		85 Cu, 10 Sn, 3 Zn, 2 Pb							Gears	
2616	Guinea Gold		88 Cu, 12 Zn							Ornamental parts, cheap jewelry	
2617	Gun Metal, Sheet		90 Cu, 10 Sn							Electric contacts, valve disks	Corrosion resistant
2618	Guthries Alloy		47 Bi, 20 Sn, 19 Pb, 13 Cd							Fire extinguisher plugs	Fusible alloy
2619	Gurley's Metal		86.5 Cu, 5.4 Zn, 5.4 Sn, 2.7 Pb							Steam fittings, valves, cocks	
2620	Gun Metal, Soft		90 Cu, 6.5 Sn, 2 Zn, 1.5 Pb							Steam fittings, valves, cocks	
2621	Guishibuichi	Jap.	67-51 Cu, 32-49 Ag, Au, Fe							Jewelry, ornaments	v. Shibu-ichi
2622	Guillaume's Metal		64.3 Cu, 35.7 Ni							Tape, chemical equipment	Name also applied to "Invar" tape
2623	Gray Gold		86 Au, 5.7-17.0 Fe, 0-8.6 Ag							Jewelry	
2624	Green Gold		75 Au, 11-25 Ag, 13-0 Cd							Jewelry	
2625	Granfin Cast Iron		2.2-2.6 C, 1.7-2.1 graphite 2.3-2.5 Si, 0.7-1.0 Mn, bal. Fe							Frames, housings, general castings	
2626	Gold Solder		Ag, Au, Cu, Zn							Gold Solder	
2627	Gold Metal Leaf		84-66 Cu, 16-34 Zn, 0-0.4 Pb							Gold Solder	
2628	Gold, Imitation		97.8 Cu, 2.0 Al, 0.2 Au							Gold Solder	
2629	Goldal		Au alloy							Gold Solder, dental alloy	
2630	Gold	M-558	100 Au							Inlays, jewelry, dental applications	
2631	Glyco Turbo		70 Pb, 22 Sb, 8 Sn							Turbine bearings	
2632	Glyco Metal		85.5 Zn, 5 Sn, 4.7 Pb, .4 Cu, 2 Al							Bearings	
2633	Glyco	M-240	1 Pb, 15 Sb, 4.5 Sn, .5 As							Bearings	Five grades special analysis—Babbitts
2634a	Glievor Bearing		74 Zn, 9 Sb, 6.7 Sn, 5 Pb, 4.4 Cu, 1.4 Cd							Bearings	
2634b	Glievor Bearing		14 Sb, 8 Sn, 77 Pb, 1.5 Fe							Bearings	
2635	Glass Mold Alloy		65-55 Cu, 12-18 Ni, 11-17 Zn 8-12 Fe, 0.5-1.0 Si							Glass molds	U.S. Pat. 1360773
2636a	Gilding Metal		72-64 Cu, 23-34 Zn, 0.3-2.5 Sn, 0.3 P							Cheap jewelry, bullet jackets	
2636b	Gilding Metal	M-33	95-97 Cu, 5-3 Zn		35000 60000	10000 30000	40 5			Cheap jewelry	Corrosion resistant
2637	Gilding	M-8	94.9 Cu, 5.11 Zn, 0.01 Pb, 0.01 Fe							Jewelry and bullet jackets	
2638	Gear Steel, High Duty		C, alloy, bal. Fe							Gears	
2639	Gear Steel		3.5 Ni, 1.5 Cr, 0.45-0.50 C, bal. Fe							Gears and pinions	
2640	Hydrone		67 Pb, 33 Sb							Bearings	Light shocks only
2641	Husmann Metal		74 Sn, 11 Sb, 11 Pb, 4 Cu, 0.2 Fe, 0.2 Zn							Bearings	
2642	High Manganese Nickel		98-94 Ni, 2-6 Mn							Spark plug wire	
2643	Heavy Bearing		85 Sn, 7.5 Cu, 7.5 Sb							Bearings	
2644	Heavy Axle Bearing		47 Zn, 38 Sn, 6 Sb, 4 Pb, 1 Cu							Axle bearings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2645	Heat Resistant Steel		70 Fe, 15 Cr, 14 Co, 0.5 Mn, 0.5 C, 0.5 Si							Corrosion and heat resisting parts	Corrosion and heat resistant. U.S. Pat. 1357549
2646	Haynes Metal		20-30 Cr, 5-25 Co, bal. Fe							Welding rod, tools	Stainless and corrosion resistant
2647	Hayles Metal		46 Sn, 42 Pb, 12 Sb							Bearings	
2648	Harlington (Harrington?) Bronze		56 Cu, 43 Zn, 0.9 Sn, 0.6 Fe							Sheathing, condenser tubes, bolts, nuts	
2649	Hard Zinc (Hartzink)		92 Zn, 5.3 Fe, 2.4 Pb, 0.1 Cu								
2650	Hard Yellow Solder		58 Cu, 43 Zn, 1.3 Sn, 0.3 Pb							Solder	
2651	Hard Solder		57-50 Cu, 43-50 Zn							Solder	
2652	Hard Silver Solder		80 Ag, 13 Cu, 6.8 Zn							Solder	
2653	Hard Sheet Aluminum		99-98 Al, 1-2 Mn							Kitchen ware	
2654	Hard Head		90 Sn, 8 Sb, 2 Cu							Bearings	
2655	Hard Bearing		98.7 Pb, 1.3 Mg							Bearings	
2656	Hard Babbitt		83 Sn, 8.4 Cu, 8.3 Sb							Bearings	
2657	Hard Aluminum		77 Al, 12 Zn, 4.5 Mg							Light alloy parts	
2658	Hammonia Metal	Ger.	65 Sn, 32 Zn, 3.3 Cu							Ornamental parts	
2659a	Hamilton Metal		93 Zn, 3.5 Cu, 3.1 Pb, 1.5 Sb, 0.5 P+Sn							Ornamental castings	Similar to "Chrysorin"
2659b	Hamilton Metal		33.3 Zn, 66.7 Cu							Drawn, spun and stamped articles	
2660	H.A.L.H. Steel		C, alloy, bal. Fe							Tools	Same as "Stellite"
2661	Halberland Alloy	Ger.	87 Cu, 13 Zn							Hardware, fittings	
2662	Helmet Metal (Helmet Bronze)		72-70 Cu, 28-30 Zn							Cartridges, shell cases, helmets	Deep drawn
2663	Hyman		58.3 Ag, 16.7 Cu, 16.7 Zn, 8.3 Ni							Jewelry, ornaments	
2664	Hoyles Metal		46 Sn, 12 Sb, 42 Pb							Bearings	
2665	Hawks Brand White Metal	M-410	53.2 Sn, 7.87 Sb, 0.48 Cu, 38.48 Pb							Bearings	Castings
2666	Hanover White Metal		86.8 Sn, 7.6 Sb, 5.6 Cu							Bearings	
2667	High Tensile Bronze		68.5 Cu, 6.5 Al, 2.2 Mn, 2.5 Fe	Forged	101000 110000	50000 57000	10 5		200 220	Propellers, nuts, bolts	
2668	Hairsprings		4.5-6.5 Sn, 0.2 P, bal. Cu							Hair springs	
2669	Hobson's Choice		1.48 C, 0.34 Mn, bal. Fe							Tools	
2670	Halcomb "S.R.B."		1.08 C, 0.37 Mn, 1.37 Cr bal. Fe							Tools	
2671	Halcomb Special	M-260	1.35 C, 0.24 Mn, .25Cr, bal. Fe							Tools, dies, taps, reamers	
2672	Halcomb High Speed		0.75 C, 0.27 Mn, 1.7 Cr, 17.8 W, 1.07 V, bal. Fe							Tools	
2673	Halcomb Double Special W	M-260	1.19 C, 0.22 Mn, 0.12 Cr, 2.84 W, bal. Fe	Brine harden						Tools, finishing tools, drawing dies	Finishing steel
2674	Huron Aluminum Alloy		3-7 Cu, 0-0.6 Mn, 0.5 Mg., 0-1.25 Ni, Cr, Co, Cd, bal Al							Light alloy parts	
2675	High Speed, Wissler		15-50 Ni or Co, 15-35 Cr, 15-40 W, 0.5-2.5 B, 0.75-2.5 C							Cutting tools, dies	
2676	High Speed Tool		5-12 W, 6-12 Ti, 3-6 Si, 3-5 Al, up to 1.0 B, bal. Ni							Cutting tools, dies	
2677	Haynes Patent		8-60 Cr, 1.0 max. C, bal. Fe							Tools, dies, corrosion and heat resisting parts	Stainless and corrosion resistant
2678	Hass		4.5 Cu, 0.75 Mn, 1.0 Si, bal. Al							Aircraft structures	Age-hardening alloy
2679	Iserlohn		70.1 Cu, 29.9 Zn							Cartridges, shell cases, condenser tubes	
2680	Iridosmine		57 Os, 34 Rh+Ir, 8 Ru							Pen points	v. Osmiridium

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2681	Imperial	M–49	80 Cu, 20 Ni							Condenser tubes	
2682a	Ignition Pin Alloy		61 Ce, 39 Fe							Ignition pins	Pyrophoric
2682b	Ignition Pin Alloy		73-70 Ce, 1.6-6.0 Fe, 17-24 Zn, 0-2.4 Al							Ignition pins	Pyrophoric
2683	Ideal (Elalco)	M–44	58-53 Cu, 40-45 Ni, 0.6-1.0 Fe, 0.5-1.0 Mn							Electrical resistors, heating elements	Heat resistant
2684	Ia-Ia	M–345 M–303	58-60 Cu, 42-40 Ni, 1.0 Fe + Mn		70000		46			Resistances, thermocouples	Negligible temp. coef.
2685	Imita Gold		89 Cu, 10.3 Al, 0.33 Fe, 0.25 Ni, 0.23 Sn, 0.2 Mn							Cheap jewelry, ornaments	
2686	Iridium		77-83 Zn, 1.21-1.25 Cu, 21.6-15.7 Sn, trace Sb							Bearings	
2687	Invariant		47 Ni, 53 Fe							Surveyors tape, piston struts	
2688	IngAclad	M–328	20% layer 18-8 stainless welded to carbon steel		62000 68000	48000 50000	48	50		Tanks, vessels, kettles, bins, table tops, vats	Corrosion resistant
2689	Jeweler's Metal		91.5-83 Cu, 6.5-17 Zn, 0-2 Sn							Jewelry	
2690	Jacoby Metal		85 Sn, 10 Sb, 5 Cu							Bearings	
2691	Jacona Metal		70 Pb, 20 Sb, 10 Sn							Bearings	
2692	Jonas & Colver		1.36 C, 0.41 Mn, bal. Fe							Tools	
2693	Jessops "J-4" Steel	M–261	C, alloy, bal. Fe							Hand and pneumatic chisels, boiler cups, punches, shear blades, tools	
2694	Jessops Superior Oil Hardening	M–261	C, Mn, bal. Fe							Tools and dies	Non-deforming steel
2695	Jessop Tool	M–261	C, bal. Fe							Tools	
2696	Jessop Sheet Spring	M–261	0.95 C, 0.30 Mn, bal. Fe							Tools, springs	
2697a	Knife Bolsters		68 Cu, 16.5 Zn, 15 Ni, 0.5 P							Knife bolsters	
2697b	Knife Bolsters		56 Cu, 28 Zn, 16 Ni							Ornamental parts	
2698	Kinghorn Metal		58.5 Cu, 39.3 Zn, 0.96 Sn, 1.14 Fe							Screws, nuts, hardware	
2699	Kick Plate Brass		84 Cu, 15 Zn, 1 Pb							Hardware, water pipe, fittings	
2700	Kuromi	Jap.	Cu + Sn + Co								Japanese alloy
2701	Koch White Gold		75 min. Au, 3.3-24.75 Ni, 0.25-5.0 Mn							Jewelry, ornaments	
2702	Kin-Shibu-ichi	Jap.	One part "Shaku-do" two parts "Shibu-ichi"							Jewelry, ornaments	Japanese alloy
2703	Kemler		76 Zn, 9 Cu, 15 Al							Ornamental parts	
2704	Koltchougalumin		91.7-93.9 Al, 6-4 Cu, 0.6 Mn, 0.4 Mg, 0.8 Fe, 0.2 Si, 0.11 Cr							Light alloy parts, aircraft structures	Similar to "Dural"
2705	"K" Alloy		11.3 Cu, 1.1 Mn, 0.5 Mg, 0.79 Si, bal. Al							Light alloy parts	Leak-proof castings
2706	"K.P." Styrian		1.15 C, 0.24 Mn, 0.04 Cr, 4.67 W, bal. Fe							Tools	
2707	Konstantan	M–297	54 Cu, 45 Ni, 1 Mn	Annealed Hard	83000 120000		30 1			Precision resistances, reducing rheostats, shunts, electrical instruments	Max. operating temp.-600 °C. M.P.-1276 °C.
2708	Ketos	M–260	0.80 C, 0.25 Si, 1.1-1.3 Mn, 0.6 Cr, 0.4 W, bal. Fe	Oil harden						Tools, dies, taps, reamers broaches, gauges	Non-deforming. Oil hardening
2709	Krupp-V-2 A	M–72	23 Cr, 9.5 Ni, 0.4 C, bal. Fe		85000 105000	35000	50		150 200	Heat and corrosion resisting parts, chemical equipment	Heat and corrosion resistant. Austenitic
2710	K.S.Magnet Steel		30-40 Co, 1.5-3 Cr, 5-9 W, 0.35 Mn, 0.12 Si, 0.4-0.8 C, bal. Fe	Hardened					444 652	Tools, magnets	Corrosion and heat resistant. Br-10000-10500 Hc-200-240
2711	Krupp Type Metal		60 Pb, 18 Sb, 12 Sn, 4.7 Cu, 4.7 Ni, 1 Bi							Type metal	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2712	Kruppin		28 Ni, C, bal. Fe							Resistance alloy	
2713	Krupp Bearing		87 Al, 8 Cu, 5 Sn							Bearings	
2714	Kromore		85 Ni, 15 Cr							Heating elements, electrical resistances	Heat resistant
2715	Kosmos									Dental alloy	
2716	Koultchoog-Aluminum (Kaultchaag)		4-6 Cu, Mn, Mg, Si, bal. Al							Light alloy parts	Similar to Russian Duralumin
2717	Kochlins Bearing		90 Cu, 10 Sn							Bearings	
2718	Kneiss Metal		50-40 Zn, 25-42 Pb, 25-15 Sn, 0-3 Cu							Bearings	
2719	Key Stock		60-65 Cu, 26-22 Zn, 12 Ni, 2-1 Pb							Hardware, keys	
2720	Key Alloy		65.2 Cu, 20.15 Zn, 12.70 Ni, 0.40 Fe, 1.10 Pb, 0.15 Sn							Hardware, keys	
2721	Kern's Hydraulic Bronze		78 Cu, 12 Sn, 10 Zn							Vessels, pressure castings, valves, fittings	
2722	Kemlet		67 Zn, 15 Al, 9 Cu							Bearings	
2723	Kelmet		70.5-68 Cu, 22.5-25.5 Pb, 6.4-6.6 Sn, 0.03 S, 0.03 Zn, 0.04 Ni							Bearings	Heavy duty
2724	Keinmayer's Amalgam		50 Hg, 25 Sn, 25 Zn							Amalgam	
2725	Keene's Alloy		75 Cu, 16 Ni, 2.8 Sn, 2.3 Zn, 2 Co, 1.5 Fe, 0.5 Al							Corrosion resistant and ornamental parts	Corrosion resistant
2726a	Kamarsch Bearing		85 Sn, 5 Sb, 3.6 Cu, 1.6 Bi, 1.4 Zn							Bearings	
2726b	Kamarsch Bearing		71 Sn, 7.2 Sb, 21 Cu							Bearings	
2726c	Kamarsch Bearing		71 Sn, 20 Sb, 9.5 Cu							Bearings	
2727	Kalchoids		Cu-Sn-Zn							Bearings	
2728	Lyon's Gold		28 Zn, 72 Cu							Cartridge cases, condenser tubes, brazing	v. "Tombac"
2729	Lueteun (leMat's Paris Metal)		80 Cu, 16-6 Ni, 5 Zn, 5 Fe, 2 Sn, 1 Co							Cheap jewelry	
2730	Lurgimetall (Lurgi Metal)	M-299	96.5 Pb, 2.8 Ba, 0.4 Ca, 0.3 Na							Bearing metals	
2731	Ludlum		13-17 Cr, 1 Si, 1 Mo, 0.4 C, bal. Fe							Corrosion resisting parts Cutlery	Corrosion resistant
2732	Lucerno		68-65 Ni, 27-30 Cu, 0-2.4 Fe, 2.2-5.0 Mn							Resistance alloy	
2733	Lo-Luminium		55 Sn, 33 Zn, 11 Al, 1 Cu							Aluminum solder	
2734	"L.M." Steel	M-327	2.8-3.3 Ni, 0.7-0.9 Cr, 0.3-0.5 Mo, 0.2-0.4 C, bal. Fe							Gears, shafts, machinery parts	Discontinued
2735	Littles Speculum		65 Al, 31 Sn, 2.3 Zn, 1.9 As							Mirrors, reflectors	
2736	Linotype	"	85 Pb, 11 Sb, 3.5 Sn		11700		9		21	Type metal	Cheap Alloy. M.P.-476°F.
2737a	Light Duty Bearings		90-80 Pb, 10-17 Sb, 10-0 Sn, 0-1 Cu							Bearings (light duty)	
2737b	Light Duty Bearings		83.3 Pb, 9.8 Sb, 6.9 Sn							Light duty bearings	
2738	Liddel's Alloy		90-88 Zn, 6.5-5.0 Cu, 6.5 Al							Die castings	
2739	Liberty Pistons		77 Al, 21 Zn, 1.1 Cu, 0.5 Fe					"		Pistons	
2740	Le Mat's Metal (Lucetin)		80 Cu, 5 Zn, 16 Ni, 5 Fe, 2 Sn, 1 Co							Cheap jewelry	v. "Lutecin"
2741	Lemarquand's Alloy (Non-oxidizable)		39 Cu, 7 Ni, 37 Zn, 9 Sn, 8 Co							Cheap jewelry	Corrosion resistant
2742a	Ledebur's Bearing		85 Zn, 10 Sb, 5 Cu							Bearings	
2742b	Ledebur's Bearing		77 Zn, 5.5 Cu, 18 Sn							Bearings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2743	Lechesne		90-60 Cu, 10-40 Ni, 0.2-0.05 Al							Chemical engineering equipment	Corrosion resistant
2744	Lead Tape		95 Pb, 4.5 Sb, 0.5 Sn							Lead tape	
2745	Lead Shot		99.8 Pb, 0.2 As							Lead shot	
2746	Lead Foil		86 Pb, 6.9 Fe, 5.5 Al, 1.9 Sn							Lead foil	
2747	Leaded Monel Metal		60 Ni, 32 Cu, 2.2 Pb, 2.2 Fe, 2.0 Mn, 0.9 Si, 0.2 C							Corrosion resistant parts	Improved machinability
2748	Leaded Gun Metal		Gun Metal + 1.0 Pb							Corrosion resistant parts	Improved machinability
2749	Lead Alloy		75 Sn, 20 Sb, 5 Pb							Bearings	
2750	Lafond's Heavy Bearing		83 Cu, 15 Sn, 1.5 Zn, 0.5 Pb							Heavy duty bearings	
2751	Lafond's Axle Bearing		80 Cu, 18 Sn, 2 Zn							Axle bearings	
2752	Laderig's Speculum		69 Cu, 29 Sn							Mirrors, reflectors	
2753	4 L-11 Specification	M-28	7 Cu, 0-2 Sn, 0-1 Zn, bal. Al, traces of Fe and Si	and cast	17000 20000	12000 14500	2.5 1.5		60 70	Light alloy parts, general castings	Formerly "L-11"
2754	L-10 Alloy	M-28	89 Al, 10 Cu, 1 Sn, Fe, Si							Light alloy parts	Discontinued
2755	La Bour R-55	M-263	4 Si, 23 Cr, 6 Cu, 4 Mo, 2 W, 0.2-0.3 C, 52 Ni, 8 Fe							Pump parts	Modification of "R-50"
2756	Locomotive Tubes		97 Cu, 3 Ni							Tubes for locomotives	
2757	Liebknecht White Gold		80 Au, 13.9 Ni, 5 Zn, 1 Cu, 0.1 Pd							Jewelry	
2758	Leddel Bearing		87.5 Zn, 6.25 Cu, 6.25 Al							Bearings	
2759	Leddel Alloy		90 Zn, 5 Cu, 5 Al							Die castings	
2760	Lead-Calcium, Filipoff		1.37 Cu, 1.9 Ca, 1.0 Sr, 1.1 Ba, 0.1 Na, bal. Pb							Bearings	
2761	Lead-Calcium		97 Pb, 0.79 Ca, 0.66 Ba							Bearings	
2762	Mach's Alloy		98-90 Al, 2-10 Mg							Light alloy parts	
2763	Mach's Speculum		69 Al, 31 Mg							Light alloy parts	
2764	Macht's Yellow Metal		57 Cu, 43 Zn							Hardware, bolts, nuts	
2765	MacKenzie Metal		70-68 Pb, 17-16 Sb, 13-16 Sn							Bearings	
2766	Magna Metal		Mg alloy							Light alloy parts	Same as "Electron"
2767	Maillechort		67-65 Cu, 13.5 Zn, 13-19 Ni, 0.5-3.2 Fe, Sn + Pb							Ornamental white metal parts	
2768	Major Metal		3 Cu, 2 Fe, 0.4 Zn, 0.4 Ni, bal. Al							Light alloy parts	
2769	Malleable Casting Pig		3-4 C, 0.75-1.5 Si, >1 Mn, 0.2 P, >0.05 S, bal. Fe							Hardware, malleable iron manufacture	
2770	Mallet Alloy		75 Zn, 25 Cu							Bearings	
2771	Malloydium		60 Cu, 23 Ni, 13 Zn, 0.9 Fe							Tableware	Acid resisting
2772	Maluminum	Ger.	87 Al, 6.4 Cu, 4.8 Zn, 1.4 Fe, 0.2 Si, 0.1 Mn, 0.2 Pb		21000		1.5			Light alloy parts	
2773	Mangaloy		Ni, Mn, Fe								
2774	Manganese Copper		Mn, Cu								
2775	Manganese Nickel Silver		73-60 Cu, 2.4-20 Mn, 10-17 Ni, 0-10 Sn, 0-8.8 Zn							White metal parts	
2776	Mangan-Neusilber	Ger.	73-59 Cu, 10-18 Ni, 2.4-20 Mn, 5-20 Zn							White metal parts	
2777	Manhardt's Alloy		83 Al, 10 Sn, 6.2 Cu, 0.1 Mg, P							Light alloy parts	
2778	Marine Babbitt		72 Pb, 21 Sn, 7 Sb							Marine bearings	
2779	Marsh's Patent		75 Ni, 25 Cr							Electrical resistances, heating elements	Heat resistant
2780a	Marties' Non-Oxidizable Alloy		35 Ni, 18 Zn, 17 Cu, 10 Fe, 10 Sn							Heat and corrosion resistant parts	Also called "Marlies"

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2780b	Marties' Non-Oxidizable Alloy		35 Ni, 10 Fe, 10 Zn, 20 Sn, 25 brass							Heat and corrosion resistant parts	
2781	Mathesius Metal		Pb, 3 Ca, 1-2 Alkali earth metals							Bearings	U.S.Pat. 1549137
2782	Mayari Pig	M-24	1 Ni, 2 Cr, 0.15 Ti, 0.17 V, varying C, Si, Mn, bal. Fe							For steel making	
2783	McAdams Alloys		82-60 Al, 0-55 Cu, 0-8 Cd, 0-4 Ag, 0-8 Sn, 0-43 Cr, 0-23 Zn, 0-5 Sb							Light alloy parts	
2784	McFarland & Harder Alloys		59-29 Ni, 11-55 Cu, 10-43 Cr							Corrosion and heat resistant parts	Stainless and corrosion resistant
2785	McInnes Record "A"	M-81	12-14 W, 2-4 Cr, 0.3-0.5 C, bal. Fe							Piercing, punches, heading and trimming dies, gripper and forging dies	High speed steel Heat resisting
2786	McInnes Special Cr-Ni Steel	M-81	.5 Cr, 1.5 Ni, .6 Mn, .7 C, bal. Fe							Hot work tools, bolt heading and forming dies, gripper dies, shear blades, hot punching dies	Heat resisting, high strength and toughness
2787	McInnes Special Tool Steel	M-81	0.95-1.10 C, bal. Fe							For hard wearing surface and extreme depth hardness	Deep hardening
2788	McInnes Standard Va High Speed	M-81	18 W, 4 Cr, 1.5 V, 0.5-0.9 C, bal. Fe							Turning and boring tools, cutters, special dies, reamers	Discontinued
2789	McInnes "V"	M-81	C, Cr, V, W, bal. Fe							Turning and boring tools, special dies, taps, reamers, milling cutters	High speed steel *Discontinued*
2790	McInnes Vanadium Crucible	M-81	0.75-1.0 C, .3 Mn, .2 V, bal. Fe							Cold forming dies, punches, chisels, shear blades, dies, rivet sets	
2791	McKinney Alloys		95-97 Al, 2-3 Cu, 1-2 Mn							Light alloy parts exposed to sea water	Resists sea water corrosion
2792	McLure Alloy		85 Al, 8.2 Cu, 5-6 Sn, 0.9 Fe, 0.3 Si, 0.2 Mn							Light alloy parts	
2793	Meco		50 Cu, 25 Ni, 20 Zn, 5							Chemical equipment	Corrosion resistant
2794a	Medal Bronze		92 Cu, 8 Sn							Medals, ornaments	
2794b	Medal Bronze		95 Cu, 4 Sn, 1 Zn							Medals, ornaments	
2794c	Medal Bronze		97 Cu, 1 Sn, 2 Zn							Medals, ornaments	
2795	Medal Metal		84 Cu, 16 Zn							Medals, ornaments	
2796	Medium Silver Solder		75-70 Ag, 20-23 Cu, 5-7.5 Zn							Silver solder	
2797a	Melchoir Wire		57.3 Cu, 41.6 Ni, 1.1 Mn							White metal wire	
2797b	Melchoir Wire		62.7 Cu, 25.9 Zn, 10.8 Ni, 0.6 Mn							White metal wire	
2798	Metallic Packing		82.25 Pb, 4.75 Sn, 13 Sb							Metallic packing	
2799	Metalline		35 Co, 10 Fe, 30 Cu, 25 Al							Tools	Heat and corrosion resistant
2800	Meteor Steel		C, Ni, bal. Fe							Structural parts	
2801	Armco 18-10 Ti	M-10	.10 max. C, 2 max. Mn, .75 max. Si, 17-19 Cr, 8-11 Ni, Ti=4×C, bal. Fe	Annealed	90000	35000	55	60	160	High temperature service and welded corrosion resistant	
2802	War Babbitt	M-993	Sn, Pb, Cu	Cast	10750	5630	2		22	Bearings	Babbitt
2803	Rex M.M.	M-38	.8 C, 5.5 W, 4 Mo, 4 Cr, 1.5 V, bal. Fe							Hobs, drills, reamers, taps, lathe and planer tools	High speed steel
2804	Michiana 55	M-184	.5 C, 30 Cr, 2 Ni, bal. Fe	Cast	45000	30000	1	2	250	For parts in contact with brass and copper at rolling temp.	Heat and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2805	Michiana No. 63	M-184	C, 28 Cr, 15 Ni, bal. Fe	Cast						For resistance to sulfurous gases at high temperatures and also molten salts	Heat and corrosion resistant
2806	Midvaloy Extra High Speed	M-85	0.66 C, 0.27 Mn, 4.32 Cr, 13.3 W, 1.94 V, bal. Fe							Tools, high speed cutters	High speed steel, now called Ore Star High Speed
2807	Midvaloy Nut Piercer	M-85	0.5 C, 4 Cr, 13 W, bal. Fe							Tools, piercers	
2808	Midvaloy Finishing	M-85	1.26 C, 0.36 Mn, 4 W, 1 Cr, bal. Fe							Tools, finishing tools	
2809	Midvaloy Special Finishing	M-85	1.31 C, 0.43 Mn, 0.75 Cr, 6.80 W, bal. Fe							Tools, finishing tools	
2810	Milling		54-56 Cu, 27.5-31 Zn, 15-18 Ni, 0.5-1.0 Pb							White metal parts	Easy to machine
2811a	Milling Silver		56 Cu, 31 Zn, 12 Ni, 1 Pb							White metal parts	Easy to machine
2811b	Milling Silver		56 Cu, 27.5 Zn, 16 Ni, 0.50 Pb							White metal parts	Easy to machine
2812	Minofor		69-66 Sn, 18-20 Sb, 9-10 Zn, 3-4 Cu, 0-1 Fe							Bearings	
2813	Misch Metal		50 Ce, 45 Lathanum + didymium							Pyrophoric alloy in cigarette lighters	Removes gas from radio tubes
2814	Misco "A" Tool Steel	M-81	1.0 C, bal. Fe							Mining tools, chisels, quarry and track tools	
2815	Misco "B" Tool Steel	M-81	1.0 C, bal. Fe							Tools, chisels	
2816	Mitifine	M-123	Babbitt containing no Pb and more Sn							Heaviest marine engine bearings, cross-heads, heavy machine babbitts	Free flowing, great toughness, slight shrinkage
2817	Mitis Iron		0.06-0.27 Al, C, bal. Fe							Pipes, fittings	Wrought iron deoxidized with Al
2818a	Mock Gold		80-67 Cu, 20-29 Pt, 0-4 Zn							Ornaments	
2818b	Mock Gold		6 Ni, 1 Pt, 1 Ag, 1 Brass							Ornaments	
2819	Mock Silver		84 Al, 10 Sn, 5.5 Cu, P							Instruments, fittings, ornamental	Corrosion resistant
2820	Modified Monel Metal	M-230	60-65 Ni, 24-27 Cu, 9-11 Sn, 1-3 Fe, Mn, Si							Valves for superheated steam	v. M.M.M.
2821	Molybdenum Steel		0.15-0.40 Mo, 0.1-0.45 C, 0.6-1.3 Mn, 0.3-0.5 Si, bal. Fe							Machinery parts, gears, shafts	Tough
2822	Mond "70"	M-86	26 Cu, 70 Ni, 4 Mn		85000 94000	36000 40400	65 45			Turbine blades, pump rods, valve stems, valve seats	Similar to Monel Metal
2823	Monotype, Standard		74 Pb, 18 Sb, 8 Sn							Type metal	Slightly expansive on solidifying
2824	Montanium		2.5-3.5 Cu, 0.5 Mg, bal. Al		51000		16	50		Light alloy parts	Similar to "Duralumin"
2825	Montegal	M-299	0.95 Mg, 0.8 Si, 0.2 Ca, bal. Al		50000		6		100	Light alloy parts	
2826	Mosaic Gold		63 Cu, 37 Zn		46000					Brass ornaments	
2827	Mourey White Gold		50 Au, 35 Ag, 15 Pd							Jewelry	
2828	Moussets Silver		27.5 Ag, 59.5 Cu, 9.5 Zn, 3.5 Ni							Instruments and cheap jewelry	Corrosion resistant
2829	"M.S." Steel	M-151	0.8-1.1 Cr, 0.3-0.4 Mo, 0.6-0.9 Mn, 0.4-0.6 C, bal. Fe							Gears, pinions, shafts, axles, tools, forgings	Discontinued
2830	Mudges Speculum		69 Cu, 31 Sn		15500					Mirrors, reflectors	Very brittle
2831	Muntz Patents		63-56 Cu, 37-42 Zn, 0-4 Pb							Tubes, hardware	
2832a	Murmans Alloy		72 Al, 15 Zn, 14 Mg							Light alloy parts	
2832b	Murmans Alloy		92 Al, 4.4 Zn, 3.6 Mg							Light alloy parts	
2833	M.W. Metal		90-95 Mg, 3-7 Al, 2-5 Zn, 0.5 Mn		36000 39000	33000	16 13			Light alloy parts	
2834	Mystic Metal		89 Pb, 11 Sn, 0.1 Bi							Solder	
2835	Naubuc		58 Cu, 16.25 Zn, 25 Ni, 0.75 Fe							Knives	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2836	Naval Aluminum		1.5 Cu, 0.9 Mn, 0.4 Ni, Fe+Si, bal. Al							Instruments and fittings	Resists corrosion
2837	Naval Gun Metal "G"		88 Cu, 10 Sn, 2 Zn							Gears, pistons, bearings, bushings	
2838	Navy Aluminum Alloy		1.5 Cu, 0.9 Mn, 0.4 Ni, 0.4 Fe, 0.3 Si, bal. Al							Instruments, fittings, light alloy parts	
2839a	Navy Bearing		91-80 Sn, 4.5-15 Sb, 3.7-5.0 Cu							Bearings	
2840	Navy Bearing, Hard		80 Sn, 15 Sb, 5 Cu							Bearings	
2841	Navy Composition "W"		89 Sn, 7.3 Sb, 3.7 Cu							Bearings	
2842	Needle Metal		85 Cu, 8 Sn, 5.3 Zn, 1.7 Pb							Needles, valves, fittings	
2843	Neogen		58 Cu, 27 Zn, 12 Ni, 2 Sn, 0.5 Al, 0.5 Bi							Ornamental and structural parts	
2844	Nevada Silver		Cu-Ni							Ornaments, electrical resistances	Nickel Silver
2845	Nevyanskite	Russ.	58-44 Ir, 27-49 Os, 0-10 Pt, 0-6 Ru, 1.5-3 Rh, Pd+Fe+Cu							Fountain pen points	Mined by U.S.S.R.
2846	New Capital Steel		14 W, 3.7 Cr, 0.1 V, 0.6 C, bal. Fe							High speed tools, cutters, reamers, punches, gages	High speed steel
2847	New Tool Steel Cast		58 Ni, 20 Zn, 12 Al, 10 Si							Cutting tools and dies	
2848	Neustadt	Ger.	71.5 Cu, 28.5 Zn							Condenser tubing	Deep drawn
2849	Niag		46.7 Cu, 40.7 Zn, 9.1 Ni, 2.8 Pb, 0.3 Mn							White metal parts	
2850	Nicaloy	M-60	49 Ni, 51 Fe							Electrical equipment and apparatus	Resistance alloy High magnetic permeability. Discontinued
2851	Nickel Bearing		50 Cu, 25 Ni, 25 Sn							Bearings	
2852	Nickel Cerium Steel		2.2-3.0 Ni, 0.1-0.9 Ce, 0.4-0.75 C, bal. Fe							Machinery parts	
2853	Nickel Chrome Aluminum		88 Ni, 12 Al, 8 Cr							Corrosion and heat resistant parts	Corrosion and heat resistant
2854	Nickel Chrome Peerless		16.5 Cr, 3.0 Fe, 2.0 Mn, 0.1 C, bal. Ni							Heat resisting parts	Heat resistant
2855	Nickel Chrome Premier		25 Fe, 11 Cr, 3.0 Mn, bal. Ni							Heat resisting parts	Heat resistant
2856	Nickel Chrome Superior		19.5 Cr, 0.5 Fe, 2.0 Mn, 0.2 C, bal. Ni							Heat resisting parts	Heat resistant
2857	Nickel Coinage U.S.A.		75 Cu, 25 Ni							Coinage	
2858	Nickel Copper Steel		1-25 Ni, 0.4-10 Cu, 0.15-0.8 C, bal. Fe							Structures, machinery parts, fences, gates	
2859	Nickelin	M-297	58 Cu, 22 Ni, 20 Fe							For regulating and checking electrical resistances	German Silver
2860	Nickelin Resistance	M-297	54 Cu, 20 Zn, 26 Ni							For motor starters, electrical equipment	
2861	Nickel Malleable (Inco)	M-68	96.75 Ni+Co (min.) 0.15-1.75 Mn, 0.15 C, 0.5-0.75 Fe							Coinage, constituent of alloys	
2862	Nickel Manganese Bronze		53 Cu, 39 Zn, 2.6 Sn, 2.5 Ni, 1.7 Mn, Al, Pb							Corrosion resistant strong castings	Corrosion resistant
2863	Nickel Molybdenum Steel		1.5-3.0 Ni, 0.1-0.7 Mo, 0.4 C, Mn, bal. Fe							Gears, shafts	
2864a	Nickel Oreide	M-303	63-66 Cu, 31-33 Zn, 2-6 Ni							Hardware, ornamental parts	
2864b	Nickel Oreide	M-303	87 Cu, 6.7 Zn, 6.7 Ni							Hardware, ornamental parts	
2865	Nickel Silicon Steel		2.8-3.3 Ni, 0.5-2.2 Si, 0.35-0.50 C, bal. Fe							Machining parts, gears, shafts, axles	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2866	Nickel Silver, Casting		70-56 Cu, 13-20 Ni, 5.6-24 Zn, 0-4 Sn, 0-3.5 Pb							Plumbing fixtures, fittings	
2867	Nickel Silver, Rolling		49 Cu, 39 Zn, 12 Ni							Ornamental sheets and rolled parts	
2868	Nickel Silver, Turning		66-59 Cu, 22-29 Zn, 12 Ni, 0-5 Pb							Screws, bolts	Machining grade
2869	Nickel-Tungsten		75-50 W, 25-50 Ni							Chemical apparatus	Resistant to acids
2870	Nickel Vanadium Steel		3-3.3 Ni, 0.1-0.45 V, 0.36 C, 0.2-0.4 Si, bal. Fe							Machinery parts, gears, pinions shafts, crankshafts	Tough, shock resistant
2871	Nickel-Zirconium		86 Ni, 6 Si, 1.5 Zr, 0.1 C							Chemical apparatus	Corrosion resistant
2872	Nickel Zirconium Steel		3 Ni, 0.24 Zr, 0.4 C, 2.4 Si, bal. Fe							Crankshafts, axles, machinery parts	
2873	Nicral "FM"	M-93	Mg, Ni, Cr, bal. Al	Extruded Heat treated	22000 41000	12000 36000	22 11			Structural and extruded sections, architectural	Corrosion resistant
2874	Nicu Steel		2.2 Ni, 0.6 Mn, 0.5 Cu, 0.3 C, bal. Fe							Machinery parts, structural work	
2875	Non-Oxidizable		62 Fe, 25 Cr, 10 Mn, 1.1 C, 0.95 Si							Corrosion and heat resisting parts, abrasion resistant parts	U.S.P. 1,333,151 Corrosion, heat and abrasion resistant
2876a	Non-Scaling		30-40 Ni, 15-20 Cr, 3.5 Si 1.25 Cu, bal. Fe							Furnace parts	Heat resisting
2876b	Non-Scaling		24 Ni, 24 Cr, 3 Si, bal. Fe							Furnace parts	Heat resisting
2877	Non-Shrinking Patent		87 Pb, 6 Sb, 6 Sn, 1.3 Cd							Impressions, type	
2878	Non-Tarnishable		63.6 Cu, 31 Zn, 3.25 Sn, 2 Pb							Corrosion and tarnish resisting parts	Corrosion resistant
2879	Novo High Speed		0.50 C, 0.25 Mn, 2.72 Cr, 15 W, 0.64 V, bal. Fe							Tools, cutters	High speed steel
2880	Novo Superior	M-345	0.80 C, 0.17 Mn, 2.60 Cr, 18.63 W, 1.01 V, bal. Fe							Tools, lathe and cutting tools	High speed steel
2881	Nu-Bronze		95. 4 Cu, 3.25 Ni, 0.25 Mn, 0.73 Si							Corrosion resistant parts	Corrosion resistant
2882	Nu-Gold		87.73 Cu, 12.22 Zn							Jewelry, ornaments	
2883	Nuerenberger Gold (Nurnberger Gold)		2-7.5 Al, 0.2-2.5 Au, bal. Cu							Gold substitute	
2884	Odessa		33.25 Ag, 42.5 Cu, 15.75 Zn, 8.5 Ni							Silver solder	
2885	Ohmal		87.5 Cu, 9 Mn, 3.5 Ni							Electrical resistors	
2886	Oil Cups		88 Cu, 5 Sn, 7 Zn							Oil cups, fittings	
2887	Oil Engine Babbitt Metal	M-317	Sn, Pb, Sb	At 70°F. At 212°F.					34.4 15.7	Bearings for oil engines	M.P.-462°F. Discontinued
2888	Oil Pump		83 Cu, 3 Sn, 9 Zn, 3 P							Oil pump parts	
2889	Oreide, Brunswick		68 Cu, 32 Zn, 0.5 Sn							Condenser tubing	Corrosion resistant
2890	Oreide, French Gold		90-81 Cu, 10-15 Zn, 0-4.9 Sn, Pb							Plumbing, hardware	
2891a	Osmiridium (Natural) Nevyanskite		58-44 Ir, 27-49 Os, 0-10 Pt, 0-6 Ru, 1.5-3.0 Rh							Pen points	
2891b	Osmiridium (Natural) Siserskite		57 Os, 34 Rh + Ir, 8 Ru							Pen points	
2892	Otisel No. 1	M-331	18 Cr, 8 Ni, C, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resisting alloy
2893	Packing		82 Pb, 4.8 Sn						20	Metallic packing	Pouring temp.-324°C.
2894	Packing Metal		51.8 Cu, 14.3 Zn, 15 Ni, 17 Pb, 1.8 Sn							Metallic packing	
2895	Packing Rings, French	Fren.	51.8 Cu, 14.3 Zn, 15 Ni, 17 Pb, 1.8 Sn							Packing rings	
2896	Packing, Russian	Russ.	99 Zn, 0.9 Sn, 0.3 Pb, 0.2 Fe							Packing metal	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2897	Page Dental Alloy		93 Al, 2.25 Cu, 4.75 Au							Dental applications	
2898	Paitung White Copper		26-40 Cu, 41-32 Zn, 16-37 Ni, 0-2.6 Fe							Ornamental white metal parts	
2899	Pale Yellow Gold		92 Au, 0.8-3 Ag, 0-8.3 Fe							Jewelry	
2900a	Palladium Alloy		10 Rh, 90 Pb							Jewelry	
2900b	Palladium Alloy		67 Pd, 33 Ag							Jewelry	
2901	Parkers Chrome Alloy		60 Cu, 20 Zn, 10 Ni, 10 Cr							Fountain pen points	
2902	Pechko White Gold		60 Au, 30 Pd, 10 Pt, 0.1-2.0 Ir							Jewelry, ornaments	
2903	Peerless		16.5 Cr, 3 Fe, 2 Mn, bal. Ni							Heating elements	Resistance alloy
2904	Percit									Tools	Similar to Stellite
2905	Perlit Nickel Cast Iron		1.7-3.0 C, <1 Si, Ni, Mn, bal. Fe							Castings, frames, housings	U.S.P. 1564284 Sufficient Ni to ppt. graphite
2906	Phono Electric Wire		98.55 Cu, 1.40 Sn, 0.05 Si							Trolley wire, electrical conductors	
2907	B.A.-34	M-28	9-11 Cu, 1.0-1.3 Fe, .2-, 3 Mg, bal. Al	Cast	23000 30000		.5 1.0		95 105	Pistons	
2908	Pierrot Metal, Beugnot		83 Zn, 8.3 Cu, 7.6 Sn, 3.5 Sb, 3 Pb							Bearings	
2909	Pinchbeck		88-94 Cu, 6-12 Zn							Cheap jewelry	
2910	Pioneer Metal (Pioneer "A" Acid Resisting)	M-326	35 Ni, 25 Cr, <5 Mo, 0.2-0.5 C, bal. Fe	Cast Heat treated	74000 65000	36500 45000	42 20		150	Valves, fittings, pump parts, castings	Corrosion and acid resisting
2911	Pirsch's German Silver		80-71 Cu, 16-17 Ni, 1-7.5 Zn, 1-2.8 Sb, 1-2 Co, 1-1.5 Fe, 0-0.5 Al							Ornaments, tableware	
2912	Platalargan		Pt, Al, Ag								
2913	Midvaloy No. 11	M-85	0.35-0.50 C, 0.6-0.9 Cr, 3.0 Ni, bal. Fe	Heat treated	275000 135000	245000 110000	10 25	38 58	500 275	Airplane crankshafts, gears, splines, transmission units	Shock resistant (0.45-0.50 C alloy)
2914	Midvaloy No. 3	M-85	0.15-0.45 C, 1.5 Ni, 0.5 Cr, bal. Fe	Heat treated	248000 118000	242000 98000	6 20	22 61	400 225	Gears, pinions, shafts, bolts, nuts, axles	Shock resistant (0.37 C alloy)
2915	Platine artificielle (Platinoid)		83-65 Ag, 17-35 Pt							Substitute for platinum	
2916	Platinitic_im		55 Pt, 28 Ir, 7 Rh, 3 Cu, 4 Fe, traces Pd+As							Pen nibs, ornamental parts	Mined in Russia
2917	Platinor		45 Cu, 18 Pt, 18 brass, 9 Ag, 9 Ni							Cheap jewelry, ornaments	
2918	Platinum Alloy		2-5 parts Ag, 1 part Pt, 0-1 part Cu							Ornaments, jewelry	
2919a	Platinum Gold		70 Au, 30 Pt							Ornaments, jewelry	White
2919b	Platinum Gold		58 Pt, 25 Ag, 17 Au							Jewelry	
2919c	Platinum Gold		60 Au, 40 Pt							Jewlery	
2920a	Platinum-Iridium		5.0 Ir, 95 Pt						170	Jewelry	
2920b	Platinum Iridium		30 Ir, 70 Pt						400	Surgical instruments	
2921	Platinum Lead (Birmingham Platinum)		79-53 Zn, 20-47 Cu, 0.3 Fe							Ornamental parts	
2922	Platinum Rhodium		100-80 Pt, 0-20 Rh							Thermocouples	
2923	Platinum Silver		66.7 Ag, 33.3 Pt							Ornaments, jewelry	
2924	Platinum Solder		73 Ag, 27 Pt							Solder for platinum alloys	
2925	Platinum Substitute		23.6-24 Al, 3.7 Bi, 0.7 Au, 72 Ni							Ornamental white metal parts	
2926a	Platinum Substitute Coopers		70 Ag, 25 Pd, 5 Co							Jewelry	
2926b	Platinum Substitute Coopers		70 Ag, 25 Pt, 5 Ni							Jewelry	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2927a	Platinum Substitute Electrical		70 Au, 25 Ag, 5 Ni or Pt							Electrical contacts	
2927b	Platinum Substitute Electrical		68 Au, 25 Ag, 7.5 Pt							Electrical contacts	
2928	Platnam	M–995	54 Ni, 33 Cu, 13 Sn, 0.5 Fe, 0.3 Al							Steam valves up to 600°C, valve disks and seats	Heat resisting, abrasion & erosion resist.
2929	Platnik		Pt-Ni							Ornaments, jewelry	
2930	Plow Steel		0.6-0.9 C, bal. Fe							Plow shares, blacksmith tools	
2931	Plumbers Solder		67 Pb, 33 Sn							Solder	
2932a	Plumbers White No. 1		54 Cu, 27 Zn, 17 Ni, 2 Pb							Plumbing fixtures	
2932b	Plumbers White No. 2		54 Cu, 25 Zn, 13 Ni, 7 Pb, 1 Sn							Faucets, cocks	
2932c	Plumbers White No. 3		58 Cu, 25 Zn, 15 Ni, 1 Pb, 1 Fe, 0.3 Mn							Faucets, cocks	
2933	Plumbite	M–123	Pb, Sn, Sb							Used in slow running and light weight machines	Free flowing, durable, plastic
2934	Pompton	M–76	0.7-1.4 C, bal. Fe, 0.25 Mn, 0.25 Si	Water hardened					228 715	Threading dies, hot and cold work dies, shear knives, chisels	Made in all tempers Iz-7-50
2935	Pompton Special	M–76	0.7-1.4 C, 0.015 max. P, 0.015 max. S, 0.25 Mn, 0.20 Si, bal. Fe	Water hardened					228 715	Lathe, planer and finishing tools, reamers, taps, gages, dies	Made in all tempers Iz-7-50
2936	Popes Island Metal	Fren.	70 Cu, 15 Zn, 14 Ni, 1 ?							Tableware, base for plated ware	Generic name of a series of French alloys
2937	Potassium Amalgam		$Hg_{24}K_2$							Organic reductions	
2938	Poterie d'etain		90 Sn, 9 Sb, 1 Cu							Tableware, bearings	
2939	Potingris		Potinjaune plus Pb+Sn							Hardware	
2940	Potinjaune		72 Cu, 25 Zn, 2 Pb, 1.2 Sn							Hardware	French yellow brass
2941	Pot Metal		80-67 Cu, 20-33 Pb							Bearings	
2942	Potosi Silver		Ni-Cu							Ornamental and corrosion resistant parts	Nickel Silver
2943	Preuss Alloy		30 Co, 0.2-1.5 Si, 0.04-0.06 C, bal. Fe							Magnetic circuits	
2944	Primer Gilding		97 Cu, 3 Zn, traces Pb, Fe							Primers, base for fire-enameled parts	
2945a	Princes Metal No. 1		83-61 Cu, 17-39 Zn							Hardware	
2945b	Princes Metal No. 2		85 Cu, 15 Sb								
2946	Promethium		67 Cu, 30 Zn, 3 Al							Condenser tubes	
2947	Propeller Bushing		69 Zn, 19 Sn, 7 Sb, 5 Cu							Propeller bushings	
2948	Protective Deck Plate		3.5 Ni, 1.5 Cr, 0.2-0.3 C, bal. Fe							Armor plate	
2949	Protective Netting		27.8 Ni, 0.4 C, bal. Fe							Armor steel for torpedo defense, netting	
2950	Pump Cocks		72 Zn, 7 Cu, 21 Sn							Pump cocks	
2951	Pure Silver Solder		72 Ag, 28 Cu							Silver solder	
2952	Quicksilver Solder		63-57 Ag, 21-25 Cu, 3.8-6.2 Sn, 10-12 Zn							Silver solder	
2953	Rail Steel		0.50-0.89 C, 0.60-0.90 Mn, 0.04 max. P, 0.15 min. Si, bal Fe							Steel rails	
2954	Rakel's Metal		88 Cu, 10 Ni, 1 Mn, 1 Zn							Corrosion resistant parts	Corrosion resistant
2955	Randolf Metal									Dental alloy	
2956	Rauchberg		66-75 Cu, 15-19 Pb, 10-5 Sn, 1-5 Sb							Bearings	Corrosion resistant
2957	Raymur		Cu-Ni							Ornamental and corrosion resistant parts	Corrosion resistant
2958	Rayo		85 Ni, 15 Cr							Resistance alloy	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2959	Reactal	M-419	Ni-Cr-Al	Cast	42000 55000				187	Corrosion and heat resisting parts	Corrosion and heat resistant castings
2960	Sivyer No. 64	M-288	0.25 C, 0.50 Mn, 1.0 Si, 30 Cr, 9.5 Ni, bal. Fe							Corrosion and heat resistant parts	Corrosion and heat resistant
2961	Red Gold		75 Au, 15 Cu							Jewelry, ornaments	
2962	Red Ray		85 Ni, 15 Cr							Heating elements	
2963	Red Star Tap	M-34	1.1 C, bal. Fe							Taps	Highest quality carbon tool steel
2964	Red Star Tool	M-34 M-115	.6-1.2 C, .2 V, bal. Fe							Tools	Standard carbon tool steel
2965	Refractory Solder		50 Cu, 50 Zn							Solder	
2966	Regel-Metall		83.3 Sn, 11.1 Sb, 5.6 Cu							Bearings	
2967	Regulus Venus		50 Cu, 50 Sb								
2968	Reichsbahn Alloys	Ger.	All specifications							Railroad applications	Series of German government railroad alloys
2969	Reich's Bronze		85 Cu, 7.5 Fe, 0.6 Al, 0.5 Mn							Strong corrosion resistant parts	Corrosion resistant
2970	Reiths Alloy		74.5 Cu, 11.6 Sn, 0.9 Pb, 4.9 Sb							Bearings	
2971	Reostene		Ni, Fe							Resistances	Heat resistant
2972	Resistal		90 Cu, 9 Al, 1 Fe		75000	37000	20			Gears, slides	Corrosion resistant
2973	Resistance, Lunge		87-84 Cu, 12-14 Mn, 1.8-1.9 Fe							Electrical resistors	
2974a	Resistin		1.8 Fe, 11.7 Mn, 86.5 Cu							Resistance alloy	
2974b	Resistin		3 Fe, 12 Mn, 85 Cu							Resistance alloy	
2975	Rextox										
2976	Rhenium	M-133	99.5 Re		70000		24			Constituent of alloys and chemicals	Electroplating
2977a	Rheotan No. 1		84 Cu, 12 Mn, 4 Zn							Resistances	
2977b	Rheotan No. 2		53 Cu, 18 Zn, 25 Ni, 5 Fe							Resistances	
2977c	Rheotan No. 3		84 Cu, 2 Mn, 4 Zn, 12 Fe							Resistances	
2978	Rhotantum		90-60 Au, 10-40 Pd							Jewelry	
2979	Richard's Alloy		96 Zn, 4 Al							Die castings	
2980	Richards's Speculum		65 Cu, 30 Sn, 2 As, 2 Si, 0.7 Zn							Reflectors	
2981	Moulimphy	M-104								For glass rolls and molds	
2982	Roberts-Austen (Purple Gold)		79 Au, 21 Al							Jewelry	
2983	Roesch		50 Zn, 49 Sn, 0.7 Sb, 0.2 Cu							Aluminum solder	
2984	Roma Bronze		59 Cu, 41 Zn, 0.4 Pb, 0.2 Al, traces Fe							Hardware, nuts, bolts	
2985	Ronia Metal		Cu, Zn, Co, Mn, P								
2986	Rosein		40 Ni, 30 Al, 20 Sn, 10 Ag								
2987	Rose Label		1.24 C, 0.27 Mn, bal. Fe							Tools	
2988	Rosenhain-Arch-butt Alloy		72 Al, 25 Zn, 3 Cu							Strong light alloy parts	
2989	Anaconda 67	M-8	67 Cu, 33 Zn							Water pipes	For normal corrosion waters
2990	Rotguss		93-82 Cu, 4-10 Sn, 3-10 Zn + Pb							Cast fittings, valves, hardware	
2991	Roulz		35-50 Cu, 25-30 Ni, 20-40 Ag							Ornamental and corrosion resistant pens	
2992	Rupee (Silver)		91.6 Ag, 8.3 Cu							Coinage	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
2993a	Russian		64 Cu, 18 Ni, 18 Zn, 0.3 Fe, 0.3 Pb							Ornaments, corrosion resisting white metal parts	
2993b	Russian		1.3 Cu, 26.5 Zn 72.2 Sn							Bearings	
2993c	Russian		66-78 Cu, 21-34 Zn, 0-1 Sn							Condenser tubes	
2994	Salge Antifriction Metal		86 Zn, 9.9 Sn, 4.0 Cu, 1.1 Pb							Bearings	
2995	Sallit's Speculum		65 Cu, 31 Sn, 4 Ni							Metallic mirrors	
2996	Samlegierung		13 Mn, 10.2 Si, 5.8 Al, 2.5 C, 0.3 Cu, bal. Fe								
2997	Sampson		0.43 C, 0.43 Mn, 1.22 Ni, 0.43 Cr, bal. Fe							Tools	
2998	Sashchain		92-95 Cu, 8-5 Sn							Sash chain	
2999	Sceptre Brass		62 Cu, 36 Zn, 1.4 Fe, 1.1 Al, 0.07 Pb							Ornamental parts, hardware	
3000	Schomberg Alloy		87 Zn, 10 Sn, 3 Cu							Bearings	
3001a	S.A.E. No. 1A Solder		44-45 Sn, .4 max. Sb, bal. Pb							Soft solder	361-414 °F. melt range
3001b	S.A.E. No. 1B Solder		43.0-43.5 Sn, 1.5-2.0 Sb, bal. Pb							Soft solder	361-405 °F. melt range
3002a	S.A.E. No. 2A Solder		39-40 Sn, .4 max. Sb, bal. Pb							Soft Solder	361-460 °F. melt range
3002b	S.A.E. No. 2B Solder		38.0-38.5 Sn, 1.5-2.0 Sb, bal. Pb							Soft solder	361-450 °F. melt range
3003a	S.A.E. No. 3A Solder		29-30 Sn, .4 max. Sb, bal. Pb							Soft solder	361-494 °F. melt range
3003b	S.A.E. No. 3B Solder		28-28.5 Sn, 1.5-2.0 Sb, bal. Pb							Soft solder	361-484 °F. melt range
3004a	S.A.E. No. 4A Solder		24-25 Sn, .4 max. Sb, bal. Pb							Soft solder	361-511 °F. melt range
3004b	S.A.E. No. 4B Solder		24-25 Sn, 1.25-1.75 Sb, bal. Pb							Soft solder	361-502 °F. melt range
3005	S.A.E. No. 10 Babbitt		90 min. Sn, 4-5 Sb, 4-5 Cu, .35 max. Pb							Bearings, aircraft engine liners	Babbitt
3006	S.A.E. No. 11 Babbitt		86 min. Sn, 6-7.5 Sb, 5-6.5 Cu, .35 max. Pb							Bearings for connecting rods	Babbitt
3007	S.A.E. No. 110 Babbitt		87.75 min. Sn, 7-8.5 Sb, 2.25-3.75 Cu, .35 max. Pb							Bearings	Babbitt
3008	S.A.E. No. 13 Babbitt		4.5-5.5 Sn, 9.25-10.75 Sb, 86 max. Pb							Bearings for large and light service	Babbitt
3009	S.A.E. No. 14 Babbitt		9.25-10.75 Sn, 14-16 Sb, 76 max. Pb							Bearings for light service	Babbitt
3010	S.A.E. No. 26 Aluminum Alloy		3.5-4.7 Cu, 0.2-0.8 Mg, 0.4-1.0 Mn, 92 min. Al	Wrought Annealed	55000 35000	30000	18 6			Light alloys, tubing, airplane and dirigible parts	Same as "Duralumin" Dural or "17S"
3011	S.A.E. No. 27 Aluminum Alloy		3.9-5.0 Cu, 0.4-1.2 Mn, 0.5-1.2 Si, 92 min. Al	Forged Heat treated	55000 55000 63000	30000 30000 43000	16 22 9			Connecting rods, aircraft propellers, automobile hardware and fittings	Same as "25 S" Excellent hot working properties
3012	S.A.E. No. 28 Aluminum Alloy		0.45-0.90 Mg, 0.6-1.2 Si, 96.3 min. Al	"T" Temper "W" Temper	45000 50000 30000 40000	30000 40000	10 18 20 30			General light metal forgings, airplane engine crankcases, automobile hardware	Same as "51 S" Wrought alloy
3013	S.A.E. No. 29 Aluminum Alloy		1.0-1.5 Mn, 0.2 max. Cu, 97 min. Al	Soft Hard	19000 27000		20 25 1 4			Automobile body panels, gas tanks for airplanes, paneling	To replace pure Al Same as "3S"

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3014	S.A.E. No. 30 Aluminum Alloy		7-8.5 Cu, 0.2 max. Zn, 1.7 Si +Fe+Zn+Mn+Sn, bal. Al	Sand Cast	18000		1			Crank cases, oil pans, transmission cases, hub caps, camshaft housings	
				Chill Cast	20000		2				
					20000	10000	1–3		50–65		
3015	S.A.E. No. 31 Aluminum Alloy		2.25-3.25 Cu, 12.5-14.5 Zn, 1.70 Si, Fe, Mn, Sn, bal. Al	Sand Cast	25000		1			Crank cases, oil pans, steering wheel spiders, transmission cases	
					30000		3				
3016	S.A.E. No. 31 A Aluminum Alloy		2.0-3.5 Cu, 9-11.5 Zn, 1.25-1.75 Fe, 1.0 max. impurities, bal. Al	Sand cast	25000		3			Sand castings, crankcases	Not to be used for high temp.
					36000		7				
3017	S.A.E. No. 32 Aluminum Alloy		11-13.5 Cu, 0.2 max. Zn, 1.7 max. Si, Fe, Mn, Sn, bal. Al	Sand cast	19000	10000	0			Permanent mold castings,	
					28000	15000	1.5		70	dense sand castings	
3018	S.A.E. No. 33 Aluminum Alloy		6-8 Cu, 2.5 max. Zn, 1.5 max. Fe, 1.0 max. Si, bal. Al	Sand cast	19000		1		70	Automobile parts, crankcases,	
					24000		2.5		90	oil pans, transmission cases, camshaft housings	
3019	S.A.E. No. 34 Aluminum Alloy		9.25-10.75 Cu, 0.9-1.5 Fe, 0.15-0.35 Mg, bal. Al	Chill cast	24000		1.0		85	Pistons, camshaft bearings,	Good bearing qualities
					30000				100	valve tappet guides	
3020	S.A.E. No. 35 Aluminum Alloy		4.5-6.0 Si, 0.6 max. Cu, 1.0 max. Fe, bal. Al	Sand cast	16000		3.5			Automobile body parts, architectural castings	Resists sea-water corrosion
3021	S.A.E. No. 36 Aluminum Alloy		7-8.5 Cu, 1-1.5 Si, 0.8-1.4 Fe, bal. Al	Sand cast	19000		1			Crankcases, oil pans, differential carriers, transmission cases	Low yield point
					24000		3				
3022	S.A.E. No. 37 Aluminum Alloy		12-13 Si, 0.8 max. Fe, 0.3 max. Cu, 0.2 max. Zn, 0.5 max. Mn, bal. Al	Sand cast	24000		5			Corrosion resisting tight castings	Resists salt-water corrosion
					31000		15				
3023	S. A. E. No. 38 Aluminum Alloy		4-5 Cu, 1.2 max. Si, 1.2 max. Fe, 0.25 max. Zn, bal. Al	Heat treated	28000		6			Windshield frames, engine crankcases, airplane parts	Heat treated castings. Age hardens, tough
					38000		12				
				Age hardened	50000		0–5				
3024	S. A. E. No. 39 Aluminum Alloy		3.75-4.25 Cu, 1.8-2.3 Ni, 1.2-1.7 Mg, 0.7 max. Si, 1.0 max. Fe, bal. Al	Heat treated	30000		0			Pistons, cylinder heads of aircraft engines	Retains strength at elevated temp.
					42000		2				
				Cast	20000						
					28000						
3025	S. A. E. No. 40 Aluminum Alloy, Red Brass		84-86 Cu, 4.0-6.0 Sn, 4.0-6.0 Pb, 4.0-6.0 Zn, 0.25 max. Fe, 0.25 max. Sb, 0.75 max. Ni	Castings—sand	27000	12000	15			Water pump impellers, bushings, oil lines and gasoline line fittings	Free cutting
3026	S. A. E. No. 41 Yellow Brass		64-69 Cu, 2-4 Pb, 31-36 Zn, 1.0 max. Sn, 0.5 max. Fe	Castings—sand	20000	12000	15			Radiator parts, battery terminals, fittings, castings	Good machining properties
3027	S. A. E. No. 42 White Nickel Brass		55-64 Cu, 18 min. Ni, 0.35 max. Fe, bal. Zn	Sand cast	30000		20			Trimmings, control brackets, levers, fittings, plumbing	
3028	S. A. E No. 43 Manganese Bronze		56-59 Cu, 38-42 Zn, 0.5 max. Si, 0.40 max. Pb, 0.5 max. Mn, 1.5 max. Al, 2.0 max. Fe	Sand cast	65000	30000	25			Gear shifter forks, brackets,	Same as A. S. T. M. B 7-14
				Chill cast	70000		20			spiders, castings for airplane tail skids	Strong and tough
3029	S. A. E. No. 44 Cast Brass		83-86 Cu, 14-17 Zn, 0.5 max. Pb, 0.15 max. Fe							Cast brass to be brazed, fittings for water pipes to be brazed	Melting range—1830—1870°F.
3030	S. A. E. No. 45 Brazing Solder		50-53 Cu, 0.5 max. Pb, 0.10 max. Fe, bal. Zn							Brazing solder	Melting range—1560-1600°F.
3031	S. A. E. No. 62 Bronze		86-89 Cu, 9-11 Sn, 0.2 max. Pb, 1-3 Zn	Sand cast	30000	15000	14			Gears, bearings, fuel pump, timers, piston pins, bushings	Hard cast bronze for severe working conditions and heavy pressures
3032	S. A. E. No. 63 Leaded Gun Metal		86-89 Cu, 9-11 Sn, 0.25 max. P, 0.5 Zn, 1-2.5 Pb	Sand cast	30000	12000	10			Bushings, bearings, fittings	For heavy loads and severe working conditions
3033	S. A. E. No. 64 Phosphor Bronze		78-82 Cu, 9-11 Sn, 8-11 Pb, 0.05-0.25 P, 0.75 max. Zn, 0.25 impurities	Sand cast	25000	12000	8			Bearings, wrist pins, piston pins, bushings	Good anti-friction qualities. For heavy loads and severe

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3034	S. A. E. No. 65 Gear Bronze		88-90 Cu, 10-12 Sn, 0.10-0.30 P, 0.5 max. Pb, Zn	Sand cast	35000	20000	10			Gears, worm wheels	Not regularly used. For severe service
3035	S. A. E. No. 66 Bronze Backing		83-86 Cu, 4.5-6.0 Sn, 8-10 Pb, 2.0 max. Zn, 0.25 max. impurities	Sand cast	25000	12000	8			Bronze-backed bearings, main bearings, connecting rod bearings	
3036	S. A. E. No. 67 Semi-Plastic Bronze		76.5-79.5 Cu, 5.00-7.00 Sn, 14.5-17.5 Pb, 4.0 max. Zn, 0.4 max. Sb, 0.40 max. Fe, 1.00 max. impurities	Sand cast	20000		10			Soft bronze bearing, water pump bearings	Good antifriction qualities
3037	S. A. E. No. 68 Cast Al Bronze		85-87 Cu, 7-9 Al, 2.5-4.5 Fe, 0.5 max. Sn, 0.25 impurities	Cast	65000	20000	20			Worm wheels, gears, valve seats, valve guides, forgings	Non-corrodible alloy
3038	S. A. E. No. 69 Wrought Al Bronze		87-89 Cu, 7-9 Al, 2.5-4.5 Fe, 0.25 max. impurities		72000 80000	35000 40000	20 30			Gears, forgings	Good bearing and anti-corrosion qualities
3039	S. A. E. No. 70 Commercial Brass		64.5-67.5 Cu, 0.3 max. Pb bal. Zn	Annealed Hard Spring	45000 67500 87500		32 5 1			Sheet brass, fixtures, ornaments, radiators, pipes	
3040	S. A. E. No. 71 Copper Sheet		99.9 min. Cu	Soft Hard	36000 37000 35000 40000		20 25 8 15			Cover plates, radiators, fittings	
3041	S. A. E. No. 72 Brass Rod		60-63 Cu, 2.50-3.75 Pb, 0.15 max. Fe, 0.50 max. impurities, bal. Zn							Pins, nuts, plugs, screws, valve disks, valve caps	Free cutting
3042	S. A. E. No. 73 Naval Brass Rod (Tobin Bronze)		59-62 Cu, 0.5-1.0 Sn, 0.3 max. Pb, 0.10 max. Fe, bal. Zn		62000	31000	25			Piston rods, propeller shafts, plates, bolts, nuts, gears, gear bearings	Resistant to sea water corrosion
3043	S. A. E. No. 74 Seamless Brass		60 min. Cu, 1.0 max. Pb, 0.10 max. Fe, bal. Zn		40000		25			Water pipes, heaters, lighting plants, ignition tubes	
3044	S. A. E. No. 75 Copper Tubing		99.9 min. Cu							Tubes, oil and fuel lines	
3045	S. A. E. No. 76 Naval Brass Tubing (Tobin Bronze)		59-62 Cu, 0.5-1.0 Sn, 0.10 max. Fe, 0.30 max. Pb, bal. Zn		50000 60000	20000 24000	35 28			Tubes, piston rods, shafts, propeller shafts, bushings, bearings	Resistant to sea water corrosion
3046a	S.A.E. No. 77 Grade A Phosphor Bronze Strip		4-6 Sn, 0.03-0.40 P, 0.20 max. Zn, bal. Cu	Half Hard Spring	55000 90000		15 1			Springs, clutch friction plates, thrust washers	
3046b	S.A.E. No. 77 Grade B Phosphor Bronze Strip		7-9 Sn, 0.03-0.20 P, 0.20 max. Zn, bal. Cu	Half Hard Spring	65000		20			Springs, clips, contact supports	
3047	S.A.E. No. 78 Al Sheet		99 min. Al	Soft Hard	12000 22000 30000		15 4 1			Panels, airplane cowling and structure	Now known as S.A.E. 25 Wrought Al
3048a	S.A.E. No. 80 Grade A Brass Wire		71-73 Cu, 0.10 max. Pb, bal. Zn		100000					Wire, springs, locking wire	
3048b	S.A.E. No. 80 Grade B		64-68 Cu, 0.10 max. Pb, bal. Zn							Wire, springs	
3049	S.A.E. No. 81 Phosphor Bronze Wire		4-6 Sn, 0.03-0.4 P, 0.2 max. Zn, bal. Cu		100000 130000					Wire, springs	
3050	S.A.E. No. 82 Brass Wire		59-62 Cu, 0.30 max. Pb, 0.06 max. Fe, bal. Zn							Wire for brazing and torch welding	
3051	S.A.E. No. 83 Annealed Cu Wire		Cu		36000 40000		35 20			Wire, cable, electrical machines	
3052	S.A.E. No. 88 Brass Rod		58.5-61.5 Cu, 1.5-2.5 Pb, 0.15 max. Fe, bal. Zn							Forgings, screws, studs	
3053	S.A.E. Steel No. 1010		0.08-0.13 C, 0.3-0.5 Mn, 0.040 max. P, 0.050 max. S, bal. Fe	Annealed	28000 36000		40 30	65 55		Tubing and pressed steel parts	Soft and ductile. Carburizing steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3054	S.A.E. Steel No. 1015		0.13-0.18 C, 0.3-0.5 Mn, 0.040 max. P, 0.050 max. S, bal. Fe	Annealed	28000 36000		40 30	65 55		Tubing and pressed steel parts	Soft and ductile. Carburizing steel
3055	S.A.E. Steel No. 1020		0.18-0.23 C, 0.3-0.5 Mn, 0.040 max. P, 0.050 max. S, bal. Fe	Water quenched	80000 70000	50000 35000	20 32	60 70	163 140	Machine parts	Carburizing steel
3056	S.A.E. Steel No. 1025		0.22-0.28 C, 0.3-0.5 Mn, 0.040 max. P, 0.050 max. S, bal. Fe	Water quenched	95000 78000	65000 40000	22 35	60 75	192 159	Forged, machined or cold worked parts	
3057	S.A.E. Steel No. 1030		0.28-0.34 C, 0.6-0.9 Mn, 0.040 max. P, 0.050 max. S, bal. Fe							Forged, machined or cold worked parts	
3058	S.A.E. Steel No. 1035		0.32-0.38 C, 0.6-0.9 Mn, 0.040 max. P, 0.050 max. S, bal. Fe	Oil hardened Water hardened	97000 84000 106000 85000	65000 52000 75000 50000	18 35 23 33	48 63 52 68	197 170 212 174	Forgings	
3059	S.A.E. Steel No. 1040		0.37-0.44 C, 0.6-0.9 Mn, 0.040 max. P, 0.050 max. S, bal. Fe							Forgings	
3060	S.A.E. Steel No. 1045		0.43-.5 C, .6-.9 Mn, 0.045 max. P, 0.050 max. S, bal. Fe	Oil hardened Water hardened	115000 95000 122000 96000	80000 62000 92000 62000	16 22 16 28	41 55 46 56	235 192 248 197	Forgings	
3061	S.A.E. Steel No. 1050		0.48-0.55 C, 0.60.9 Mn, 0.040 max. P, 0.050 max. S, bal. Fe							Forgings, machinery parts	Tough
3062	S.A.E. Steel No. 1095		0.90-1.05 C, 0.30-0.50 Mn, 0.04 max. P, 0.05 max. S, bal. Fe							Leaf and coil springs, shear blades, cold punches, mining drills, drop dies	Hard and tough
3063	S.A.E. Steel No. 1112		0.08-0.13 C, 0.6-0.9 Mn, 0.09-0.13 P, 0.16-0.23 S, bal. Fe							Screw machine products	Screw stock, free cutting
3064	S.A.E. Steel No. 1120		0.18-0.23 C, 0.6-0.9 Mn, 0.06 max. P, 0.075-0.15 S, bal. Fe							Screw machine products	Screw stock, free cutting
3065	S.A.E. Steel No. 1235		C (as required), 0.05 max. P, 0.055 max. S, bal. Fe	Hard Soft	80000 60000	36000 27000	15 22	20 30		General applications	Steel castings
3066	S.A.E. Steel No. X-1315		0.14-0.20 C, 1.30-1.60 Mn, 0.05 max. P, 0.08-0.13 S, bal. Fe							Screw stock	Free cutting
3067	S.A.E. Steel No. 1350		0.45-0.55 C, 0.90-1.20 Mn, 0.04 max. P, 0.05 max. S, bal. Fe							Gears, pinions, shafts	
3068	S.A.E. Steel No. 1360		0.55-0.70 C, 0.90-1.20 Mn, 0.04 max. P, 0.05 max. S, bal. Fe							Wheels, car wheels, tools	
3069	S.A.E. Steel No. 2015		0.10-0.20 C, 0.3-0.6 Mn, 0.04 P, 0.05 S, 0.4-0.6 Ni, bal. Fe							Case-hardened parts, shafts	Carburizing steel
3070	S.A.E. Steel No. 2115		0.10-0.20 C, 0.3-0.6 Mn, 0.04 P, 0.05 S, 1.25-1.75 Ni, bal. Fe							Shafts, pinions	Carburizing steel
3071	S.A.E. Steel No. 2315		0.15-0.20 C, 0.4-0.6 Mn, 0.04 P, 0.04 S, 3.25-3.75 Ni, bal. Fe	Oil quenched Water quenched	162000 75000 192000 82000	138000 48000 155000 62000	9 35 8 28	35 75 40 72	350 150 390 170	Gears, pinions, shafts, piston pins, transmission spline shafts	Case-hardening steel. Iz-28-115

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3072	S.A.E. Steel No. 2320		0.15-0.25 C, 0.3-0.6 Mn, 0.04 P, 0.05 S, 3.25-3.75 Ni, bal. Fe	Oil quenched	130000	98000	18	55	262	Gears, pinions, shafts	Case-hardening steel
					76000	47000	29	75	140		
				Water quenched	140000	110000	18	58	277		
					78000	50000	29	78	143		
3073	S.A.E. Steel No. 2330		0.28-0.33 C, 0.6-0.8 Mn, 0.04 P, 0.04 S, 3.25-3.75 Ni, bal. Fe	Oil quenched	145000	120000	17	52	293	Heat treated automobile parts, gears, axles, shafts, turnbuckles, bolts, nuts	For high stress applications
					84000	56000	23	68	167		
3074	S.A.E. Steel No. 2335		0.3-0.4 C, 0.5-0.8 Mn, 0.04 P, 0.05 S, 3.25-3.75 Ni, bal. Fe	Oil hardened	240000	220000	12	37	450	Heat treated automobile parts, gears, axles, shafts, drive shafts	Iz-8-85
					105000	75000	28	63	225		
3075	S.A.E. Steel No. 2340		0.38-0.43 C, 0.70-0.90 Mn, 0.04 P, 0.04 S, 3.25-3.75 Ni, bal. Fe	Oil hardened	165000	148000	15	47	331	Clutches, pinions, machinery parts, drive shafts	
					94000	63000	27	62	183		
3076	S.A.E Steel No. 2345		0.43-0.48 C, 0.70-0.90 Mn, 0.04 P, 0.04 S, 3.25-3.75 Ni, bal. Fe	Oil hardened	266000	238000	9	32	520	Clutches, pinions, machinery parts, drive shafts	Iz-9-62
					112000	95000	25	62	250		
3077	S.A.E. Steel No. 2350		0.45-0.55 C, 0.60-0.90 Mn, 0.04 P, 0.05 S, 3.25-3.75 Ni, bal. Fe	Oil hardened	278000	240000	13	30	540	Gears, transmission units	Iz-5-48
					130000	105000	25	60	250		
3078	S.A.E. Steel No. 2515		0.12-0.17 C, 0.4-0.6 Mn, 0.04 P, 0.04 S, 4.75-5.25 Ni, bal. Fe	Oil hardened	192000	155000	13	48	360	Gears, transmission gearing, wrist pins, rock drill parts, aircraft engine cams	Case-hardening steel. Iz-33-95
					105000	80000	29	70	200		
3079	S.A.E. Steel No. 3115		0.13-0.18 C, 0.4-0.6 Mn, 0.04 P, 0.04 S, 1.1-1.4 Ni, 0.55-0.75 Cr, bal. Fe	Oil hardened	158000	124000	13	43	300	Structural parts, gears, pinions, shafts, reamer cutters, piston pins	Case-hardening steel
					83000	60000	32	72	160		
3080	S.A.E. Steel No. 3120		0.17-0.22 C, 0.4-0.6 Mn, 0.04 P, 0.04 S, 1.1-1.4 Ni, 0.55-0.75 Cr, bal. Fe	Oil hardened	125000	96000	18	65	241	Structural parts, gears, pinions, shafts.	Case-hardening steel Free-machining
					78000	48000	30	72	163		
3081	S.A.E. Steel No. 3125		0.20-0.30 C, 0.5-0.8 Mn, 0.04 P, 0.05 S, 1.0-1.5 Ni, 0.45-0.75 Cr, bal. Fe							Heat treated automobile parts, shafts, axles, bolts, studs, steering knuckles	
3082	S.A.E. Steel No. 3130		0.28-0.33 C, 0.6-0.8 Mn, 0.04 P, 0.04 S, 1.1-1.4 Ni, 0.55-0.75 Cr, bal. Fe	Oil hardened	150000	125000	16	58	293	Heat treated automobile parts, gears, shafts, steering knuckles, studs, bolts	
					85000	58000	24	70	170		
3083	S.A.E. Steel No. 3135		0.33-0.38 C, 0.6-0.8 Mn, 0.04 P, 0.04 S, 1.1-1.4 Ni, 0.55-0.75 Cr, bal. Fe	Oil hardened	238000	205000	8	28	445	Heat treated automobile parts, gears, pinions, shafts, valves, flanges	Iz-5-97
					100000	80000	23	65	215		
3084	S.A.E. Steel No. 3140		0.38-0.43 C, 0.70-0.90 Mn, 0.04 P, 0.04 S, 1.1-1.4 Ni, 0.55-0.75 Cr, bal. Fe	Oil hardened	175000	152000	12	45	331	Gears, pinions, shafts, axles, crankshafts, power shovel parts	Iz-6-90
					112000	71000	20	64	217		
3085	S.A.E. Steel No. 3145		0.43-0.48 C, 0.70-0.90 Mn, 0.04 P, 0.04 S, 1.1-1.4 Ni, 0.55-0.75 Cr, bal. Fe	Oil hardened	252000	223000	8	23	490	Farm and road machinery parts, shovels, machine tool gears	Iz-4-87
					108000	90000	22	62	225		
3086	S.A.E. Steel No. 3150		0.48-0.53 C, 0.70-0.90 Mn, 0.04 P, 0.04 S, 1.1-1.4 Ni, 0.55-0.75 Cr, bal. Fe	Oil hardened	258000	230000	7	26	505	Farm and road machinery parts, shovels, machine tool gears	Iz-3-83
					112000	92000	20	62	235		
3087	S.A.E. Steel No. 3215		0.10-0.20 C, 0.3-0.6 Mn, 0.04 P, 0.045 S, 1.5-2.0 Ni, 0.9-1.25 Cr, bal. Fe	Oil hardened	156000	131000	20	54	311	Gears and structural parts	Case-hardening steel
					82000	54000	30	70	174		
3088	S.A.E. Steel No. 3220		0.15-0.25 C, 0.3-0.6 Mn, 0.04 P, 0.045 S, 1.5-2.0 Ni, 0.9-1.25 Cr, bal. Fe	Oil hardened	156000	131000	20	54	311	Gears and structural parts	Case-hardening steel
					82000	54000	30	70	174		
3089	S.A.E. Steel No. 3230		0.25-0.35 C, 0.3-0.6 Mn, 0.04 P, 0.045 S, 1.5-2.0 Ni 0.9-1.25 Cr, bal. Fe	Oil hardened	179000	153000	15	48	352	Heat treated machined and forged parts	For severe service
					98000	70000	28	68	201		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3090	S.A.E. Steel No. 3240		0.38-0.43 C, 0.4-0.6 Mn, 0.04 P, 0.040 S, 1.6-2.0 Ni, 0.9-1.20 Cr, bal. Fe	Oil hardened	202000 110000	180000 88000	15 22	44 65	388 229	Heat treated forgings and machined parts, drive and axle shafts, connecting rods, transmission gears	For severe service
3091	S.A.E. Steel No. 3245		0.40-0.50 C, 0.3-0.6 Mn, 0.04 P, 0.040 S, 1.6-2.0 Ni, 0.9-1.20 Cr, bal. Fe							Gears, clutches, drive and axle shafts, connecting rods, transmission gears	
3092	S.A.E. Steel No. 3250		0.45-0.55 C, 0.3-0.6 Mn, 0.04 P, 0.040 S, 1.6-2.0 Ni, 0.9-1.20 Cr, bal. Fe	Oil hardened	220000 119000	200000 97000	13 21	39 60	415 241	Transmission gears, drive and axle shafts, connecting rods, keys	
3093	S.A.E. Steel No. 3312		0.13 max. C, 0.4-0.6 Mn, 0.02 P, 0.02 S, 3.25-3.75 Ni, 1.4-1.75 Cr, bal. Fe	Oil hardened	215000 108000	178000 88000	13 23	32 73	405 210	Roller bearings, truck and bus gears	Case-hardening steel
3094	S.A.E. Steel No. 3325		0.2-0.3 C, 0.3-0.6 Mn, 0.04 P, 0.04 S, 3.25-3.75 Ni, 1.25-1.75 Cr, bal. Fe	Oil hardened	170000 110000	145000 92000	18 25	55 68	352 229	Heat treated forged and machined parts, oil pump gears, connecting rods, drive shafts	Resists severe dynamic stresses
3095	S.A.E. Steel No. 3335		0.3-0.4 C, 0.3-0.6 Mn, 0.04 P, 0.04 S, 3.25-3.75 Ni, 1.25-1.75 Cr, bal. Fe	Oil hardened	190000 118000	170000 100000	12 22	50 63	375 241	Heat treated forged and machined parts, oil pump gears, connecting rods, drive shafts	
3096	S.A.E. Steel No. 3340		0.35-0.45 C, 0.3-0.6 Mn, 0.04 P, 0.04 S, 3.25-3.75 Ni, 1.25-1.75 Cr, bal. Fe	Oil hardened	272000 135000	246000 118000	10 23	40 58	500 265	Oil pump gears, connecting rods, drive shafts, aircraft starter gears	Iz-10-70
3097	S.A.E. Steel No. 3415		0.10-0.20 C, 0.3-0.6 Mn, 0.04 P, 0.045 S, 2.75-3.25 Ni, 0.6-0.95 Cr, bal. Fe	Oil hardened	192000 102000	168000 85000	13 27	47 75	375 215	Gears, transmission units	Case-hardening steel
3099	S.A.E. Steel No. 3450		0.45-0.55 C, 0.3-0.6 Mn, 0.04 P, 0.045 S, 2.75-3.25 Ni, 0.6-0.95 Cr, bal. Fe	Oil hardened	200000 126000	175000 108000	13 21	52 62	375 269	Gears, heavy duty transmission units, machine tool gears	
3100	S.A.E. Steel No. 4130		0.28-0.33 C, 0.4-0.6 Mn, 0.04 P, 0.04 S, 0.8-1.1 Cr, 0.15-0.25 Mo, bal. Fe							Gears, shafts, machinery parts	
3101	S.A.E. Steel No. 4140		0.38-0.43 C, 0.7-1.0 Mn, 0.04 P, 0.04 S, 0.8-1.10 Cr, 0.15-0.25 Mo, bal. Fe	Oil treated	180000 110000	155000 85000	10 21	35 59	363 223	Gears, shafts, machinery parts	
3102	S.A.E. Steel No. 4150		0.46-0.53 C, 0.7-1.0 Mn, 0.04 P, 0.04 S, 0.8-1.1 Cr, 0.15-0.25 Mo, bal. Fe							Gears, shafts, machinery parts	
3103	S.A.E. Steel No. 4615		0.13-0.18 C, 0.4-0.6 Mn, 0.04 P, 0.04 Si, 1.6-2.0 Ni, 0.20-0.30 Mo, bal. Fe	Oil treated	150000 100000	107000 77000	18 30	52 73	290 210	Gears, pinions, roller bearings, wrist pins, piston pins, splined shafts	Case-hardening steel Iz-20-105
3104	S.A.E. Steel No. 5120		0.17-0.22 C, 0.7-0.9 Mn, 0.04 P, 0.04 S, 0.7-0.9 Cr, bal. Fe							Gears	Case-hardening steel
3105	S.A.E. Steel No. 5140		0.38-0.43 C, 0.7-0.8 Mn, 0.04 P, 0.04 S, 0.7-0.9 Cr, bal. Fe	Oil treated	180000 100000	160000 98000	13 21	42 62		Gears, clutches	
3106	S.A.E. Steel No. 5150		0.48-0.55 C, 0.7-0.9 Mn, 0.04 P, 0.04 S, 0.7-0.9 Cr, bal. Fe							Gears, clutches	
3107	S.A.E. Steel No. 52100		0.95-1.1 C, 0.3-0.5 Mn, 0.02 P, 0.025 S, 1.2-1.5 Cr, bal. Fe							Antifriction ball bearing balls and races, tools	
3108	S.A.E. Steel No. 6115		0.10-0.20 C, 0.3-0.6 Mn, 0.04 P, 0.045 S, 0.8-1.1 Cr, 0.15 V, bal. Fe							Gears, pinions, shafts	Case-hardening steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3109	S.A.E. Steel No. 6120		0.15-0.25 C, 0.3-0.6 Mn, 0.04 P, 0.045 S, 0.8-1.1 Cr, 0.15 V, bal. Fe							Gears, pinions, shafts	Case-hardening steel
3110	S.A.E. Steel No. 6125		0.2-0.3 C, 0.5-0.8 Mn, 0.04 P, 0.045 S, 0.8-1.1 Cr, 0.15 V, bal. Fe							Structural and machine parts	
3111	S.A.E. Steel No. 6130		0.25-0.35 C, 0.5-0.8 Mn, 0.04 P, 0.045 S, 0.8-1.1 Cr, 0.15 V, bal. Fe							Structural and machine parts	
3112	S.A.E. Steel No. 6135		0.30-0.40 C, 0.5-0.8 Mn, 0.04 P, 0.045 S, 0.8-1.1 Cr, 0.15 V, bal. Fe							Structural and machine parts	
3113	S.A.E. Steel No. 6140		0.35-0.45 C, 0.5-0.8 Mn, 0.04 P, 0.045 S, 0.8-1.1 Cr, 0.15 V, bal. Fe	*Oil treated* Annealed	*180000* 108000	*160000* 87000	*13* 21	*42* 62		*Structural and machine parts*	
3114	S.A.E. Steel No. 6145		0.40-0.50 C, 0.5-0.8 Mn, 0.04 P, 0.045 S, 0.8-1.1 Cr, 0.15 V, bal. Fe							Structural and machine parts	
3115	S.A.E. Steel No. 6150		0.48-0.55 C, 0.6-0.9 Mn, 0.04 P, 0.040 S, 0.8-1.1 Cr, 0.15 V, bal. Fe							Structural and machine parts	
3116	S.A.E. Steel No. 6195		0.90-1.05 C, 0.2-0.45 Mn, 0.03 P, 0.035 S, 0.8-1.1 Cr, 0.15 V, bal. Fe							Antifriction bearings, machine tool parts	
3117	S.A.E. Steel No. 7260		0.50-0.70 C, 0.3 Mn, 0.035 P, 0.04 S, 0.5-1.0 Cr, 1.5-2.0 W, bal. Fe							Tools, hacksaw blades	
3118	S.A.E. Steel No. 7360		0.5-0.7 C, 0.3 Mn, 0.035 P, 0.04 S, 3-4 Cr, 12-15 W, bal. Fe							Tools, hot work dies	
3119	S.A.E. Steel No. 71660		0.5-0.7 C, 0.3 Mn, 0.035 P, 0.04 S, 3-4 Cr, 15-18 W, bal. Fe							High speed tools	
3120	S.A.E. Steel No. 9250		0.45-0.55 C, 0.6-0.9 Mn, 0.045 P, 0.05 S, 1.8-2.2 Si, bal. Fe							Gears, springs	
3121	S.A.E. Steel No. 9260		0.55-0.65 C, 0.7-0.10 Mn, 0.040 P, -0.04 S, 1.8-2.2 Si, bal. Fe							Gears, springs	
3122	Sundeel		80 Au, 10 W, 7 Ni							Dental alloy	
3123	Schomberg Bearing		59 Zn, 40 Sn, 0.4 Cu, 0.2 Pb, 0.2 Fe							Bearings	
3124	Schulz Alloy		91 Zn, 6 Cu, 3 Al							Die castings, ornamental parts	
3125	Scovill Leaded Rod	M-102	61.5 Cu, .3 Pb, bal. Zn	Soft Hard	48000 90000	18000 88000	55 6			Screw machine parts	
3126	Screen Plates		58 Cu, 41 Zn, 0.75 Sn, 0.25 Pb							Screen plates	
3127	Screw Metal		60 Cu, 1.5 Pb, bal. Zn							Screws	
3128	Seamless Tubing		60-61.5 Cu, 38.5-40 Zn							Tubing	
3129a	Sea Water Alloy		17 Ni, 5 Mn, 0.7 C, bal. Fe							Marine construction	Stainless and corrosion resistant
3129b	Sea Water Alloy		1.2 Cr, 24 Ni, 0.6 Mn, 0.5 C, bal. Fe							Marine construction	Stainless and corrosion resistant
3130	Secretan		95-91 Cu, 9-5 Al, 1.5 Mg, 0.5 P							Strong corrosion resistant parts	
3131	Seifert		73 Sn, 21 Zn, 5 Pb, 0.5 P, 0.5 Sn							Ornaments, bearings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3132	Selva Metal		Zn, bal. Cu							Hardware	A high tension brass
3133	Semi-Steel		3.0-3.5 total C, 0.5-0.81 combined C, 1.4-1.8 Si, bal. Fe							Frames, housings, cast gears	
3134	Seventy-Thirty		70 Cu, 30 Ni							Turbine blades, condenser tubes	Corrosion resistant
3135	Sivyer High Silicon	M–288	0.12 C, 0.15 Mn, 1.75 Si, bal. Fe							Electrical equipment	
3136	Shakudo (Shakdo)	Jap.	96-94 Cu, 3.7-4.2 Au, 1.6-0.1 Ag, traces of Pb, Fe, As							Ornamental parts	Japanese alloy
3137	Sheffield Hard Alloy		46 Cu, 31 Sn, 20 Zn							Ornamental parts	
3138	Sheffield Nickel Silver		63-55 Cu, 17-37 Zn, 19-11 Ni, 0-3 Pb							Base for plated tableware	Nickel Silver
3139	Shemtschushny		1.3-4.45 Fe, 11.1-13.8 Mn, 86.8-84.2 Cu, 0.6-0.5 Si							Electrical resistances	Resistance alloy
3140a	Shibu-ichi	Jap.	67.3 Cu, 32.1 Ag, 0.5 Fe, trace Au							Ornaments	Japanese alloy
3140b	Shibu-ichi	Jap.	51.1 Cu, 48.9 Ag, 0.12 Au							Ornaments, jewelry	Japanese alloy
3141	Shiga White Gold		90-60 Au, 5-20 Ni, 5-20 Cr							Ornaments, jewelry	
3142	Ship Nail Alloy		50 Sn, 33 Pb, 17 Sb							Bearings	
3143	Ship Nail Brass		64 Cu, 25 Zn, 8.5 Pb, 2.5 Sn							Ship nails, hardware	
3144	Shoe Tip Metal		88 Cu, 12 Zn							Shoe tips	
3145	Show Case Metal		58-59.5 Cu, 24-22.5 Zn, 18-8 Ni							Show cases, architectural parts	
3146	Sibley Alloy		67 Al, 33 Zn							Strong light alloy parts	
3147	Sibley Casting Alloy		80 Al, 20 Zn							Strong light alloy castings	
3148a	Siemens-Halske	M–198	90-95 Ni, 5-10 Ta							Heat and corrosion resistant parts	Stainless and corrosion resisting
3148b	Siemens-Halske	M–198	70 Ni, 30 Ta							Spark plug electrodes	Stainless and corrosion resisting
3148c	Siemens-Halske	M–198	48 Zn, 5 Sb, 47 Cd							Solder	Stainless and corrosion resisting
3149	Silanca		92.5-94.5 Ag, 0-2.5 Zn, 4-4.5 Sb, 1-3 Cd							Silverware	
3150a	Silchrome		9.5 Cr, 4 Si, 0.5 C, bal. Fe							Heat and corrosion resisting parts	Heat resisting
3150b	Silchrome		64 Fe, 21 Ni, 6.2 Cr, 6.1 Si, 0.8 Mn, 0.14 C							Heat and corrosion resisting parts	Heat and corrosion resistant
3151	Silchrome Wire		18 Cr, 3 Si, 3 W, 0.3 C, bal. Fe							Heat and corrosion resisting wire	Heat and corrosion resistant
3152	Silico-Chromium Steel		9-12 Cr, 3-5 Si, 1-1.2 C, bal. Fe							Valves, heat resistant parts	Heat resistant
3153	Silico-Manganese Steel		0.45-15 Mn, 0.4-1.9 Si, 0.1-1.0 C, bal. Fe							Springs	
3154	B.A.-37	M–28	7.5-8.5 Cu, 1.5-2.5 Si, bal. Al	Cast	20000		1.5		75	Light alloy parts	Sand and Die castings
3155	Silicon-Ferrochrome		55-45 Cr, 30-50 Fe, 1-17 Si, 2.5-7 C		26000		3.0			For steel making	
3156	Silicon-Manganese		68 Mn, 20 Si, 11.6 Fe, 0.7 C							For steel making	
3157	Silicon-Nickel		80-40 Ni, 16-18 Si, 2.5-30 Fe								
3158	Silico-Spiegel		15-20 Mn, 8-15 Si, 0.15 P, C, bal. Fe							For steel making	
3159	Sil-man	M–34 M–115	0.55 C, 2.1 Si, 0.85 Mn, 0.25 Cr, 0.3 V, bal. Fe		205000	175000	8	16	400	Shock tools, punches, chisels, shear blades	Shock resisting tool steel. Silico-manganese steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3160	Silver, Coinage U.S.A.		90 Ag, 10 Cu							Coins	
3161a	Silver, Foil		90 Sn, 10 Zn							Foil for wrapping purposes	
3161b	Silver, Foil		98 Sn, 2 Cu							Foil for wrapping purposes	
3161c	Silver, Foil		91 Sn, 8.3 Zn, 0.4 Pb							Foil for wrapping purposes	
3162	Silver, Leaf		8.25 Zn, 91 Sn, 0.35 Pb							Foil for wrapping purposes	
3163	Anaconda 85	M–8	85 Cu, 15 Zn							Water pipes	For highly corrosive waters
3164	Silverine	M–452	80-71 Cu, 16-17 Ni, 1-8 Zn, 1-2.8 Sn, 1-2 Co, 1-1.5 Fe							Ornamental and sanitary fittings	
3165	Silverite		Cu, Ni							Corrosion resistant parts	Nickel Silver
3166a	Silver Metal		67 Zn, 33 Ag							Ornaments	
3166b	Silver Metal		53.3 Cu, 8.3 Zn, 31.6 Ni, 0.8 Fe, 1.2 Sn, 3.6 Pb, 0.3 Mn							Corrosion resistant parts	Corrosion resistant
3167	Silver Solders		32 Ag, 23 Cu, 17 Zn, 18 Cd							Solders, silver solders	
3168	Silvore		61.9 Cu, 19.5 Zn, 18.4 Ni, 0.3 Fe							Show cases and architectural trim	
3169	Simeteora		0.76 C, 0.17 Mn, 2.87 Cr, 16.86 W, bal. Fe							Tools	
3170	Similargent		Cu, Ni							White metal parts	Nickel Silver
3171	Similor		89-80 Cu, 9-20 Zn, 0-7 Sn							Hardware, pipe fittings	
3172	Sin-chu	Jap.	66.5 Cu, 33.4 Zn, 0.1 Fe								Japanese Brass
3173	Siserskite	Russ.	57 Os, 8 Ru, 34 Rh+Ir, Pt, Pd, Au, Cu							Fountain pen points	Natural Osmiridium mined in U.S.S.R.
3174	S-less Steel (Brearly)		13 Cr, 0.3 C, bal. Fe							Corrosion resisting parts	Corrosion resistant
3175	Smitter Lenian		72 Cu, 13 Ni, 9.8 Zn, 2.3 Sn, 2 Fe, 1 Bi							Corrosion resistant parts	
3176	S.M.L. Alloy (Monel)		68 Ni, 28 Cu, 2.5 Fe, 2.5 Mn							Parts requiring high corrosion resistance and strength at elevated temperatures	Corrosion resistant
3177	S.M.Steel, Carpenter		2 Si, 0.8 Mn, 0.5-0.6 C, bal. Fe							Machinery parts	
3178	Solder, A.S.T.M. Spec. B-32-31, Class A										
3178a	Grade 0		63 Sn, 37 Pb, 0-0.12 Sb, 0.08 Cu							Solder	
3178b	Grade 1		50 Sn, 50 Pb, 0-0.12 Sb, 0.08 Cu							Solder	
3178c	Grade 2		45 Sn, 55 Pb, 0-0.12 Sb, 0.08 Cu							Solder	
3178d	Grade 3		40 Sn, 60 Pb, 0-0.12 Sb, 0.08 Cu							Solder	
3178e	Grade 4		37.5 Sn, 62.5 Pb, 0-0.12 Sb, 0.08 Cu							Solder	
3178f	Grade 5		33 Sn, 67 Pb, 0-0.12 Sb, 0.08 Cu							Solder	
3179	Solder, A.S.T.M. Spec. B-32-31, Class B										
3179a	Grade 1		49.25 Sn, 50 Pb, 0-0.75 Sb, 0-0.15 Cu							Solder	
3179b	Grade 2		43.5 Sn, 55 Pb, 0-1.5 Sb, 0-0.15 Cu							Solder	
3179c	Grade 3		38 Sn, 60 Pb, 0-2 Sb, 0-0.15 Cu							Solder	
3179d	Grade 4		35.5 Sn, 62.5 Pb, 0-2 Sb, 0-0.15 Cu							Solder	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3179e	Grade 5		31 Sn, 67 Pb, 0-2 Sb, 0-0.15 Cu							Solder	
3180	Solder, Half and Half		50 Pb, 50 Sn							Solder	
3181	Solder, Silver (U.S.Bur.Stds.)		40 Ag, 40 Sn, 14 Cu, 6 Zn							Silver solder	
3182	Sondermessing		Cu, alloy, bal. Zn							Nuts, bolts, hardware	Special alloy high tensile brass
3183a	Sorel's Alloy		80 Zn, 10 Cu, 10 Fe							Bearings	
3183b	Sorel's Alloy		98 Zn, 1 Cu, 1 Fe							Bearings	
3184	Spelter Wire		64 Cu, 36 Zn, 0.4 Pb, 0.2 Fe							Brazing	
3185	Spianter		90 Zn, 8 Sb, 2 Cu							Bearings	Hard zinc
3186	B.A.-23	M-28	1.0-1.5 Mg, .5-.75 Si, bal. Al	Cast	15000 22000		5 20		50	Electrical fittings, architectural purposes	Sand or die cast
3187	Spinning Silver		67 Cu, 17 Zn, 16 Ni							Spoons, forks, knives	Spun and drawn
3188	Spoon Metal		Cu, Ni							Spoons	Nickel Silver
3189	Spring Gold		50 Cu, 25 Au, 25 Ag							Jewelry, dental applications	
3190	Spring Silver		54.6 Cu, 27.3 Zn, 18 Ni							Corrosion resistant springs	Corrosion resistant
3191	Spring Steel		0.9-1.1 C, 0.4-0.8 Mn, bal. Fe							Springs	
3192	Standard Gold (Great Britain)		92 Au, 8 Cu							Coinage	
3193	Standard Gold (U.S.A.)		90 Au, 10 Cu							Money, jewelry	
3194	Standard No. 4 Babbitt Metal	M-428		At 70°F. At 212°F.					14.3 6.4	Bearings	M.P.-476.8°F.
3195	Standard Silver		92.5 Ag, 7.5 Cu							Coinage	
3196	Standard Silver, Sterling		90 Ag, 10 Cu							Cutlery, ornaments, utensils	
3197a	Stanniol		96 Sn, 2.4 Pb, 1 Cu, 0.3 Ni, 0.1 Fe							Bearings, wrapping foil	
3197b	Stanniol		98.9 Sn, 0.7 Pb, 0.33 Cu							Bearings, wrapping foil	
3198a	Stereotype Metal		60 Sn, 35 Pb, 5 Sb							Type metal	
3198b	Stereotype Metal		82 Pb, 14.8 Sb, 3.2 Sn		12000		4		22	Type metal	M.P.-468°F.
3198c	Stereotype Metal		82 Pb, 6 Sn, 12 Sb							Type	
3198d	Stereotype Metal		76 Pb, 4 Sn, 20 Sb							Type	
3198e	Stereotype Metal		70 Pb, 7 Sn, 23 Sb							Type	
3198f	Stereotype Metal		67 Pb, 17 Sn, 16 Sb							Type	
3199	Sterlin		69 Cu, 18 Ni, 13 Zn, 0.8 Pb							Base for plated tableware	
3200	Sterline		68-68.5 Cu, 13.3-12.8 Zn, 18 Ni, 0.75-0.80 Fe, 0-0.8 Pb							Tableware, architectural trim	
3201	Sterling Metal		66 Cu, 33-27 Zn, 0.7 Fe, 0-2 Pb, Sn							Hardware, fittings	
3202	Sterling Silver Solder		80 Ag, 18 Zn, 2.5 Cu							Silver solder	
3203	Stirling, Cast		66.2 Cu, 33.11 Zn, 0.02 Pb, 0.66 Fe							Hardware	
3204	Stitching Wire		74.5 Ni, 18 Cr, 7.5 Mn							Electrical resistances	Resistance alloy
3205	Stovall		72 Au, 16.5 Cu, 2 Pt, 13.5 Ni							Dental alloy	
3206	Suhler-White Copper		40 Cu, 32 Ni, 25 Zn, 2.6 Pb							Ornamental parts	Corrosion resistant
3207	Substitute		90 Cu, 6.5 Sn, 3 Zn, 0.5 Pb								
3208	Superior		19.5 Cr, 0.5 Fe, 2.0 Mn, bal. Ni							Resistances	Resistance alloy
3209	Super Steel	M-275	.8 C, 19 W, 4 Cr, 2 V, .7 Mo, bal. Fe							Cutting tools for real hard metal	High speed steel
3210	Superior Tool Steel	M-81	.9 C, .4 Mn, 3 Si, bal. Fe							Chisels, trimming dies, punches, general tools	Water hardening

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3211	Susini		1.5-4.5 Cu, 1-8 Mn, 0.5-1.5 Zn, bal. Al							Light alloy parts	
3212a	Talmi Gold		90 Cu, 8.9 Zn, 0.9 Au							Cheap jewelry	Au welded on by rolling
3212b	Talmi Gold		86 Cu, 12 Zn, 1.1 Sn, 0.3 Fe							Hardware, cheap jewelry	
3213	Tandem		78 Pb, 17 Sb, 5.9 Sn							Bearings	
3214	Tarnac		Cu, Mn, Ni							Electrical instruments	v. "Manganin"
3215	Taylor-White		8.5 W, 3 Cr, 0.75-1.0 C, bal. Fe							Tools, dies, cutters	Semi high speed steel
3216	Tea Lead		98 Pb, 2 Sn							Lead foil for packing tea	
3217	Tenax Metal		4.2-4.6 Al, 2.2-3.0 Cu, >1.2 Pb, >0.35 Fe, bal. Zn							Solder for aluminum ware	
3218	Tensilia		0.48 C, 0.51 Mn, 0.18 V, bal. Fe							Tools, gears, pinions, shafts	
3219	Therlo		85 Cu, 13 Mn, 2 Al							Electrical resistors	
3220	Three-Twenty		77 Al, 20 Zn, 3 Cu							Light alloy parts	
3221	Tibon	M-294	C, bal. Fe							Die blocks	
3222	Tico		27.5-30.4 Ni, 1.12 Mn, 1.1 Cu, bal. Fe							Electrical resistances	Resistance alloy
3223	Tiers Argent		66 Al, 33 Ag							Ornamental parts	
3224	Tifico	M-294	C, alloy, bal. Fe							Engine crankshaft, die blocks, marine service parts	
3225	Tiloy	M-294	Cr, Mo, C, bal. Fe							Die blocks	
3226	Tin Foil		88 Sn, 8 Pb, 4 Cu, 0.5 Sb							Bearings, packing foil	
3227	Tinite	M-123	Pb, Sb, bal. Sn							Bearings	Hard and tough without being brittle
3228	Tinman's Solder		66.5 Sn, 33.5 Pb							Solder	
3229	Tinsel		60 Sn, 40 Pb							Tinsel for decorative purposes	
3230	Titanium Steel		0.3-9.0 Ti, 0.1-0.8 C, bal. Fe, Mn, Si, P, S							Machinery parts, tools	
3231	Titem	M-294	Cr, Mo, C, bal. Fe							Die blocks	Easy to machine
3232	Tivan	M-294	C, alloy, bal. Fe							Fishing tools, fish tail bits	
3233	"T" Metal		0.1 Cu, 3.8 Mg, 0.5 Fe, 0.5 Si, bal. Al							Light alloy forgings	
3234	Toledo	M-352	1.47 C, 0.48 Mn, 4.16 W, bal. Fe							Tools, dies	
3235	Toucas (Toncas)		36 Cu, 29 Ni, 7.1 Fe, 7.1 Pb, 7.1 Sn, 7.1 Sb, 7.1 Zn							Ornamental white metal parts	
3236	Tournn Leonard's Metal		90 Sn, 10 Cu							Bearings	
3237	Trojan Babbitt Metal	M-428	Sb, Sn, Pb	At 70°F. At 212°F.					27.4 11.2	Bearings	Babbitt M.P.-386.6°F.
3238	Tula		Ag with a small amount of Cu and Pb							Jewelry, silverware	
3239	Tungo	M-34	0.5 C, 2 W, 1.65 Cr, 0.25 V, bal. Fe		180000	160000	12	45	400	Punches, chisels, shear blades	Tough
3240	Tungsten Filaments		0.5-0.75 ThO_2, bal. W							Electric light bulbs	
3241	Tungsten Steel		1.7-2.2 W, 0.3-0.45 C, Mn, Si, S, P, bal. Fe							Machinery parts, dies, tools	
3242a	Turbine Blading		82.1 Cu, 14.7 Ni, 2.5 Al, 0.7 Zn, 0.04 Si							Turbine blades	
3242b	Turbine Blading		78-81 Cu, 21-19 Ni, 0.75 max. Fe							Turbine blades	
3243a	Turning		58.5 Cu, 29 Zn, 12 Ni, 0-5 Pb							White metal parts	Corrosion resistant
3243b	Turning		65 Cu, 22 Zn, 12 Ni, 1 Pb							White metal parts	Corrosion resistant
3244	Tutania, Cast		92 Sn, 4.7 Sb, 2.5 Cu, 0.3 Pb							Bearings, table & kitchenware	

Serial No.	Alloy	Mfg. No	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3245	Tutania, Plate		91-90 Sn, 8-6 Pb, 0.7-2.7 Cu, 0.3-1.3 Zn							Household ware, platters, dishes	
3246	Tutania, English		80 Sn, 16 Sb, 2.7 Cu, 1.3 Zn							Dishes, ornamental pieces	
3247	Tutenag		Commercial Zn							Roofing, alloying	
3248	Two-to-One		66.7 Cu, 33.3 Zn							Drawn or spun brass parts	
3249	Typewriter Metal		57 Cu, 20 Ni, 20 Zn, 3 Al							Typewriter parts	
3250	Udylite		Cd plating							Cadmium plating	Patented process
3251	Ulcony		65 Cu, 35 Pb							Heavy duty bearings	
3252	Ultra-Capital Steel	M-350	17 W, 3.4 Cr, 0.1 V, 0.7 C, bal. Fe							Turning tools and cutters	High speed steel
3253	Unmagnetizable Watch Wheels		62.75 Pt, 18 Ni, 18 Cu, 1.25 Cd							Watch wheels	
3254	Uranium Steels		3 U, 0.2-0.7 C, Mn, Si, V, bal. Fe							Machinery parts	
3255	Va-Alloy		80.2 Al, 5.01 Cu, 13.7 Zn, 0.72 Fe, 0.2 V,							Light alloy parts	
3256	Valve Steels		5.8 Si, 1.5 Ti, 1.5 V, bal. Fe							Valves	
3257	Vanadium Steel		0.1-14.0 V, 0.1-1.3 C, Mn, Si, P, S, bal. Fe							Machinery parts, tools, dies, gears	Depending on temper. MP-76
3258	Van Allen		64 Au, 18.75 Ag, 9 Cu, 8 Pd 0.25 Al							Dental alloy	
3259	Vaucher's Alloy		75 Zn, 18 Sn, 4.5 Pb, 2.5 Sb							Bearings	
3260	Vestalin		28 Ni, C, bal. Fe							Electrical resistances	Resistance alloy
3261	Victoria Aluminum		Cu, Zn, Si, Fe, bal. Al							Light alloy parts	v. "Partinium"
3262	Viennese Ornaments		55 Cu, 25 Zn, 20 Ni							Brass ornaments	
3263	Viennese Sheet		60 Cu, 20 Zn, 20 Ni							Ornaments, hardware	
3264	Virginia Steel		C, bal. Fe							Construction work	
3265	"V.M." Steel		0.7-1 Cr, 0.35-0.85 Mo, 0.17 V, 0.4-0.6 Mn, bal. Fe							Gears, shafts, blacksmith tools	
3266	Volomit		WC+MoC							Cutting tools, dies	Similar to "Stellite"
3267	Vulcan Auto Steel	M-274	.5 C, Cr, V, bal. Fe							Drive shafts, spindles, structural parts	
3268	Vulcan Extra Chrome Steel	M-274	C, bal. Fe							Compression rivet dies, hot gripper dies	For hot work
3269	Vulcan Hardrite	M-275	1.1 C, 1.7 W, .6 Cr, .25 V, bal. Fe							Light and heavy press dies, punches, taps, reamers, thread rolling dies	Non-shrinkable
3270	Vulcan Hecla	M-275	Cr, V, C, bal. Fe							Arbors, spindles, gears, drop hammer, clutches, leaf springs, piston rods	Resists vibration and shock
3271	Vulcan Hi-Pro	M-275	2.2 C, 12 Cr, bal. Fe							Blanking and deep drawing dies, punches, trimming dies, shear blades, ring gages	High resistance to wear and abrasion
3272	Vulcan "K.R."	M-275	C, Cr, bal. Fe							Brake drum drawing dies, automobile rim rolls, dies and punches for deep drawing steel	Wear and abrasion resistant
3273	Vulcan Metal		80.5 Cu, 11.7 Al, 4.4 Fe, 0.25 Zn, 1.5 Ni, 0.7 Sn, 0.7 Cr							Corrosion resistant structural parts	Corrosion resistant
3274	Vulcan Non-Shrinkable	M-275	.9 C, 1.6 Mn, .3 Cr, bal. Fe							Plug and ring gages, intricate dies	Non-shrinking and non-deforming oil hardening
3275	Vulcan Special Vanadium	M-275	.7-1.6 C, .3 V, bal. Fe							Taps, blanking dies, cold heading dies, reamers, chisels, shear blades, pneumatic rivet sets	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3276	W-0.33		85 Al, 14 Cu, 1 Mn							Pistons, light alloy castings	
3277	Wagners Formula		50-66 Cu, 19-31 Zn, 13-18 Ni							Base for plated table ware	
3278	W-Alloy		82 Al, 12 Cu, 4.5 Zn, 1 W							Light alloy castings	Leak proof, hard
3279	Walramite		Tungsten carbide W_2C + W C							Cutting tools, dies	
3280a	Ziskon		60 Al, 40 Zn							Light alloy parts	
3280b	Ziskon		25-33 Al, 75-67 Zn							Castings	
3281a	Watch Alloy		70 Pd, 25 Cu, 4 Ag, 1 Ni							Watch cases	
3281b	Watch Alloy		50 Cu, 47.2 Ni, 2.8 Cd							Watch cases	
3281c	Watch Alloy		37.5 Au, 27 Cu, 23 Ag, 12.5 Pd							Watch cases	
3282	Watch Case Bezels		60-63 Cu, 24-21 Zn, 16 Ni							Watch case bezel	
3283	Watch Case Metal		55-65 Cu, 30-16 Zn, 10-28 Ni							Watch cases	
3284	Watchmakers Alloy		59 Cu, 40 Zn, 1.2 Pb							Watch parts	
3285	Wagner & Guhrs Aluminum		80 Sn, 20 Zn							Aluminum solder	
3286	Weiger		77-80 Ag, 18-20 Cu, 2-5 Pt							Silver solder	
3287	Weights		90 Cu, 8 Sn, 2 Zn							Weights	
3288	Welch's Alloy		52 Sn, 48 Ag							Dental alloy, solder	
3289	Wessel's Silver		66-51 Cu, 19-32 Ni, 12.5-17 Zn, 0-0.5 Fe, 0-2 Ag							Ornamental parts, architectural trim	
3290	Wheel Brand Babbitt		83 Sn, 14 Sb, 3 Cu							Bearings	
3291	Whistle, Lafond's		80-81 Cu, 17-18 Sn, 0-2 Zn, 0-2 Sb							Steam whistles	
3292a	White Alloy		64.5 Cu, 32 Sn, 3.5 As							Metallic mirrors	
3292b	White Alloy		53-49 Cu, 23-25 Zn, 22-25 Ni, 2-2.4 Fe							Corrosion resistant white metal parts	Corrosion resistant
3293	White Benedict		60.4 Cu, 18.1 Zn, 16.4 Ni, 0.7 Sn, 4.4 Pb							Restaurant white metal ware	
3294	White Button Alloy		48.8-53 Cu, 24.4-23.0 Zn, 24.4-22 Ni, 2.4-2.0 Fe							White buttons	
3295	White Copper		70 Cu, 18 Zn, 12 Ni							Corrosion resistant white metal parts	Corrosion resistant
3296a	White Gold		90 Au, 10 Pd							Jewelry	
3296b	White Gold		85-75 Au, 10-8 Ni, 2-9 Zn							Jewelry	
3297	White Gold Solders 10 Carat		30 Au, 55 Ag, 1 Cu, 12 Zn, 2 Cd							Gold solders	
3298	White Label Styrian	M–651	0.77 C, 0.17 Mn, 4.34 Cr, 20.7 W, bal. Fe							Tools	
3299	White Label Styrian New Rapid	M–651	0.70 C, 0.14 Mn, 4.63 Cr, 15.42 W, 1.0 V, bal. Fe							Tools	
3300	Whiteley		45-55 Au, 30-35 Pd, 15-20 Pt							Dental alloy	
3301a	White Metal		77 Pb, 15 Sb, 5 Sn, 2.3 Cu							Bearings	
3301b	White Metal		53-59 Sn, 33-34 Pb, 11-14 Sb, 2.4-3.3 Cu, 0-1 Zn							Bearings	
3302	Illinois Nickel Steel Plates	M–240	0.3-0.4 C, 3.5 Ni, bal. Fe	Hot rolled	85000 100000	50000 60000	18	25		Dredging cranes, motor truck frames, elevators, power shovels	
3303	White Nickel Alloy		65 Cu, 32.25 Ni, 2.75 Al							Strong heat and corrosion resistant parts	Corrosion resistant
3304	Wilmott's Aluminum		86 Sn, 14 Bi							Aluminum solder	
3305	Winchester Drawing Die		1.54 C, 0.25 Mn, 5.11 W, bal. Fe							Tools	
3306	Winn's Superheat		62 Cu, 35 Zn, 2 Sn, 0.4 Pb, 0.13 As, 0.2 Fe							Valves, fittings for superheated steam	
3307	Bethlehem No. 5 Nickel Steel	M–24	C, 30 Ni, bal. Fe							Heat and corrosion resisting parts, resistance parts	Heat and corrosion resistant
3308	Wire, Augsburg		71.89 Cu, 27.33 Zn, 0.85 Pb							Screens, pins	
3309	Wire, Common		65.4 Cu, 34.6 Zn							Pins, wire parts	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3310	Wire, English		70.29 Cu, 29.36 Zn, 0.28 Sn, 0.17 Pb							Brass pins	
3311	Silcrome CC	M-76	0.12 max. C, 13 Cr, 1 Si, 1 Cu, bal. Fe							Stainless parts	Stainless. Discontinued
3312	Selflube Bronze	M-989	90 Cu, 10 Sn	Cast	14000					Bearings	Sintered
3313	Corrix Metal	Ger.	88.1 Cu, 8.7 Al, 3.2 Fe	Cast	78000		30			Worm wheels, gears, marine and mining applications	Corrosion resistant to acids and alkalis
					90000		20	30			
3314	Zelco		83 Zn, 15 Al, 2 Cu							Aluminum solder	
3315	Zenith High Speed		0.61 C, 0.12 Mn, 3.39 Cr, 19.2 W, bal. Fe							Tools, high speed cutting tools	High speed steel
3316a	Zeppelin Alloys		94.58 Al, 4.16 Cu, 0.62 Mn, 0.42 Fe, 0.52 Si							Rods for zeppelin construction	Light alloy
3316b	Zeppelin Alloys		99.1 Al, 0.96 Cu, 0.13 Zn, 0.38 Fe, 0.36 Si							Braces for zeppelin construction	Light alloy
3316c	Zeppelin Alloys		88.68 Al, 0.7 Cu, 9.1 Zn, 0.45 Mn, 0.43 Fe, 0.49 Si, 0.15 Sn							Channels for zeppelin construction	Light alloy
3316d	Zeppelin Alloys		90.27 Al, 0.73 Cu, 7.8 Zn, 0.27 Mn, 0.45 Fe, 0.37 Si, 0.11 Sn							Alloys for zeppelin construction	Light alloy
3317	Zinc Babbitt		69 Zn, 26 Sn, 5 Cu, 3 Sb							Bearings	
3318	Zinc Duralumin ("E" Alloy)		20 Zn, 2.5 Cu, 0.5 Mg, 0.5 Mn, bal. Al							Strong light alloy parts	
3319	Zinkalium		0.8-8.3 Mg, 0.8-8.3 Zn, bal. Al							Light alloy parts	
3320	Zirconium Steel		0.1-0.6 Zr, 0.2-0.6 C, Mn, Si, P, S, bal. Fe							Machinery parts, shafts	
3321	Zisium		82-83 Al, 1-3 Cu, 15 Zn, 0-1 Sn							Strong light alloy parts	
3322	Hioloy-0-2	M-95	0.20-0.35 C, 0.30-0.55 Si, 0.60-0.90 Mn, 0.4-0.6 Mo, bal. Fe		85000	55000	20	30		Oil Refinery equipment	
3323	Hioloy-0-4	M-95	0.15-0.35 C, 0.30-0.55 Si, 0.4-0.7 Mn, 4-6 Cr, 0.4-0.65 Mo, bal. Fe		110000	75000	16	30		Oil Refinery equipment	Corrosion resistant
3324	Hioloy-0-7	M-95	0.20-0.35 C, 0.5-0.8 Mn, 1.75-2.25 Ni, 0.6-0.9 Cr, 0.2-0.3 Mo, bal. Fe		100000	65000	18	30		Oil Refinery equipment	
3325	Lubrico No. 2	M-256	70-75 Cu, 20-22 Pb, 5-10 Sn, Ni							Bearings and bushings	
3326	Lubrico No. 3	M-256	70-75 Cu, 20-22 Pb, 5-10 Sn, Ni							Bearings and bushings	
3327	Midcyl	M-185	C, bal Fe							Cylinder liners	Centrifugally cast
3328	Univan "C"	M-112	C, Mn, V, bal. Fe	Heat treated	85000	55000	22	40		General castings	Tough
3329	Kreidlers Brass "Ms 58"	M-324	58 Cu, 2.5 Pb, bal. Zn	Annealed	54000		25			Screws, instruments, structural parts, armatures, knives, locks	
				Hard	89000		13				
3330	Kreidlers Brass "Ms 63"	M-324	63 Cu, 27 Zn	Annealed	41000		45			Tubes, apparatus	
				Hard	59000		18				
3331	Scleron	M-116	Al alloy	Heat treated	58000	42000	15		100	Small structural parts	Age-Hardening
3332	A.B.C.	M-40	0.4 C, 0.5 W, 0.25 Cr, 0.3 Si, 0.5 Mn, bal. Fe	Air harden	72000	50000	10		135	General tools, chisels, hammers, drills, gears	Tough and hard
3333	Admiralty Bronze Modified	M-126	86 Cu, 8 Sn, 2 Pb, 4 Zn							Valves, fittings	
3334	Admiralty Nickel	M-126	70 Cu, 29 Zn, 1 Ni							Condenser tubes	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3335	Alpro No. 4	M-126								Yellow brass fluidizer	Contains small amount of Al
3336	Alpro No. 11	M-126								Deoxidizer for Cu	
3337	Alpro No. 15	M-126								Ni degasifying alloy	
3338	Alpro No. 19 AX	M-126	30 Mn, 70 Cu, C-free							For adding Mn to alloys	
3339	Alpro No. 19 AZ	M-126	30 Mn, 70 Cu, C-free							For adding Mn to alloys	
3340	Alpro No. 19 BX	M-126	30 Mn, 0.15 max. C, 2.5 Fe, bal. Cu							For adding Mn to alloys	
3341	Alpro No. 19 CX	M-126	30 Mn, 0.25 max. C, 4.5 max. Fe, bal. Cu							For adding Mn to alloys	
3342	Alpro No. 31	M-126	75 Al, 25 Mn							For adding Mn to alloys	
3343	Alpro No. 34	M-126	20 Ni, 80 Al							Hardeners for Ni-Al alloys	
3344	Alpro No. 39	M-126	10 Fe, 90 Al							For adding Fe in Al alloys	
3345	Alpro No. 40	M-126	25 Ni, 25 Cu, 50 Al							Hardeners for Ni-Al alloys	
3346	Alpro No. 41	M-126	25 Ni, 25 Mn, 50 Al							Hardeners for Ni-Al alloys	
3347	Alpro No. 42	M-126	25 Ni, 25 Sn, 50 Al							Hardeners for Ni-Al alloys	
3348	Alpro No. 44	M-126	25 Cu, 50 Al, 25 Mn							For adding Mn to alloys	
3349	Alpro No. 46	M-126	25 Fe, 50 Al, 25 Mn							For adding Mn to alloys	
3350	Alpro No. 50 B	M-126	50 Ni, 50 Cu							Used for addition of Ni to bronzes	
3351	Alpro No. 55	M-126								Deoxidizer of Cu alloys	Red composition deoxidizing alloy
3352	Alpro No. 126 A	M-126								Hardener of Al bronzes	
3353	Alpro No. 126 C	M-126								Hardener of Al bronzes	
3354	Alpro No. 126 D	M-126								Hardener of Al bronzes	
3355	Alpro No. 139	M-126	20 Fe, 80 Al							For adding Fe to Al alloys	
3356	Alpro No. 140	M-126	20 Ni, 40 Cu, 40 Al								
3357	Alpro No. 143	M-126	40 Ni, 20 Cu, 40 Al							Hardener for Ni-Al alloys	
3358	Alpro No. 158	M-126	50 Ni, 50 Mn							For adding Mn to alloys	
3359	Alpro No. 304	M-126	2 Si, 8 Cu, bal. Al								
3360	Alpro No. 306	M-126	4 Si, 6 Cu, bal. Al								
3361	Alpro No. 312	M-126	2 Si, 8 Cu, 2 Zn, bal. Al								
3362	Alpro No. 314	M-126	4 Si, 6 Cu, bal. Al								
3363	Alpro No. 316	M-126	4 Si, 4 Cu, bal. Al								
3364	Alpro No. 317	M-126	2 Si, 6 Cu, bal. Al								
3365	Alpro No. 335	M-126	4.5-5.5 Si, 0.75 max Fe, bal. Al		19000 21000		4 3		37	Marine parts	Cast alloy
3366	Alpro No. 338	M-126	11-13.5 Si, 0.8 max. Fe, bal. Al		25000 27500		7 6		45		Cast alloy
3367	Alpro No. 351	M-126	5 Si, bal. Al								
3368	Alpro No. 352	M-126	12 Si, bal. Al								
3369	Alpro No. 360	M-126	2 Ni, 6 Cu, bal. Al								
3370	Alpro No. 361	M-126	2 Ni, 6 Cu, 2 Si, bal. Al								
3371	Alpro No. 363	M-126	2 Ni, 5 Cu, 2 Si, 91 Al								
3372	Alpro No. 364	M-126	2 Ni, 4 Cu, 4 Si, 90 Al								
3373	Alpro No. 365	M-126	3 Ni, 5 Cu, 2 Si, 90 Al								
3374	Alpro No. 370	M-126	4 Cu, 2 Ni, 1.5 Mg, 92.5 Al	At 68°F. At 482°F.	29000 25500					Aeronautical parts	Similar to "Y" alloy
3375	Alpro No. 371	M-126	2 Cu, 1.5 Ni, 1 Mg, 0.6 Si, 94.9 Al							Pistons	Similar to "Magnalite"
3376	Alpro No. 385	M-126	6.5 Cu, 1.5 Ni, 0.1 Cr, 0.5 Mg, 0.5 Mn, 90.9 Al								Modified Duralumin
3377	Aluminum Titanium Bronze		90-89 Cu, 9-10 Al, 1 Fe, Ti								
3378	Athos		22 Ni, 8 Cr, 1.75 Si, 1.0 Cu, 0.7 Mn, >0.5 C, bal. Fe								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3379	Austrian (Gersdorf)		60-50 Cu, 20-25 Zn, 20-25 Ni								German silver
3380	Bell Brass		64 Cu, 35 Zn, 0.85 Sn							Bells	
3381	Brazing Brass		80-75 Cu, 20-25 Zn							Brazing	
3382	Brazing Solder		57-45 Zn, 35-45 Cu, 8-10 Ni							Solders	
3383	Bristol		60.8-75.7 Cu, 24.3-39.2 Zn							Hardware, clocks	
3384	Can Metals	Ger.	95 Pb, 1.75 Ca, 1.35 Cu, 1 Sr, 1 Ba							Bearings	
3385	Carbobronze		92 Cu, 8 Sn, 0.3 P							Tubing	Resists acid and alkalis
3386	Chinese		40 Cu, 32 Ni, 25 Zn, 2.6 Fe							Decorative parts	
3387	Chromnickel	M-297	20 Cr, 77 Ni, 2 Mn							For heating resistances up to 1100°C.	
3388	Chronin		83.7 Ni, 14.7 Cr							Resistance alloy	
3389	Chronin "85"	M-303	13 Cr, 85 Ni, bal. Cu, Fe, Mn, Al impurities	Annealed	100800		30			Electric resistances, resistors, thermocouple element against Ni	Heat resistant to 1200°C.
3390	Chronin "100"	M-303	18 Cr, 80 Ni, bal. Cu, Fe, Mn, Al	Annealed	117000		30			Electric resistances, resistors, thermocouple element	Heat resistant to 1200°C.
3391	Cimet, cast	M-44	26-28 Cr, 10-12 Ni, bal. Fe							Pumps, screens, valves, furnace parts, mining machinery	Corrosion resistant to acid mine waters and many chemicals
3392	Clinching Screw Wire		69 Cu, 29.5 Zn, 1.5 Pb							Brass screws	
3393	Clunise		40 Cu, 32 Ni, 25 Zn, 2.6 Fe							Decorative parts	
3394	Colonial High Speed	M-34	0.52 C, 0.28 Mn, 3.8 Cr, 18.25 W, 0.24 V, bal. Fe							High speed cutting tools	High speed steel
3395	Commercial Bronze Rod		86 Cu, 12.75 Zn, 0.75 Pb, 0.5 Sn	Hard Soft	65000 37000	45000 11000	4 40		127 50	Hardware, tubing, screens, cheap jewelry, radio parts	
3396	Commercial Castings B.C.		62 Cu, 30 Zn, 6 Sn, 2 Pb							Name plates, oil cups, instrument cases	
3397	Common Formula		55 Cu, 25 Zn, 20 Ni							Electrical resistance	German silver
3398	Cooper's Specalum		57.8 Cu, 27.3 Sn, 3.6 Zn, 1.2 As, 10 Pt							Mirrors, reflectors	
3399	Copper-Nickel		Cu, Ni							Hardware	See "Cupronickel"
3400	Cronit		60 Ni, 40 Cr							Resistance alloy	
3401	Deoxoloy	M-126								General brass and bronze deoxidizer	
3402	Duralumin, Imitation		79 Al, 11 Mg, 10 Cu, 0.05 P							Light alloy parts	
3403	Manganoid	M-170	High C, Mn, Si, bal. Fe							Grinding balls for crushers, grinders and pulverizers	Discontinued
3404	E.F.A. "A.T.V."		13.4 Cr, 22.6 Ni, 3.3 W, 1.5 Mn, 1.8 Si, bal. Fe							Heat and corrosion resisting parts	Stainless and corrosion resistant
3405	Evansteel "0"	M-146	C, bal. Fe		140000	120000	14			Tractors	Discontinued
3406	Expanded Metal		low C, bal. Fe							Reinforced concrete or plaster walls	Low carbon steel mesh
3407	File Metal (Genfer)		64.4-62 Cu, 18-20 Sn, 10 Zn, 7 6 8 Pb							Nail file	
3408	File Metal (Vogel)		51-73 Cu, 19-28.5 Sn, 0-7 Zn, 7-8.5 Pb							Nail file	
3409	Firinit	M-381								Welding and soldering rods	
3410	Firth	M-56	1.05 C, 0.22 Mn, bal. Fe							Tools, dies	
3411	French	Fren.	50 Cu, 31 Zn, 18 Ni							Ornamental parts, fittings	
3412	Frigidal	M-303	35 Ni, low Cr, bal. Fe		86000		32			Electric resistances	Coef. exp.-(0-40°C.)=0.0000014
3413	Frontier Alloy No. 1	M-58	90 Cu, 10 Al		65000 80000	22000 26000	15 25		120 130	Worm gears	Iz-20-30 Discontinued

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3414	Frontier Alloy No. 3	M–58	88.5 Cu, 11 Sn, 0.25 Pb, 0.25 P		35000	20000	6		67	Worm gears, bearings	Iz-2-10
					40000	25000	10		85		
3415	Frontier Alloy No. 6	M–58	86 Cu, 9.5 Sn, 2.5 Pb, 2 Sn		30000	18000	15		55	General utility bearing bronze	Iz-8-10
					45000	20000	20		70		
3416	Frontier Alloy No. 7	M–58	79.5 Cu, 11 Al, 6 Fe, 3.5 Mn		70000	35000	3		150	Paper mill machinery and valve seats	Iz-3-5
					80000	45000	5		170		
3417	Frontier Alloy No. 8	M–58	83.5 Cu, 10 Sn, 2.5 Pb, 3.5 Ni, 0.5 P		35000	25000	10		80	Heavy duty bearings, worm gears, lead screws	High strength bearing Iz-3-5
					45000	28000	15		93		
3419	Frontier Alloy No. 9	M–58	90 Cu, 10 Sn		30000	15000	10		63	Acid resisting work	Iz-3-10
					35000	20000	15		70		
3419	Frontier Alloy No. 10	M–58	88 Cu, 10 Sn, 2 Zn		30000	18000	15		65	Bearings, screw down nuts, worm gears, hydraulic castings steam fittings	Iz-10-14
					45000	23000	30		74		
3420	Frontier Alloy No. 12	M–58	87.75 Cu, 10 Sn, 2 Pb, 0.25 P		32000	19000	5		60	Worm gears, bearings	For high service Discontinued Iz-5-10
					40000	23000	15		75		
3421	Frontier Alloy No. 14	M–58	84.75 Cu, 10 Sn, 5 Pb, 0.25 P		30000	19000	15		50	Bearings	Iz-3-5
					40000	22000	5		61		
3422	Frontier Alloy No. 15	M–58	79.75 Cu, 10 Sn, 10 Pb, 0.25 P		28000	19000	5		52	Small machine tool bearings	Iz-3-8
					35000	22000	10		70		
3423	Frontier Alloy No. 18	M–58	85 Cu, 5 Sn, 5 Pb, 5 Zn		27000	15000	15		50	General utility bronze	Not recommended for bearings Iz-13-18
					33000	20000	20		70		
3424	Frontier Alloy No. 20	M–58	77.75 Cu, 7 Sn, 15 Pb, 0.25 P		27000	17000	12		43	Bearings, acid resisting alloy in mining machinery	For high speeds Iz-6-8
					31000	18000	18		63		
3425	Frontier Alloy No. 28	M–58	99.6-99.9 Cu		17000	6000	40		40	High electrical conductivity bearings	
					20000	9000	50		50		
3426	Frontier Alloy No. 29	M–58	56 Cu, 0.50 Sn, 41 Zn, 1 Fe, 1 Al, 0.5 Mn		65000	25000	20		104	Castings	Not resistant to shock and impact Iz-11-24
					85000	35000	35		119		
3427	Frontier Alloy No. 30	M–58	68.5 Cu, 20 Zn, 2.5 Fe, 6.5 Al, 2.5 Mn		90000	50000	10		196	Castings requiring high strength	Iz-5-10
					110000	65000	15		220		
3428	Frontier Alloy No. 32	M–58	82 Al, 8 Cu		16000	11000	1		50	General castings	Iz-1-2
					22000	13000	2		55		
3429	Frontier Alloy No. 33	M–58	82 Al, 15 Zn, 3 Cu		18000	12000	1		60	Free machining Al castings	Iz-1-3 Discontinued
					25000	15000	3		65		
3430	Frontier Alloy No. 37	M–58	10 Cu, 86 Zn, 4 Al		30000				105	Electric motor and machine tool bearings	Discontinued
					35000		0		119		
3431	Ajax Structural Bronze Grade "S"	M–123	Cu, Zn, special hardening agents	Chill cast	70000					Plungers, housing nuts, worms propeller shafts and blades	
3432	Gilding Foil		98 Sn, 2.2 Cu, 0.1 Fe							Cheap jewelry	
3433	Lyncast	M–523	High C, Mn, Si, bal. Fe							Chemical engineering equipment	Cast iron
3434	Griesheim "Rauchlos"	M–380								Welding rod	
3435	Griesheim "Sini"	M–380	Alloyed Cu							Welding rod for copper welding	
3436	Harz Refined Lead	M–382	99.9 Pb							Lead tubes and sheets for chemical industry	
3437	Heat Resisting Acid Metal	M–126	55 Cu, 6 Pb, 9 Zn, 30 Ni							Chemical apparatus	
3438	High Strength		18.5-21.5 Zn, 2-3 Fe, 6-7 Al, 1.5-2.25 Ni, bal. Cu							High strength corrosion resistant parts	Corrosion resistant
3439	Invarstahl	M–303	36 Ni, bal. Fe		86000		32			Clocks, balances, measuring devices	Same as "Invar"
3440	Iserlohn, Cast		64 Cu, 34 Zn, 2.4 Sn, 0.3 Pb							Fittings, hardware	
3441	Johnson		9-36 Ni, 10-30 Cr, 1-10 Si, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3442	Krupp, K.A.-2	M-72	7-10 Ni, 16-20 Cr, 0.75 Si, 0.15 C, bal. Fe							Heat and corrosion resisting parts	For high temp. use. Heat and corrosion resistant
3443	Laveyssiere Bronze		61 Cu, 38 Zn, 1 Sn							Condenser tubing, marine parts	
3444	L.M.-0	M-302	Al alloy		23000 28000		4 3			Light alloys, food handling machinery	
3445	Markana Metal	M-303	58-60, Cu 40-38 Zn, 1.5-2.0 Mn+Fe							Sheets for spinning, lavatories, wash basins, sinks	Corrosion resistant M.P.-880 °C.
3446	Markus Alloy		Cu, Ni, Zn							Decorative parts	
3447	Marties Alloy		18 Zn, 35 Ni, 10 Fe, 10 Sn, bal. Cu							Resistances, heat and corrosion resistant parts	Heat and corrosion resistant
3448	Matrix Brass		62 Cu, 37 Zn, 1.5 Pb							Engraving, hardware	
3449	Meterite		98-94 Al, 1-4 P, 1-2 Zn							Light alloy parts	
3450	Modified "Ounce" Metal	M-126	84 Cu, 5 Sn, 5 Pb, 5 Zn, 1 Ni							Fittings, valves, hardware castings	
3451	Motal	M-302	Al alloy		21500 27000		6 3			Light alloys, automobile parts, motor housings	Sand cast alloy
3452	Nickahl Iron	M-429	High C, Ni, Si, Mn, bal. Fe							Dies to stamp fenders, door panels and seat sides for automobiles	Tough and wear resisting cast iron
3453	Nickel Boron Steel		2.8-3.6 Ni, 0.1-0.5 B, 0.15-0.7 C, bal. Fe							Dynamically stressed parts	
3454	Nickel Bronze	M-126	82 Cu, 8 Sn, 2 Zn, 8 Ni							Superheated steam parts	
3455	Nickel Silver 10%		56-65 Cu, 25-34 Zn, 10 Ni							Ornaments, plated ware	Corrosion resistant
3456	Nickel Silver 14%		60-56 Cu, 26-28 Zn, 14 Ni							Ornaments, plated ware	Corrosion resistant
3457	Nickel Silver 15%		64-57 Cu, 21-28 Zn, 15 Ni							Ornaments, plated ware	Corrosion resistant
3458	Nickel Silver 18%		65-55 Cu, 17-27 Zn, 18 Ni							Ornaments, plated ware	Corrosion resistant
3459	Nickel Silver 20%		64-53 Cu, 16-27 Zn, 20 Ni							Ornaments, plated ware	Corrosion resistant
3460	Nickel Silver 25%		55 Cu, 25 Ni, 20 Zn							Ornaments, plated ware	Corrosion resistant
3461	Nickel Silver 30%		65-47Cu, 30 Ni, 5-23 Zn							Ornaments, plated ware	
3462	Atlas 10	M-13	81 Cu, 9 Al, 10 Pb	Cast	45000 50000	18000 20000	35 32	30 25	50 60	Bearings subject to doubtful lubrication	Obsolete
3463a	Palladium-Gold		90 Au, 10 Pd							Jewelry	White gold, Pt substitute
3463b	Palladium Gold		40 Cu, 31 Au, 10 Ag, 10 Pe							Jewelry	White gold, Pt substitute
3464a	Pistons		83 Cu, 16 Zn, 1 Sn							Pistons	
3464b	Pistons		93.5 Al, 2.45-3.4 Cu, 1.39 Mg, 0.4 Si, 0-0.28 Zn, 0-1.47 Ni							Pistons	
3465	Premier No. 1		0.10-0.20 C, 0.65-0.85 Cr, 0.10 max. V; bal. Fe							Case hardened parts	
3466	Presto Steel No. 9-266	M-32	1.05 C, 1.4 Cr, bal. Fe	Hardened						Ball races	
3467	Purple Label	M-69	1.1 C, 0.20 Mn, bal. Fe, Co							Tools, turning tools	High speed steel
3468	Radio Alloy No. 30	M-61	98 Cu, 2 Ni							Electrical instruments, rheostats, voltage control relays	Working temp.-350 °C. (max.)
3469	Radio Alloy No. 60	M-61	95 Cu, 5 Ni							Electrical instruments, resistors	Working temp.-350 °C (max.)
3470	Radio Alloy No. 90	M-61	88 Cu, 12 Ni							Electrical instruments, resistors	Working temp.-400 °C (max.)
3471	Radio Alloy No. 180	M-61	95 Ni, 2.5 Si, 2.5 Mn							Electrical instruments, resistors	Working temp.-400 °C. (max.)
3472	Readily Fusible Alloy		67 Zn, 33 Cu							Brazing	
3473	Red Metal		70 Cu, 20 Zn, 6 Pb, 4 Sn							Hardware	
3474	Rich Gold Metal		90 Cu, 10 Zn							Window screen wire	
3475	Rohn		50 Ni, 30 Cr, 17 Fe							Resistances, heat and corrosion resistant parts	Non-scaling, heat resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3476	Jessop Superior Oil Hardening	M-69	C, Mn, W, bal. Fe							Cutting tools, dies	Non-deforming, oil-hardening
3477	Standard Admiralty Bronze	M-126	88 Cu, 10 Sn, 2 Zn							Bronze castings, gears, worm wheels, trolley wheels	
3478	Standard Nickel Bronze	M-126	88 Cu, 5 Sn, 2 Zn, 5 Ni							Valves, corrosion resistant parts	Corrosion resistant
3479	Steam Metal	M-126	88 Cu, 6 Sn, 3 Pb, 3 Zn							Injectors, valves, steam specialties	
3480	Stuffing Box Alloy		61.5 Cu, 15.5 Ni, 11 Zn, 10 Pb, 2 Sn							Stuffing boxes	
3481	Sudal	M-380								Al solders	
3482	Sudalon "A"	M-380								Al solders	
3483	Sudalon "B"	M-380								Al solders	
3484	Sudalon "C"	M-380								Al solders	
3485	Cannonite	M-347	Cast iron (low C)		50000		0		250	Diesel engine and refrigeration parts, crankshafts, pistons, cylinders, brake drums	High test Tr. S.-8300
3486	Magnesium Alloy A.M. 53-S	M-4	4 Al, 0.2-0.4 Mn, bal. Mg	Annealed	33000	18000	16	26	56	Extruded rods and shapes, rolled sheet	Formerly "A.M.4.4" obsolete
		M-313		Hard rolled	45000	35000	8	8	62		
3487	Magnesium Alloy A.M. 58-S	M-4	8.5 Al, 0.2-0.4 Mn, 0.5 Zn, bal. Mg	Hot press forgings	43000	24000	4		70	Propeller blades, hot pressed forgings	
		M-313			48000	38000	8		76		
3488	Kramer Alloy No. 33	M-346								Deoxidizer	
3489	Magnesium Alloy A.M. 65-S	M-4	3-4 Al, 0.6 Mn, 5 Sn, bal. Mg	Forging	37000	20000	9		50	Hammer forgings	
		M-313			39000	22000	17		55		
3490	Magnesium Alloy X.A.M. 67-S	M-4	1.0 Mn, 5 Sn, 4 Zn, bal. Mg	Hot press forging	38000	18000	16		55	Press forgings	Obsolete
		M-313			40000	21000	20		61		
				Heat treated	35000	22000	1.5		62		
					39000	25000	4.0		65		
3491	Magnesium Alloy A.M. 241	M-4	7.5-8.5 Al, 0.2-0.4 Mn, 0.3 max. Zn, bal. Mg	Sand cast	23000	11000	3	2	44	Sand and die castings	"A.M. 241" Formerly "A.M. 7.4"
		M-313			25000	12000	5		48		
				Heat treated	29000	10000	6	6	46		
					36000	12000	10	10	56		
3492	Magnesium Alloy A.M. 246	M-4	11.5-12.5 Al, 0.1-0.2 Mn, 0.3 max. Zn, bal. Mg	Sand cast	18000	11000	0		65	Pistons, sand and mold castings	"A.M.-246" Formerly "A.M.-12.4", Obsolete
		M-313			20000	12000	1				
				Heat treated	23000	10000	0		76		
					32000	19000	1		80		
3493	Magnesium Alloy A.M. 265	M-4	5.5-6.5 Al, 0.1-0.3 Mn, 2.4-3.3 Zn, bal. Mg	Cast	22000	11000	3	7	53	Sand castings	"A.M.-265" Formerly "AZG"
		M-313			28000	15000	6		57		
3494	Magnesium Alloy A.M. 740	M-4	0.75-1.25 Mn, 9.5-10.5 Sn, bal. Mg	Cast	18000	8000	3		42	Sand castings	"A.M. 740" Discontinued
		M-313			20000	9000	5		45		
3495	Proferall	M-347	2.2-2.35 Si, 0.5-0.6 Mn, 0.55-1.0 combined C, 3.15 total C, 0.8-1.0 Cr, 0.4-0.5 Mo, bal. Fe, 0.4-0.5 Ni		60000				250	Diesel engine parts, crankshafts, cylinders, pistons, refrigeration parts	High test cast iron. Wear resistant
					75000				300		
3496	Kramer Grade "A" Manganese Bronze	M-346	58 Cu, 1 Fe, 0.5 Mn, 1 Al, bal. Zn	Cast	70000	28000	22		120	Piston rods, valve stems, worm gears, propellers	Corrosion resistant
					75000	35000	35		140		
3497	Kramer Grade "S" Manganese Bronze	M-346	60 Cu, 1 Fe, 0.25 Mn, 0.75 Al, 1 Pb, 1 Sn, bal. Zn	Cast	50000		12			Piston rods, valve stems, worm gears, propellers, valve bodies, fittings	Corrosion resistant free machining
					65000	30000	20		105		
3498	Kramer Grade "X" Manganese Bronze	M-346	60 Cu, 1.5 Fe, 1.5 Mn, 3 Al, bal. Zn	Cast	85000	45000	20			Hub caps, piston rods, valve stems and bodies, propellers, fittings	Corrosion resistant
					95000		18		175		
3499	Kramer Grade "X.X" Manganese Bronze	M-346	63 Cu, 2 Fe, 2.5 Mn, 5 Al, bal. Zn	Cast	100000	60000	13			Hub caps, piston rods, valve stems, propellers fittings	Corrosion resistant
					105000	72000	18		225		
3500	Kramer Alloy No. 22	M-346	Cu alloy							As a deoxidizing and densifying agent for brass and bronze castings	Pressure tight casting alloy

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3501	Kramer Alloy No. 44	M-346								As a deoxidizing agent for high conductivity copper castings	
3502	Kramer Alloy No. 66	M-346								As a deoxidizer and degasifier for Ni alloys	
3503	Kramer Alloy No. 77	M-346								As an Al bronze degasifier	
3504	Kramer Alloy No. 88	M-346								As a brass and bronze deoxidizer	
3505	Kramer Nickel Silver 12%	M-346	12 Ni, 22 Zn, 10 Pb, 3 Sn, 53 Cu	Cast	38000	20000	8		65	Hardware, plumbing fixtures, valves	Corrosion resistant
3506	Kramer Nickel Silver 20%	M-346	20 Ni, 8Zn, 4Pb, 5Sn, 63Cu		45000	25000			90	Hardware, plumbing, fixtures, valves	Corrosion resistant
3507	Aitch Metal		59 Cu, 40 Zn, 1 Fe							Hydraulic cylinders and forgings	
3508	Aladar		0.13 Cu, 0.40 Fe, 12.5 Si, 0.09 Mn, bal. Al							Light alloys—castings	Same as "Alpax", "Alcoa No. 47", and "Silumen"
3509	Edgar Allen Tool Class "C"	M-210	0.6-1.35 C, bal. Fe	Water harden						Spiral springs, chisels, punches shear blades, drills, reamers, taps, dies	
3510	Edgar Allen Tool Class "E"	M-210	0.6-1.35 C, bal. Fe	Water harden						Wood working tools, chisels, punches, shear-blades, drills, reamers, taps	
3511	Edgar Allen Tool Class "F"	M-210	0.6-1.35 C, bal. Fe	Water harden						Spiral springs, chisels, punches, shear-blades, drills, reamers, taps, dies	
3512	Edgar Allen Tool Class "H"	M-210	0.6-1.35 C, bal. Fe	Water harden						Dies, taps, reamers, drills, punches	
3513	Edgar Allen Tool Class "P"	M-210	0.6-1.35 C, bal. Fe	Water harden						Chisels, punches, shear-blades, snaps, drills, reamers, taps, milling cutters	
3514	Edgar Allen Tool Class "V"	M-210	0.6-1.35 C, bal. Fe	Water harden						Spiral springs, chisels, punches, shear-blades, drills, reamers, taps	
3515	Edgar Allen Durable Shear Temper Steel	M-210	C, bal. Fe	Water harden						Shears, cutting tools	
3516	Edgar Allen Five Ply Steel	M-210	C, bal. Fe	Water harden						Engineering Construction	Manufactured in plates containing 3 layers of soft steel and 2 layers of hard steel
3517	Sicrome H-17	M 76	1.0 C, 17 Cr, bal. Fe	Annealed Heat treated	120000 175000	60000 140000	10 7	15 10	240 350	Heat and corrosion resistant parts	Hard, heat and corrosion resistant
3518	Edgar Allen Genuine Double Shear Steel	M-210	C, bal. Fe							Carving knives	
3519	Edgar Allen Imp. C. S.	M-210	C, W, bal. Fe, Cr	Water harden						Cutting tools	Water hardening
3520	Edgar Allen Iron Fibered Steel	M-210	C, bal. Fe	Toughen						Screwed studs for cylinder and boiler mountings, piston rods, axles, chains, crank pins	Resists shock and impact
3521	Edgar Allen K-9	M-210	C, Mn, bal. Fe, Cr, W	Air harden						Dies, stay taps, broaches, milling cutters, plugs, gages, master tools	Oil hardening, tough and wear resistant. Non-warping
3522	Edgar Allen Maxchip No. 1	M-210	C, Ni, Cr, bal. Fe	Air harden						Hand tools, chisels, sates	Air hardening, tough and shock resisting
3523	Edgar Allen Maxchip No. 2	M-210	C, Cr, bal. Fe	Oil harden						Chisels	Oil hardening, tough and shock resisting
3524	Edgar Allen Maxnap	M-210	C, Cr, V, bal. Fe	Water harden						Rivet snaps for pneumatic hammers, nut piercers (hot work) heavy duty lathe centers	Tough and fatigue resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3525	Edgar Allen Maxtack	M-210	C, W, Cr, Mn, bal. Fe	Air harden						Nail and tack dies, wood working tools	Self hardening steel
3526	Edgar Allen Minerva	M-210	C, W, Cr, bal Fe	Oil harden						Chisels, shear blades	Wear resistant
3527	Edgar Allen No. 4 Hot Die	M-210	C, Cr, bal. Fe	Air harden						Pressing and squeezing dies, hot nut dies, piercers, punches gripper dies	Resistant to heat and shock
3528	Edgar Allen No. 5 Hot Die	M-210	C, Cr, W, bal Fe	Air harden						Hot shear blades, pressing and squeezing dies, hot nut dies, piercers	Higher quality than No. 4
3529	Edgar Allen Red Label	M-210	W, C, bal. Fe	Water harden						Twist drills, taps, milling cutters, reamers	
3530	Edgar Allen Safe-Plate	M-210	C, bal. Fe							Safes	Discontinued
3531	Edgar Allen Shear Temper	M-210	C, bal Fe							Carving knives	Discontinued
3532	Edgar Allen Special Chrome	M-210	C, Cr, bal. Fe	Water harden						Thread rolling dies	Retains hardness at high temperatures
3533	Edgar Allen Stagpick	M-210	C, Cr, V, bal. Fe	Water harden						Coal cutter picks	Tough, hard and shock resisting
3534	Edgar Allen Turners Safe-Plate	M-210	C, bal. Fe							Safes	Layers of very hard steel Discontinued
3535	Edgar Allen Welding Steel	M-210	0.3-0.5 C, bal. Fe							Welding	Discontinued
3536	Alpacca		63.9 Cu, 19.25 Zn, 14.6 Ni, 0.5 Fe							Base for plated table ware	
3537	Alumac No. 13		13 Si, bal. Al		28000 30000		3 1		70 80	Light alloy parts	Die cast alloy Discontinued
3538	Alumac No. 83		2 Cu, 3 Si, bal. Al		25000 28000		6 3		55 65	Light alloy parts	Die cast alloy Discontinued
3539	Alcoa 85	M-4	5.5 Si, 4.0 Cu, bal. Al	Die cast	28000 35000	19000	4 2.5		60 70	Die castings	
3540	Aluminum Iron Bronze "H"		89.43 Cu, 6.97 Al, 3.41 Fe							Strong corrosion resistant structural parts	Corrosion resistant
3541	Aluminum Iron Bronze "R"		85.16 Cu, 6.6 Al, 7.52 Fe, 0.5 Mn							Strong corrosion resistant structural parts	Corrosion resistant
3542	Aluminum Iron Bronze "S"		85.16 Cu, 9.43 Al, 4.74 Fe, 0.38 Pb, 0.09 P							Strong corrosion resistant structural parts	Corrosion resistant
3543	Carpenter No. 11 Special	M-32	1.1 C, bal. Fe							Tools, taps, reamers, drills, jigs, fixtures, dies, for blanking, trimming and cold heading	Water hardening, Tough timbre
3544	Castaloy	M-378	Non-ferrous white alloy							Chemical apparatus	High resistance to corrosion
3545	Chrome Nickel	M-297	20 Cr, 77 Ni, 2 Mn	Annealed Hard	121000 195000		23 1			Heat resistances, electrical heating elements, rheostats	Max. operating temp. -1150 °C.
3546	Chrome Nickel Iron	M-297	20 Cr, 70 Ni, 8 Fe, 2 Mn	Annealed Hard drawn	114000 182000		24 1			Electrical heating elements, rheostats, electrical measuring instruments	Max. operating temp -1150 °C.
3547	Chromnickel I	M-297	78 Ni, 20 Cr, 2 Mn							Furnace parts, electric heating elements	Heat and corrosion resistant
3548	Chromnickel II	M-297	70 Ni, 20 Cr, 2 Mn, 8 Fe							Electrical heating elements	Heat and acid resistant
3549	Circle "L" No. 7	M-74	0.03 C, 0.025 Mn, 0.6 Si, bal Fe	Air quench	50000	27000	35	65	120	Electrical parts	High magnetic perm.
3550	Cowles Special "A"		89 Cu, 11 Al								
3551	Cowles "A-1"		80 Cu, 10 Al								
3552	Cowles "A-2"		80 Cu, 10 Al								
3553	Cowles "B"		92.5 Cu, 7.5 Al								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3554	Cowles "C-1"		94.5 Cu, 5.5 Al								
3555	Cowles "C-2"		95 Cu, 5 Al								
3556	Cowles "C-3"		95 Cu, 5 Al								
3557	Cowles "D"		97.5 Cu, 2.5 Al								
3558	Cowles "E"		98.75 Cu, 1.25 Al								
3559	Crucible Stainless Iron No. 12	M-38	0.12 max. C, 12-15 Cr, bal. Fe							Stainless parts	Discontinued
3560	Crucible Stainless Iron No. 18	M-38	C, 17-19 Cr, bal. Fe							Stainless parts	Discontinued
3561	Crucible Stainless Iron No. 24	M-38	C, 24-27 Cr, bal. Fe							Stainless parts	Discontinued
3562	Rezistal Stainless Steel Grade "A"	M-38 M-260	0.45 C, 12-15 Cr, bal. Fe	Heat treated	250000	220000	4	6		Stainless parts, cutlery	Corrosion resistant
3563	Rezistal Stainless Steel Grade "B"	M-38 M-260	0.60 C, 15-18 Cr, bal. Fe	Heat treated					430 600	Stainless parts, bearings, valves	Corrosion resistant
3564	Crucible Stainless Steel No. 12	M-38	C, 11.5-13.0 Cr, bal. Fe							Stainless parts	Corrosion resistant Discontinued
3565	Crucible Stainless Steel No. 18	M-38	C, 17-19 Cr, bal. Fe							Stainless parts	Corrosion resistant Discontinued
3566	Crucible Stainless Steel No. 24	M-38	C, 23-30 Cr, bal. Fe							Stainless parts	Corrosion resistant Discontinued
3567	Crucin	M-303	44 Ni, 56 Cu							Kitchen utensils, kettles	Corrosion and wear resistant
3568	Darwin Brand "H"	M-40	0.95 C, 0.4 Cr, 0.2 V, 1.0 Mn, bal. Fe							Dies, blanking, forming and trimming dies, taps, broaches	Oil hardening, non-deforming. Resistant to wear
3569	Dense Steel		Cr, Si, Mo, C, bal. Fe							Tools	
3570	Deo									High grade bearings	
3571	Die Casting Alloy "A"		91-84 Sn, 2-9 Sb, 4.5-8 Cu							Light duty bearings	
3572	Die Casting Alloy "B"		91-84 Sn, 10-17 Sb, 0-1 Cu							Light duty bearings	
3573	Die Casting Alloy "C"		80 Sn, 10 Pb, 10 Sb							Light duty bearings	
3574	Die Casting Alloy "D"		61.5 Sn, 25 Pb, 10.5 Sb, 3 Cu							Soft work die castings	
3575	Die Casting Alloy "E"		74 Zn, 15 Sn, 6 Al, 5 Cu							Standard die castings	
3576	Die Casting Alloy "F"		85 Zn, 8 Sn, 4 Cu, 3 Al							Hard die castings	
3577	Die Casting Alloy "G"		82.75 Zn, 13.75 Al, 3 Cu							Hard die castings	
3578	Die Casting Alloy "H"		46 Zn, 31 Sn, 20 Cu, 3 Sb							Tools and dies	Non-deforming
3579	Dixi No. 3	M-344	C, Cr, bal. Fe							Tools and dies	Non-deforming
3580	Double Six Die	M-210	C, Cr, bal. Fe, Mo	Air harden						Tools, shear blades, cold press work	Non-deforming Air hardening
3581	Double Seven	M-210	C, Cr, bal. Fe, Mo, Co	Air harden						Tools, stamping dies, cold heading dies	"Cyclops Draco Tool." High strength and toughness
3582	Draco	M-39	0.66-1.15 C, V, bal. Fe							Tools	
3583	Dualoy	M-358	C, W, bal. Fe							Condenser tubes for pure fresh water	
3584	Scovill Muntz	M-102	0.35 max. Pb, 0.10 max. Fe, 60 min. Cu, bal. Zn	Soft Hard	45000 100000	20000 98000	60 2			Condenser tubes for polluted fresh or sea water	
3585	Scovill Admiralty	M-102	0.06 max. Fe, 0.075 max. Pb, 0.90 min. Sn, 70 min. Cu, bal. Zn	Soft Hard	55000 105000		65 2		50 175		
3586	Dukex	M-358	C, W, bal. Fe							Cutting tools	
3587	Dumost		C, V, bal. Fe							Tools	
3588	Durabil	M-358	C, bal. Fe							Tools and dies	
3589	Duralumin Special "Y"		92.5 Al, 4 Cu, 2 Ni, 1.5 Mg							Dirigible, airplane and motor car light alloy parts	
3590	Duranmium	M-358	C, W, bal. Fe							High speed cutting tools	High speed steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3591	Duredge	M-333 M-85	.55 C, 1.6 Si, .4 Mo, .6 V, bal. Fe							Cutting tools, chisels, rivet sets, shear blades	Will maintain keen cutting edge, hard and tough
3592	Duro	M-81	High C, bal. Fe							Roll turning tools, dies for drawing brass tubing	Discontinued
3593	Stronger-Than-Steel	M-603	89 Cu, 10 Al, 1 Fe	Cast Heat treated	80000 100000				140 160	Die castings	Resists corrosion
3594	Duvan	M-358	C, V, bal. Fe							Tools	
3595	Electrite Vanadium	M-73	1.0 C, 18.5 W, 4 Cr, 3.5 V, .8 Mo, bal. Fe							High speed tools for cutting hard materials	High speed steel, Rockwell "C"-67
3596	Everbrite	M-129	60 Cu, 30 Ni, 3 Fe, 3 Si, 3 Cr	Cast	75000	45000	14		170	Valve, chemical plants	
3597	Everdur No. 50		94.5 Cu, 4.5 Si, 1 Mn							Bolts, screws, turnbuckles, hardware	
3598	Fagersta "30" Hollow Drill	M-385 M-52	C, Cr, Mo, bal. Fe							Drills for mining and quarrying	
3599	Fagersta Alloy Chisel	M-385 M-52	Cr, W, Mo, C, bal. Fe							Punches, chisels, rivet sets and busters	
3600	Fagersta Carbon	M-385 M-52	C, bal. Fe							General	
3601	Fagersta Circular Plates	M-385 M-52	C, Cr, Ni, bal. Fe							Saws	
3602	Fagersta Cold Header	M-385 M-52	C, V, bal. Fe							Cold heading and swedging dies	
3603	Fagersta Cutlery Steel	M-385 M-52	C, bal. Fe							Knives, saws	
3604	Fagersta Drawing Die Steel	M-385 M-52	C, Mn, Cr, W, bal. Fe							Wire drawing dies	
3605	Fagersta Fast Finishing	M-385 M-52	C, W, bal. Fe							Finishing tools	
3606	Fagersta Hack Saw	M-385 M-52	C, W, bal. Fe							Hack saws	
3607	Fagersta High Production	M-385 M-52	C, Cr, Mo, V, bal. Fe							Production dies and tools	Non-deforming
3608	Fagersta Hollow Drill	M-385 M-52	.8 C, .3 Mn, bal. Fe							Drills for mining and quarrying	
3609	Fagersta Hot Die	M-385 M-52	C, Cr, W, bal. Fe							Hot work dies	
3610	Fagersta Oil Hardening	M-385 M-52	C, Cr, W, bal. Fe							Blanking, stamping and forming dies and tools	Non-deforming
3611	Fagersta Overcoat Axe	M-385 M-52	1.0 C, .25 Mn, bal. Fe							Axes	
3612	Fagersta Pavement Breaker	M-385 M-52	.65 C, .3 Mn, bal. Fe							Spades, moil points for concrete breaking	
3613	Fagersta "Polhem" Wire	M-385 M-52	C, Mn, Cr, W, bal. Fe							Wire drawing dies	
3614	Fagersta Shoe Die	M-385 M-52	C, bal. Fe							Cutting dies for leather, paper and rubber	
3615	Fagersta Solid Drill	M-385 M-52	C, bal. Fe							Drills, chisels	
3616	Fagersta Twisted Auger	M-385 M-52	C, bal. Fe							Soft ore mining, coal mining augers	
3617	Ferrocal	M-302	Al alloy	Chill cast	23000 28000		4 2			Permanent mold castings. General machinery parts, automobile and motorcycle parts	Coef. exp.-0.000024

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3618	Field, Rolled		60 Ni, 29 Fe, 20 Mo								Stainless and corrosion resistant
3619	Fricks Alloys		55-50 Cu, 31-30 Zn, 19-17 Ni							Resistances, decorative parts	
3620	Fricks Bluish Yellow, Hard		55.5 Cu, 39 Zn, 5.5 Ni							Hardware, decorative parts	
3621	Fricks Pale Yellow, Ductile		62.5 Cu, 31.2 Zn, 6.3 Ni							Hardware, decorative parts	
3622	Fricke's Harder		69 Cu, 30 Zn, 10 Ni							Strong corrosion resistant parts	Corrosion resistant
3623	Fricke's Silvery		50 Cu, 18.8 Zn, 31.2 Ni							Ornamental and decorative parts	
3624	Gold, 8 Carat		47 Cu, 33 Au, 20 Ag							Jewelry	
3625	Gold, 10 Carat		38-46 Cu, 42 Au, 12-20 Ag							Jewelry	
3626	Gold, 14 Carat		12 Cu, 58 Au, 30 Ag							Dental fillings and crowns	
3627	Gold, 15 Carat		13 Cu, 62 Au, 11 Ag							Jewelry	
3628	Gold, 16 Carat		8-27 Cu, 67 Au, 6.6-26 Ag							Jewelry	
3629	Gold, 18 Carat		15-5 Cu, 75 Au, 10-20 Ag							Jewelry	
3630	Gold, 20 Carat		6-8.3 Cu, 84 Au, 8.3-11 Ag							Jewelry	
3631	Gold, 22 Carat		4.2 Cu, 92 Au, 4.2 Ag							Jewelry	
3632	Gold, 22 Carat		3 4 Cu, 92 Au, 4.9 Ag							Dental crowns and fillings	
3633	Gold, Solder, 8 Carat		40 Au, 37 Ag, 23 Cu							Gold solder	
3634	Gold Solder, 10 Carat		41 Au, 37 Ag, 21 Cu, 0.6 brass							Gold solder	
3635	Gold Solder, 14 Carat		50 Au, 33 Ag, 17 Cu							Gold solder	
3636	Gold Solder, 16 Carat		75 Au, 17 Ag, 8.3 Cu							Gold solder	
3637	Gold Solder, 18 Carat		75-63 Au, 13-31 Ag, 6 3-12 Cu							Gold solder	
3638	Gold Solder, Best		63 Au, 23 Ag, 15 Cu							Gold solder	
3639	Gold Solder, Easy Melt		55 Au, 32 Ag, 14 Cu							Gold solder	
3640	Gold Solder, Very Easy Melt		55 Ag, 29 Cu, 12 Au, 5.5 Zn							Gold solder	
3641	Government Bronze U.S. Spec.		82-84 Cu, 12.5-14.5 Sn, 4.5-2.5 Zn, 0.8-1.0 Pb, 0.1 Fe							Journals, bearings, bushings	"U. S. N.-4689c" "Composition H"
3642	Government Bronze Substitute		90 Cu, 6.5 Sn, 3 Zn, 0.5 Pb							Structural and marine fittings	Corrosion resistant
3643	Grapho Babbitt Metal No. 1	M-300	Graphite and babbitt						19	Babbitt, graphite bearing, transmission and railroad axle bearings, engine bearings	Low bearing temp. reduced friction losses
3644	Haynes Metal, Hard		45 Co, 40 W, 15 Cr							Weld metal, tools	Corrosion and heat resisting
3645	Haynes Metal, Soft		62 Co, 28 W, 10 Cr							Weld metal, tools	Corrosion and heat resisting
3646	Heppenstall Grade "C" Steel	M-64	0.50 C, Ni, Cr, Mo, C, bal. Fe	Oil treated	305000 206000	288000 195000	6 18	17 52		Die blocks	Drop forged die steel Sc.-59-90
3647	Hioloy 0-6	M-95	0.55-0.75 C, 0.30-0.55 Si, 0.8-1.2 Cr, 0.5-0.8 Mn, bal. Fe							Liner plates, screen plates, cement mills	Wear resistant. Formerly "Hioloy "W"
3648	Hoyt Metal	M-317	94-90 Pb, 6-10 Sb							Bearings	
3649	Huron Aluminum Castings "A-5" Alloy		6.6 Cu, 0.5 Mg, 1.25 Ni, 0.25 Co, 0.5 Mn+Sn+Cd, bal. Al							Light alloy parts	
3650	Huron Aluminum Alloy "A," Rolled		3.5 Cu, 0.6 Mn, 0.5 Mg, 0.1 Cr, bal. Al							Light alloy parts	
3651	Huron Aluminum Alloy "B," Rolled		4 Cu, 0.6 Mn, 0.5 Mg, 0.1 Cr, bal. Al							Light alloy parts	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3652	Huron Aluminum Alloy "D," Rolled		4 Cu, 0.5 Mg, 0.6 Cr, bal. Al							Light alloy parts	
3653	Huron Metal, Cast		6.6 Cu, 1.3 Ni, 0.5 Mg, 0.3 Co, bal. Al							Light alloy parts	
3654	Huron Metal, Rolled		3.5-4.0 Cu, 0.5 Mg, 0-0.6 Mn, 0.1-0.6 Cr, bal. Al							Light alloy parts	
3655	Ideal		40-45 Ni, 1.0-0.66 Fe, 0.45-1.0 Mn, 53.4-58 Cu, 0-0.66 Al							Resistances	
3656	Imphy N. F. C.-2	M-104	C, 3 Ni, 1 Cr, bal. Fe		83000 200000	61000 192000	25 7			Axles, shafts, steering parts	
3657	Imphy N.F.C.-3	M-104	C, 4 Ni, 1 Cr, bal. Fe		86000 214000	72000 199000	20 6			Axles, shafts, steering parts	
3658	Kovar	M-118	30 Ni, 15 Co, 0.2 Mn, bal. Fe							Low expansion alloy for hard glass to metal seals	Mean expansivity—(25-400 °C.)—0.0000045.
3659	Kromax		80 Ni, 20 Cr							Resistance alloy	
3660	Lead Foil (Calin)		87 Pb, 13 Sn, 1 Cu							*Lead foil*	
3661	Lominium Steel	M-210	C, Cr, V, bal. Fe	Oil harden						Die casting die steel	
3662	K.E. 965	M-510	C, high alloys, bal. Fe	Heat treated	152000		27	49	269	Valves	Austenitic. Non-distorting
3663	Maillechort, German	Ger.	65.4 Cu, 13.4 Zn, 16.8 Ni, 3.4 Fe							Hardware, fittings	
3664	Maillechort, Paris	French	66.24 Cu, 13.42 Zn, 16.42 Ni, 3.2 Fe							Hardware, fittings	
3665	Maillechort, Vienna	Aus.	66.6 Cu, 13.6 Zn, 19.3 Ni, 0.48 Fe							Hardware, fittings	
3666	Dutch Silver		81.5 Sn, 8.8 Sb, 9.6 Cu							Tableware, novelties, art *metal pieces*	
3667	Manganese Metal	M-394	Approx. 0.2 C, 97 Mn							Constituent of alloys	Discontinued
3668	Manganese Bronze, Cast		58 Cu, 2 Mn, 40 Zn							Marine propellers	Corrosion resistant
3669	Manganese Bronze, Rolled		59 Cu, 1 Sn, 0.3 Mn, 31 Zn							Marine parts, nuts, bolts	Corrosion resistant
3670	Manganese Copper "A"		29.2 Cu, 51.65 Mn, 9.68 Fe, 6.25 Al, 3.23 C							Resistances, heat and corrosion resistant parts	Heat and corrosion resistant
3671	Manganese Copper "B"		56.3 Cu, 40.9 Mn, 1.5 Fe, 1.1 Si							Resistances, heat and corrosion resistant parts	Heat and corrosion resistant
3672	Manganese Copper "C"		75 Cu, 25 Mn							Resistances, heat and corrosion resistant parts	Heat and corrosion resistant
3673	Manganese Copper "D"		75.3 Cu, 22.4 Mn, 2.15 Fe							Resistances, heat and corrosion resistant parts	Heat and corrosion resistant
3674	Manganese Copper "E"		85 Cu, 10.92 Mn, 1.83 Fe, 2.0 Zn							Resistances, heat and corrosion resistant parts	Heat and corrosion resistant
3675	Manganese Copper "F"		89.7 Cu, 8.72 Mn, 1.54 Fe							Resistances, heat resisting parts	Heat resistant
3676	Manganese Copper "G"		85.55 Cu, 10.66 Mn, 2.66 Fe, 0.39 Sn, 0.45 Pb							Resistances	Heat resistant
3677	Manganese Copper "H"		84.33 Cu, 10.61 Mn, 2.31 Fe, 2.1 Zn, 0.4 Sn, 0.3 Pb							Resistances	Heat resistant
3678	Manganese Nickel		82-52 Cu, 14-31 Mn, 3-16 Ni							Heat resistant parts	Heat resistant
3679	Magno	M-44	96 Ni, 4 Mn							Spark plug electrodes	Heat resistant
3680	Manganese Nickel No. 484 Alloy	M-65	98.5 Ni, 1.5 Mn							Spark plug electrodes	Heat resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3681	Manganese Steel Pearlitic	Eng.	1.4-3.5 Mn, 0.2-0.3 Si, 0.2-0.6 C, bal. Fe							Gears, shafts	Brit. Pat. 131980
3682	Maxhete No. 1 A	M-210	C, Cr, Ni, W, bal. Fe	At 20°C. At 900°C.	106000 61000		45 27	54 44		Furnace parts	
3683	Maximum Steel	M-360	C, W, bal. Fe							Cutting tools	Discontinued
3684	McAdams Alloy "A"		60 Al, 11-55 Cu, 10-43 Cr, 20 Zn							Light alloy parts	
3685	McAdams Alloy "B"		69 Al, 7.7 Cu, 0.6 Ni, 23 Zn							Light alloy parts	
3686	McAdams Alloy "C"		70 Al, 3 Cu, 22 Zn, 5 Sb							Light alloy parts	
3687	McAdams Alloy "D"		80 Al, 8 Cd, 4 Ag, 8 Sn							Light Alloy parts	
3688	McAdams Alloy "E"		82 Al, 12 Cu, 5 Cd, 1 Ag							Light alloy parts	
3689	McFarland & Harder Alloy "A"		10 Cr, 48 Ni, 43 Cu							Heat and corrosion resistant parts	Stainless and corrosion resistant
3690	McFarland & Harder Alloy "B"		16 Cr, 29 Ni, 55 Cu							Heat and corrosion resistant parts	Stainless and corrosion resistant
3691	McFarland & Harder Alloy "C"		30 Cr, 59 Ni, 11 Cu							Heat and corrosion resistant parts	Stainless and corrosion resistant
3692	McFarland & Harder Alloy "D"		43 Cr, 46 Ni, 11 Cu							Heat and corroalon resistant parts	Stainless and corrosion resistant
3693	Melchor Wire		57.3 Cu, 41.6 N 1.1 Mn							Wire	
3694	Music Spring	M-120	0.80 C, 0.25 Mn, 0.25 Si, bal. Fe							Springs	Swedish steel
3695	Nickel "C"	M-303	1 5 Mn, bal. Ni		69000		45			Chemical apparatus, thermo-couple element	Heat and corrosion resistant to salt solutions and caustics
3696	Nitrosa Steel	M-57	18 Cr, 8 Ni, 0.35 Mn, 0.35 C, bal. Fe	Cold worked	200000	100000	13			Stainless parts, chemical apparatus	Resists corrosion of acids and gases. Resists high temp. to 1650°F.
3697	No. 93 Chrome-Molybdenum	M-76	C, Cr, Mo, bal. Fe							Tools	Oil hardening, shock resisting
3698	Patina Steel	M-383	C, 0.2-0.3 Cu, bal. Fe	Rolled	52000 64000	35000 50000	725	750	100	Sheet metal structures, roofing fences, pipes, bridges, nails	Rust resisting
3699	Phosphor Bronze, American No. 1	M-98	70 Cu, 13 Sn, 16 Pb, 1 P							Fittings exposed to sea water gun fittings, small springs	High resistance to corrosion and fatigue
3700	Phosphor Bronze, American No. 2	M-98	95 Cu, 4.9 Sn, 0.1 P							Screw propellers airplane parts, worm wheels, bearings, fuse clips	High resistance to corrosion and fatigue
3701	Phosphor Bronze, English No. 1	M-98	79.5 Cu, 10.2 Sn, 9.6 Pb, 0.7 P							Fittings exposed to sea water, gun fittings, small springs, bearings	High resistance to corrosion and fatigue
3702	Phosphor Bronze, English No. 2	M-98	76.8 Cu, 8 Sn, 15 Pb, 0.2 P							Screw propellers, airplane parts, worm wheels, fuse clips	High resistance to corrosion and fatigue
3703	Phosphor Bronze, Locomotive Bearing	M-98	90.34-94.7 Cu, 8.9-4.4 Sn, 0.76-0.35 P							Screw propellers, fittings exposed to sea water, worm wheels, bearings	High resistance to corrosion and fatigue
3704	Phosphor Bronze, Russian	M-98	93.7 Cu, 5.8 Sn, 0.16 P, 0.34 Zn							Screw propellers, fittings exposed to sea water, bearings, worm wheels	High resistance to corrosion and fatigue
3705	P.X.D.	M-73	C, W, Ni, Mo, bal. Fe							Piercing points, hot forging dies	For hot working
3706	Riverside Phosphor Bronze No. 209	M-98	90 Cu, 10 Sn, trace P		135000	115000	1 70			Screw propellers, fittings exposed to sea water, bearings	High resistance to corrosion and fatigue
3707	Cerrosafe	M-216	40 Bi, 40 Pb, 11.5 Sn, 8.5 Cd		5990		140		9	Toy casting sets	Formerly "Safalloy"
3708	Saratoga	M-76	0.90 C, 0.38 Si, 0.50 W, 1.2 Mn, 0.50 Cr, bal. Fe	Heat treated					652 302	Tools and dies, taps, reamers, plug gages, broaches, threading dies	Oil hardening Iz-6-96

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3709	Sicromal No. 8	M-383	Cr, Al, C, <0.005 S, very low P and O, bal. Fe	At 20 °C. At 800 °C.	67200 10000	43000 5800	20 38	75 93	140	Superheater and recuperator tubes, annealing ovens and pots, air heaters	Resistant to oxidizing and reducing gases, sulfurous gases and fuel ashes
3710	Sicromal No. 9	M-383	Cr, Al, C, <0.005 S, very low P and O, bal. Fe	At 20 °C. At 800 °C.	78400 11400	40000 7200	15 50	68 90	160	Superheater and recuperator tubes, pipes, fittings and coils, annealing furnaces, burner tips	Resisting to oxidizing reducing and S gases
3711	Sicromal No. 10	M-383	Cr, Al, C, <0.005 S, very low P and O, bal. Fe	At 20 °C. At 800 °C.	85200 14500	50400 7200	10 53	63 98		Pyrometer tubes, anchor bolts, furnace parts, air heaters	Resisting to oxidizing, reducing and S gases
3712	Sicromal No. 12	M-383	Cr, Al, C, <0.005 S, very low P, O, bal. Fe						185	Pyrometer tubes, tuyere pipes, annealing boxes, air heaters	Resistant to oxidizing, reducing and S gases
3713	Silbereisen No. 1	M-383 M-403	1-1.5 Si, 0.9-1.5 Mn, 0.07-0.09 P, 0.02-0.04 S, <2.8 C, bal. Fe		36000 50000					Steamship and locomotive cylinders, turbine housings, pump bodies, high pressure valves	High strength machine and centrifugal castings
3714	Silbereisen No. 2	M-383 M-403	1.7-2.5 Si, 0.4-0.7 Mn, 0.07-0.09 P, 0.02-0.04 S, <2.8 C, bal. Fe		36000 50000					Steam ship and locomotive cylinders, turbine housings, pump bodies, high pressure valves	Malleable iron and chilled iron castings
3715	Silbereisen No. 3	M-383 M-403	1.0-1.3 Si, 0.4-0.7 Mn, 0.3-0.8 P, 0.02-0.04 S, <2.8 C, bal. Fe		36000 50000					Steam shipand locomotive cylinders, turbine housings, pump bodies, high pressure valves	Heavy castings, hard iron (chilled) castings
3716	Silbereisen No. 4	M-383 M-403	1.3-1.7 Si, 0.4-0.7 Mn, 0.3-0.8 P, 0.02-0.04 S, <2.8 C, bal. Fe		36000 50000					Steamship and locomotive cylinders, turbine housings, pump bodies, high pressure valves	Ordinary machinery castings
3717	Silbereisen No. 5	M-383 M-403	1.7-2.5 Si, 0.4-0.7 Mn, 0.3-0.8 P, 0.02-0.04 S, <2.8 C, bal. Fe		36000 50000					Steamship and locomotive cylinders, turbine housings, pump bodies, high pressure valves	Thin sections, common machinery castings
3718	Solder No. 1		30-40 Sn, 2-3 Sb, bal. Pb		6890		117		12	Commercial lead solders	M.P.-401 °F.
3719	Solder No. 2		50 Sn, 50 Pb		6400		96		11	Commercial lead solders	M.P.-446 °F.
3720	Sterling Stainless Steel "A"	M-57	0.35 C, 0.35 Mn, 12-15 Cr, bal. Fe	Oil treated Annealed	240000 150000 100000	200000 125000 65000	4 12 27	8 40 60	500 300 185	Cutlery, sharp edged or pointed parts, scissors, surgical and dental instruments	Stain resisting, tough and hard. Max. operating temp.-1650 °F.
3721	Sterling Stainless Steel "B"	M-57	16 Cr, 0.35 Mn, 0.65 C, bal. Fe	Oil treated Annealed	270000 130000 95000	245000 100000 54000	2 12 27	3 30 45	545 285 185	Cutlery, surgical and dental instruments, ball bearings, valve seats	Max. operating temp.-1650 °F. Requires heat treatment for stainless properties
3722	Sterling Stainless Steel "T"	M-57	12.5 Cr, 0.35 Ni, 0.35 Mn, 0.12 C, bal. Fe	Oil treated Normalized	185000 120000 145000	160000 100000 125000	17 22 20	60 70 63	395 240 241	Pump rods, machinery parts, turbine blades, shafts, pistons, gun barrels	Resists stain without heat treatment Max. operating temp.-1650 °F.
3723	Sterling Stainless Type No. S B	M-57	0.15 C, 18 Cr, 8 Ni, bal. Fe	Annealed	110000	35000	63	45	160	For applications requiring stainless steel in strip form and in bars which are to be used for upset or cold pressed articles	Stainless. Cannot be hardened by heat treatment. Iz-100 Discontinued
3724	Sterling Stainless Type "B.H."	M-57	1.0 C, 0.40 Mn, 17.5 Cr, bal. Fe	Hardened					600	Bearing surfaces, balls, valves, cutlery	Austenitic
3725	Sterling Stainless Type "H"	M-57	0.8 C, 13.5 Cr, bal. Fe							Stainless articles	Stainless when heat treated (Discont.)

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3726	Sterling Stainless Type "M"	M-57	0.12 max. C, 15-18 Cr, bal. Fe	Annealed	100000	70000	25	65	200	Heat resisting parts, corrosion resisting parts	Stain resisting without heat treatment
3727	Sterling Stainless Type "M.G."	M-57	0.35 max. C, 0.50 Mn, 18-23 Cr, bal. Fe							Shafts, pump rods, furnace parts, glass molds	Is-40 High temp. resistance Corrosion resistant
3728	Iso-Elastic	M-520	C, 36 Ni, 8 Cr, 4 Mn-Si-Mo, V, bal. Fe	Heat treated	160000	140000	4	40		Springs, precision springs	Similar to "Elinvar"
3729	Teton	M-76	1.0 C, 1.3 Cr, bal. Fe							Balls and races for bearings, compression dies, machine parts	
3730	T H-30	M-383 M-625	C, bal. Fe	At 20°C. At 600°C.	61000 34000	42500 15500	20			Boiler and superheater tubes	Good strength at high temp., corrosion resistant
3731	T H-31	M-383 M-625	C, bal. Fe	At 20°C. At 600°C.	71700 35000	44000 23000	18			Boiler tubes, superheater tubes	Maintains strength at high temp.
3732	U.M.A. (Agathon) Spring	M-97	0.47-0.52 C, 0.80-1.0 Mn, 1.0-1.2 Cr, bal. Fe		255000 165000	222000 145000	13 20	32 58	490 355	Leaf springs, lock nuts	Flexible and shock resistant
3733	Union-Larssen Steel "Resista"	M-383 M-222	C, 0.4 Cu, bal. Fe		71300 86000	55000 61000	22 26			Storage bins, retaining walls for canals	Corrosion resistant
3734a	V T-Steel (V T-Stahl)	M-383 M-222	C, Cr, W, Mo, Va, bal. Fe		114000 135000	78400	8			Steel rails, tires, rims, gears, taps	Tough at very low temp. (-20°C.) Wear resistant
3734b	V T-Steel (V T-Stahl)	M-383 M-222	C, bal. Fe		121000 143000	78400	10 8			Steel rails, tires, rims, gears, taps	Wear resistant
3735	W.A.B. Alloys (Wab Alloys)	M-384	All specifications							Air brake parts	Westinghouse Air-Brake Co. alloys
3736	Wabcoloy	M-384	2.6 C, 2.3 Si, 0.6 Mn, Ni or Cr, or Mo, bal. Fe	Cast	40000 50000		0		228 255	Cylinders of steam driven compressors	Nickel cast iron Wear resistant
3737	Alpro No. 362	M-126	4 Ni, 4 Cu, 92 Al							Pistons, light alloy parts	
3738	Alcoa 24-S	M-4	4.5 Cu, 1.5 Mg, .6 Mn, bal. Al	T RT T-86	68000 73000 77000	46000 57000 73000	19 13 6		105 116	Aircraft structures, wings	High strength, age-hardening
3739	Aluminum Silver		95 Al, 5 Ag							Ornaments	
3740	Aluminum Solder, Bates		70 Al, 30 Zn							Al solder	
3741	Aluminum Solder, Bourbouse		81.82 Zn, 18.18 Al							Al solder	
3742	Aluminum Solder B. of Stds. S N-1		78 Sn, 9 Al, 8 Zn, 5 Cd							Al solder	U.S. Bureau of standards
3743	Aluminum Solder B. of Stds. S N-2		69 Sn, 2.4 Al, 26 Zn, 2.4 P							Al solder	U. S. Bureau of Standards
3744	Aluminum Solder B. of Stds. S N-3		86 Sn, 5 Al, 9 Zn, 0.25 P							Al solder	U. S. Bureau of Standards
3745	Aluminum Solder B. of Stds. S N-4		86 Sn, 5 Al, 9 Zn							Al solder	U. S. Bureau of Standards
3746	Aluminum Solder B. of Stds. Z N-1		75 Zn, 20 Cd, 5 Al							Al solder	U. S. Bureau of Standards
3747	Aluminum Solder, Cornande & Cruiys		52 Zn, 30 Sn, 17.5 Al, 0.5 Ni							Al solder	
3748	Aluminum Solder (Geophysical Lab.)		90 Zn, 6 Al, 4 Cu							Al solder	Carnegie Institution alloy
3749	Aluminum Solder Mourey		94-80 Zn, 2-8 Cu, 4-12 Al							Al solder	
3750	Aluminum Solder Richards		25 Zn, 71.5 Sn, 3.5 Al							Al solder	
3751	Aluminum Solder U. S. Pat. 1329899		41 Sn, 28 Zn, 3 Cu, 0.6 Mn, 0.1 Al							Al solder	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3752	Aluminum Solder U. S. Pat. 1333666		92 Pb, 8 Cd							Al solder	
3753	Bario, Hard		30 Co, 30 Cr, 25 W, 10 Mn, 5 Ti							Tools	Corrosion and heat resistant
3754	Bario, Sheet		90 Ni, 4.3 Cr, 1.2 W, 0.3 Si, traces Co, Cu, Fe							Tools	Stainless and corrosion resistant
3755	Bario, Soft		60 Co, 20 Cr, 20 W							Tools	Corrosion and heat resistant
3756	Biddery, Heinies		84.3 Zn, 11.4 Cu, 2.9 Pb, 1.4 Sn							Bearings	
3757	Phoenix Rapid Machining Steel	M-448	C, bal. Fe		63500	44000	48	61		Screws, bolts, nuts	Free cutting
3758	Brass, Wire		72-65 Cu, 27-35 Zn, 0.17 Sn, 0.28 Pb							Wire	
3759	Type "L.M."	M-151	0.25-0.35 C, 0.5-0.8 Mn, 2.75-3.25 Ni, 0.7-1.0 Cr, 0.3-0.5 Mo, bal. Fe	Oil hardened	185000 265000	175200 240000	16 12	52 47	300 460	Shafts, gears, axles, piston rods	Tough and shock resistant
3760	Type "M.S."	M-151	0.4-0.5 C, 0.6-0.9 Mn, 0.1-0.2 Si, 0.8-1.1 Cr, 0.25-0.40 Mo, bal. Fe	Oil hardened	270000 160000	225000 140000	12 22	25 50	530 281	Gears, springs, pneumatic tools	Wear resistant
3761	Type "N.M."	M-151	0.2-0.4 C, 0.3-0.5 Mn, 3-5 Ni, bal. Fe	Oil hardened	174000 250000	164000 225000	16 12	53 38	500 241	Turrets, armor, crankshafts, connecting rods, gears	
3762	Type "V.M."	M-151	0.3-0.4 C, 0.4-0.6 Mn, 0.7-1.0 Cr, 0-0.17 V, 0.35-0.85 Mo, bal. Fe	Oil hardened	105000 245000	70000 220000	29 11	65 45	197 495	Airplane engine parts, crankshafts, gears, connecting rods, wrist pins, springs	
3763	Electrite "Super" Cobalt	M-73	.8 C, 1.7 V, 9 Co, .8 Mo, 18 W, 4 Cr, bal. Fe							Tools, high speed cutting tools	High speed steel
3764	Electrite Ultra Cobalt	M-73	.8 C, 1.7 V, 12 Co, .8 Mo, 18 W, 4 Cr, bal. Fe							Tools, high speed cutting tools	High speed steel
3765	Electron "A.M.-503"	M-78 M-338	.2 Al, .2 Zn, 2.5 Mn, .2 Cu, .4 Si, bal. Mg	Cast Rolled	14000 18000 30000	15000	3 8	20	30 40	Light alloy parts, aircraft panelling, cowling, fairing	Easy to weld, rolled sheets
3766	Electron "A.Z.-31"	M-78	3.3 Al, 0.3-0.5 Mn, bal. Mg, 1.25 Zn		36000 40000	25000 29000	12 8		50	Light alloy parts	C.S.-49000-52000
3767	Electron "A.Z.M.Q."	M-78	6.5 Al, 1 Zn, 0.3-0.5 Mn, bal. Mg	Cast Extruded	41000 47000 46000	31000 33000 32000	16 10 13	 27	 55 55	Light alloy parts	Now obsolete. C.S.-50000-56000
3768	Electron "C.M.-Si"	M-78	1.5 Si, bal. Mg	Cast	13000 14000	8500	1.5	3	45	Light alloy parts	
3769	Electron "Z-1-b"	M-78	6.5 Al, 1 Zn, 0.3-0.5 Mn, bal. Mg	Extruded	36500	24000	16	27	45	Light alloy parts	
3770	German Silver, Firsts "A-1" Best	M-102	16 Ni, 56 Cu, 28 Zn	Soft	60000		50			Cheap flat work	German Silver
3771	German Silver, Firsts "A" Special	M-102	17 Ni, 56 Cu, 27 Zn							Electrical resistances, flat work	German Silver
3772	German Silver, Seconds	M-102	14 Ni, 62 Cu, 24 Zn	Hard	120000		2			Ornamental and decorative parts	German Silver
3773	German Silver, Thirds	M-102	12 Ni, 56 Cu, 32 Zn							White metal trim	German Silver
3774	German Silver, Special Thirds	M-102	11 Ni, 56.5 Cu, 32.5 Zn							White metal trim	German Silver
3775	German Silver, Fourths	M-102	10 Ni, 55 Cu, 35 Zn							Ornamental parts	German Silver
3776	German Silver, Fifths	M-102	7 Ni, 57 Cu, 36 Zn	Soft	55000	20000	50			Ornamental parts	German Silver
3777	German Silver, B. of Stds.	M-102	21.1 Ni, 61.6 Cu, 17.2 Zn							Instrument parts	German Silver, U.S. Bureau of Standards
3778	German Silver Foundry Alloy	M-102	35 Ni, 45 Cu, 20 Zn							White metal castings	German Silver

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3779	German Silver White	M-102	24 Ni, 54 Cu, 22 Zn							Corrosion resistant parts	German Silver
3780	German Silver Extra White	M-102	30 Ni, 50 Cu, 20 Zn							Corrosion resistant parts	*German Silver*
3781	Neusilber IIa	M-303	25 Ni, 60 Cu, 15 Zn							For deep drawing, knives, spoons, wash basins, fittings, jewelry, ornaments	
3782a	Phosphor Bronze Bearings		83 Cu, 14 Sn, 1 P, 2 Zn, 1 P							Bearings	
3782b	*Phosphor Bronze* Bearings		*88.1 Cu, 8 Sn, 0.15 P,* 10 Pb							Bearings	
3783a	Phosphor Bronze Bridge		80 Cu, 20 Sn, 1-0.2 P							Bearings	
3783b	Phosphor Bronze Bridge		85 Cu, 15 Sn, 1 P							Bearings	
3784	Phosphor Bronze English		79.2 Cu, 10.2 Sn, 9.6 Pb, 0.97 P							Tubes, hardware	
3785a	Phosphor Bronze Gear		88 Cu, 10 Sn, 2 Pb, 0.1 P							Gears	
3785b			85 Cu, 13 Sn, 2 Zn, 0.1 P							Gears	
3785c			79 Cu, 12 Sn, 0.75 Pb, 0.1 P							Gears	
3786	Phosphor Bronze Hairsprings		93 Cu, 6.6 Sn, 0.12-0.2 P							Hairsprings	
3787a	PhosphorBronze PRR-B		76.8 Cu, 8 Sn, 15 Pb, 0.2 P							Railroad bearings	
3787b			86.5 Cu, 9.85 Sn, 3.77 Zn, 0.05 P							Railroad bearings	
3787c			80 Cu, 8 Sn, 10 Pb, 2 P-Sn							Railroad bearings	
3788	Phosphor Bronze Rolling		95.6 Cu, 4.5 Sn, 0.1 P							Switches, electrical parts	
3789	Phosphor Bronze Very Hard		80 Cu, 9 Sn, 1.0 P							Bearings, slides, gears	
3790	Phosphor Bronze Wire		98.75 Cu, 1.2 Sn, 0.05 P							Springs, electrical purposes	
3791	Red Cut Superior Temper "J"	M-115	0.50-0.55 C, 17.5-18.5 W, 3.75-4.25 Cr, 0.95-1.15 V, bal. Fe							High speed cutting tools, blanking dies, forming tools, taps	Wear and abrasion resistant
3792	Red Cut Superior Temper "L"	M-115	0.61-0.65 C, 17.5-18.5 W, 3.75-4.25 Cr, 0.95-1.15 V, bal. Fe							High speed cutting tools, blanking dies, forming tools, taps	Wear and abrasion resistant
3793	Red Cut Superior Temper "O"	M-115	0.66-0.70 C, 17.5-18.5 W, 3.75-4.25 Cr, 0.95-1.15 V, bal. Fe							High speed cutting tools, blanking dies, forming tools, taps	Wear and abrasion resistant
3794	Red Cut Superior Temper "P"	M-115	0.71-0.75 C, 17.5-18.5 W, 3.75-4.25 Cr, 0.95-1.15 V, bal. Fe							High speed cutting tools, blanking dies, forming tools, taps	Wear and abrasion resistant
3795	Richards		71.5 Sn, 25 Zn, 3.5 Al							Aluminum solder	
3796	Schulz		31 Co, 15 Cr, 35 W, 2 Fe, 10 Mo, 0.7 C							Tools	Corrosion and heat resistant
3797	Screw Brass		78 Cu, 16 Zn, 4.5 Sn, 1.5 Pb							Screws	
3798	Sheet		65-40 Cu, 17-32 Zn, 15-20 Ni, Fe							Ornamental and decorative parts	
3799	Silver Solder, Hard		80 Ag, 13 Cu, 6.8 Zn							Silver solder	
3800	Silver Solder, Medium		75-70 Ag, 20-23 Cu, 5-7.5 Zn							Silver solder	
3801	So-luminum Aluminum Solder		55 Sn, 33 Zn, 11 Al, 1 Cu							Aluminum solder	
3802	Speculum		68.25 Cu, 31.75 Sn							Reflectors, mirrors	Cu, Sn
3803	Standard		58 Pb, 26 Sn, 15 Sb, 1 Cu							Bearings	
3804	Steam Valve Bronze		Cu alloy							Steam valves	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3805	Sterling Aluminum Solder									Solder	
3806	Stone Bronze	M-452	58 Cu, 39 Zn, 1.5 Fe, 0.8 Al, 0.5 Mn, Sn							Marine propellers, nuts, bolts	Corrosion resistant
3807	Tombac, Arcet		82.3 Cu, 17.7 Zn							Water pipes	
3808	Tombac, Cast		87 Cu, 13 Zn							Hardware	
3809	Tombac, Golden		82 Cu, 17.5 Zn, 0.5 Sn							Pipes, hardware	
3810	Tombac, Ludenscheidt		82.3 Cu, 17.5 Zn							Pipes	
3811	Tombac, Oker		85.3 Cu, 14.7 Zn							Pipes	
3812	Tombac, Sheet, Paris		92-84 Cu, 8-16 Zn							Hardware, tubes	
3813	Viennese Tableware		50 Cu, 25 Zn, 25 Ni							Cutlery, ornaments	
3814	Virginia Silver		Cu, Ni							Ornaments	Nickel silver
3815	Vulcan Regal No. 2	M-275	1.3 C, 5.5 W, .6 Cr, bal. Fe							Finishing tool, dies	
3816	Acorn	M-375	C, bal. Fe							Tools, drills	
3817	Atha Pneu	M-38	0.50 C, 2.75 W, 1.25 Cr, 0.25 V, bal. Fe							Pneumatic chisels, rivet busters	Hot work steel
3818	Silcrome H-17-EZ	M-76	C, 17 Cr, bal. Fe							Heat and corrosion resistant parts	
3819	Crucible Copper Bond	M-38	Copper Welded to steel core							Nails, staples, line wire	
3820	Dukane Cold Drawn	M-370	C, bal. Fe							Small tools and parts	Cold drawn
3821	Dukane Drill Rod	M-370	0.95-1.05 C, bal. Fe							Drill rod, small tools and machine parts	
3822	Elhanco		C, V, bal. Fe							General tools	
3823	"E.S.A."	M-73	1.4 C, 4 W, .5 Cr, bal. Fe							Finishing tools	
3824	Excel Hollow Drill	M-34	0.85 C, bal. Fe							Rock drills, coal drills	
3825	Extra		C, bal. Fe							Tools and dies	
3826	Extra	M-39	0.65-1.35 C, bal. Fe							Tools and dies, chisels, shear blades, mine drills, vise jaws	
3827	Extra	M-32	C, bal. Fe							Taps, reamers, drills, dies, cold heading dies	Water hardening
3828	Extra	M-140	C, bal. Fe							General tools	
3829	Extra	M-35	C, bal. Fe							Shear blades, cold chisels	
3830	Extra	M-289	C, bal. Fe							Forming dies, shear blades	
3831	Crasco Broach Steel	M-337	C, alloy, bal. Fe							Broaches, punches, dies	Resists heavy pressures
3832	Extra Best	M-364	C, bal. Fe							Tools, taps, reamers	
3833	Extra Chrome	M-275	C, 4 Cr, bal. Fe							Hot work dies and tools	
3834	Extra M.G.	M-363 M-27	1.05 C, 1.1 Mn, 0.5 Cr, 0.25 Si, bal. Fe							Tools and dies, long taps, reamers, screw dies, calipers	Non-deforming
3835	Extra Punch	M-73	C, W, Cr, V, bal. Fe							Punches, dies	
3836	Extra Quality	M-363	C, bal. Fe							Punches, dies, general tools	
3837	Extra Tool	M-38 M-85	C, bal. Fe							Cutters, dies, general tools	
3838	Extra Warranted	M-260	C, bal. Fe	Water harden						Taps, dies, reamers, knives	Water hardening Small tools
3839	E.Z. 14 W	M-336	C, 14 W, 3 Cr, .2 V, bal. Fe						240	Hot dies, tools, extrusion and hot forging dies	
3840	Fedol	M-375	C, bal. Fe							Tools	Oil hardening
3841	First Quality	M-363	C, bal. Fe							Tools, punches, dies	
3842	F.J.A.B. Extra	M-365	C, bal. Fe							General tools and dies	
3843	F.J.A.B. Hollow Drill	M-365	C, bal. Fe							Mining, quarrying and construction tools	
3844	F.J.A.B. Regular	M-365	C, bal. Fe							General tools and dies	
3845	F.J.A.B. Rolled Auger	M-365	C, bal. Fe							Tools for mining soft ores, coal, etc.	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3846	F.J.A.B. Solid Drill	M-365	C, bal. Fe							Mining, quarrying and construction work tools	
3847	F.J.A.B. Special	M-365	C, bal. Fe							Special die work tools	
3848	Fool-Proof	M-80	C, Cr, W, bal. Fe							Hand and pneumatic chisels	
3849	Silcrome KA2	M-76	0.09-0.20 C, 18 Cr, 8 Ni, bal. Fe	Annealed Hard drawn	90000 200000	30000 150000	55 25	65 45	150 315	Heat and corrosion resistant parts	Heat and corrosion resistant. Scaling temp.—1550°F.
3850	Frasse Temper "A"	M-360	C, bal. Fe							General tools	Discontinued
3851	Frasse Temper "B"	M-360	C, bal. Fe							General tools	Discontinued
3852	Frasse Temper "C"	M-360	C, bal. Fe							General tools	Discontinued
3853	Gilbraltar	M-345	C, bal. Fe							Tools, dies	
3854	Gold Anchor	M-342 M-115	0.68-0.73 C, 17.5-18.5 W, 3.75-4.25 Cr, 0.95-1.15 V, bal. Fe							Chasers, dies, punches, special tools	High speed steel
3855	Gold Anchor Drill Rod	M-32	0.68-0.73 C, 17.5-18.5 W, 3.75-4.25 Cr, 0.95-1.15 V, bal. Fe							Twist drills, reamers, punches, small tools	High speed steel
3856	Gold Star	M-32	0.77 C, 13.7 W, 5.0 Co, 3.75 Cr, 2.1 V, bal. Fe							High speed cutting tools	High speed steel for heavy duty service
3857	Gralur	M-358	C, bal. Fe							Drills	
3858	Grade "H"	M-360	C, W, bal. Fe							General tools	Discontinued
3859	Gray Cut Cobalt	M-115	0.8 C, 1.4 V, 20.5 W, 4.25 Cr, 12.25 Co, 0.6 Mo, bal. Fe							Cutting tools, shapers, planers	
3860	Green Label	M-343	0.8-0.9 C, 1.2-1.4 Mn, 0.3-0.5 W, bal. Fe							Precision tools and files, taps, reamers, chasers, gages	Non-deforming. "Stayput" Oil Hardening
3861	Green Label (Cast, Special)	M-261	C, bal. Fe							Tools, dies	
3862	Griffin	M-350	C, Cr, Mn, bal. Fe							Dies, punches, thread rolling tools	Non-deforming
3863	Gripmore	M-334	C, 4 Cr, 0.25 V, 0.5 Mo, bal. Fe							Hot blanking and forming dies, gripping dies	Non-deforming
3864	G.S.N.	M-73	2.2 C, 13 Cr, bal. Fe							Stamping and forming dies	Non-deforming
3865	G.S.N. Special	M-73	1.5 C, 11.5 Cr, .7 Mo, bal. Fe							Stamping and forming dies	Non-deforming
3866	G.S.N. Tool Steel	M-73	C, bal. Fe							Tools	
3867	"H"	M-40	0.95 C, 0.35 Cr, 0.2 Si, 1.0 Mn, bal. Fe	Oil harden						Dies	Non-deforming
3868	Hacksaw "B"	M-261	C, W, bal. Fe							Hack saws	
3869	Hacksaw "A"	M-261	C, bal. Fe							Hack saws	
3870	Halco	M-260	.9 C, 3.6 Cr, bal. Fe							Hot work dies, hot punches and shear blades	Tough and heat resistant
3871	Halcut	M-260 M-38	.5 C, 1.3 Cr, 2.7 W, bal. Fe	Oil harden					400	Hot work tools, chisels, shear blades forging dies	Tough and abrasion resistant
3872	Haldi	M-260 M-38	High C, high Cr, bal. Fe	Air harden						Dies, swages, punches, shears, drawing dies	Air hardening. Resists wear and abrasion
3873	Silcrome KA2-EZ	M-76	0.08-0.20 C, 18 Cr, 8 Ni, bal. Fe							Heat and corrosion resistant parts	Free machining. Heat and corrosion resistant
3874	Hawk Brand	M-362	0.60-1.40 C, 0.15-0.30 Mn, 0.15-0.30 Si, bal. Fe							General tools, dies	Shallow hardening, fine grained
3875	Hawk "H"	M-362	0.85-1.10 C, 1.0-1.5 Cr, 2V, 0.3-0.6 Mn, 0.15-0.30 Si, bal. Fe							General tools, dies, rolls	Deep hardening, fine grained

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3876	Hawk Special	M-362	0.90-1.40 C, 0.20-0.30 Cr, 0.15-0.30 Mn, 0.40-0.60 Si, bal. Fe							General tools, dies, cutters, taps, drills	Holds its cutting edge
3877	Hawk Vanadium	M-362	0.70-1.40 C, 0.15-0.25 V, 0.15-0.30 Mn, 0.15-0.30 Si, bal. Fe							General tools, dies, cutters, punches	Tough
3878	Headmore	M-334	C, Cr, V, bal. Fe							Header dies	
3879	Heppenstall "E.I.S.-51"	M-64	0.6-0.65 C, 0.5-0.8 Mn, 1.25-1.5 Ni, 0.6-0.8 Cr, 2-2.25 W, 0.15-0.20 V, bal. Fe							Dies	Hot or cold trimmer steel
3880	Hidalgo	M-344	C, W, Cr, V, bal. Fe							Pneumatic and flogging tools, *shear blades, dies, punches*	
3881	Silcrome KA2M	M-76	C, 18 Cr, 8 Ni, 3 Mo, bal. Fe							Corrosion resistant parts	Corrosion resistant
3882	Hobson Non-Shrink	M-340	C, bal. Fe, alloy							Dies and tools	Non-deforming
3883	Hobsons Warranted Best	M-340	C, bal. Fe							General tools	
3884	Hollo	M-344	C, bal. Fe							Rock drills	
3885	Hollow Bar	M-80	C, Cr, bal. Fe							Dies, punches	
3886	Hot Die No. 2	M-140	1.0 C, 4 Cr, bal. Fe							Hot work dies	
3887	Hot Header No. 3	M-34	C, Cr, bal. Fe							Hot work tools and dies	
3888	Hypro	M-344	1.5 C, 14 Cr, bal. Fe							Punches, dies, forming rolls, shear blades	Non-deforming
3889	Hypro No. 62	M-336	2.0 C, 12 Cr, .6 Mn, bal. Fe		122000	54000	7.6		257	General tools, high production tools, stamping and blanking dies	
3890	Imperial Major	M-210	C, 22 W, 5 Cr, 13 Co, bal. Fe							Lathe and planing tools	High speed steel
3891	Intra	M-345	1.2 C, 1.3 W, bal. Fe							Dies, reamers, blanking dies	
3892	Invincible Drill Rod	M-339	C, bal. Fe							Drills, general tools	
3893	J.C./C.	M-355 M-584	C, bal. Fe							General tools	
3894	"K"	M-39	C, Cr, W, bal. Fe							Hot work dies, punches	
3895	"K.D." No. 6	M-344	C, Co, W, bal. Fe							High speed lathe tools, twist drills, reamers	High speed steel
3896	"K.D." No. 10	M-344	C, W, Co, bal. Fe							High speed lathe tools, twist drills, reamers	High speed steel
3897	Keystone	M-357	C, Cr, W, V, bal. Fe							Chisels	
3898	Keystone	M-140	1.2 C, 0.5 Cr, 0.2 V, 1.7 W, bal. Fe							Form tools, dies, taps, chasers	
3899	Kloster Hollow Drill	M-335	C, bal. Fe							Rock drills	
3900	"K.R." Alloy	M-32	C, Cr, bal. Fe							Hot work dies	Discontinued
3901	Kronos	M-360	.8 C, .4 Mn, bal. Fe							General tools	Discontinued
3902	Krovan	M-361 M-260	C, Cr, V, bal. Fe	Water harden						Jewelers dies, heavy blanking dies, rolls	Deep hardening. Resists wear and impact, tough
3903	Kutkwik	M-357	.8 C, 18 W, 4 Cr, 1 V, bal. Fe							Cutting tools	
3904	"K.W."	M-32	1.3 C, 3.5 W, bal. Fe							Draw dies, punches, mandrels, reamers, gages	Wear resistant, water hardening
3905	LaBelle "C" & "H"	M-38	C, .4 Ni, .2 Cr, .1 V, bal. Fe							Chipper knives	
3906	La Belle Eagle	M-38	C, bal. Fe							Tools, cutters, drills, dies, hammers	Discontinued
3907	La Belle No. 2-70	M-38	0.6 C, 2 Si, 0.8 Mn, bal. Fe							Punches, chisels	
3908	La Belle No. 24 Die	M-38	1.1 C, 12 Cr, 1 Mo, 0.25 V, bal. Fe							Forming and crimping rolls, perforating dies, plug gages	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3909	La Belle No. 89 Die	M-38	0.5 C, 4 Cr, 1 V, 0.5 Mo, bal Fe							Dies and tools	
3910	La Belle Semi-Hot	M-38	C, Cr, W, V, bal. Fe							Hot work tools and dies	Discontinued
3911	La Belle Silicon Punch No. 1	M-38	C, Cr, Si, Mn, bal. Fe							Punches, chisels	Discontinued
3912	La Belle Silicon 2	M-38	0.6 C, 0.8 Mn, 1.9 Si, 0.3 Mo, bal. Fe							Punches, chisels	
3913	La Belle Special Hot Die	M-38	0.4 C, 2.25 Cr, 2.5 Ni, bal. Fe							Hot heading dies	
3914	Latrobe	M-115	C, bal. Fe							Tools, general purposes	
3915	Halcomb L.C.T.	M-260 M-38	.4 C, .3 Mo, 2.7 Cr, .4 V, 15 W, bal. Fe							Hot work dies and tools, shear blades, nut piercers	Tough and heat resistant
3916	Liberty	M-260 M-38	1.2 C, .3 Cr, 1.2 W, bal. Fe							Broaches, reamers, dies	Water hardening Tough
3917	L.L.C.T.	M-260 M-38	.2 C, 4 Cr, .5 V, 15 W, bal. Fe							Hot work dies and tools, shear blades, crowning tools	Tough and heat resistant
3918	Lophos	M-289	C, V, bal. Fe							Cold heading dies	
3919	Macco Certified	M-80	C, bal. Fe							General purpose tools	Water hardening
3920	Magic	M-69	0.50 C, 2.0 Si, Mo, V, bal. Fe	Annealed					207	Chisels, track tools, punches, cement breakers	Shock resistant
3921	Mansil	M-357	.9 C, 1.1 Mn, .5 Cr, .5 W,							Dies	Non-deforming
3922	Marathon	M-260 M-38	bal. Fe 2.2 C, 12 Cr, .2 V, bal. Fe	Oil harden						Dies, swedges, punches, drawing, shearing and riveting dies	Resists wear and abrasion
3923	Master	M-358	C, Mn, bal. Fe							Tools and dies	
3924	Midvaloy 77F	M-85	C, 1.2 Cr, 0.3 Mo, bal. Fe							Dies, taps, ball races, cams, balls and bearings	Oil hardening
3925	Milo	M-344	C, bal. Fe							Flogging and contractors tools, scarifier and fire tools	Resists heat
3926	Minerva Special	M-210	C, W, bal. Fe							Pneumatic chisels, cold chisels, rivet busters	
3927	Silcrome K-2S	M-76	0.08 max. C, 18 Cr, 8 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
3928	Monaca Drill Rod	M-370	1.18-1.28 C, bal. Fe							Small tools and parts, drills	
3929	Monaca Cold Drawn	M-370	C, bal. Fe							Small tools and parts	Cold drawn
3930	"M.Y."	M-363 M-27	0.42 C, 1.4 Cr, 1.5 Si, 0.25 V, bal. Fe							Pneumatic tools, chisels, snaps, hot dies, hot shears	
3931	"M.Y." Extra	M-363 M-27	C, W, Cr, Si, bal. Fe							Pneumatic tools, chisels, snaps, hot dies, hot shears	
3932	New Rapid	M-363	C, W, bal. Fe							Punches, dies, cutting tools	High speed steel
3933	Nitricastiron	M-386	2.75 T.C., 1.89 G.C., 0.86 C.C., 2.58 Si, 1.22 Cr, 0.16 V, 0.24 Mo, 1.01 Al, bal. Fe	Annealed	56000 67000				302	Nitrided cast iron, cams, cylinders, valves	
3934	No. 000	M-111	C, bal. Fe	Annealed					180	Dies and punches, taps, shears, broaches	Discontinued
3935	No. 000 Double Extra Carbon	M-350	C, bal. Fe							Intricate tools, broaches, drawing and threading dies	
3936	No. 2 B	M-260	C, W, bal. Fe							Hot die work	
3937	No. 3 C	M-69	C, Cr, Co., bal. Fe							Coldwork dies	
3938	La Belle N-183 Mix	M-38	C, Ni, V, bal. Fe							Keen edge dies, machine knives	Discontinued
3939	No. 812	M-57	C, Cr, bal. Fe							Dies	Non-deforming
3940	No. 821	M-357	C, V, bal. Fe							Tools	
3941	No. 826	M-357	C, V, bal. Fe							Tools	
3942	No. 999	M-340	C, Co, bal. Fe							Hogging cuts for fast speeds, cutters	High speed steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3943	Non-Shrink	M-334	C, W, Cr, bal. Fe							Dies and tools, production dies	Non-shrinking oil-hardening
3944	Normar	M-289	C, Cr, Mn, bal. Fe							Dies	Non-deforming
3945	North Star	M-333	C, W, bal. Fe							Dies	Non-deforming
3946	Novo Special	M-345	0.7 C, 3-4 Cr, 18 W, 0.9 V, bal. Fe							Lathe tools	High speed steel
3947	One Star	M-85	0.7 C, 13 W, 3.5 Cr, 2 V, balFe							Cutting and lathe tools	High speed steel
3948	One-Plus	M-366	C, W, Cr, V, bal. Fe							Cutting tools	High speed steel
3949	Orange Label	M-343	0.45-0.55 C, 1.25-1.75 Cr, 2-3 W, 0.2-0.3 V, bal. Fe							Chisels, punches, rivet sets	"Special Alloy Tool"
3950	Orion	M-39	0.5 C, 0.8 Cr, 0.2 V, bal. Fe	Heat treated	240000 115000	195000 80000	5 23	15 65	440 262	Machine parts, tools, automobile springs and gears, forging dies, shear blades	Resists heavy vibrations
3951	Paragon Oil Hardening	M-38	0.95 C, 1.7 Mn, 0.27 Cr, 0.25 V, bal. Fe							Stamping dies, taps, reamers	Non-deforming
3952	Silcrome KA2T	M-76	C, Ti, 18 Cr, 8 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
3953	Park Silver	M-38	C, bal. Fe							Cutters, drills, broaches, dies	
3954	P. B.	M-368	C, bal. Fe							Tools	
3955	Penco No. 4	M-341	1.0 C, bal. Fe							Tools and dies	
3956	Peerless Extra	M-38	C, bal. Fe							Tools, punches, cutters	
3957	Planet Cold Rolled	M-372	C, bal. Fe							Tools	
3958	Planet Drill Rod	M-372	C, bal. Fe							Drill rods	
3959	Planet High Speed	M-372	C, W, bal. Fe							Cutting tools	High speed steel
3960	Planet Special	M-372	C, V, bal. Fe							Dies and tools	
3961	Poldi Brand No. 4	M-96	1.0 C, bal. Fe							General tools, cold work dies, stamps, punches	
3962	Poldi Brand No. 2002-E. S.	M-96	High C, high Cr, V, bal. Fe							Highly stressed tools subject to severe abrasive wear	Oil or air hardening
3963	Poldi "C.R."	M-96	C, Cr, bal. Fe							Dies, punches, cold rolls	Deep hardening, water quench
3964	Poldi "H.P.S."	M-96	C, W, bal. Fe							Tools for hot work	
3965	Poldi No. 212	M-96	C, W, bal. Fe							Hot work tools	
3966	Poldi "S.S.T."	M-96	C, W, bal. Fe							Taps, dies, punches, shop tools	Water hardening
3967	Prince	M-365	C, Cr, bal. Fe							Ballbearing	
3968	Pure-Ore Production	M-335	High C, high Cr, bal. Fe							Intricate dies	Non-deforming
3969	Pure Ore Cobalt	M-335	C, W, Co, V, Cr, bal. Fe							Special tools	High speed steel
3970	Pure Ore Cold Heading	M-335	C, V, bal. Fe							Header dies	
3971	Pure Ore Drill Rod	M-335	C, bal. Fe							Taps, drills, twist drills, reamers, punches	
3972	Pure Ore High Speed	M-335	C, W, Cr, V, bal. Fe							Special tools, high speed cutters	High speed steel
3973	Pure Ore Special	M-335	C, bal. Fe							Dies and special tools	
3974	Pure Ore No. 25 Special Alloy	M-335	C, Cr, W, V, bal. Fe							Broaching tools, stamping white gold	Wear resistant
3975	Halcomb Pyro	M-260 M-38	.7 C, .9 Cr, .2 V, bal. Fe	Oil harden						Hot and cold work impact tools, bull-dozing tools	Resists shock and wear
3976	Ryolite Chromium Hot Work	M-240	C, Cr, V, bal. Fe							Hot heading dies, hot shearing tools	Discontinued
3977	Ryolite Tungsten Hot Work	M-240	C, Cr, V, bal. Fe							Hot heading dies, hot shearing tools	Discontinued
3978	Sa-Best Extra Standard	M-357	C, bal. Fe							Tools and dies	
3979	S.B. Steel	M-38	C, Cr, bal. Fe							Tools	Discontinued
3980	Seaco High Speed	M-374	C, W, Cr, V, bal. Fe							Cutting tools	High speed steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
3981	Seaco O. H. No. 4 Non-Shrink	M-374	C, Cr, Mn, bal. Fe							Dies	Non-deforming
3982	Seaco Standard	M-374	C, bal. Fe							Tools, chisels, rock drills	
3983	Seaco "70-20"	M-374	C, V, bal. Fe							Drills, tools	
3984	Seaco Extra	M-374	C, bal. Fe							Chisels, rock drills	
3985	Section "A" Auger	M-289	C, bal. Fe							Tools, mining drills	
3986	Section "B" Auger	M-289	C, bal. Fe							Tools, mining drills	
3987	Simonds Diamond "S"	M-373	C, bal. Fe							Cutting tools	
3988	Simonds Frontier	M-373	C, W, bal. Fe							Cutting tools	
3989	Simonds Frontier Special	M-373	C, W, Co, bal. Fe							Heavy duty high speed tools	
3990	Simonds Non-Shrinking	M-373	C, Mn, bal. Fe							Dies	Non-deforming
3991	Simonds "T.A.S."	M-373	C, W, Cr, bal. Fe							Shear blades, heavy duty cutters, dies	
3992	Sisco	M-375	.9 C, bal. Fe							Tools, drills	
3993	S.K.F. 100	M-267	C, bal. Fe							Stamping, cold heading and trimming dies, general tools	
3994	S.K.F. No. 3 Tubing	M-267	C, Cr, bal. Fe							Bearing races, bushings	
3995	S.K.F. No. 6	M-267	C, Cr, Mn, bal. Fe							Ball bearings, rollers, spindles	
3996	S.K.F. No. 7	M-267	1.1 C, .6 Cr, bal. Fe							Balls, rollers, spindles	
3997	S.K.F. No. 9	M-267	C, Cr, bal. Fe							Balls, rollers, spindles	
3998	S.K.F. No. 13	M-267	1.1 C, 1.0 Cr, bal. Fe							Balls, rollers, spindles	
3999	S.K.F. 2	M-267	C, Cr, Mo, bal. Fe							Trimming and stamping dies, drills	
4000	S.K.F. No. 50	M-267	C, Cr, W, bal. Fe							Blanking and moulding dies, gages, cutters, broaches	Non-deforming Discontinued
4001	S.K.F. No. 99	M-267	C, Cr, bal. Fe							Hot heading tools and dies	Discontinued
4002	S.K.F. No. 100	M-267	C, Cr, W, V, bal. Fe							Hot punching and piercing dies	Discontinued
4003	Soho Self-Hardening	M-340	C, alloy, bal. Fe							Tools	
4004	Silcrome L-12	M-76	0.30 C, 12 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
4005	Self-Hardening	M-35	1.6 C, 3.75 Cr, 9.5 W, 0.45 Si, 0.25 Mn, bal. Fe							Tools, cutters	Air-hardening
4006	Special	M-260	C, bal. Fe	Water harden						Tools, taps, dies, reamers	Deep hardening
4007	Special	M-289	C, bal. Fe							Tools, taps, reamers	
4008	Special	M-73	C, bal. Fe							General tools	
4009	Special	M-35	Any C, 0.15 Cr, 0.02 V, 0.25 Si, 0.25 Mn, bal. Fe							Tools, dies, punches, taps	See Serial No. 2197
4010	Special	M-39	0.65-1.35 C, bal. Fe							Tools and dies, reamers, taps, milling cutters, chisels, cutlery	
4011	Silcrome M-17	M-76	0.60 C, 17 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
4012	Special	M-69	C, 18 W, 4 Cr, 1 V, bal. Fe							Drilling tools, reamers, cutters, broaches, lathe tools	High speed steel
4013	Special	M-140	C, V, bal. Fe							Tools	
4014	Special Bolt Die	M-85	.35 C, 1.8 Cr, 11 W, bal. Fe							Hot work dies, bolt headers, gripper and forging dies	
4015	West No. 7A (Duracast)	M-465	0.3-0.4 C, 0.6-0.8 Mn, 0.3-0.4 Si, 0.3-0.4 Mo, bal. Fe	Heat treated	60000 90000				170 302	Tools, dies	Tough
4016	Special Chrome Vanadium	M-210	C, Cr, V, bal. Fe	Oil harden						Rivet sets and dies, hot punch and die work, thread rolling	
4017	Special	M-344	C, W, bal. Fe							Dies, high duty shafts, Hot dies	
4018	Special	M-363 M-27	2.2 C, Cr, 0.6 Si, 0.3 Mn, bal. Fe							Punch and die work tools, cutting dies, plug gages	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4019	Special Punch	M-85	C, Si, bal. Fe							Punches, cold punches	
4020	Special Shell Turning		C, W, bal. Fe							High speed cutting tools	High speed steel
4021	Special Vanadium	M-339	C, V, bal. Fe	Water harden						Dies, cold punches, impact tools, shear blades	Tough and shock resistant
4022	Special Very Hard	M-363	C, W, bal. Fe							Fast finishing tools	
4023	Special No. 18	M-336 M-341	0.45 C, 1.4 Cr, 2.2 W, 0.2 V, 0.3 Mo, bal. Fe						180	Pneumatic tools, shear blades, chisels, rivet sets	Shock tool steel
4024	Special No. 19	M-336	C, W, Mn, Cr, bal. Fe						200	Taps, thread dies	
4025	Special No. 20	M-336	C, Cr, W, Mn, V, bal. Fe						240	Finishing tools	
4026	Silcrome 12	M-76	0.12 max. C, 11.5-13.0 Cr, bal. Fe	Annealed Heat treated	65000 130000	35000 95000	30 15	60 35	156 280	For applications requiring moderate corrosion resistance and high physical properties	Corrosion resistant. Scaling temp.—1100°F.
4027	Super Cesco Diamond	M-356	0.50-0.65 C, 2.0 Si, 1.0 Mn, 1.25 Mo, 0.3 V, bal. Fe	Heat treated	236400 338000	231000 279200	10.5 4	31 7.7	612	Chisels, concrete busters, drills, caulking and beading tools	Superseded by "Cesco Diamond Special"
4028	Super Chrome	M-345	2.25 C, 13-14 Cr, 0.50-0.75 Ni, bal. Fe							Drawing and blanking dies	
4029	Super Dreadnought	M-260 M-38	.7 C, 4 Cr, 2 V, 14 W, bal. Fe	Oil or air						High speed cutting tools, roughing cuts on hard material	High speed steel
4030	Superior Ark	M-261	C, W, bal. Fe							High speed cutting tools	High speed steel
4031	Super-rapid Extra	M-363	C, W, bal. Fe							Punches, dies, cutting tools	High speed steel
4032	Superior Oil Hardening	M-261	C, alloy, bal. Fe							Tools and dies	Non-deforming
4033	Super-Panther	M-76	.8 C, 18 W, 4 Cr, 2 V, 7 Co, bal. Fe							Cutting tools, lathe, planer and boring tools on castings	High speed steel
4034	Swedish Vanadium	M-80	C, V, bal. Fe							*Tools and dies, punches*	
4035	Swedesteel "A"	M-367	C, bal. Fe							Rock drills, concrete busters	
4036	Swedesteel "B"	M-367	C, Mo, bal. Fe							Scarifier teeth, chisel blanks	
4037	Swedesteel "C"	M-367	C, Cr, Ni, bal. Fe							Shovel teeth	
4038	Swedesteel "D"	M-367	C, V, bal. Fe							Digging bars	
4039	Swedesteel "E"	M-367	C, W, bal. Fe							Tool bits	
4040	Swed-Oil	M-335	C, Cr, W, bal. Fe							Dies and tools	Non-deforming
4041	"S" No. 2	M-81	C, Cr, W, bal. Fe							Milling cutters, dies, taps, master tools	Non-deforming
4042	"S" No. 4	M-81	C, Cr, W, Mo, bal. Fe							Rivet sets, shear blades, pneumatic tools	
4043	Tack Die	M-38	2 C, 2 Cr, 12 W, bal. Fe							Tools, dies	
4044	Tennessee Special	M-377	C, bal. Fe							General tools	
4045	Thermo Die	M-260	.4 C, 2 Cr, .2 V, bal. Fe	Oil harden						Hot work dies, die casting dies for aluminum work	No heat checking Resists erosion
4046	Three Star	M-85	.72 C, 4 Cr, 18.5 W, 1.2 V, 4 Co, .75 Mo, bal. Fe							Cutting tools	High speed steel
4047	Tiger	M-334	C, 18 W, 4 Cr, 1 V, bal. Fe							Cutting tools, reamers, gages	High speed steel
4048	Timken Special Carbon	M-376	0.10-0.20 C, 0.3-0.6 Mn, bal. Fe			61500	45000	31	70	132	Oil refinery tubing, cracking furnace tubes, condenser tubes, heat exchanger tubes
4049	Ti-Tax	M-371	Cemented carbide							Cutting tools	Discontinued
4050	Titus	M-39	0.7 C, 0.75 Cr, 0.2 V, bal. Fe	Heat treated	220000 125000	200000 100000	5 20	5 53	487 320	Punches and chisels, axes, ball races, dies, shear blades	"Cyclops Titus"
4051	"T-K" Alloy	M-32	.35 C, 9 W, 3.5 Cr, bal. Fe							Hot work dies	
4052	Toledo Extra	M-352	C, bal. Fe							Tools	
4053	Toledo High Speed	M-352	C, W, bal. Fe							Cutting tools	High speed steel
4054	Toledo Non-Shrinking	M-352	C, alloy, bal. Fe							Tools and dies	Non-deforming

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4055	Toledo Scimitar	M-352	C, W, Cr, bal. Fe							Tools	
4056	Toledo Special	M-352	C, bal. Fe							General tools	
4057	Toledo Superior	M-352	C, bal. Fe							General tools	
4058	Tool Holder	M-85	1.2 C, 3 Cr, 13W, 1.2 Mo, bal. Fe							Cutting tools	Obsolete
4059	Tool	M-364	C, bal. Fe							Drills, chisels, crow-bars	
4060	Triangle "X"	M-111	C, bal. Fe							Rock drill pistons, punches, dies, broaches	Water hardening
4061	Tri-Mo	M-111	1.5 C, 12 Cr, 2 V, .8 Mo, bal. Fe	Annealed	102000		14		225	Tools and dies, reamers, gauges	Air hardening
4062	Tri-Mo Air-Hardening	M-350	C Cr, Mo, bal. Fe							Heavy dies for severe requirements	Air hardening
4063	Triple Alloy Punch	M-38	0.6 C, 0.15-0.25 V, 1.3 Cr 0.5 W, bal. Fe							High speed cutting tools, punches	High speed steel
4064	Triple Express "A"	M-344	C, W, Co, Mo, Cr, bal. Fe							High speed lathe tools, twist drills, reamers	High speed steel
4065	Triple Express "B"	M-344	C, W, Co, Mo, Cr, bal. Fe							High speed lathe tools, twist drills, reamers	High speed steel
4066	Trivan	M-350	C, Cr, V, bal. Fe							Blanking and coining dies	*Oil hardening*
4067	Twinvan	M-140	0.8 C, 4.5 Cr, 2 V, 18.5 W, 0.5 Mo, bal. Fe							Cutting tools, reamers	High speed steel
4068	Two Star	M-85	0.7 C, 3.5 Cr, 18 W, 1 V, bal. Fe							Cutting tools, reamers	
4069	"U.H.B." Crown	M-111	High C, bal. Fe	Annealed	84000		24			Cold heading dies, stamping dies, punches	Water hardening
4070	"U.H.B." No. 46 Crown	M-111	C, Mn, Cr, W, bal. Fe	Annealed	104000		21			Tools, dies, gauges, reamers	Oil hardening Non-deforming
4071	"U.H.B."	M-350	C, bal. Fe							Dies for cold heading, embossing, trimming and swedging	
4072	"U.H.B." Header	M-341	C, bal. Fe							Tools, cold heading dies	
4073	"U.H.B." No. 46	M-350	.9 C, .5 Cr, .5 W, bal. Fe							Tools and dies	Non-deforming
4074	"U.H.B." Special	M-350	C, W, Cr, bal. Fe							Blanking and forming dies	Non-deforming
4075	"U.H.B." Super	M-350	C, Mo, W, bal. Fe							Chisels	
4076	Unico	M-344	C, W, bal. Fe							Pneumatic and flogging tools, shear blades, dies	
4077	Unito Drill Rod	M-339	C, bal. Fe							Drills, tools	
4078	Vasco Hot Form No. 1	M-115	0.32 C, 1.5 Mo, 0.9 Si, 1.0 W, 4.75 Cr, 0.25 Mn, bal. Fe							Tools and dies for Al die castings	
4079	"V.D." Tool Steel	M-240	0.95-1.05 C, 0.27 Mn, 0.15-0.18 V, 0.19-0.21 Si, bal. Fe							Punches, dies, forming tools, shear blades, mandrels	Water hardening Special analysis
4080	Velvet		C, W, bal. Fe							Tools	
4081	Very Best	M-334	V, C, bal. Fe						185	Cutting tools	
4082	Very Best Water Hardening	M-336	High C, 0.3 Mn, 0.5 Cr, 0.1 V, bal. Fe	Annealed						Dies and tools, drawing and forming dies, taps, drills, mandrels	Tough and hard
4083	Vibro	M-140	0.5 C, 1.4 Cr, 0.3 V, 1.9 W, bal. Fe							Tools	
4084	Visto Superior	M-344	C, W, Cr, Mo, Co, bal. Fe							High speed lathe tools, twist drills, reamers	
4085	Weldo	M-344	C, bal. Fe							Re-steeling picks, etc., tools	Charcoal welding steel
4086	Welco Die and Tool	M-119	C, Cr, bal. Fe							Punches and dies	Discontinued
4087	Welco Finishing	M-119	C, W, bal. Fe							Tools and dies	
4088	Welco Hot Work	M-119	C, W, bal. Fe							Hot work dies	
4089	Welco Oil Hardening	M-119	C, Mn, bal. Fe							Tools and dies	Non-deforming
4090	Welco Piston	M-119	C, Cr, V, bal. Fe							Pistons, tools	Discontinued
4091	Welco Standard	M-119	C, low Cr, bal. Fe							Tools	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	B No.	Uses	Remarks
4092	Whelco Superior	M-119	C, bal. Fe							Tools	
4093	Wizard	M-289	C, W, Cr, Mo, bal. Fe							Pneumatic tools	
4094	Woco	M-334	C, low W, Cr, V, bal. Fe							Pneumatic and rivet busting tools	Shock tools
4095	Wolva	M-73	C, W, Cr, bal. Fe							Punches, dies, reamers	
4096	Wortle Die	M-38	1.2-1.3 C, 2.5-3.5 W, 0.50-0.75 Mn, bal. Fe							Drawing dies	
4097	Arrow No. 16	M-341	0.95 C, 1.2 Mn, 0.5 Cr, 0.5 W, 0.1 V, bal. Fe							Tools and dies	Non-deforming oil hardening
4098	XX Superior		C, Cr, bal. Fe							Tools	
4099	Yellow Label Cast (Very Best)	M-261	C, bal. Fe							Tools and dies	
4100	Zip	M-289	C, high Co, W, bal. Fe							Cutting tools	High speed steel
4101	Zivco	M-289	C, bal. Fe							Tools, sledges, pick-points	
4102	Ziv's Block Tested Hollow Drill	M-289	C, bal. Fe							Mining drills	
4103	Ziv's Cobalt	M-289	C, Co, W, bal. Fe							Cutting tools	High speed steel
4104	Ziv's Solid Drill	M-289	C, bal. Fe							Mining drills	
4105	Ziv's Super	M-289	C, W, Cr, V, bal. Fe							Cutting tools	High speed steel
4106	Wuest Aluminum Solder									Al solder	
4107	Bronze, Phosphor, Grade "A"	M-8	96 Cu, 3.75 Sn, 0.25 P	Cold rolled Wire	90000 150000	45000	10 0.5			Springs, electrical switches, diaphragms	
4108	Bronze, Phosphor Grade "C"	M-8	92 Cu, 8 Sn	Plates Wire	50000 150000	20000	73		60	Springs, switches, fittings	
4109	Bronze, Phosphor Grade "D"	M-8	89.5 Cu, 10.5 Sn	Cold rolled	92000	83000	29		218	Worm wheels, pumps	
4110	Edgar Allen Miners Drill Steel	M-210	C, bal. Fe	Water harden						Drills	
4111	Edgar Allen Silver Steel	M-210	C, bal. Fe	Water harden						Borers, punches, reamers, twist drills, taps	
4112	Hi-Van No. 28	M-341	0.85 C, 4 Cr, 19 W, 2 V, 0.75 Mo, bal. Fe							Tools, cutters, reamers, taps, gauges	High speed steel
4113	Edgar Allen Drift Steel		C, bal. Fe	Water harden						Tools	
4114	Edgar Allen Granite-Chisel Steel	M-210 M-210	C, bal. Fe	Water harden						Stone chisels	To cut granite
4115	Edgar Allen Dunter-Pick Steel	M-210	C, bal. Fe	Water harden						Dunter picks, drills	
4116	Edgar Allen Feather Steel	M-210	C, bal. Fe	Water harden						Feather tools	Usually requires no heat treatment
4117	Edgar Allen Plug Steel		C, bal. Fe	Water harden						Plugs	Resists heavy blows
4118	Edgar Allen Drill Steel	M-210	C, bal. Fe	Water harden						Drills	Resists abrasion
4119	Edgar Allen Maximum Steel	M-210 M-210	C, W, Cr, bal. Fe	Oil harden						Die casting die steels	
4120	Dudley's Bronze "K"		77 Cu, 10.5 Sn, 12.5 Pb							Bearings, bronze castings	
4121	Dudley's Bronze "B"		77 Cu, 8 Sn, 15 Pb							Bearings, bushings	
4122	Nickelin "A"		18 Ni, 62 Cu, 20 Zn							Resistance alloy	
4123	Nickelin "B"		32 Ni, 68 Cu							Resistance alloy	
4124	Nickelin "C"		31.5 Ni, 55.3 Cu, 13.1 Zn							Resistance alloy	
4125	Queen's Metal "B"		50.5 Sn, 16.5 Sb, 16.5 Pb, 16.5 Zn							Type metal	
4126	Queen's Metal "C"		87 Sn, 8.5 Sb, 3.5 Cu, 1 Zn							Type metal	
4127	Queen's Metal "D"		73.36 Sn, 8.88 Sb, 8.88 Pb, 8.88 Zn							Type metal	
4128	Queen's Metal "E"		88.5 Sn, 7 Sb, 3.5 Cu, 1 Bi							Type metal	
4129	Best Type Metal		50 Pb, 25 Sn, 25 Sb							Type metal	
4130	French Type Metal "A"		55 Pb, 22 Sn, 23 Sb							Type metal	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4131	French Type Metal "B"		55 Pb, 15 Sn, 30 Sb							Type metal	
4132	Common Type Metal "A"		60 Pb, 10 Sn, 30 Sb							Type metal	
4133	Common Type Metal "B"		55.5 Pb, 40 Sn, 4.5 Sb							Type metal	
4134	German Type Metal "A"		75 Pb, 2 Sn, 23 Sb							Type metal	
4135	German Type Metal "B"		60 Pb, 35 Sn, 5 Sb							Type metal	
4136	German Type Metal "C"		60 Pb, 34.6 Sn, 5.4 Sb							Type metal	
4137	German Type Metal "D"		60 Pb, 15 Sn, 25 Sb							Type metal	
4138	English Type Metal "D"		58 Pb, 15 Sn, 26 Sb, 1.0 Cu							Type metal	
4139	English Type Metal "E"		77.5 Pb, 6.5 Sn, 16 Sb							Type metal	
4140	Uniloy No. 24-11	M-114	0.15-0.30 C, 0.5-0.8 Mn, 0.9-1.2 Si, 22-25 Cr, 10-12 Ni, bal. Fe	At 70°F. At 1200°F.	112500 67500		33 22		236	For heat resisting purposes	Cannot be hardened by heat treatment. Resists heat up to 2100°F.
4141	Delta Bronze No. IV	M-156 M-450	Cu, Zn, Fe, Sn	Sand cast Chill cast	55000 60000	20000 42000	21 37	20		Marine and hydraulic parts, chemical apparatus, brewers' stills, tie rods, dowels	Resists sea and mine water corrosion
4142	H.Y.C.C.	M-38	2.2 C, 12 Cr, 0.25 V, .8 Mo, bal Fe							Forming and crimping rolls, perforating dies, plug gages	
4143	Midvale Special	M-85	High C, bal. Fe							Tools, dies, machine parts, cutting tools, taps, mill picks, reamers	Made in all tempers
4144	Special Tool	M-38	C, bal. Fe							Cutters, drills, broaches, dies	
4145	Non-Shrinkable	M-115	.9 C, 1.2 Mn, .5 Cr, .5W, bal. Fe							General tools	Non-deforming
4146	Non-Shrinkable	M-275	C, bal. Fe							General tools	Non-deforming
4147	Extra "H"	M-73	C, bal. Fe							General tools	
4148	Dixtamp	M-156	Cu alloy							Yellow metal bars for hot forging and stamping	Yellow brass
4149	Dixtrudo	M-156	Cu alloy							High speed turning and screwing rods, screws, nuts, bolts	*Free machining*
4150	Deltoid	M-156	Cu alloy							Hardware	Trade name for inexpensive metals and alloys
4151	Phoenixloy	M-68 M-369	5 Ni + Cr, C, bal. Fe	Hardened						*Mill rolls for heavy duty*	Super hard alloy cast iron. Sc.-80-90
4152	Silcrome 12-EZ	M-76	0.12 max. C, 12-15 Cr, bal. Fe							Stainless parts	Easy machining, stainless
4153	La Belle No. 211 Die	M-38	.5 C, 2.2 Ni, .7 Cr, .5 Mo, bal. Fe							Tools, hot work dies	
4154	Nicrosilal	M-86	1.8 C, 6.0 Si, 18 Ni, 2 Cr, 1 Mn, bal. Fe		36000		3		110 250	Furnace grids, regenerator boxes, annealing pots	Heat resistant. Does not grow at high temp. Austenitic
4155	F.C.C. Air Hardening	M-76 M-439	1.45-1.60 C, 0.4-0.5 Mn, 11.5-12.5 Cr, 0.9-1.1 Mo, 0.2 V, bal. Fe							Blanking, forming, drawing, embossing dies, punches, hot press work, rotary shears	Air hardening. Non-deforming. Cast to shape. Resists abrasion (Discont.)
4156	Solderal	M-427	Al alloy							Al solder, castings	Non-corroding
4157	Aluminum Alloy 3 L-11	M-86 M-28	Al alloy	Chill cast Sand cast	22400 15500	18000	3 2		60 50	Light alloy parts	(Discontinued) Iz-1.4

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4158	Aluminum Alloy 3 L-8	M-86	Al alloy	Chill cast	24500	15500	1		80	Light alloy parts	
		M-28		Sand cast	20000		1		75		Iz-0.6
4159	Anaconda Phosphor Bronze, Grade "E"	M-8	98.25 Cu, 1.75 Sn	Hard	100000		3			Electrical parts	M.P.-1070°C.
				Soft	50000		33				
4160	Nicalun	M-250	Ni, Cu alloy base + abrasive grains imbedded							Elevator door sills, stair treads	Castings, wear resist.
4161	Feralun	M-250	Special iron base + abrasive grains imbedded							Stairs, platforms	Castings, wear resist.
4162	Special Oil Hardening	M-69	0.90 C, 1.7 Mn, 0.2 V, bal. Fe	Annealed					190	Press tools; dies for trimming, punching and stamping	Non-deforming
4163	Standard	M-336	C, Mn, bal. Fe							General tools, drills, stone tools, dies	Water hardening
4164	Standard	M-275	C, bal. Fe							General tools, dies, punches	
		M-35									
4165	White Label	M-343	0.75-0.9 C, bal. Fe							Blacksmith tools depending on temper, chisels, rock drills	"Hellers Electric Tool"
4166	Nickelin I	M-297	54 Cu, 26 Ni, 20 Zn	Hard	121000		1.5			Starting rheostats for motors, field regulators, loading resistances	Max. operating temp.-500°C.
				Annealed	85000		30				
4167	Nickelin II	M-297	67 Cu, 30 Ni, 3 Mn	Hard	121000		1			Starting rheostats, field regulators, loading resistances	Max. operating temp.-500°C.
				Annealed	70000		28				
4168	Nickelin III	M-297	58 Cu, 22 Ni, 20 Zn	Hard	118700		1			Regulating and control resistances	Max. operating temp.-500°C.
				Annealed	72000		34				
4169	Nickelin IV	M-303	85 Cu, 15 Ni		45000		48			Projectiles or bullets to be nickel-jacketed	
4170	Nitralloy, Hi-Carbon	M-97	0.55-0.65 C, Cr, Mo, Al, bal. Fe							*Nitrided parts*	*Nitriding steel*
4171	Nitralloy "1"	M-97	0.1-0.2 C, 0.4-0.7 Mn, 0.5 Si, 0.9-1.4 Cr, 0.9-1.4 Al, 0.15-0.30 Mo, bal. Fe							Nitrided parts	Nitriding steel
4172	Agathon Nickel Alloy	M-97	2 Ni, low C, bal. Fe							Staybolts and carburizing purposes	Carburizing steel, shock resistant
4173	Alloy No. 548	M-31	Fe, W, Co	Hardened	350000				653	High speed cutting tools for	Half way between
									780	hard materials	high speed steel and tungsten carbide
4174	Bourne Fuller Acme	M-379	0.3-0.5 C, bal. Fe							Armature shafts, spindles, case-hardened gears	
		M-97									
4175	Bourne Fuller Tool Steel	M-379	C, bal. Fe							Ordinary tools	
		M-97									
4176	Bourne Fuller Standard	M-379	C, bal. Fe							Mining drills, quarry drills, axes, hammers	"Now obsolete"
		M-97									
4177	Bourne Fuller Extra	M-379	C, bal. Fe							Tools	
		M-97									
4178	Bourne Fuller Extra Special	M-379	C, bal. Fe							Machine shop tools, milling cutters, punches, dies, taps, lathe and planer tools, reamers	
4179	Bourne Fuller Special Alloy Auto Type "A"	M-379	C, Cr, V, bal. Fe	Oil treated	130000	100000	28	68		Drive shafts, spindles	
		M-97			185000	165000	12	50			
4180	Bourne Fuller Unique Alloy	M-379	Cr, C, V, bal. Fe							Shafts, bolts, screws, gears, axles, piston rods	Resists torsional strains and vibrations
		M-97									
4181	Bourne Fuller Arrestite	M-379	C, Mn, bal. Fe							Tools, dies, reamers, broaches, gages	Non-warping, non-shrinking
		M-97									
4182	Bourne Fuller XX Superior	M-379	C, bal. Fe, alloy							Hot work tools	Heat resistant
		M-97									
4183	Bourne Fuller Dumost	M-379	C, V, bal. Fe							Cutting tools, dies, chisels, drills, shear blades	Resists shock, fatigue and impacts
		M-97									
4184	Bourne Fuller Velvet	M-379	C, W, bal. Fe							Finishing tools for non-ferrous alloys, blanking dies, taps	Semi-high speed steel
		M-97									

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4185	Bourne Fuller Air Hardening	M–379 M–97	W, C, bal. Fe							Bull-dozing dies, gripper dies, piercers, extrusion punches Dies	For hot work
4186	Z.T. Die Steel	M–73	.4 C, .8 Cr, bal. Fe							Tool steel for Al die castings	
4187	Aldivan	M–73	.4 C, 2.5 Cr, .2 V, bal. Fe							For high temperature use, turbine valves, bolts, pipe flanges	Creep resisting steel. Resists high pressure superheated steam
4188	Durehete	M–430	C, Cr, Mo, bal. Fe								
4189	Handy Silver Solder "I T"	M–63	Cu, Zn, high Ag							For parts under heavy strains. Silver solder	M.P.-1460 °F.
4190	Handy Silver Solder "B T"	M–63	Cu, Ag, eutectic							Silver solder	M.P.-1425 °F.
4191	Handy Silver Solder "R T"	M–63	Cu, Ag, Zn							Silver solder for Cu, Ni and Monel metal tanks	Silver-white color M.P.-1325 °F.
4192	Handy Silver Solder "E.T.X."	M–63	Cu, Zn, Ag							Silver solder	Yellow-white color. M.P.-1425 °F.
4193	Handy Silver Solder "E.T."	M–63	Cu, Zn, Ag							Silver solder	Nearly silver-white in color. M.P.-1340 °F.
4194	Handy Silver Solder "D.E."	M–63	Cu, Zn, Ag							Silver solder for small copper parts	Yellow-white color. M.P.-1370 °F.
4195	Handy Silver Solder "D.T."	M–63	Cu, Zn, Ag							Silver solder for nickel or monel metals	Pale yellow color. M.P.-1445 °F.
4196	Handy Silver Solder "S.S."	M–63	Cu, Zn, Ag							Silver solder for stainless steel	Pale yellow color. M.P.-1435 °F
4197	Handy Silver Solder "N.T."	M–63	Cu, Zn, Ag							Silver solder	Pale brass color. M.P.-1450 °F.
4198	Handy Silver Solder "N.E."	M–63	Cu, Zn, Ag							Silver solder	Low Zn content, brass color. M.P.-1575 °F.
4199	Handy Silver Solder "A.T.T."	M–63	Cu, Zn, Ag							Silver solder for brass	Brass color. M.P.-1500 °F.
4200	Handy Silver Solder "T.L."	M–63	Cu, Zn, Ag							Silver solders for heavy parts	Low Ag content. Brass color. M.P.-1600 °F.
4201	G.E.Electrode Type W-25	M–60	C, alloy, bal. Fe							Electrode for manganese welding to repair worn manganese steel castings	Discontinued
4202	Copper-Nickel 10%	M–297 M–121	10 Ni, 90 Cu	Annealed	40000		40			Dynamo rings	
4203	Copper-Nickel 15%	M–297 M–121	15 Ni, 85 Cu	Annealed	42500		40			Condenser tubes, coinage, medallions, bullet jackets, chemical works	
4204	Copper-Nickel 20%	M–297 M–121	20 Ni, 80 Cu	Annealed	45000		38			Condenser tubes	
4205	Copper-Nickel 25%	M–297	25 Ni, 75 Cu	Annealed	47000		36			Coinage	
4206	Copper-Nickel 30%	M–297	30-33 Ni, 70-67 Cu	Annealed	60500		34			Electrical resistors, condensers, corrosion resisting apparatus	Corrosion resistant
4207	Copper-Nickel 40%	M–297	40-45 Ni, 60-55 Cu	Annealed	70000		38			Electrical resistors, thermocouple element	
4208	Copper-Nickel 67%	M–297	67 Ni, 33 Cu	Annealed	71500		35 40			Machine parts in locomotives, ships, turbines, pumps, corrosion resisting containers	Corrosion resistant
4209	Nichrome, Wrought	M–44	0.12 C, 62 Ni, 15 Cr, bal. Fe	Wire	100000 175000	60000	25	50	183	Valves, rheostats, heating units	Coef. exp. (0-20°C.)-0.00017
4210	Nichrome, Cast	M–44	0.70 C, 60 Ni, 13 Cr, bal. Fe	Cast	60000 65000	35000	3	2	156 187	Carburizing boxes, retorts, heavy resistors, glass rolls, furnace parts	Coef. exp. (20-500°C.)-0.0000141

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4211	Fusible Metal "D"		33.3 Bi, 66.7 Sn							Fusible alloy	M.P.-166°C.
4212	Fusible Metal "E"		13 Bi, 40 Sn, bal. Pb							Fuses, fire extinguishers	M.P.-172°C.
4213	Fusible Metal "F"		12.5 Bi, 39.5 Sn, bal. Pb							Fuses, fire extinguishers	M.P.-178°C.
4214	Fusible Metal "G"		20 Bi, 80 Sn							Fuses, fire extinguishers	M.P.-200°C.
4215	Krupp V-3 M Cutlery		14 Cr, 0.5 Ni, 0.4 C, bal. Fe							Cutlery, razors, knives	
4216	Regulus Metal "A"		6-8 Sb, bal. Pb							Chemical plant equipment	
4217	Regulus Metal "B"		8-10 Sb, bal. Pb							*Chemical equipment*	
4218	Regulus Metal "C"		10-12 Sb, bal. Pb							Bearings	
4219	Regulus Metal "D"		12 plus Sb, bal. Pb							Bearings	
4220	Bidery Buttons "A"		48.5 Cu, 33.3 Zn, 6.06 Sn, 12.15 Pb							Buttons, ornamental parts	
4221	Mangannickel	M-297	1.5-4.0 Mn, bal. Ni							German silver, candle sticks, water meter parts	
4222	Electron A Z	M-302	Mg alloy	Sand cast	25000 29000		6 4		55	Light alloys	
4223	Z-Guss	M-302	Mg alloy		33000 40000		3 1		100	Light alloys	
4224	Avesta No. 393 S	M-16	0.06 C, 0.5 Si, 13.5-14.5 Cr, 0.3 Ni, bal. Fe		87400	54000	28	50		Used where high resistance to acids and rust and good machining properties are required	Heat resistant
4225	Avesta No. 739 H	M-16	0.35 min. C, 13-14 Cr, 0.3 Ni, 0.5 Si, bal. Fe	Heat treated					600	Cutlery, tools	Heat resistant
4226	Avesta No. 831 H	M-16	0.10 C, 1.0 Si, 20-22 Cr, 0.5 Ni, bal. Fe		98500	92800	17			Rolled or cast objects requiring great heat resistance	Heat resistant. Easy to forge and hot press
4227	Avesta No. 832 S	M-16	0.10-0.15 C, 0.5 Si, 17.5-18 Cr, 7.5-8.5 Ni, bal. Fe							Chemical apparatus and chemical tanks	Corrosion resistant
4228	Neusilber, Enamel Quality	M-297	20 Ni, bal. Cu, 5 Zn							Bullet jackets, condenser tubes	German Silver
4229	Neusilber Excelsior	M-297	25 Ni, bal. Cu, 15 Zn							Food handling equipment	German Silver
4230	Neusilber, Nickelin Quality	M-297	22 Ni, bal. Cu, 20 Zn							Hardware, electrical resistances	German Silver
4231	Neusilber, Prima—Prima Quality	M-297	18 Ni, bal. Cu, 14.5 Zn							White metal parts	German Silver
4232	Neusilber, Prima Quality	M-297	13 Ni, bal. Cu, 22 Zn							Ornamental parts	German Silver
4233	Neusilber, Sekunda Quality	M-297	10 Ni, bal. Cu, 24 Zn							Ornamental parts	German Silver
4234	Neusilber, Tertia Quality	M-297	9 Ni, bal. Cu, 25 Zn							Ornaments	German Silver
4235	Neusilber, Quarta Quality	M-297	7 Ni, bal. Cu, 22 Zn							Ornaments	German Silver
4236	Neusilber, Tubes	M-297	16 Ni, bal. Cu, 19.5 Zn							German silver tubes	German Silver
4237	Neusilber, II A	M-303	25 Ni, 60 Cu, 15 Zn	Annealed	65000		42			Bathroom fixtures	
4238	Aluminum Solder (A)		30 Zn, 65 Sn, 5 Bi							Al solder	
4239	Aluminum Solder (B)		50 Zn, 1.5 Cu, 33 Sn, 2 Sb, 12.5 Pb		6000					Al solder	
4240	Aluminum Solder (C)		57 Zn, 43 Cd							Al solder	
4241	Aluminum Solder, Frismuth (A)		47.5 Zn, 5.5 Cu, 31.5 Sn, 10.5 Al, 5.5 Ag							Al solder	
4242	Aluminum Solder, Frismuth (B)		47.4 Zn, 5.3 Cu, 36.8 Sn, 10.5 Al							Al solder	
4243	Aluminum Solder Frismuth (C)		67 Sn, 27 Pb, 3 Al							Al solder	
4244	Aluminum Solder Grimm's (A)		69.1 Sn, 28.8 Pb, 1.44 Zn, 0.72 Ag							Al solder	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4245	Aluminum Solder Grimm's (B)		50 Sn, 25 Pb, 25 Zn							Al solder	
4246	Phoenix Metal	M–369	Ni, Cr, C, bal. Fe							Rolls	Hard cast iron
4247	Heavy Pressure	M–88	Sn alloy						30	Bearings	
4248	Martin Steel		0.73 C, 0.4 Si, bal. Fe							Blacksmith tools, dies, hammers	
4249	English Type Metal (A)	Engl.	63.2 Pb, 12 Sn, 24 Sb, 0.8 Cu							Type metal	
4250	English Type Metal (B)	Engl.	60.5 Pb, 14.5 Sn, 24.2 Sb, 0.8 Cu							Type metal	
4251	English Type Metal Old "C"	Engl.	69.2 Pb, 9.1 Sn, 19.5 Sb, 1.7 Cu							Type metal	
4252	Electrometall		Al, bal. Mg							Light alloy parts	Similar to "Electron"
4253	High Grade Bearings		91-84 Sn, 2-9 Sb, 3.5-8 Cu		4000		11.6		25	High grade bearings	C.U.S.-32000 C.Y.P.-800
4254	Poldi	M–96	1.47 C, 0.23 Mn, 4.11 W, bal. Fe							Cutting tools	
4255	Cyclops Stainless Grade "A"	M–39	12.5 Cr, 0.5 Ni, 0.3-0.4 C, bal. Fe	Annealed Heat treated	94000 226000 115000	65000 180000 80000	30 2 23	60 2.5 56	228 477 241	Stainless steel parts, cutlery, dies, engine parts, gages	Corrosion resistant "Uniloy 1435"
4256	Cyclops Stainless Grade "B"	M–39	17 Cr, 0.50 Ni, 0.6 C, bal. Fe	Heat treated					580	Stainless steel parts, cutlery, dental tools, valve parts	Corrosion resistant "Uniloy 1855"
4257	Packing (Valve)		71 Sn, 24 Sb, 5 Cu							Valve packing	
4258	Paktong, Cookson		40.9 Cu, 45 Zn, 11.1 Ni, 2.5 Fe, 0.16 Co							Domestic utensils	
4259	Paktong, Fyfe		40.4 Cu, 25.4 Zn, 31.6 Ni, 2.6 Fe							Tableware, domestic utensils	
4260	Paktong, Peat		57.9 Cu, 32.2 Zn, 7.7 Ni, 2.5 Fe							Ornamental ware, domestic utensils	
4261	Paktong, Keferstein		26.3 Cu, 36.8 Zn, 36.8 Ni							Tableware	
4262	Paktong, Thurston		43.8 Cu, 40.6 Zn, 15.6 Ni							Tableware	
4263	Paktong, Tutenag		44-45.7 Cu, 16-39.6 Zn, 17.4-40 Ni							Domestic ware, ornamental parts	
4264	Pattern Metal		30-40 Zn, 15-40 Sn, 20-42 Pb, 0-3 Cu							Bearings	
4265	Platiroid		50-90 Cu, 3-40 Ni, 0-10 Al, 0-40 Zn							Chemical equipment and construction	
4266	Oranium Bronze, "H.H."		89 Cu, 11 Al							Gears, propellers	
4267	Oranium Bronze, "H.X."		88.5 Cu, 11.5 Al							Gears, bearings	
4268	Nickeline		55-75 Cu, 18-32 Ni, 0-20 Zn, 0.20-0.45 Fe							Electrical resistance	
4269	Naval Bronze No. 4		44 Pb, 36 Sn, 16 Sb, 4 Cu							Bearings	
4270	Ni-Chro-Zink		Ni, Cr, Zn							Die casting alloy	
4271	Reichsbahn, Einheits Red Brass "A"	Ger.	85 Cu, 9 Sn, 6 Zn							Railroad hardware	
4272	Reichsbahn "B"	Ger.	85 Cu, 11 Sn, 4 Zn							Railroad bearings	
4273	Reichsbahn "C"	Ger.	85 Cu, 9 Sn, 6 Zn							Railroad valves, slides	
4274	Reichsbahn "D"	Ger.	91 Cu, 5 Sn, 4 Zn							Railroad pipe flanges	
4275	Reichsbahn "E"	Ger.	82 Cu, 10 Sn, 7 Zn, 1 Pb							Machinery castings	
4276	Reichsbahn "F"	Ger.	85 Cu, 5 Sn, 8 Zn, 2 Pb							Machinery castings	
4277	Reichsbahn "G"	Ger.	86 Cu, 10 Sn, 4 Pb							Railroad dynamo and cold rolled bearings	
4278	Reichsbahn "H"	Ger.	77 Cu, 8 Sn, 15 Pb							Railroad heavy duty bearings	
4279	Reichsbahn "I"	Ger.	79 Cu, 20 Sn							Car journal bearings	
4280	Reichsbahn "J"	Ger.	85 Cu, 14 Sn							Railroad heavy duty bearings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4281	Reichsbahn "K"	Ger.	89 Cu, 10 Sn							Worm wheels	
4282	Railroad Bronze French "B"	French	82 Cu, 10 Sn, 8 Zn							Axle bearings	
4283	Railroad Bronze French Common "C"	French	78 Cu, 20 Sn, 2 Zn							Axle bearings	
4284	Railroad Bronze Lafond "D"		80 Cu, 18 Sn, 2 Zn							Axle bearings	
4285	Railroad Bronze Hard "E"		87.05 Cu, 7.88 Sn, 5.07 Zn							Hard axle bearings	
4286	Railroad Bronze Dutch "F"		85.25 Cu, 12.75 Sn, 2.0 Zn							Eccentric straps for railroad	
4287	Railroad Bronze Lafond "G"		84 Cu, 14 Sn, 2 Zn							Eccentric straps for railroads	
4288	Railroad Bronze Gearing "H"		88.8 Cu, 8.5 Sn, 2.7 Zn							Railroad gearing	
4289	Railroad Bronze "I"		89 Cu, 2.4 Sn, 7.8 Zn							Locomotive bearings	
4290	Railroad Bronze German "J"		81.17 Cu, 15.22 Zn, 14.6 Pb							Locomotive bearings	
4291	Railroad Bronze Durable "K"		73.5 Cu, 9.5 Sn, 9.5 Zn, 7.5 Pb							Locomotive bearings	
4292	Railroad Bronze "L"		74.1 Cu, 3.7 Sn, 22.2 Zn							Locomotive pistons and piston rods	
4293	Railroad Bronze "M"		84.5 Cu, 10 Sn, 5 Pb, 0.5 P							Locomotive side valves	
4294	Railroad Bronze "N"		84 Cu, 8.5 Sn, 5 Zn, 2.5 Pb							Locomotive injectors	
4295	Railroad Bronze "O"		88.5 Cu, 10 Sn, 0.5 P							Bronze parts	
4296	Railroad Bronze "P"		80 Cu, 5 Sn, 15 Pb							Locomotive axle box bearing	
4297	Railroad Bronze "Q"		75 Cu, 5 Sn, 20 Pb							Bearings, babbitts	
4298	Bidery Buttons "B"		48.5 Cu, 33.32 Zn, 6.06 Sn, 12.15 Pb							Buttons	
4299	Leaded Phosphor Bronze	M-38	80 Cu, 10 Sn, 10 Pb	Cast	30000	16000	18	16	55	Bearings for high speeds and heavy pressures	Resists shock and vibrations
					37000	23000	5	6	60		
				Chilled	30000	19000	7	10			
					33000	21000	4	7			
4300	Rezistal Stainless Iron F.M. 2	M-38 M-260	0.15 max. C, 0.30 Mn, 0.3-0.5 Si, 0.30-0.35 S, 0.55 Mo, 14-15.5 Cr, bal. Fe	Annealed	90000	55000	28	62	160	Stainless iron parts	Stainless iron, free machining
4301	Tusco	M-327	0.15-0.45 C, 0.45-0.80 Mn, 0.10-0.20 Si, 0.4-1.75 Cr, 1.25-3.75 Ni, bal. Fe							Machinery parts, gears, shafts	Discontinued
4302	Aegis	M-327	0.15-0.45 C, 0.5-0.8 Mn, 0.1-0.2 Si, 3.25-3.75 Ni, bal. Fe							Machinery parts, gears, shafts, axles	Discontinued
4303	Elastique Spring	M-327	0.4-0.6 C, 0.6-1.3 Mn, 0.1-2.0 Si, bal. Fe							Springs	Discontinued
4304	Crucia	M-327	0.8-0.95 C, 0.3-0.5 Mn, 0.2-0.4 Cr, bal. Fe							Tools, dies, springs, cutters	Discontinued
4305	Crucia Steel	M-327	0.75-1.15 C, 0.3-0.5 Mn, 0.10-0.50 Si, 0.15-3.25 Cr, bal. Fe							Tools, dies, cutters, reamers, taps	Discontinued
4306	Carbon-Ford	M-327	0.15-0.45 C, 0.3-0.85 Mn, 0.09 max. Si, bal. Fe							Machinery parts	Discontinued
4307	United Magnet	M-327	0.6-0.9 C, 0.25-0.55 Mn, 0.25-2.1 Cr, 0-6.0 W, bal. Fe							Magnets, electrical machinery	Discontinued
4308	No. 1020-90 Steel	M-397	0.15-0.25 C, 0.70-1.05 Mn, bal. Fe	Cold drawn	75000	55000	25	55	170	Carburized parts	Case-hardening steel
					90000	75000	15	50	187		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4309	Ballast Nickel	M-61	99.6 Ni	Annealed	56000					Ballast wire for voltage control electrical equipment	Res.-52 ohms/mil. ft.
4310	TAM Original Ferro Carbon Titanium	M-109	15-18 Ti, 6-8 C, 2.65 Si, 1.9 Al, bal. Fe							Deoxidizer in steel making	
4311	Anaconda Beryllium Copper	M-8	2.0-2.25 Be, 0.25-0.50 Ni, bal. Cu	Annealed Hard rolled Heat treated	50000 112000 196000		65 3			Springs, high fatigue and strong bronze parts, fuse clips, switch blades, welding electrodes	
4312	Dentalloy	M-216	High Bi, other elements							Dental castings	Non-shrinking
4313	Almag	M-871	3.5-4.5 Cu, 0.4-1.0 Mn, 0.3-0.75 Mg, bal. Al		54000		22		100	Light alloy parts, aircraft construction	Duralumin type
4314	Statuary Bronze, Augsburg "A"		89.43 Cu, 8.17 Sn, 1.07 Pb, 0.34 P, 0.19 Ni							Statuary	
4315	Statuary Bronze, Augsburg "B"		94.74 Cu, 1.64 Sn, 0.54 Zn, 6.24 Pb, 0.71 Ni							Statuary	
4316	Statuary Bronze, Bacchus Potsdam		89.34 Cu, 7.5 Cu, 1.63 Zn, 1.21 Pb, 0.18 P							Statuary	
4317	Statuary Bronze, Bavaria Munich		91.55 Cu, 1.77 Sn, 5.5 Zn, 1.3 Pb							Statuary	
4318	Statuary Bronze, Column Vendome		89.2 Cu, 10.2 Sn, 0.5 Zn, 0.1 Pb							Statuary	
4319	Statuary Bronze Melanchton, Wittenberg		89.55 Cu, 2.99 Sn, 7.45 Zn							Statuary	
4320	Statuary Bronze, Munich		92.88 Cu, 4.18 Sn, 0.44 Zn, 2.31 Pb, 0.15 P							Statuary	
4321	Manganese Bronze		86-82 Cu, 6-17 Sn, 0.2-2.7 Mn, 0-5 Zn, 0-3 Pb							Gears, general castings	
4322	Die Casting Alloy "I"		86.5 Cu, 10.75 Cu, 2.75 Al							Die castings	
4323	Die Casting Alloy "J"		90-83 Zn, 5-11 Cu, 2-5 Al, 1-5 Sn							Die castings	
4324	Aldal	M-767	3.5-4.5 Cu, 0.4-1.0 Mn, 0.3-0.75 Mg, bal. Fe		60000		22		120	Light alloy parts, aircraft construction	Duralumin type
4325	T-Alloy Tool	M-140	0.35.C3.5Cr,0.4V,11W, bal.Fe							*Hotshearknives,hotformingdies*	*Hot work steel*
4326	Superior	M-140	C, alloy, bal. Fe							Tools	
4327	West No. 8 (Duracast)	M-465	0.4-0.5 C, 0.6-0.8 Mn, 0.3-0.4 Si, 0.15-0.18 V, bal. Fe	Heat treated	60000 90000				170 402	Tools, dies, shafts, gears, anvils	Tough
4328	Red Label	M-343	0.6-0.7 C, 3-4 Cr, 18-20 W, 1.2-1.5 V, bal. Fe							Cutting tools for heaviest cuts at highest speeds	High speed steel "Peerless" (Hellers)
4329	Imperial Tool	M-210	C, W, bal. Fe							Tools, cutters	
4330	Hobsons Choice XX	M-340	C, bal. Fe							Tools	
4331	Extra Special		C, bal. Fe							Tools	
4332	Extra Special	M-260	.5 C, bal. Fe	Water harden						Tools, punches, cold trimming dies, blanking dies	Water hardening
4333	Extra Special	M-364	C, bal. Fe							Tools, finishing tools	
4334	Dynamo	M-368	C, bal. Fe							Tools	
4335	Alpha Tool	M-85	C, W, bal. Fe							Tools	Discontinued
4336	Chrome Vanadium Tool	M-140	.4-.8 C, .7 Cr, .2 V, bal. Fe							Tools	
4337	Comet	M-32	1.05 C, .25 Mn, bal. Fe							Taps, reamers, dies for blanking, trimming and forming	Water-hardening "Carpenter No. 11"
4338	Excelo	M-32	.5 C, 2.5 W, 1.5 Cr, .3 V, bal. Fe							Tools, hot work dies, punches, sheer blades	Hot work steel
4339	P.R.K	M-289	C, Co, Cr, bal. Fe							Cutting tools	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4340	Self-Hardening	M-38	C, Mo, bal. Fe							Cutting tools	Discontinued
4341	Vanadium Tool		C, Cr, V, bal. Fe							Tools	
4342	Imperial Steel		6.4 W, 2.1 Mn, 1.6 C bal. Fe							Tools, cutters	
4343	Valve Steel Chrome I		11-14 Cr, 0.4-1.2 C, 0.1-0.2 Si, bal. Fe							Valves	
4344	Valve Steel Chrome II		6.3 Cr, 0.5-1.0 C, 0.1-0.3 Si, bal. Fe							Valves	
4345	Valve Steel, Tungsten		14 W, 3 Cr, 0.6 C, bal. Fe							Valves	
4346	Valve Steel Very Hard		60 W, 26 Fe, 5 Ti, 4 Cr, 3 C, 2 Ce							Valves	Brit.Pat. 320996
4347	Gold, 14 Carat		14-28 Cu, 58 Au, 4-28 Ag							Jewelry	
4348	Gold Solder, 12 Carat		50 Au, 35 Cu, 15 Ag							Gold solder	
4349	White Gold, 10 Carat		41.6 Au, 25 Cu, 25 Ni, 8.3 Zn							Jewelry	
4350	White Gold, 14 Carat "A"		58.3 Au, 17 Cu, 17 Ni, 7.6 Zn							Jewelry	
4351	White Gold, 14 Carat "B"		59 Au, 25.5 Cu, 12.3 Ni, 3.2 Zn							Jewelry	
4352	White Gold, 18 Carat		75 Au, 18.5 Ag, 1 Cu, 5.5 Zn							Jewelry	
4353	White Gold Solder 14 Carat		50 Au, 36 Ag, 1 Cu, 11 Zn, 2 Cd							Gold solder	
4354	White Gold Solder, 18 Carat "A"		60.8 Au, 14 Ag, 4 Cu, 6 Ni, 5.2 Zn							Gold solder	
4355	White Gold Solder 18 Carat "B"		61 Au, 13.5 Ag, 1.5 Cu, 7 Ni, 17 Zn							Gold solder	
4356	White Gold Solder 18 Carat "C"		82 Au, 10 Ni, 6 Zn, 2 Cd							Gold solder	
4357	Resistance, *High Magnetic*		70 Cr, 30 Ni							Magnetic alloys	
4358	Resistance No. 1		67 Ag, 33 Pt							Resistances	
4359	Resistance No. 2		85 Cu, 12 Mn, 3 Fe							Resistances	
4360	Resistance No. 3		57 Cu, 26 Zn, 18 Ni							Resistances	
4361	Resistance No. 4		56 Cu, 26 Ni, 18 Zn, 1 Fe							Resistances	
4362	Krupp V-2 A Nirosta	M-72	20 Cr, 7 Ni, 0.2 C, bal. Fe							Stainless articles	Stainless, corrosion resistant
4363	Naval Aluminum Bronze		87-85 Cu, 7-9 Al, 2.5-4.5 Fe							Marine parts, propellers, pumps	
4364	White Metal, Hanover		86.8 Sn, 7.6 Sb, 5.6 Cu							Bearings, domestic ware	
4365	White Metal, Dutch		81.5 Sn, 8.8 Sb, 9.6 Cu							Bearings, domestic ware	
4366	White Metal Small Castings		75 Sn, 20 Sb, 5 Pb							Ornamental castings	
4367	White Metal, Small Castings "B"		66.6 Sn, 33.3 Sb							Ornamental castings	
4368	Tobin Bronze No. 1875		58.2 Cu, 39.5 Zn, 2.3 Sn							Piston rods, propeller shafts, bolts, nuts	Corrosion resistant to sea water
4369	Bridgeport Plumrite	M-141	61 Cu, 38.6 Zn, 0.4 Pb							Brass pipe for fresh water service and chemical plants	
										Railway springs	
4370	B.A. 29	M-28	9.5-11 Mg, bal. Al	Heat treated	34000		7			Light alloy castings	Sand and permanent mold
4371	B.A. 20	M-28	1.3 Mg, 1.0 Mn, bal. Al		23000		18			Light alloy parts	Wrought

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4372	B.A. 24	M-28	.5 Mg, .5 Si, bal. Al		23000	14000	20		52	Light alloy parts	Extruded
4373	B.A. 24-MS	M-28	.5 Mg, .5 Si, bal. Al	Heat treated	33000	29000	12		90	Light alloy parts	
4374	Pen-Van No. 12	M-341	0.55 C, 1 Cr, 0.15 V, bal. Fe							Tools, chisels, punches	
4375	*Aluminum Solder (D)*		*67.5 Sn, 1 Cu, 16.5 Zn, 15 Al*		*7100*					*Al solder*	
4376	Aluminum Solder (E)		53 Sn, 40 Zn, 7 Al		6700					Al solder	
4377	Birmingham		62-50 Cu, 32-20 Zn, 12-30 Ni							German Silver	
4378	Autovalve Steel	M-32	30 Ni, C, bal. Fe							Valves, spark plugs	Low coef. res. Corrosion resistant
4379	Firth Sixleda	M-56	C, 20 W, Co, bal. Fe	Hardened					700	Drills, turning tools	For drilling hard and tough alloy steels "Firth Brown K-204"
4380	Empire Steel	M-38	0.08-0.18 C, bal. Fe							Soft screw machine steel	
4381	Durocyl	M-185	Cast iron							Cylinder liners	Centrifugally cast *Hardened alloy*
4382	Enduro Free Cutting (Enduro F.C.)	M-97	0.10 max. C, 13.5-15 Cr, 0.45-0.65 Mo, bal. Fe							Corrosion resisting parts	Stainless, free machining
4383	Silcrome 12-2	M-76	0.12 max. C, 12-15 Cr, 2 Ni, bal. Fe							Corrosion resistant parts	
4384	Enduro 4-6 Chrome	M-97	4-6 Cr, 0.10-0.25 C, 0.5 Mn, 0.5 Si, bal. Fe	Annealed	65000 77000	28000 41000	34 31	75 73	131 149	Still tubes, condenser tubes, hot oil and vapor lines, pre-heaters, pump parts	Resists oxidation to 1100°F.
4385	Enduro NC-3	M-97	0.25 max. C, 1.0-1.5 Mn, 1.25-1.75 Si, 24-26 Cr, 19-21 Ni, bal. Fe	Annealed	85000	40000	45			Retorts, valves, furnace parts, pump parts, rails	Heat and corrosion resistant
4386	Enduro 18-8 S-Ti	M-97	0.20 C, 0.6 Mn, 0.75 max. Si, 17-19 Cr, 7-9 Ni, Ti = 4 x C, bal. Fe	Heat treated	85000	35000	55	65	156	For welded stainless structures where severe acid corrosion and high temperatures are encountered	Stainless, corrosion resistant
4387	Enduro 18-8 S-Mo	M-97	0.11 max. C, 1.0-1.5 Mn, 17.5-18.5 Cr, 7-11 Ni, 2-4 Mo, bal. Fe	Heat treated	85000	35000	55	65	156	Textile and dye equipment, chemical apparatus, paper and pulp mill equipment	Stainless, corrosion resistant
4388	Enduro 18-3	M-97	0.08-0.20 C, 0.3-0.6 Mn, 17-19 Cr, 7-9 Ni, bal. Fe	Heat treated	85000	35000	55	65	156	Evaporators, vessels, chemical engineering equipment sterilizers, marine parts	Stainless Resists scaling to 1450°F.
4389	Enduro 18-8 B	M-97	0.08-0.20 C, 1.0-1.5 Mn, 2-3 Si, 17-19 Cr, 7-9 Ni, bal. Fe	Heat treated	85000	35000	55	65	156	*Still tubes*, condenser tubes, hot oil and vapor lines, pump parts, pre-heaters	Stainless Resists oxidation to 1800°F.
4390	Enduro 18-8 Mo	M-97	0.16 max. C, 1.5 Mn, 0.75 max. Si, 18-22 Cr, 7-10.5 Ni, 2-4 Mo, bal. Fe							Stainless and corrosion resisting parts	Corrosion resistant, stainless
4391	Lynite 112	M-4	90 Al, 7.8 Cu, 1.5 Zn, 1.3 Fe	Sand cast	22000	14000	2		70	Crankcases	See Alcoa 112
4392	Lynite 43	M-4 M-92	95 Al, 5 Si	Sand cast	19000	9000	4		50	Light alloy automotive and airplane bodies	See Alcoa 43
4393	Enduro 18-8 S	M-97	0.11 max. C, 0.60 Mn, 0.75 Si, 17-19 Cr, 7-9 Ni, bal. Fe	Heat treated	85000	35000	55	65	156	For welded stainless structures where severe acid corrosion and high temperatures are encountered	Stainless, corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4394	Firth Sterling Stainless Type FC	M–57	14 Cr, 0.4 Mn, 0.10 C, 0.4 Mo, bal. Fe	Oil treated	165000 105000	142000 80000	10 20	30 45	335 210	Stainless steel parts, machine parts, pump shafts, valves, bushings	Corrosion resistant, free cutting
4395	Lynite	M-92	95 Al, 2 Cu, 1.5 Mg, 0.8 Fe, 0.02 Si							Pistons	
4396	U.S.S. 4-6 Chrome	M–604	0.10-0.20 C, 4-6 Cr, bal. Fe	Annealed Heat treated	66000 115000	27000 103000	38 20	76 66	136 250	Heat resisting parts	Heat resistant. 1g-75-80. Scaling temp.-1200 °F.
4397	U.S.S.-18-12	M–604	17-19 Cr, 11-12.5 Ni, 0.50 Si+Mn, 0.05-0.15 C, bal. Fe	Annealed Cold worked	80000 275000	40000	60	65 30	135 380	Stainless and heat resisting parts for cold working	Austenitic, corrosion and heat resistant
4398	Tempaloy "A"	M–8	95 Cu, 4 Ni, 1 Si	Cold rolled	120000	105000	12		110	Corrosion resistant parts	Corrosion resistant
4399	Agathon Bit Steel	M–97	0.5-0.7 C, 0.5-0.8 Mn, bal. Fe							Bits	
4400	Vancoram-Brand	M–394	Ferro alloys							Metallurgical applications, hardeners	"Vancoram"
4401	Unimetal	M–391	White metal							For welding of white metal	
4402	B.N.F. Lead Alloy No. 1	M–396	0.25 Cd, 0.5 Sb, bal. Pb							Lead sheathing of electric cables	
4403	Alumaweld	M–393	Sn, Zn, Pb, and chemical catalyzer		12000					For soldering of all metals, especially Al and white metals	
4404	Bearium (B-2)	M–431	70 Cu, 28 Pb, bal. Sn		18000		14		35	Bearings, anti-friction purposes	Cast alloy for light service and faulty lubrication
4405	Plastic Bronze	M–126	65 Cu, 5 Sn, 28 Pb, 1 Ni							Bearings	
4406	McAdamite		12-18 Zn, 3.1 Cu, 0.2 Mg, bal. Al							Strong light alloy parts	
4407	B.N.F. Lead Alloy No. 2	M–396	0.25 Cd, 1.5 Sn, bal. Pb							Water pipes, lead sheathing of electric cables	
4408	Phosphor Bronze, Hard		92.8 Cu, 7 Sn, 0.2 P							Springs, switches, clips	
4409	Tuf-Timber	M–32	0.6-1.1 C, bal. Fe							General forgings	
4410	Plastic Metal		80.5 Sn, 8.6 Sb, 9.5 Cu, 1.4 Fe							Bearings	
4411	Wuest No. 1		50 Zn, 30 Al, 20 Cu							Aluminum solder	
4412	Wuest No. 2		65 Zn, 20 Al, 15 Cu							Aluminum solder	
4413	Cesco Diamond	M–356	0.5 C, 0.85-1.0 Mn, 2.2 Si, 0.5 Mo, 0.25-0.35 V, bal. Fe	Heat treated	320500 231600	259400 185700	2 5	5 27		Hollow and solid drills, concrete busters, hammer pistons; springs	Rockwell "C"—45-59
4414	Sterling		62 Sn, 15 Zn, 11 Al, 8.3 Pb, 2.5 Cu, 1.2 Sb							Solder	
4415	Jewel Cast Iron		0.88 combined C, 1.24 graphite, 0.14 Mn, 0.81 Si, bal. Fe							Castings, gears, housings	
4416	Migra Iron No. 1	M–383 M–403	1-3 Si, 0.4-0.9 Mn, 3.8-4.1 C, bal. Fe							Cast iron pistons and cylinders	
4417	Bourne Fuller Special Alloy Type "D"	M–397	C, bal. Fe	Oil treated	185000 260000	165000 240000	15 6	45 17		Drive shafts, spindles	
4418	Nichrome V	M–44	80 Ni, 20 Cr		95000 175000	50000	35			Heating elements in electric furnaces, electric ranges	Max. operating temp.-1100 °C.
4419	Nickelin Ia	M–303	33.3 Ni, 66.7 Cu							Fruit presses, electrical resistors, chemical apparatus, boilers, kettles	
4420	Nickelin IIa	M–303	25 Ni, 75 Cu							Fruit presses, coinage	
4421	Nickelin IIIa	M–303	20 Ni, 80 Cu							Medals	
4422	Nickelin V	M–303	10 Ni, 90 Cu							Wires	
4423	Silicon Aluminum DTD-25	Eng.	Si, Al							Light alloy	English alloy

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4424	Duralumin 3L-1	Eng.	Cu, Al							Light alloy	English alloy
4425	Duralumin 3L-3	Eng.	Cu, Al							Light alloy	English alloy
4426	Stones Gear Bronze	M-126	88.5 Cu, 11 Sn, 0.25 Pb, 0.25 P							Gears	
4427	Ross Alloy		68 Cu, 32 Sn							Reflectors	"Rotguss"
4428	Grapho Babbitt Metal No. 2	M-300	0.3 graphite, Sn, Pb, Sb						26	Bearings for electric motors, blowers, high speed transmissions	High velocity and high pressures
4429	Grapho Babbitt Metal No. 3	M-300	0.3 graphite, Sn, Pb, Sb						29	Bearings for crankshafts in internal combustion engines, mining machinery, machine tools, reciprocating pumps	High pressure and high velocity with alternating load
4430	Grapho Babbitt Metal No. 4	M-300	0.4 graphite, Sn, Pb, Sb						34	Bearings for diesel engines, heavy duty compressors	Heavy duty. All kinds of shocks and velocities
4431	Allegheny No. 46	M-1	0.11-0.25 C, 4-6 Cr, bal. Fe	Annealed	60000	25000	30	70	120	Heat and corrosion resistant parts, furnace, heat exchanger	Oxidation. Heat and corrosion resistant.
				Water quenched	177000	144000	18	60	300	condenser and preheater tubes and parts, pumps, valves, tie-rods	Resists heat to 1200°F.
4432	Omega Brand Beryllium Copper Alloy No. 32	M-98	1.5-2.25 Be, bal. Cu	Annealed	60000					Contact clips, springs, diaphragms, radio socket tubes, valve seats	Age-hardening
				Heat treated	180000						Corrosion resistant
4433	Nitralloy No. 630	M-115 M-386	0.25-0.35C, 1.4-1.6 Cr, 0.45 min. V, bal. Fe							Nitrided parts	Nitriding steels
4434	Durichlor	M-46	14 min. Si, 3 min. Mo, bal. Fe		17000					Pumps, valves, pipes, fittings, exhaust fans	Resists HCl corrosion. Cast alloy
4435	Bundyweld Steel Tubing	M-401	C, bal. Fe							Tubing, gasoline and oil lines, refrigerator coils	Hydrogen welded copper coated rolled steel tubing
4436	Electrunite Boiler Tubing	M-97 M-395	C, bal. Fe							Boiler tubes	Welded tubes
4437	K-6 Metal	M-399	3.0-3.5 C, 1.5-2.0 Si, 1.0 Mn, 0.5 Cr, 1.0 Ni, bal. Fe		40000				220 180	Piston rings, parts to resist corrosive gases and liquids, packing	Alloy cast iron
4438	Cramp's Super-Strength Bronze, Grade "A"	M-309	57 Cu, 28 Zn, bal. hardeners of Mn, Fe, Al	Cast	115000	68000	10	10	240	Bushings, bearings, gears, worms, die castings, shafts, valve stems, tube sheets	Mn bronze C.Y.P.-65000
				Wrought	118000	70000	8	8			
4439	Cramp's Super-Strength Bronze, Grade "B"	M-309	57 Cu, 28 Zn, bal. hardeners of Mn, Fe, Al	Cast	110000	63000	15	15	225	Bushings, bearings, gears, worms, die castings, shafts, valve stems, tube sheets, pump impellers	Mn bronze C.Y.P.-60000
				Wrought	115000	65000	15	15			
4440	Cramp's Super-Strength Bronze, Grade "C"	M-309	57 Cu, 28 Zn, bal. hardeners of Mn, Fe, Al	Cast	100000	55000	20	18	200	Bushings, bearings, gears, worms, die castings, pump impellers, valve stems	Mn bronze C.Y.P.-50000
				Wrought	105000	60000	18	18			
4441	Cramp's Super-Strength Bronze, Grade "D"	M-309	57 Cu, 28 Zn, bal. hardeners of Mn, Fe, Al	Cast	90000	45000	25	20	185	Bushings, bearings, valve stems, shafts, gears, worms, die castings	Mn bronze C.Y.P.-40000
				Wrought	93000	50000	20	20			
4442	Cramp's Elfur Iron No. 1	M-309	3.25-3.60 C, 1.2-1.4 Si, 0.5-0.75 Mn, 1.25-1.75 Ni, bal. Fe		50000				275	Turbine castings, cylinder heads, liners, pistons, piston rings, dies	Pearlitic alloy gray iron. Wear resistant
					35000				180		
4443	Cramp's Elfur Iron No. 3	M-309	3.1-3.4 tempered C, 1.25-1.75 Si, 2.75-3.25 Ni, 0.25-0.35 Cr, bal. Fe.		35000				225	Valve bushings, brake drums, cam shafts, gears, drawing and forming dies, pump parts, gear cases	Electric furnace alloy
					45000				250		
4444	Boronic Alloys	M-7	B alloys							As deoxidizers in ferrous and non-ferrous castings	Addition agents

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A	Brin. No.	Uses	Remarks
4445	Dannemora Extra Best	M-350	C, bal. Fe							Tools	
4446	Hacksaw (Adams & Osgood)	M-350	C, bal. Fe							Tools	
4447	Balfours Shoe Die	M-350	C, bal. Fe							Tools	
4448	Hacksaw (Adams & Osgood)	M-350	C, W, bal. Fe							Tools	
4449	Dannemora Self-Hardening	M-350	C, W, bal. Fe							Tools	
4450	Dannemora No. 0	M-350	C, W, bal. Fe							Tools	
4451	Hot Die (Adams & Osgood)	M-350	C, W, bal. Fe							Tools	
4452	High Chromium Cast Iron		C, Cr, bal. Fe							Hard, heat resisting castings	
4453	Talon	M-210	C, bal. Fe							Tools	
4454	Self-Hardening (Allen)	M-210	C, W, bal. Fe							Tools	Discontinued
4455	High Speed No. 2 (Allen)	M-210	C, W, bal. Fe							Tools	High speed steel Discontinued
4456	Anchor Special Tap	M-342	C, W, bal. Fe							Tools	Discontinued
4457	Anchor Chaser Die	M-342	C, alloy, bal. Fe							Tools	Discontinued
4458	Bethlehem Tough	M-24	0.3 C, 1.3 Cr, 0.2 V, bal. Fe							Tools, punches, cold cutters, shear blades, flogging chisels	Tough and hard
4459	Extra Special High Speed	M-24	0.7 C, 4 Cr, 14 W, 2.2 V, bal. Fe							Tools, extrusion dies, cutters	High speed steel
4460	Bethlehem Tool Room	M-24	0.8 C, 1.2 Mn, 0.5 Cr, 0.2 V, 0.5 W, bal. Fe							Tools, master tools and dies, taps, hobs, reamers, broaches	Non-deforming Oil hardening
4461	C.N. Die	M-345	C, Cr, bal. Fe							Tools	Discontinued
4462	Boker Power Chisel	M-345	C, Cr, W, bal. Fe							Tools	
4463	Boker Special 847	M-345	C, W, V, bal. Fe							Tools	High speed steel
4464	Silcrome 17	M-76	0.12 max. C, 16.5-17.5 Cr, bal. Fe	Annealed	75000	43000	28	55	170	Heat and corrosion resisting parts	Stainless, heat and corrosion resisting
4465	Soderfors Drill	M-387	C, bal. Fe							Drills, tools, hollow and solid drills	
4466	Soderfors Double Crane	M-387	C, bal. Fe							Tools, drills, stone tools	
4467	Soderfors Crown "W"	M-336	High C, 0.3 Mn, 1.8 Cr, 4.0 W, 0.2 V, bal. Fe							Tools, for turning chilled iron rolls and all hard metals	Non-warping, high speed steel
4468	Soderfors Arrow	M-336	High C, 1.2 Mn, 0.5 W, 0.5 Cr, 0.1 V, bal. Fe							Tools, dies, thread and block gages, master tools, taps	Non-shrinking Non-warping
4469	Soderfors Anvil	M-387	C, Mn, bal. Fe							Tools	
4470	Cyclops Ajax	M-39	C, alloy, bal. Fe							Punches, shear blades, swaging dies and mandrels, bull dies, bending dies	Hot work steel. A compression die steel
4471	R-301	M-671	.75-1.5 Si, 4-5 Cu, .7-1.0 Mn, .2-.5 Mg, bal. Al	Annealed Heat treated	25000 68000	10000 60000	22			Light alloy parts, aircraft wings and fuselage	Corrosion resistant
4472	R. B. Chisel	M-140	C, Cr, bal. Fe							Tools, chisels	
4473	Gyro	M-140	0.7 C, 4 Cr, 2 V, 14 W, bal. Fe							Tools, cutters	
4474	Rita Special Drill Rod	M-354	C, V, bal. Fe							Tools, drills	
4475	Rita T.C.V. alloy	M-354	C, W, Cr, V, bal. Fe							Tools	
4476	Rita Car-Van Die	M-354	C, V, bal. Fe							Tools	
4477	Rita Oil Hardening Drill Rod	M-354	C, Mn, Cr, bal. Fe							Tools	Non-deforming
4478	Fast Finishing (Carpenter)	M-32	C, W, bal. Fe							Tools, fast finishing cutters	Discontinued
4479	Extra "L" (Colonial)	M-34	C, bal. Fe							Tools	(Discontinued)

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4480	Colonial Gripper	M-34	C, Cr, bal. Fe							Tools, hot work dies and tools	Hot work steel (Discontinued)
4481	Colonial No. 36	M-34	C, Cr, V, bal. Fe							Hot work tools	(Discontinued)
4482	Colonial No. 4	M-34 M-115	1.3 C, 3.5 W, bal. Fe							Tools	(Discontinued)
4483	Marog	M-34	C, alloy, bal. Fe							Tools	High speed steel (Discontinued)
4484	Beaver (Colonial)	M-34	C, W, Cr, V, bal. Fe							Tools	High speed steel (Discontinued)
4485	Rennite	M-425	C, high W, bal. Fe							Cutting tools	
4486	Extra Special	M-35	C, Cr, bal. Fe							Tools	(Discontinued)
4487	Die Block	M-35	C, Cr, Ni, bal. Fe							Tools, dies, die blocks	(Discontinued)
4488	Regular Tool (Crucible)	M-38	C, bal. Fe							Tools	
4489	Delhi Grade A	M-15 M-76	16-18 Cr, 0.10 max. C, 0.5 max. Si, 0.5 Mn, bal. Fe	Rolled Annealed	110000 70000	45000	10 30	25 60	200 160	Ornamental work, tanks	Max. operating temp. 1600°F. Austenitic, corrosion resistant
4490	Delhi Special	M-15	0.14 C, 0.46 Mn, 0.64 Si, 17 Cr, bal. Fe	At 70°F. At 1500°F.	65000 10000	40000 8000	32 90	63 98		Furnace linings, conveyors, furnace parts	Heat and corrosion resistant
4491	Double Special	M-38	1.3 C, 3.6 W, bal. Fe							Tools, finishing tools	
4492	Amsco Ni-Mn Steel	M-9	0.75-0.95 C, 13-15 Mn, 0.90-1.20 Si, 3.5-4.5 Ni, bal. Fe							Welding rod for welding austenitic-manganese steel parts	Abrasion resistant
4493	Amsco No. 459 Alloy	M-9	Cr, Mo, alloy						600	Welding rod, hard surfacing	Abrasion resistant
4494	La Belle Hot Header	M-38	C, alloy, bal. Fe							Tools, hot header dies	(Discontinued)
4495	Hacksaw Steel (Crucible)	M-38	C, alloy, bal. Fe							Tools, hack saws	(Discontinued)
4496	Cyclops Standard	M-39	0.65-1.35 C, bal. Fe							Tools	
4497	B-Y Hot Work	M-39	C, W, Cr, V, bal. Fe							Hot work tools	(Discontinued)
4498	Como	M-40	C, Co, Mo, bal. Fe							High speed tools	High speed steel, obsolete
4499	Best (Disst.)	M-357	C, bal. Fe							Tools	
4500	Extra (Disston)	M-357	1.0 C, bal. Fe							Tools	
4501	Standard (Disston)	M-357	C, bal. Fe							Tools	
4502	Special Alloy (Disston)	M-357	.45 C, .8 Cr, bal. Fe							Tools	
4503	Fast Finishing (Disston)	M-357	C, alloy, bal. Fe							Tools	
4504	Eltun Die Steel	M-357	.4 C, 3 Cr, 9 W, .2 V, bal. Fe							Tools, dies	
4505	H.R.W. Die Steel	M-357	.9 C, 3.7 Cr, .15 V, bal. Fe							Dies, tools	Hot work
4506	No. 712 Die Steel	M-357	C, alloy, bal. Fe							Dies, tools	
4507	Alloy Trimmer	M-357	C, alloy, bal. Fe							Tools	
4508	Coe Bronze	M-8	89.5 Cu, 10.5 Sn	Hard sheet Soft sheet	115000 60000	95000 40000	5 65		190 74	Gears	
4509	D-H Tool Steel	M-44	C, alloy, bal. Fe							Tools	(Discontinued)
4510	D-H Special Alloy Tool Steel	M-44	C, alloy, bal. Fe							Tools	(Discontinued)
4511	Very Hard (Electrosteel Co.)	M-388	C, bal. Fe							Tools	
4512	Duke-Kidd	M-358	C, bal. Fe							Tools	
4513	Hard	M-388	C, bal. Fe							Tools	
4514	Medium Hard	M-388	C, bal. Fe							Tools	
4515	Tough Hard	M-388	C, bal. Fe							Tools	
4516	Tough	M-388	C, bal. Fe							Tools	
4517	Soft	M-388	C, bal. Fe							Tools	

Serial No.	Alloy	Mfg. No	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4518	Special	M-388	C, alloy, bal. Fe							Tools	
4519	Electro	M-388	C, W, Mo, bal. Fe							High speed cutting tools	High speed steel
4520	Dannemora Standard	M-387	C, bal. Fe							Tools	
4521	Dannemora Best	M-387	C, bal. Fe							Tools	
4522	Dannemora Very Best	M-387	C, bal. Fe							Tools	
4523	Tungsten Tap	M-387	C, W, bal. Fe							Tools	
4524	Crown "W"	M-387	C, W, bal. Fe							Tools	
4525	Arrow Oil Hardening	M-387	C, W, bal. Fe							Tools	
4526	Anvil Heading Die	M-387	C, alloy, bal. Fe							Tools, heading dies	
4527	Sisco Extra No. 2	M-375	High C, bal. Fe							Tools	Formerly "Acorn Extra No. 2"
4528	Sisco Standard No. 3	M-375	High C, bal. Fe							Tools	Formerly "Acorn Standard No. 3"
4529	Sisco C.V.S.	M-375	C, Cr, V, bal. Fe							Tools	
4530	Sisco C.N.V.	M-375	C, Cr, Ni, V, bal. Fe							Tools	
4531	Sisco C.V.R.	M-375	C, Cr, V, bal. Fe							Tools	
4532	Sisco V.A.S.	M-375	C, V, bal. Fe							Tools	
4533	Federal High Speed	M-375	C, W, bal. Fe							High speed cutting tools	High speed steel
4534	Special (Firth-Sterling)	M-57	1.0 C, bal. Fe							Tools	
4535	Extra	M-57	1.0 C, bal. Fe							Tools	
4536	Sterling (Firth-Sterling)	M-57	1.0 C, bal. Fe							Tools	
4537	C.Y.W. Choice Die	M-57	1.0 C, 3.5 Cr, 0.50 Mn, bal. Fe	Hardened					625 425	Dies, mandrels, nut piercers, swaging and piercing dies	Hot work steel
4538	R.T. Steel	M-57	1.3 C, 3.5 W, bal. Fe							Tools	
4539	Double Special	M-57	2.1 C, 0.4 Cr, bal. Fe							Tools	
4540	A.W. Special	M-57	1.0 C, 1.4 Cr, bal. Fe							Tools	
4541	Invaro	M-57	0.85-0.95 C, 1.0-1.25 Mn, 0.4-0.6 Cr, 0.25 V, 0.5 W, bal. Fe							Tools, hobs, milling cutters, reamers, taps, forming dies	Non-distorting, tough Oil hardening
4542	Triple Die	M-57	2.2 C, 12 Cr, 0.10 V, bal. Fe							Tools, dies	
4543	4 Best (Frasse)	M-360	C, bal. Fe							Tools	Discontinued
4544	Causul Metal	M-264	15 Ni, Cu, Cr, C, bal. Fe							Valve bodies, paper mill and resisting parts	Alloy cast iron, austenitic. Corrosion resistant
4545	Stabil	M-360	C, alloy, bal. Fe							Tools	Discontinued
4546	Supercase	M-406	0.08-0.15 C, bal. Fe	Hot rolled Heat treated	60000 81000		33 24	60 69	110 217	Cam shafts, gears, bolts, transmission shafts, worms, sprockets	Case hardening steel. Free machining
4547	Halcomb C.C.S.	M-260 M-38	.4 C, 1.1 Si, 5 Cr, 4 W, bal. Fe	Air-oil					400	Tools, die casting dies	Tough wear resistant
4548	Air Hardening (Halcomb)	M-260	C, alloy, bal. Fe							Tools	
4549	Wortle Drawing Die	M-260	C, alloy, bal. Fe							Tools, drawing dies	
4550	Peerless Cold Header	M-260	.95 C, bal. Fe	Water harden						Tools, cold heading dies	
4551	Yellow Label	M-343	0.8-1.1 C, 0.15-0.25 V, bal. Fe							Tools, dies, boring and shaping tools, milling cutters	"Hellers Alloy Die"
4552	Heller's Chrome Die	M-343	C, Cr, bal. Fe							Tools, dies	
4553	Heller's Hollow Drill	M-343	High C, bal. Fe							Tools, dies	
4554	Peerless Special	M-343	C, Co, bal. Fe							Tools	
4555	Hobson's Special Tap Rods	M-340	C, bal. Fe							Tools, taps	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4556	Hobson's Choice Drill Rods	M-340	C, bal. Fe							Tools, drills	
4557	Hobson's Oil Hardening	M-340	C, alloy, bal. Fe							Tools	
4558	Hobson's Fast Finishing	M-340	C, alloy, bal. Fe							Fast finishing tools	
4559	Gold Label (H.&R.)	M-363	C, W, bal. Fe							Finishing tools	
4560	W.K.Z. Hot Work	M-363	C, W, bal. Fe							Hot work tools	
4561	White Label	M-363	C, W, bal. Fe							Cutting tools	High speed steel
4562	Vanadium Hot Work	M-364	C, V, bal. Fe							Hot work tools	
4563	Black Label (Jessop & Sons)	M-261	C, bal. Fe							Tools	
4564	Charles Leonard	M-261	C, bal. Fe							Tools	
4565	Composite Die	M-261	C, alloy, bal. Fe							Dies, tools	
4566	Duro	M-261	C, alloy, bal. Fe							Tools	(Discontinued)
4567	Alloy "B" Finishing	M-261	C, alloy, bal. Fe							Finishing tools	
4568	B.B. Hot Die	M-261	.4 C, 10 W, 3.5 Cr, .5 V, bal.Fe							Hot dies, punches	Hot die steel
4569	Cyclops B-4	M-39	.5 C, 13 W, 3.5 Cr, bal. Fe							Hot blanking dies, bull dozing tools, hot dies, flying shears,	Modified highspeed steel
4570	Armco Zincgrip Paintgrip	M-10	Galvanized sheet steel bonderized							Structures	
4571	Ark Superlative	M-261	C, 18 W, 4 Cr, 1 V, 5 Co, bal. Fe							Tools, cutters	High speed steel
4572	Ark Supreme	M-261	C, 18 W, 4 Cr, 1 V, 12 Co, bal. Fe							Tools, cutters	High speed steel
4573	Domestic	M-69	0.30-0.70 C, bal. Fe							Tools	
4574	Centaur	M-261	C, bal. Fe							Tools in general	
4575	Rapid Finishing	M-261	C, alloy, bal. Fe							Tools	
4576	Hot Stamping Alloy Die	M-261	C, alloy, bal. Fe							Fast finishing tools	
4577	Shock Resisting	M-261	C, alloy, bal. Fe							Hot stamping dies, tools	
4578	L.C.H. S. Chisel	M-261	C, alloy, bal. Fe							Tools	Shock resistant
4579	Truform Special	M-261	C, alloy, bal. Fe							Tools, chisels	
4580	K.L.S. 19 Hot Work	M-335	C, alloy, bal. Fe							Tools	Non-deforming
4581	Pure Ore Prior Extra	M-335	C, Cr, W, V, Co, bal. Fe							Hot work tools	Discontinued
4582	Cyclops K-L Die Steel	M-39	0.35 C, 6 Cr, 6 W, bal. Fe							High speed cutters	High speed steel
4583	Select	M-73	C, Cr, bal. Fe							Coining dies, punches, hot heading dies	
4584	Wortle Die Steel	M-73	C, W, bal. Fe							Hot work tools	
4585	C.F.S. Die Steel	M-73	.9-1.3 C, .5 Cr, bal. Fe							Dies	
4586	Arrow (Latrobe)	M-73	.26 C, .9 Cr, .2 V, bal. Fe							Dies	
4587	Crown	M-73	.5 C, .9 Cr, .2 V, bal. Fe							Tools, arbors, shafts	
4588	Supreme	M-73	C, Cr, V, bal. Fe							Tools	
4589	Superb	M-73	.7 C, .9 Cr, bal. Fe							Tools	
4590	Latrobe No. 426	M-73	C, W, bal. Fe							Tools	
4591	Cyclops K-M Die Steel	M-39	0.45 C, 6 Cr, 6 W, bal. Fe							Blanking, forming and gripper dies, hot piercers	
4592	Seminole	M-76	0.4-0.5 C, 1.4 Cr, 0.25 V, 0.25 Mn, 0.30 Si, bal. Fe	Annealed Oil treated	110000 261700		22 5	42 38	207 555	Tools, chisels, rivet sets, shear blades, pneumatic tools	Tough and shock resistant
4593	Macco Hollow-Drill	M-80	C, bal. Fe							Hollow drills, tools, rock drills	
4594	Macco Brand Swedish	M-80	C, bal. Fe							Tools	Special grade of tool steel
4595	Macco Superior Swedish	M-80	C, bal. Fe							Tools, special punches, dies	
4596	Macco Swedish Chrome Tungsten	M-80	C, Cr, W, bal. Fe							Tools, special taps, dies	
4597	Die Block (A) (Midvale)	M-85	0.62 C, 0.7 Mn, bal. Fe							Dies, tools	
4598	Die Block (B) (Midvale)	M-85	0.80 C, 0.25 Mn, bal Fe							Tools, dies	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4599	Alpha Chisel	M-85	C, W, bal. Fe							Chisels, tools	Discontinued
4600	Bit & Jar Steel	M-85	C, Mn, bal. Fe							Tools, oil well tools	
4601	Carbon Tool Double Extra	M-85	C, Cr, bal. Fe							Tools	
4602	Carbon-Vanadium	M-85	C, V, bal. Fe							Tools, cold heading	
4603	Alloy No. 6	M-85	C, Cr, bal. Fe							Tools	
4604	Chrome-Vanadium Die	M-85	C, Cr, V, bal. Fe							Hot dies	Discontinued
4605	Triple Extra	M-85	C, alloy, bal. Fe							High speed cutters	Discontinued
4606	Triple Extra Die	M-85	C, Cr, V, bal. Fe							Tools	Discontinued
4607	Die Blanking	M-85	2.2 C, 10 Cr, 0.2 V, bal. Fe							Tools	Discontinued
4608	Die Block "C"	M-85	0.45 C, 1.5 Ni, 0.7 Cr, bal. Fe							Tools	
4609	Die Block "E"	M-85	0.85 C, 1 W, bal. Fe							Tools	
4610	Tap Steel Special	M-85	C, Cr, V, W, bal. Fe							Tools, taps, dies	
4611	High Speed Extra Drill	M-85	0.7 C, 3.5 Cr, 18W, 1 V, bal. Fe							Drills, tools	High speed steel; now called Two Star High Speed
4612	High Speed Mo Extra	M-85	C, W, Mo, V, bal. Fe							High speed cutters, tools	High speed steel
4613	High Double Extra	M-85	C, W, Co, V, bal. Fe							High speed cutters	Discontinued
4614	Ajax Gear Bronze Grade "S"	M-123	88 Cu, 10 Sn, 2 Zn	Chill cast	45000	26000	27		55	Worm wheels	
4615	A.M.C.	M-365	C, Cr, W, V, bal. Fe							Tools, cutters	High speed steel
4616	Fer	M-365	C, bal. Fe							Tools	
4617	A M C O H Extra Special	M-365	C, Mn, Cr, V, W, bal. Fe							Tools	High speed steel
4618	On	M-366	C, Cr, V, W, bal. Fe							Tools, high speed cutters	High speed steel
4619	Ontop	M-366	C, Cr, V, W, Co, bal. Fe							Tools, high speed cutters	
4620	Bell, Special	M-368	C, bal. Fe							Tools	
4621	Bell Brand	M-368	C, bal. Fe							Tools	
4622	Drill Rod	M-341	C, bal. Fe							Drills, tools	
4623	Hollobar	M-341	1.0 C, 1.4 Cr, bal. Fe							Tools	
4624	Ajax Gear Bronze Grade "M"	M-123	87 Cu, 1 Pb, 10 Sn, 2 Zn	Chill cast	40000	24000	25		55	Worm wheels	
4625	On-Plus	M-341	C, Cr, V, W, Mo, bal. Fe							Tools, high speed cutters	Discontinued
4626	White Label	M-341	1.6 C, 13 Cr, .3 V, .8 Mo, bal. Fe							Tools, dies	Discontinued
4627	Monaca Special	M-370	C, bal. Fe							Tools	Cold drawn
4628	Monaca	M-370	C, bal. Fe							Tools	Cold drawn
4629	Ajax Nickalloy Bronze Grade 21	M-123	59.5 Cu, 19 Zn, 21 Ni, 0.5 Al	Chill cast	80000	18000	20		80	Automobile trimmings, typewriter parts, milking machine parts	Corrosion resistant
4630	Special Tungsten Alloy	M-370	C, W, bal. Fe							Tools, drills	
4631	High Speed	M-370	C, W, Cr, V, bal. Fe							High speed cutters, drills	High speed steel
4632	No. 5 Best	M-96	0.85 C, bal. Fe							Tools	
4633	F. S. Extra Best	M-96	1.20 C, bal. Fe							Tools	
4634	S. R.-4 Regular	M-96	1.0 C, bal. Fe							Tools	Water hardening
4635	S. P. S. Special	M-96	C, W, Cr, bal. Fe							Tools	
4636	C. R.-2	M-96	C, Cr, bal. Fe							Tools	
4637	S. P. Special	M-96	C, W, bal. Fe							Tools	Water hardening
4638	C. V. Special	M-96	C, Cr, V, bal. Fe							Tools for hot work and die casting dies	Hot work steel
4639	O. Special	M-96	C, W, Cr, V, bal. Fe							Finishing tools	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4640	Trojan Steel No. 8	M-307	0.75-0.85 C, bal. Fe	Rolled	80000 90000	40000 45000	25 15		170 190	Tools, chisels, track tools, forming dies	Welds & forges
4641	Extra Special (Potts)	M-307	C, alloy, bal. Fe							Tools	Discontinued
4642	Solid Drill	M-307	C, alloy, bal. Fe							Tools, drills	Discontinued
4643	Hollow Drill	M-307	C, alloy, bal. Fe							Hollow drills	Discontinued
4644	Potts Special Drill Rod	M-307	0.95-1.05 C, bal. Fe	Rolled	80000 90000	40000 45000	20		160 190	Drills, arbors, roller bearings, broaches	Uniform quality
4645	Vanadium Potts Best	M-307	C, V, bal. Fe							Tools	Discontinued
4646	Whiz	M-307	C, alloy, bal. Fe							Tools	(Discontinued)
4647	Indura Drawing Die	M-307	C, alloy, bal. Fe							Drawing dies	(Discontinued)
4648	Troxeit, Grade 100	M-53	Cu-W							Welding where extreme hardness is required	Discontinued
4649	P. R. K. (Potts)	M-307	C, alloy, bal. Fe							Tools	(Discontinued)
4650	Elastuf Type K	M-307	C, Cr, bal. Fe							Tools	(Discontinued)
4651	Potts Superior	M-307	C, alloy, bal. Fe							High speed cutting tools	High speed steel (Discontinued)
4652	Ace Oil Hardening	M-307	C, alloy, bal. Fe							Tools	Non-deforming (Discontinued)
4653	Planet Choice	M-372	C, bal. Fe							Tools	
4654	Planet Extra	M-372	C, bal. Fe							Tools	
4655	Planet Regular	M-372	C, bal. Fe							Tools	
4656	Purco Chisel	M-372	C, bal. Fe							Chisels	
4657	Planet Sheffoil	M-372	C, alloy, bal. Fe							High speed tools	High speed steel
4658	Carbon Steels (Simonds)	M-373	C, bal. Fe							Tools	
4659	Special Alloys (Simonds)	M-373	C, alloy, bal. Fe							Tools	
4660	Die Steel	M-373	C, alloy, bal. Fe							Tools	
4661	Hacksaw (Simonds)	M-373	C, W, bal. Fe							Hack saws	
4662	High Speed (Simonds)	M-373	C, alloy, bal. Fe							High speed cutters	High speed steel
4663	Seaco	M-374	C, bal. Fe							Tools	
4664	Seaco Hot Die	M-374	C, Cr, bal. Fe							Hot dies	
4665	Seaco Chrome Vanadium	M-374	C, Cr, V, bal. Fe							Tools	
4666	Seaco Non-Shrinkable	M-374	C, Mn, bal. Fe							Tools	Non-shrinking
4668	S.K.F. Special	M-267	C, bal. Fe							Tools	Discontinued
4669	S.K.F. Drill	M-267	C, bal. Fe							Drills	
4670	C.R.U.	M-267	C, bal. Fe							Tools	Discontinued
4671	L.L.L. Standard	M-267	C, bal. Fe							Tools	Discontinued
4672	L.L.L. Extra	M-267	C, bal. Fe							Tools	Discontinued
4673	S.K.F. No. 114	M-267	C, V, bal. Fe							Tools	Discontinued
4674	S.K.F. No. 685	M-267	C, alloy, bal. Fe							Tools	Discontinued
4675	L.L.L. No. 44	M-267	C, alloy, bal. Fe							Tools	Discontinued
4676	L.L.L. No. 82	M-267	C, alloy, bal. Fe							Tools	Discontinued
4677	L.L.L. No. 83	M-267	C, alloy, bal. Fe							Tools	Discontinued
4678	V.H. Atlas	M-267	C, alloy, bal. Fe							Tools	Discontinued
4679	V.H. No. 54	M-267	C, alloy, bal. Fe							Hot punching tools	Discontinued
4680	C.R.U. Composite	M-267	C, Cr, bal. Fe							Tools	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4681	C.R.U. Excelsior	M-267	C, alloy, bal. Fe							High speed cutting tools	Discontinued
4682	C.R.U. Excelsior Extra	M-267	C, alloy, bal. Fe							High speed cutting tools	Discontinued
4683	C.R.U. Excelsior Extra XII	M-267	C, alloy, bal. Fe							High speed cutting tools	Discontinued
4684	C.R.U. Excelsior XXII	M-267	C, alloy, bal. Fe							High speed cutting tools	Discontinued
4685	B-Arrow 1733	M-267	C, alloy, bal. Fe							Tools	Discontinued
4686	Tacony Bit	M-390	C, bal. Fe							Bits, tools	Discontinued
4687	Tacony Jar	M-390	C, bal. Fe							Tools	Discontinued
4688	Tacony Carbon	M-390	C, bal. Fe							Tools	Discontinued
4689	Tacony Regular Die	M-390	C, bal. Fe							Dies	Discontinued
4690	Tacony Chisel and Drill	M-390	C, bal. Fe							Chisels, drills	Discontinued
4691	Tacony Regular Trimmer	M-390	C, bal. Fe							Tools, dies	Discontinued
4692	Tacony Alloy Trimmer	M-390	C, alloy, bal. Fe							Tools, dies	Discontinued
4693	Tacony Alloy Die	M-390	C, alloy, bal. Fe							Dies	Discontinued
4694	Tacony Gol Chisel	M-390	C, alloy, bal. Fe							Chisels	Discontinued
4695	Tacony Alloy Steel	M-390	C, alloy, bal. Fe							Tools	Discontinued
4696	U.B. Double Bolt	M-111	.40-0.50 C, bal. Fe	Annealed			2			Tools, chisels	
4697	Bearium B-4	M-431	70 Cu, 26 Pb, bal. Sn		21650		16		40	Bearings	
4698	Valutap Die Steel	M-115	C, W, Cr, V, bal. Fe							Dies	
4699	Non-Hardening (Vulcan)	M-275	C, alloy, bal Fe							Tools, drawing dies	
4700	Red Label	M-389	C, bal. Fe							Tools	(Discontinued)
4701	Blue Label	M-389	C, bal. Fe							Tools	(Discontinued)
4702	Green Label	M-389	C, bal. Fe							Tools	(Discontinued)
4703	Standard (Wards)	M-389	C, bal. Fe							Tools	(Discontinued)
4704	Self-Hardening	M-389	C, alloy, bal. Fe							Tools	(Discontinued)
4705	Extra Best Cast	M-389	C, Cr, V, bal. Fe							Tools	(Discontinued)
4706	Special No. 0	M-389	C, alloy, bal. Fe							Tools	(Discontinued)
4707	Gold Label	M-389	C, W, bal. Fe							Tools	(Discontinued)
4708	Tennax	M-389	C, alloy, bal. Fe							Tools	Non-deforming (Discontinued)
4709	Wardlow's	M-392	C, bal. Fe							Tools	
4710	Wardlow's Tough	M-392	C, bal. Fe							Tools	
4711	Whelco Alloy Tap	M-119	1.1 C, 0.35 Cr, 0.2 V, 0.85 W, bal. Fe							Tools, taps	
4712	Hollow Drill (Ziv)	M-289	C, bal. Fe							Hollow drills	
4713	Rolled Auger	M-289	C, bal. Fe							Tools	
4714	Ziv's Regular	M-289	C, bal. Fe							Tools, cold chisels	
4715	Blue Label Adams & Osgood	M-350	C, bal. Fe							Tools	
4716	Bearium B-6	M-431	24 Pb, 70 Cu, bal. Sn		22500		14		45	Bearings for severe service and large installations	
4717	Bearium B-10	M-431	20 Pb, 70 Cu, bal. Sn		25500	12000	10		55	Tough, hard bearing for general use	
4718	Bearium B-11	M-431	17.5 Pb, 70 Cu, bal. Sn		30000		8		195	Severe service bearings	
4719	Alcoa 18 S	M-4	4 Cu, 0.5 Mg, 2 Ni, bal. Al	T	63000	47000	16		115	Light alloy pistons	
4720	Alcoa 32 S	M-4	12 Si, 1 Mg, 0.8 Ni, .9 Cu bal. Al	(S.T.) forged	54500	47000	7.7	10	126	Aircraft pistons, forged	S.S.-37000 End. Lim.-14000
4721	Alcoa 53S	M-4	0.7 Si, 1.25 Mg, 0.25 Cr, bal. Al	S.O.	17000	9000	25		26	Aircraft forgings, crank case	Forgings
				S.W.	33000	20000	22		65	nose piece	
				S.T.	40000	35000	14		80		
4722	Alcoa 70 S	M-4	1 Cu, 0.7 Mn, 0.4 Mg, 10 Zn, bal. Al	T	58000	45000	18		100	Light alloy parts	Forgings

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4723	Alcoa No. 113	M–4	7.0 Cu, 1.2 Fe, 1.8 Si, 2.0 Zn, bal. Al	Cast	29000		1.3		70 90	Light weight castings	General purposes Obsolete
4724	Alcoa B-214	M–4	3.7 Mg, 1.7 Si, bal. Al	Cast	20000	13000	2		50	Pipe fittings	
4725	Alcoa 216	M–4	6 Mg, bal. Al	Sand cast	27000	16000	6		60	Corrosion resistant light alloy castings	C.U.S.-57000; S.S.-23500; C.Y.P.-15000
4726	Alcoa 214	M–4	3.75 Mg, bal. Al	Sand cast	25000	12000	9		50	Corrosion resistant light alloy castings	C.U.S.-50000; S.S.-20000; C.Y.P.-12000
4727	Alcoa 220	M–4	10 Mg, bal. Al	(T-4)	44000	26000	14		75	Aircraft castings	High strength, corrosion resistant
4728	Alcoa A-334	M–4	3 Cu, 4 Si, 0.3 Mg, bal. Al	Sand cast	26000	20000	1.8		70	Sand cast light alloy castings	S.S.-24000
4729	Alcoa A-355	M–4	1.4 Cu, 5 Si, 0.5 Mg, 0.75 Ni, 0.75 Mn, bal. Al	T-51 T-59	28000 25000	24000 21000	1.4 1.9		60 55	Castings	
4730	Alcoa 645	M–4	2.5 Cu, 1.5 Fe, 11 Zn, bal. Al	Sand cast	29000	22000	4		70	Light alloy parts	C.U.S.-50000; C.Y.P.-34000; S.S.-22500
4731	Enduro 4-6 Cr-"Mo"	M–97	0.25 max. C, 0.6 max. Mn, 4-6 Cr, 0.4-0.6 Mo, bal. Fe						70	Corrosion resisting parts	Stainless and heat resistant
4732	Enduro 4-6 Cr-"W"	M–97	0.25 max. C, 0.5 max. Mn, 4-6 Cr, 0.75-1.25 W, bal. Fe							Corrosion resisting parts	Stainless and heat resistant
4733	Enduro S-1	M–97	0.12 max C, 0.6 max. Mn, 12-14-Cr, 0.50 Si, bal. Fe	Annealed Heat treated	65000 200000	33000 180000	35 10	65 25	135 390	Cutlery, pump shafts, steam turbine parts, valve seats, rifle and revolver barrels	Stainless and heat resistant
4734	Enduro K.A.-28	M–97	0.12-0.18 C, 1.5 max. Mn, 2-2.5 Si, 16.5-19.5 Cr, 8-10.5 Ni, bal. Fe							Heat and corrosion resistang parts	Stainless and heat resistant
4735	Enduro K.A.-2 Mo	M–97	0.16 max. C, 1.5 max. Mn, 7-10.5 Ni, 2-4 Mo, bal. Fe							Heat and corrosion resisting parts	Stainless and heat resistant
4736	Enduro K.A.-2-S-Mo	M–97	0.07 max. C, 1.5 max. Mn, 0.75 max. Si, 18-22 Cr, 7-10.5 Ni, 2-4 Mo, bal. Fe							Heat and corrosion resisting parts	Stainless and heat resistant(Superseded)
4737	Enduro 18-8 F.M.	M–97	0.08-0.20 C, 1.25 max. Mn, 17-19 Cr, 7-9 Ni, 0.15-0.30 Se, bal. Fe	Heat treated Annealed	101700 85000	46900 35000	55 40	62 50	179	Tanks, vessels, chemical engineering equipment	Stainless and heat resistant. Free machining
4738	Enduro K.A.-2-F.M.	M–97	0.1-0.2 C, 0.75-1.25 Mn, 16.5-20 Cr, 7-10.5 Ni, 0.4-0.6 Mo, bal. Fe							Stainless parts	Stainless and heat resistant
4739	Enduro 18-8 Ti	M–97	0.16 max. C, 0.6 max. Mn, Ti, 0.75 max. Si, 16.5-20 Cr, 7-10.5 Ni, 0.8 Mo, bal. Fe							Stainless parts	Stainless and heat resistant
4740	Enduro K.A.-2-S-Ti	M–97	0.07 max. C, 0.6 max. Mn, Ti, 0.75 max. Si, 16.5-20.0 Cr, 7-10.5 Ni, 3.5 Mo, bal. Fe							Stainless parts	Stainless and heat resistant (Superseded)
4741	Enduro K.A.-2-Ti	M–97	0.16 max. C, 0.6 max. Mn, 0.75 Si, 16.5-20 Cr, 7-10.5 Ni, 0.8 Mo, bal. Fe, Ti							Stainless parts	Stainless and heat resistant
4742	Bronze, Composition "M" U.S.N.-46 B 8 e		86-91 Cu, 6-7 Sn, 1.5-5 Zn, 1-2 Pb, 0.75 max. Ni, 0.25 Sb, 0.15 Fe		32000		17			Valve castings, manifolds, cocks	Castings
4743	Bronze, Composition "P-c" U.S.N.-46 B 5 g		85-89 Cu, 7.5-11 Sn, 1.5-4.5 Zn, 0.75 max. Ni, 0.5 P, 1 Pb	Grade I Grade II	35000 30000		18 12			Phosphor bronze castings, gears, valves, pipe fittings, bearings	Resists sea-water corrosion
4744	Bronze, Composition "P-r" U.S.N.-46 B 14 d		94 min. Cu, 3.5 min. Sn, 0.05-0.5 P, 0.2 max. Pb, 0.1 Fe	Rods Springtemper	50000 80000 90000	25000 60000 25000	25 12 25			Phosphor bronze rolled or drawn, bolts, pump rods, valves, valve stems	Resists sea-water corrosion
4745	Phosphor Bronze Spring Wire U.S.N.-22 W 5 d		94 min. Cu, 3.5 min. Sn, 0.05-0.5 P		15000 105000		1 9			Springs	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4746a	Bronze Bearing Castings, Grade I U.S.N.-46 B 22 a		73-80 Cu, 5-7 Sn, 0.50 Zn, 15-20 Pb, 1 max. Ni, 0.05 P, 0.25 max. Fe, S, Sb							Bearings for machinery	Heavy loads and low speeds
4746b	Grade II		82-85 Cu, 7-9 Sn, 0-0.25 Zn, 7-9 Pb, 1 max. Ni, 0.3-0.6 P		25000		8			Bearings	General service
4746c	Grade III		84-86 Cu, 13-15 Sn, 0-0.15 Zn, 0.2 max. Pb, 0.75 Ni		30000		1-8			Bearings	Hard bearing and gear work
4746d	Grade IV		80-82 Cu, 18-20 Sn, 0.25 Zn, 0.5 max. Pb, 0.75 Ni		45000				160	Bearings	Extra hard for special work
4747	Argentan, French	French	50.32 Cu, 30.94 Zn, 18.4 Ni							Electrical resistances	
4748	Argentan, Berlin	Ger.	55.5 Cu, 29.1 Zn, 15.5 Ni							Electrical resistances	
4749	Argentan, English	Eng.	63.36 Cu, 17 Zn, 19.13 Ni, 0.38 Fe							Domestic ware	
4750a	Gun Metal Cochin China	Chi.	77.18 Cu, 3.42 Sn, 5.02 Zn, 13.22 Pb, 1.16 Fe							Early cannons and guns	
4750b	Gun Metal Cochin China	Chi.	93.19 Cu, 5.43 Sn, 1.38 Fe							Early cannons and guns	
4751a	Gun Metal, Chinese	Chi.	71.16 Cu, 27.36 Zn, 1.40 Fe							Early cannons and guns	
4751b	Gun Metal, Chinese	Chi.	93.2 Cu, 5.05 Sn, 1.72 Fe							Early cannons and guns	
4752	Gun Metal, Turkish	Turk.	91-95 Cu, 4.7-8.8 Sn, 0-0.2 Fe							Early cannons and guns	
4753a	Gun Metal, French	Fr.	90.1 Cu, 9.9 Sn							Early cannons and guns	Modern
4753b	Gun Metal, French	Fr.	89.44 Cu, 8.91 Sn, 1.31 Zn, 0.16 Pb							Early cannons and guns	Old
4754	Gun Metal, Prussian	Pruss.	90.9 Cu, 9.1 Sn							Cannons and guns	Modern
4755	Gun Metal, Swiss	Swiss	88.93 Cu, 10.37 Sn, 0.42 Zn							Early cannons and guns	"Lucern"
4756	Gun Metal, English	Eng.	89-92 Cu, 8-11 Sn							Early cannons and guns	
4757	Gun Metal, Russian	Russ.	88-91 Cu, 9-12 Sn, 0.07 Fe							Early cannons and guns	
4758	German Silver, Austrian	Aus.	60-50 Cu, 20-25 Zn, 20-25 Ni							Ornamental purposes, electrical resistances	
4759	German Silver, Birmingham	Eng.	62-50 Cu, 32-20 Zn, 12-30 Ni							Ornamental purposes, electrical resistances	
4760	German Silver, Common Formula		55 Cu, 25 Zn, 20 Ni							Ornamental purposes, electrical resistances	
4761	German Silver, Berlin	Ger.	54 Cu, 28 Zn, 18 Ni							Ornamental purposes, electrical resistances	
4762	German Silver, French (Arcet)	Fren.	50 Cu, 30-31.3 Zn, 20-18.7 Ni							Ornamental purposes, electrical resistances	
4763	German Silver, French (Chaval)	Fren.	58.3 Cu, 25 Zn, 16.7 Ni							Ornamental purposes, electrical resistances	
4764	German Silver, Russian	Russ.	45-56 Cu, 18-23.5 Zn, 20-36 Ni							Ornamental purposes, electrical resistances	
4765a	German Silver,	Eng.	59.3 Cu, 25.9 Zn, 14.8 Ni							Ornamental purposes, electrical resistances	Common Yellow
4765b	Sheffield		55.2 Cu, 24.1 Zn, 20.7 Ni								Silver White
4765c	Sheffield		51.6 Cu, 22.6 Zn, 25.8 Ni								Electrum, Bluish
4765d	Sheffield		45.7 Cu, 20 Zn, 31.3 Ni								Hard Alloy
4766	German Silver, Austrian		50 Zn, 44 Cu, 3.3 Sn, 1.2 Pb							Solder	Nearly White
4767	Solder, White		60 Zn, 40 Cu							Solder	
4768	Solder, Very Refractory		58 Cu, 42 Zn							Solder	
4769	Solder, Very Soft White		57 Cu, 28 Zn, 15 Sn							Solder	
4770	Silver Solder, Pure Silver		72 Ag, 28 Cu							Solder	
4771a	Aluminum Bronze		95 Cu, 5 Al	Hard	105000		5		166	Diaphragms, condenser tubes	
4771b	Aluminum Bronze		92 Cu, 8 Al	Hard	122000	60000	4		155	Bearings	
4771c	Aluminum Bronze		85.5 Cu, 8 Al, 2.5 Fe	Hard	125000	80000	5		190	Bearings	
4771d	Aluminum Bronze		90 Cu, 10 Al	Hard	125000	67000	5		170	Gears	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4772	Mazak	M–414	4.1 Al, 2.7 Cu, 0.03 Mg, bal. Zn		47300				83	Castings	Free from hot shortness. Iz-15, C.U.S.-93100
4773	Alcoa 14 S	M–4	4.4 Cu, .8 Si, .8 Mn, .4 Mg, bal. Al	T	70000	55000	14	34	135	Light alloy parts, aircraft propellers, forgings	S.S.-45000; End. Lim.-15000—17000
4774	Bu-Nite		Ni-Al-Cu							Pistons	Retains strength up to 370 °C.
4775	Carnolia	M–405								Antifriction alloy for bearings	
4776	Galicar	M–405	83 Sn, bal.?							Antifriction alloy	
4777	Ruscar	M–405								Antifriction bearings	
4778	Clarus Metal	M–407	Al alloy							Light alloy parts	Will not oxidize. 60% stronger than Al
4779	Cromaloy IV	M–408	80 Ni, 20 Cr		134500					Heating appliances for high temperature work	Heat resistant up to 1150 °C.
4780	Cupranium		Cu, Ta, V Bronze							Corrosion resistant parts	Corrosion resistant
4781	Delta Bronze V	M–156	Cu, Zn, Fe, Sn							Chemical equipment, worm wheels, bearings	Corrosion resistant
4782	Duralum	M–450	79 Al, 11 Mg, 10 Cu, 0.5 P							Light alloy parts	
4783	Gallimore Metal	M–409	45 Ni, 28 Cu, 25 Zn, 2 Fe, Si, Mn	Hard rolled Soft rolled	156000 98000		2.5 42			Airplane parts, non-corrosive stampings	Non-corrosive in sea water
4784	Haywood's High Tensile Bronze Grade 8	M–411	Cu alloy		86000	61000	36		115	Corrosion resisting, high strength cast and forged bronze parts	Non-corrosive Iz-28
4785	Hoyt's No. Eleven Bearing Metal	M–317	91.4 Sn, 3.49 Sb, 4.31 Cu, 0.18 Pb, 0.55 Ni						27	Connecting rod bearings for airplane and diesel engines, air compressors, etc.	Tough, ductile alloy for severe duty
4786	Hytempite (Commercial No. 1)	M–412	Ni-Cr-Fe		50000		1.5	1.7	170	Carburizing and heat treating boxes, annealing pots, pyrometer tubes	Discontinued
4787	Lion Brand Antifriction Metal	M–413								Antifriction metal for rolling mills, stone crushing and wood working machinery	For heaviest pressures and highest speeds
4788	Lion Brand Plastic White Metal	M–413	Sn alloy							Main bearings of marine engines, locomotives and electrical machinery	M.P.-402 °F.
4789	M.G. 7	M–338	7 Mg, 0.6 Mn, .7 Ni, bal. Al	Soft sheet Hard rolled	50000 70000	24000 62000	26 4		115	Corrosion resistant light alloy parts, tubes, sections	Similar to "Duralumin" Iz-17
4790	Miralite	M–415	95 Al, 4.1 Ni, 0.32 Si, 0.40 Fe, 0.04 Na, 0.05 Pb	Cast Drawn	24000 54000					Pistons	Good machining qualities
4791	Morrison's Ductile Bronze	M–409	91 Cu, 9 Sn							Hardware, pump rods, valves, gears	Discontinued
4792	N.C.A. (Non-Corrodible Aluminum)	M–411	2.2 Ni, 3 Cu, .2 Mg, .2 Mn, bal. Al	Rolled Sand cast	45000 24000 31000	12000 15000	7 5		63	Light alloy parts	Resists sea-water corrosion
4793	Nichrome II	M–416	65-67 Ni, 20-22 Cr, 12-14 Fe, 1.5-2.0 Mn							Heavy ribbon for large heating furnaces	Max. working temp.-1100 °C. (Discon.)
4794	N.K.L. Metal	M–417								For superheated steam	
4795	Parson's Mota Metal	M–179	Sn base alloy	Cast						Antifriction metal for internal combustion engines	White metal
4796	Pireks Metal	M–418	Ni-Cr	At 20 °C. At 1000 °C.	80500 34000				250	Annealing and carburizing boxes, heat treating appliances	Cast alloy. Resists heat up to 1000 °C.
4797	Rhometal	M–108	36 Ni-64 Fe							High frequency electrical circuits	Constant magnetic permeability

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4798	Rely C.M. 1	M-420	6 Cu, 84 Sn, 10 Sb							Bearings	
4799	Rely C.M. 2	M-420	6 Cu, 72 Sn, 12 Pb, 10 Sb							Bearings	
4800	Rely C.M. 3	M-420	3 Cu, 40 Sn, 42 Pb, 15 Sb							Bearings	
4801	Rely C.M. 4	M-420	3 Cu, 31 Sn, 50 Pb, 16 Sb							Bearings	
4802	Rely C.M. 5	M-420	1 Cu, 15 Sn, 70 Pb, 14 Sb							Bearings	
4803	Rely C.M. 6	M-420	6 Sn, 80 Pb, 14 Sb							Bearings	
4804	S.A.B. Alloy	M-421									
4805	Solusal	M-388 M-427	Al alloy		34000		16			Airplane, automobile and marine parts to resist corrosion	
4806	Sunray Gold	M-422								Imitation gold, jewelry	
4807	Trimax									Packing	White metal alloy
4808	V-Phosphor Bronze No. 207 A	M-423	70 Cu, 29 Zn, 1 P							Wire for weaving purposes	Great ductility
4809	Yorcalbro	M-286	70 Cu, 28 Zn, 2 Al	Annealed	52000		55		60	Condenser tubes	Anti-corrosive alloy
4810	Z-3 Alloy	M-137	6.5-8.5 Cu, 3-4.25 Zn, 2.5-3.25 Si, 0.7-1.1 Fe, bal. Al	Cast	23000 28000		1 2		90	Crankcases, gear boxes, flywheel housings, brake shoes	Die casting
4811	Aluminum Alloy B.E.S.A. No. 361	Eng.	6-8 Cu, 0.1 Zn, 1.0 max. Fe, 1.0 max. Si, bal. Al	Chill cast Sand cast	20160 18000		3 1-2		60	General castings, cylinder heads	
4812	Aluminum Alloy B.E.S.A. No. 362	Eng.	11-13 Cu, 0.1 Zn, 1.0 max. Fe 1.0 max. Si, bal. Al	Chill cast Sand cast	20160				80	Permanent mold castings, pistons	
4813	Aluminum Alloy B.E.S.A. No. 363	Eng.	2.5-3.0 Cu, 12.5-14.5 Zn, 1.0 max. Fe, 1.0 max. Si, bal. Al	Sand cast	25000 30000		1		70	Sand castings, crankcases	
4814	Union Hymo Steel	M-397	0.15-0.25 C, 1.0-1.3 Mn, bal. Fe	Cold drawn Cold rolled	66000 75000 85000	55000 55000 65000	15 15 25	35 45 55	 143 170	Case hardened parts, shafts, pinions	Free machining case hardening steel. Cold drawn
4815	Phoenix Metal	M-88	Pb alloy							Bearings	Solidification temp.-234°C.
4816	Hills-McCanna No. 1	M-168	89 Cu, 11 Sn		35000 40000	22000 25000	6 10	7 9	75 85	Gears, worm wheels	Known as "Stones English Worm Gear Bronze"
4817	Hills-McCanna No. 2	M-168	88 Cu, 10 Sn, 2 Zn		32000 45000	19000 23000	15 30	12 25	65 75	Gears, superheated steam and hydraulic castings, bearings	Known as "Gun Metal" or "G-Bronze"
4818	Hills-McCanna No. 10	M-168	80 Cu, 10 Sn, 10 Pb		28000 33000	19000 22000	5 10	6 11	52 60	Bearings for heavy duty	Resists shock and vibration
4819	Hills-McCanna No. 11	M-168	88 Cu, 10 Sn, 2 Pb		30000 40000	19000 23000	15 25	12 20	65 70	Centrifugal pump parts, mine pump bodies, rods, gears	C.E.L.-15000
4820	Hills-McCanna No. 20	M-168	85 Cu, 5 Sn, 5 Pb, 5 Zn		27000 33000	15000 19000	16 20	15 20	50 60	Pump bodies, valves, bearings	Known as "Ounce Metal" or "Red Composition"
4821	Hills-McCanna No. 21	M-168	82 Cu, 4 Sn, 6 Pb, 8 Zn		28000 33000	14000 16000	15 20	20 26	55 60	General use, bearings	C.E.L.-10000
4822	Hills-McCanna No. 25	M-168	99.6-99.9 Cu		17000 20000	6000 9000	50 40	70 60	30 40	Electrical installations, parts of electric welding machines	C.E.L.-4000
4823	Hills-McCanna No. 30	M-168	56 Cu, 41 Zn, 1 Fe, 1 Al, 0.5 Mn, 0.5 Sn		65000 85000	26000 33000	20 35	18 30	104 119	Propeller blades, hubs, valve stems, engine frames, bearings, gears	C.E.L.-28000
4824	Hills-McCanna No. 35	M-168	92 Al, 8 Cu		16000 22000	11000 13000	1 2	1 2	50 55	Crankcases, housings, automobile castings	C.E.L.-10000

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	V.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4825	Hills-McCanna No. 40	M-168	90 Cu, 10 Al		65000	23000	20	21		Structural parts	Non-magnetic
					80000	28000	30	29			Wear resistant
4826	Hills-McCanna No. 41	M-168	77 Cu, 11 Al, 5 Fe, 7 Mn-Cu		65000	23000	20	21	158	Structural parts	Wear resistant
					80000	28000	30	29			C.E.L.-283000
					97800	26200	10	12	190		
4827	Hills-McCanna No. 42	M-168	88 Cu, 8 Al, 4 Fe		65000	23000	20	21	92	Gears, bushings, bolts	Wear resistant
					80000	28000	30	29	100		C.E.L.-19000
4828	Hills-McCanna No. 45	M-168	89 Cu, 10 Al, 1 Fe		65000	23000	20	21	92	Equipment in oil refineries	Wear and corrosion
					80000	28000	30	29	100		resistant. C.E.L.-19000
4829	Hills-McCanna No. 46	M-168	81 Cu, 11 Al, 5 Fe, 3 Fe-Mn		65000	23000	20	21		Packing tools in the explosive industry	Wear resistant
					80000	28000	30	29			C.E.L.-26100
					94300	26400	10	11	176		
4830	Hills-McCanna No. 47	M-168	80 Cu, 12 Al, 8 Fe		65000	23000	20	21		Bearings, gears to resist heavy loads and shocks	Wear resistant
					80000	28000	30	29			C.E.L.-22100
					92300	26400	8.5	8.5	206		
4831	Hills-McCanna No. 50	M-168	52 Cu, 31 Ni, 12 Fe, 5 Cr		75000	42000	4.5	7.8	190	Hydraulic valve seats	Corrosion resistant C.E.L.-33040
4832	Hills-McCanna No. 50A	M-168	60.5 Cu, 23.5 Ni, 2 Sn, 3 Pb, 11 Zn		38000	19000	13	15	85	Vessels to resist H_2SO_4	Corrosion resistant
					45000	22000	21	20	90		
4833	Hills-McCanna No. 52	M-168	74.5 Cu, 16.5 Ni, 9 Al		85000	36000	4	3.5	213	Vessels to resist hot oils	Corrosion resistant C.E.L.-29610
4834	Hills-McCanna No. 53	M-168	80 Cu, 10 Al, 5 Ni, 5 Fe	Untreated	95000	44000	9	18	170	Spark proof tools	Corrosion resistant
				Heat treated	110000	77000	3	9	235		
4835	Hills-McCanna No. 54	M-168	60-65 Ni, 23-28 Cu, 3.5 Fe, 2 Mn, 0.75 Si, 0.25 C		65000	35000	30		100	Chemical apparatus	Corrosion resistant C.E.L.-29610
					70000	40000	25				
4836	Hills-McCanna No. 55	M-168	65-67 Ni, 30-32 Cu, 2.5-3.5 Si, 2.5-3.5 Fe		75000	44000	10.5	16	170	Still plugs in oil industries	Corrosion resistant
					80000	*48000*	*10*	*13*			
4837	Uni-Die	M-35	0.9 C, 1.2 Cr, 0.2 V, bal. Fe 0.90 Mn	Annealed					180	Tools, blanking, cutting and forming dies	Oil-hardening, non-deforming
4838	Nickel Silver (Int. Silver C)	M-322	18 Ni, 65 Cu, 18 Zn		59900	31800	34	65		Silver plated table ware	Rockwell "B"-50
4839	Nikro (Colonial)	M-34	0.85 C, 0.55 Cr, 0.3 Ni, bal. Fe							*Trimming dies, cold-shears*	*Tough*
4840	Colona (Colonial)	M-34	0.65 C, 0.75 Cr, 1.5 Ni, bal. Fe							Drop forge dies, molds	Oil hardening
4841	Cronite W.X. 2	M-37	Ni, Cr, Fe, W		70000					For drastic temperature conditions	
					120000						
4842	Berdo No. 6	M-20	Cu-Sn-Ni-Pb-P							Mill bearings, rock drill parts, gears	Wear resistant
4843	Berdo No. 7	M-20	Cu-Sn-Ni-Pb-P							Mill bearings, rock drill parts, gears	Wear resistant
4844	Lumen Alloy No. 15A	M-77	87.5 Cu, 11 Sn, 1.5 Pb	Sand cast	43000	20400	5	5	54	Bearings for machine tools	Deoxidized with Iz-3-6
				Chill cast	36000	25000	4		80		
4845	Lumen Alloy No. 31	M-77	70 Cu, 9 Sn, 21 Pb	Cast	27000	17000	17		59	Bearings	
					29000	19000	14		63		
4846	Lumen Alloy No. 33	M-77	70 Cu, 4 Sn, 26 Pb	Cast	18000	12000	20		41	Bearings	
					23000	16000	12		45		
4847	Old Genuine Babbitt	M-77	89 Sn, 7.5 Sb, 3.5 Cu							Bearings	Same as A.S.T.M. No. 7
4848	Mercoloy	M-519								Valves	
4849	Macco Swedish Magnetic Iron	M-80	Fe							Magnetic parts for all kinds of electrical instruments	Pure iron
4850	Macco Alloy Razor Blade	M-80	C, Cr, bal. Fe							Razor blades	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4851	Macco Belt Knife	M-80	C, Cr, Ni, V, Si, Mn, bal. Fe							Knives, leather splitting belt knives	
4852	Macco Enormous	M-80	.8 C, 5 Cr, 17 W, 1.5 V, 5 Co, bal. Fe							Taps, dies, twist drills, cutters	High speed steel
4853	Bethlehem Best	M-24	0.2 V, varying C, bal. Fe	Water harden						Tools, punches, dies, broaches, reamers, shear blades	
4854	Bethlehem Chrome Ball Race	M-24	1.0 C, 1.5 Cr, with or without V or Mo, bal. Fe							Ball races, cups, cones, ball bearings, roller paths	Water hardening Bearing steel
4855	Bethlehem Piston	M-24	1.15 C, 0.6 Cr, 0.2 V, bal. Fe							Pistons, pneumatic chipping and riveting hammers	Hard and tough
4856	Bethlehem No. 1 Permanent Magnet	M-24	6 W, .65 C, bal. Fe							Magnets	Magnet steel
4857	Cobaflux	M-24	5 Cr, 4 W, 37 Co or 4 Cr 9 W, 19 Co, bal. Fe							Magnets, magnetos, scientific instruments	
4858	Mayari Staybolt Steel	M-24	0.8 C, 1.5 Ni, bal. Fe	Rolled	55000	35000	32	62	112	Staybolts	High fatigue resistant
4859	Mayari Engine Bolt Steel	M-24	.1 C, 1.5 Ni, .2 Cr, bal. Fe	Rolled	65000	40000	25	50	50	Engine bolts, structures	Tough
4860	Resilia	M-24	C, Si, Mn, bal. Fe							Springs	
4861	Alculoy	M-158	7 Cu, 3 Si, 2.25 max. Fe, 1.5 max. Zn, bal. Al		29000 32000	12000 17000	2 1		75 80	Die castings, (Al)	
4862	Alsiloy	M-158	0.6 max. Cu, 11.5-12.5 Si, 2 max. Fe, bal. Al		30000 33000	10000 12000	3 1.5		70 75	Die castings	
4863	Carpenter No. 610 Air hardening	M-32	1.5 C, 12 Cr, 0.8 Mo, 0.20 V, bal. Fe							Blanking, forming and drawing dies, gages, master tools, reamers, rolls, taps	Air hardening
4864	Boyd-Wagner Tungsten Magnet	M-336	C, W, bal. Fe							Magnets	Magnet steel
4865	Boyd-Wagner Chrome Magnet	M-336	C, Cr, bal. Fe							Magnets	Magnet steel
4866	Bisset Tool Steel Tubing	M-324	C, bal. Fe							Tubing, bushings, can dies, spacers	Non-shrink oil hardening
4867	Bisco Die	M-324	W, C							Dies, wire drawing dies and cutlery tools	
4868	Par 1	M-153	Cr-W-Co, Fe							Heat and wear resisting parts	Resists wear at high temp. to 2000°F.
4869	Par 2	M-153	0.3 C, 1.5 Cr, 2.5 Ni, 0.3 Mo, bal. Fe							Gears, pinions, shafts	Wear and shock resistant
4870	Par 3	M-153	0.35 C, 3 Cr, bal. Fe							Machinery parts	Wear and abrasion resistant
4871	Par 4	M-153	0.4 C, 25 Cr, 2 Ni, bal. Fe							Heat and corrosion resisting parts	Heat and acid resistant
4872	Par 5	M-153	0.3 C, 18 Cr, 8 Ni, bal. Fe							Heat and corrosion resisting parts	Heat and acid resistant
4873	Par 6	M-153	0.4 C, 28 Cr, 10 Ni, bal. Fe							Heat and corrosion resisting parts	Heat and acid resistant
4874	Par 7	M-153	0.4 C, 16 Cr, 35 Ni, bal. Fe							Heat and corrosion resisting parts	Heat and acid resistant
4875	Par 8	M-153	0.25 C, 18 Cr, 65 Ni, bal. Fe							Heat and corrosion resisting parts	Heat and acid resistant
4876	Par 9	M-153	0.40 C, 30 Cr, bal. Fe							Heat and corrosion resisting parts	Heat and acid resistant
4877	Par 10	M-153	0.8 C, 15 Cr, 0.45 Mo, 0.50 W, 0.04 Al, bal. Fe							Guides for hot work	
4878	Par 11	M-153	0.55 C, 0.75 Cr, 1.5 Ni, 0.3 Mo, bal. Fe							Forging dies	
4879	Cerrobase	M-216	58 Bi, 42 Pb		6200	4000	64		10		M.P.-123.5 °C Formerly "Basaloy"

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4880	Thermo-Lectric Copper-Hardened Babbitt	M-143	20 Sn, 68 Pb, 11 Sb, 1 Cu		9950		1.7		18	Babbitt bearings	C.E.L.-4000
4881	Darwin N-32	M-40	0.38 C, 3-4 Ni, 0.6 Mn, bal. Fe	Oil harden						Chisels	Oil hardening
4882	Crotung	M-151	0.15 C, 0.5 Mn, 0.5 Si, 5.0 Cr, 1.0 W, bal. Fe		66500	25000	36	71		Dies, petroleum still parts	
4883	Defirust Machining	M-100	0.12 max. C, 12-15 Cr, 0.50 max. Si, 0.25-0.50 S, bal. Fe	Hardened Annealed	122500 76000	90000 45000	18 38	56 62	239 156	Bolts, nuts, screw machine products	Stainless, free machining
4884	Rustless 21	M-100	0.35 max. C, 18-23 Cr, bal. Fe	Annealed	77000	50000	34	63	170	Stainless parts, oil-burner sleeves, nozzles	Non-hardenable, not welded
4885	Miscrome 1	M-84	0.25 C, 16 Cr, bal. Fe		10500	72000	17	25		Chemical engineering equipment	Resists HNO_3
4886	Miscrome CR	M-84	2.5 C, 16 Cr, bal. Fe							Heat and corrosion resisting parts, grids	Heat and corrosion resistant
4887	Miscrome 2	M-84	0.25 C, 21 Cr, bal. Fe							Chemical engineering equipment	Resists HNO_3
4888	Miscrome 3	M-84	0.25 C, 28 Cr, bal. Fe							Chemical engineering equipment	Resists HNO_3
4889	Misco 18-8	M-84	0.16 C, 18 Cr, 8 Ni, bal. Fe		85000	45500	40	50		Stainless parts, chemical engineering equipment	Resists sulfurous acid
4890	Misco B	M-84	0.25 C, 25 Cr, 13 Ni, bal. Fe							Corrosion and heat resisting parts, chemical engineering equipment	Corrosion and heat resistant
4891	Misco B-1	M-84	0.5 C, 25 Cr, 13 Ni, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resistant
4892	Misco C-1	M-84	0.5 C, 29 Cr, 9 Ni, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resistant
4893	Misco N	M-84	0.4 C, 9 Cr, 21 Ni, bal. Fe		75000	45000	30	40		Chemical engineering equipment	Resists sulfuric acid
4894	Misco HN-2	M-84	0.7 C, 18 Cr, 65 Ni, bal. Fe							Chemical engineering equipment	Resists H_2SO_4
4895	Misco N-5	M-84	0.4 C, 30 Ni, 4 Si, bal. Fe							Chemical engineering equipment	Resists H_2SO_4
4896	Green Lab. Extra (Hellers)	M-343	C, alloy, bal. Fe							Tools	
4897	O.B. Alloy U-5	M-94	85 Cu, 5 Sn, 5 Pb, 5 Zn		34750	14800	25		59	Valves, electrical appliances	Ounce Metal
4898	Hybnickel R	M-194	0.2 C, 31-39 Ni, 7-11 Cr, bal. Fe							Heat and corrosion resistant parts	Heat resistant
4899	U.S.S. 21	M-604	0.35 max. C, 18-23 Cr, 0.5 Si, 0.5 Mn, bal. Fe	Annealed	75000	40000	22	50	212	Chemical apparatus, architecture, oil burner parts	Corrosion and heat resistant
4900	U.S.S. 18-8 S	M-604	0.08 max. C, 0.75 Si, 0.5 Mn, 8-10 Ni, 18-20 Cr, bal. Fe	Annealed	85000	35000	60		135	Stainless parts, acid resisting apparatus, food-dairy, chemical and oil industries	Corrosion resistant Minimized intergranular corrosion
4901	U.S.S. 19-9		0.20 max. C, 0.5 Mn, 0.75 Si, 8 min. Ni, 18 min. Cr, bal. Fe		90000	50000	60		140	Stainless parts, chemical apparatus	Corrosion and acid resistant
4902	U.S.S. 20-10		0.20 max. C, 0.5 Mn, 0.75 Si, 9 min. Ni, 19 min. Cr, bal. Fe							Stainless parts, chemical apparatus	Corrosion and acid resistant
4903	Tantalum Bronze	M-99	1.25 Mo, 0.20 Ta, 10 Al, bal. Cu	Sand cast Drawn wire	68700 162200	44000 154000	8.5 1.7			Steam fittings, valves	
4904	Pioneer Heat Resisting Metal	M-326	C, 20 Cr, 20 Ni, 1 Mo, bal. Fe							Heat treating equipment between 1700-2000 °F.	Resists heat up to 2000 °F.
4905	Extrude Die	M-115	0.38 C, 15.5 W, 3 Cr, 2 Ni, 3 Mo, bal. Fe							Dies for extruding brass	Hot work steel
4906	TAM Foundry Ferro Titanium	M-109	0.25 C, 20.6 Si, 17.7 Ti, 0.4 Al, bal. Fe							Source of Ti for Alloy Cast Iron	Approx. composition
4907	TAM Low Carbon Ferro Titanium 25% Grade	M-109	<0.15 C, <5 Si, 20-30 Ti, 2.5-8 Al, bal. Fe							Source for Ti for steel	
4908	W. 3 Tungsten	M-344	C, W, bal. Fe							Hot dies	Heat resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4909	W. 9 Tungsten	M-344	C, W, bal. Fe							Hot dies	Heat resistant
4910	Chrome B	M-344	C, Cr, bal. Fe							Cutting dies	Non-deforming
4911	Uranus Extra	M-344	C, bal. Fe							Cold dies	Very tough
4912	Janus	M-344	C, bal. Fe							Cold dies	Very tough
4913	Circle "L" No. 21	M-74	0.07 max. C, 18-20 Cr, 8-10 Ni, 0.35-0.50 Si, bal. Fe, 6 Cb	Cast	70000 80000	32000 40000	35 50	35 55	130 160	Stainless and corrosion resistant parts	Stainless, corrosion resistant
4914	Circle "L" No. 25	M-74	0.20 max. C, 20-23 Cr, 9-11 Ni, bal. Fe	Cast	70000 85000	35000 45000	30 40	35 45	130 170	Heat and corrosion resisting parts	Heat and corrosion resistant
4915	Circle "L" No. 30	M-74	0.20 max. C, 24-27 Cr, 9-11 Ni, bal. Fe	Cast	80000 90000	45000 55000	25 45	35 55	150 180	Heat and corrosion resisting parts	Heat and corrosion resistant
4916	Ohmax	M-44	20 Cr, 8.5 Al, bal. Fe		130000 100000					Electrical resistances	Heat resistant to 1200° C. (Discon.)
4917	Radiohm	M-44	12-13 Cr, 4-5 Al, bal. Fe		128000 85000		5 33			Radio tube parts, resistors	Heat resistant to 1000°C. Sp. Res.-133
4918	D-H No. 525 Alloy	M-44	35 Ni, 16 Cr, bal. Fe		150000 70000		35			Resistors for high temperatures	Heat resistant to 800°C. Sp. Res.-100
4919	D-H No. 42 Alloy	M-44	41.5-43 Ni, bal. Fe		150000 70000					Glass to metal seal	Coef. of expansion of glasses. Max. operating temp.-400°C.
4920	D-H No. 52 Alloy	M-44	51-52 Ni, bal. Fe		150000 70000					Glass to metal seal, grid wire	Max. operating temp.-500°C.
4921	D-H R 63 Alloy	M-44	4 Mn, 1 Si, bal. Ni		175000 70000					Spark plug electrodes resistances	Heat resistant to 750°C.
4922	D-H Nirosta	M-44	9 Ni, 18 Cr, bal. Fe		250000 80000					Heat and corrosion resistant parts	Heat and corrosion resistant. Max. operating temp.-800°C.
4923	Nilvar	M-44	36 Ni, bal. Fe		150000 70000					Bimetals, measuring tapes, length standards, thermostats	Low expansion alloy Max. operating temp.-200°C.
4924	Midohm	M-44	22-23 Ni, bal. Cu		100000 50000					Resistances, rheostats	Heat resistant. Max. operating temp.-200°C.
4925	Hytemco	M-44	70 Ni, bal. Fe		150000 70000					Immersion heaters, heater pads, electrical resistances	Max. operating temp.-500°C.
4926	Lohm	M-44	7.0-7.5 Ni, bal. Cu		100000 50000					Electrical purposes, radio rheostats	Low elec. resistance Max. operating temp.-200°C.
4927	Sponge Iron	M-359 M-638	0.3-0.4 C, 1.5-0.2, SiO_2, 96 min. Fe							Raw material for steel	
4928	Hoskins 667	M-65	95 Ni, bal. Si, Mn	H.R. & C.D.	75000		40			Spark plug electrodes, electrical terminals	Heat and corrosion resistant to combustion gases
4929	Neydium No. 8	M-349	72 Au.-Pt, bal. Cu, Ag, Zn, Sn	Soft Heat treated	121000 154000	91000 122000	9 4		195 255	Dental applications	M.P.-1860°F.
4930	Neydium No. 9	M-349	82 Au.-Pt, bal. Cu, Ag, Zn, Sn		148000 167000	115000 134500	9 8		225 260	Dental applications	M.P.-1975°F.
4931	Stainless Iron (Amer. Stainless Steel)	M-293	0.12 max. C, 8-60 Cr, bal. Fe							Hardware, tools, chemical equipment	Stainless
4932	Soderfors No. 1	M-387	0.6 C, 0.3 Mn, bal. Fe							Tools	
4933	Soderfors No. 2	M-387	0.7 C, 0.2 Si, 0.3 Mn, bal. Fe							Tools	
4934	Soderfors No. 3	M-387	0.8 C, 0.2 Si, 0.3 Mn, bal. Fe							Tools	
4935	Soderfors No. 3½	M-387	0.9 C, 0.2 Si, 0.3 Mn, bal. Fe							Tools	
4936	Soderfors No. 4	M-387	1.0 C, 0.2 Si, 0.3 Mn, bal. Fe							Tools	
4937	Soderfors No. 5	M-387	1.1 C, 0.2 Si, 0.3 Mn, bal. Fe							Tools	
4938	Soderfors No. 6	M-387	1.2 C, 0.2 Si, 0.3 Mn, bal. Fe							Tools	
4939	Soderfors No. 7	M-387	1.3 C, 0.2 Si, 0.3 Mn, bal. Fe							Tools	
4940	Soderfors No. 8	M-387	1.45 C, 0.2 Si, 0.3 Mn, bal. Fe							Tools	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4941	Soderfors No. 9	M-387	0.6-1.45 C, 0.2 Si, 0.3 Mn, 0.45 Cr, bal. Fe							Tools	
4942	Soderfors No. 9 A	M-387	0.6-1.45 C, 0.20 Si, 0.3 Mn, 0.25 Cr, bal. Fe							Tools	
4943	Soderfors No. 9 B	M-387	0.6-1.45 C, 0.2 Si, 0.3 Mn, 0.15 Cr, bal. Fe							Tools	
4944	Soderfors No. 10	M-387	0.6-1.45 C, 0.2 Si, 0.3 Mn, 1.0 Cr, bal. Fe							Tools	
4945	Soderfors No. 11	M-387	0.6-1.45 C, 0.2 Si, 0.3 Mn, 1.5 Cr, bal. Fe							Tools	
4946	Soderfors No. 12	M-387	0.8 C, 0.2 Si, 0.3 Mn, 0.45 C, 0.10 V, bal. Fe							Tools	
4947	Soderfors No. 13	M-387	0.95 C, 0.2 Si, 0.3 Mn, 0.45 C, 0.10 V, bal. Fe							Tools	
4948	Soderfors No. 14	M-387	1.05 C, 0.2 Si, 0.3 Mn, 0.45 C, 0.10 V, bal. Fe							Tools	
4949	Soderfors No. 16	M-387	0.95 C, 0.2 Si, 1.25 Mn, 0.5 Cr, 0.5 W, 0.1 V, bal. Fe							Tools	Non-shrinking
4950	Soderfors No. 17	M-387	1.15 C, 0.2 Si, 0.3 Mn, 1.0 W, bal. Fe							Cutting tools	
4951	Soderfors No. 18	M-387	0.45 C, 0.25 Si, 1.4 Cr, 2.2 W, 0.20 V, bal. Fe							Chisels	
4952	Soderfors No. 19	M-387	1.15 C, 0.10 Si, 0.5 Cr, 1.5 W, bal. Fe							Tools	
4953	Soderfors No. 20	M-387	1.3 C, 1.8 Cr, 4 W, 0.20 V, bal. Fe							Tools	
4954	Soderfors No. 21	M-387	1.3 C, 0.5 Cr, 5 W, bal. Fe							Tools	
4955	Soderfors No. 22	M-387	0.5 C, 3 Cr, 9 W, bal. Fe							Tools	
4956	Soderfors No. 23	M-387	0.45 C, 3 Cr, 14 W, bal. Fe							Tools	
4957	Soderfors No. 25	M-387	0.70 C, 4 Cr, 18 W, 1.0 V, bal. Fe							Tools, cutters	High speed steel
4958	Soderfors No. 26	M-387	0.80 C, 5.5 Cr, 18 W, 1.5 V, 1.5 Mo, 2 Co, bal. Fe							Tools, cutters	High speed steel
4959	Soderfors No. 27	M-387	0.80 C, 5.5 Cr, 18 W, 1.5 V, 1.5 Mo, 5.5 Co, bal. Fe							Tools, cutters	High speed steel
4960	Soderfors No. 28	M-387	0.75 C, 5.5 Cr, 18 W, 1.5 V, 1.0 Mo, 10 Co, bal. Fe							Tools, cutters	High speed steel
4961	Soderfors No. 41	M-387	0.5-1.3 C, 0.2 Si, 0.55 Mn, bal. Fe							Tools	
4962	Soderfors No. 42	M-387	0.45-0.70 C, 0.7 Si, 0.9 Mn, bal. Fe							Tools	
4963	Soderfors No. 43	M-387	0.60 C, 1.9 Si, 0.9 Mn, bal. Fe							Tools	
4964	Soderfors No. 61	M-387	2.2 C, 13 Cr, 1 W-Mo-Ni-Co, bal. Fe							Tools, dies	
4965	Soderfors No. 62	M-387	2.2 C, 12.5 Cr, bal. Fe							Dies	
4966	Soderfors No. 85	M-387	0.5 C, 0.8 Cr, 3.25 Ni, 0.2 Mo, bal. Fe							Gears, dies, tools	
4967	Bourne-Fuller High Speed Steel	M-379 M-97	C, Cr, V, W, bal. Fe							Lathe tools, cutters	High speed steel
4968	Bourne-Fuller "H-C"	M-379 M-97	C, Cr, bal. Fe							Special die work	
4969	Fox No. 221 Nitralloy	M-430	C, Cr, Al, Mo, bal. Fe							Nitrided parts	Nitriding steel
4970	Fox No. 223 Nitralloy	M-430	C, Cr, Al, Mo, bal. Fe							Nitrided parts	Nitriding steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4971	Fox No. 225 Nitralloy	M-430	C, Cr, Al, Mo, bal. Fe							Nitrided parts	Nitriding steel
4972	Fox No. 227 Nitralloy	M-430	C, Cr, Al, Mo, bal. Fe							Nitrided parts	Nitriding steel
4973	Fox No. 030 Ni-Cr Steel	M-430	C, 4 Ni, Cr, bal. Fe	Heat treated	121000 166000	90000 146000	25 15	55 45		Gears, worm wheels	Case-hardening steel Iz-25-60
4974	Valmax ½ Fox No. 501	M-430	C, 3 Si, 8 Cr, bal. Fe	Heat treated	134000	98500	27	59	262	Valves	Heat resistant
4975	Silver Fox 10	M-430	Low C, 12-13 Cr, bal. Fe	Air hardened	166000 85000	142000 66000	13 32	37 67		Turnbuckles, rivets, split pins, shrouding for turbine blading	Stainless iron
4976	Silver Fox 11	M-430	Med. C, 12-13 Cr, bal. Fe	Heat treated	112000 134000					Taper pins, hinge pins, surgical instruments, scissors	Stainless steel
4977	Silver Fox 12	M-430	Med. C, 12-13 Cr, bal. Fe	Heat treated	112000 202000					Valve parts, precision instruments	Stainless
4978	Silver Fox 13	M-430	Med. C, 12-14 Cr, bal. Fe	Heat treated	112000 247000					Table cutlery, special tools, exhaust valves	Heat resistant. High strength at elevated temp.
4979	Silver Fox 17	M-430	Low C, 16-18 Cr, bal. Fe	Annealed	90000 101000					Nitric acid manufacture apparatus	Non-hardenable. Resists HNO_x corrosion
4980	Silver Fox 18	M-430	C, 18 Cr, 2 Ni, bal. Fe	Tempered	92000 134000	78000 112000	30 20	60 45		Precision instruments, valves, pump rods	Stainless
4981	Silver Fox 20	M-430	C, 18 Cr, 8 Ni, bal. Fe	Annealed	90000 135000		50	60		Apparatus in chemical, textile and food industries	Austenitic, stainless
4982	Silver Fox 22	M-430	C, 18 Cr, 8 Ni, alloys, bal. Fe	Softened	78000 101000	21000 32000	45	65		Welded structures, chemical apparatus	Austenitic, stainless. Weld-decay free
4983	Silver Fox 24	M-430	C, 18 Cr, 8 Ni, alloys, bal. Fe	Annealed	90000 135000	26000 45000	80 60	80 60		Centrifugal separators, dryers	Resists H_2SO_4 corrosion. Stainless
4984	Fox No. 001	M-430	Low C, bal. Fe	Heat treated	71000 90000		34 26	65 50		Case hardened parts	Case-hardening steel Iz-60-100
4985	Fox No. 002 "Mancase"	M-430	C, 3 Ni, bal. Fe	Heat treated	85000 100000		30 25	55 45		Case-hardened parts	Free cutting case-hardening steel Iz-60-90. Discon.
				Normalized	67000	41000	36	65			
4986	Fox No. 012	M-430	C, 3 Ni, bal. Fe	Heat treated	90000 112000		35 27	70 50		Levers, cam shafts, gears, pinions	Case-hardening steel Iz-50-100
				Normalized	80000		32	62			
4987	Fox No. 013	M-430	C, 3 Ni, bal. Fe	Heat treated	76000 90000	56000 67000	35 30	70 55		Case hardened parts	Case-hardened steel Iz-80-105
4988	Fox No. 015	M-430	C, 5 Ni, bal. Fe	Heat treated	90000 146000		33 18	65 45		Transmission gears, cam shafts, pinions, wormshafts	Case-hardening steel Iz-30-90
4989	Fox No. 031 "Hicore 75"	M-430	C, Cr, Ni, bal. Fe	Heat treated	155000 180000	123000 156000	20 15	60 50		Gears, pinions, differential axles	Case-hardening steel Iz-50-30
4990	Fox No. 040 "Hicore 90"	M-430	C, Cr, Ni, Mo, bal. Fe	Heat treated	190000 213000	145000 180000	18 13	60 45		Gears, pinions	Case-hardening steel Iz-25-35
4991	Fox No. 120 "Tormanc"	M-430	C, Mn, bal. Fe	Oil hardened	94000 121000	67000 90000	28 20	65 50		Nuts, bolts	Oil hardening Iz-30-70
4992	Fox No. 130 "Tormanc Major"	M-430	C, Mn, Mo, bal. Fe	Oil hardened	107000 135000	85000 121000	26 18	65 50		Automobile crankshafts, axles, drive shafts, studs, bolts	Oil hardening Iz-50-90
4993	Fox No. 140	M-430	C, 1 Ni, bal. Fe	Oil hardened	100000 123000	67000 85000	30 20	65 45		Front axles, crankshafts, connecting rods	Iz-30-90
4994	Fox No. 144	M-430	.3 C, 3 Ni, bal. Fe	Oil hardened	100000 135000	76000 123000	27 20	65 55		Crankshafts, connecting rods, axles	Iz-50-95
4995	Fox No. 145	M-430	.4 C, 3.5 Ni, bal. Fe	Oil hardened	123000 146000	101000 116500	24 18	60 50		Front axles, steering arms, brake rods, shaft pins	Iz-35-70
4996	Fox No. 160	M-430	.35 C, 1 Cr, bal. Fe	Oil hardened	101000 145600	76000 134400	26 18	65 50		Front axles, crankshafts, connecting rods, spanners	Iz-35-90
4997	Fox No. 171	M-430	.4 C, 1.75 Ni, 1.2 Cr, bal. Fe	Oil hardened	123000 27000	107500 180000	22 10	63 30		Transmission gears and pinions, connecting rods, crankshafts	Iz-15-75

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
4998	Fox No. 172	M-430	.3 C, 3.3 Ni, .8 Cr, bal. Fe	Oil hardened	123000	107000	22	55		Crankshafts, connecting rods, gear wheels, pinions	Iz-30-60
					157000	134000	16	45			
4999	Fox No. 174	M-430	.32 C, 4.2 Ni, 1.3 Cr, bal. Fe	Air hardened	235000	179000	15	45		Gears, driving shafts	Iz-10-25
					275000	213000	10	30			
5000	Fox No. 190	M-430	.33 C, 1.1 Cr, .3 Mo, bal. Fe	Oil hardened	112000	94000	25	65		Gears, pinions	Iz-45-75
					145000	135000	18	55			
5001	Fox No. 200	M-430	.4 C, 1.2 Cr, .2 V, bal. Fe	Oil hardened	112000	94000	26	60		Connecting rods, bolts, shafts, axles, piston rods	Iz-40-85
					157000	134000	18	45			
5002	Fox No. 211 "Tormol"	M-430	C, Ni, Cr, Mo, bal. Fe	Oil hardened	134500	119000	23	63		Crankshafts, gears, axle shafts, connecting rods	Iz-15-70
					202000	190000	13	45			
5003	Fox No. 213	M-430	.3 C, 4.2 Ni, 1.2 Cr, .3 Mo, bal. Fe	Air hardened	235000	180000	16	45		Gears, drive shafts.	Air hardening
					275000	224000	12	30			Iz-18-30
5004	Fox No. 143 "Du-Nic"	M-430	C, Ni, bal. Fe	As rolled	54000	36000	35	60		Staybolts	Ductile and tough
					58000	45000	45	70			Iz-80-100
5005	N A -2	M-189	15-19 Cr, 35-30 Ni, 0.30 C, bal. Fe		68000	35000	10	10	200	High temperature service, furnace parts	Corrosion and heat resistant
5006	N A-4	M-189	18-20 Cr, 8-10 Ni, 0.15-0.30 C, bal. Fe	Heat treated	75000	35000	50	50	150	Stainless parts, cast pipe	Corrosion resistant
5007	N A-19	M-189	25-29 Cr, 0.50-0.70 C, 3 Ni bal. Fe.		65000	50000	2	2	175	Stainless parts, heat resisting parts, Mg pots, pipe	Corrosion resistant Heat resistant
5008	N A-65	M-189	18-20 Cr, 65-70 Ni, 0.30 max. C, bal. Fe	Cast	80000	40000	10	15	200	High temperature service castings, pipe	Heat resistant to 2100 °F.
5009	Standard A R-1	M-105	C, Ni, Cr, Si, bal. Fe							Castings, valves and fittings for handling H_2SO_4	Acid resisting
5010	Naval Brass Rod (Titan)	M-122	60.25 Cu, 0.75 Sn, 39.0 Zn	Annealed	62000	31150	41		95	Ship construction, high strength forgings	Rockwell "B"-70
					73000	46000	44				
5011	Titan Bronze Welding Rod	M-122	59.28 Cu, 0.6 Sn, bal. Zn	Cold drawn	94000	75000	14	80	174	Welding rod	M.P.-1625 °F.
				weld	50000	40000	14		105		
5012	Manganese Bronze Welding Rod	M-122	58.75 Cu, 0.30 Mn, 0.65 Fe, bal. Zn	Cold drawn	96000	79000	16	81	180	Welding rod	M.P.-1600 °F.
				weld	50000	38000	14		105		
5013	Naval Brass Welding Rod	M-122	60 Cu, 0.75 Sn, bal. Zn	Cold drawn	90000	70000	16	78	170	Welding rod	M.P.-1630 °F.
5014	Penn Fr Flo Bronze Welding Rod	M-122	59 Cu, 41 Zn	Cold drawn	51120	35240	16		85	Welding rod	M.P.-1620 °F.
					103000	89000	13	83	207		
5015	Vancoram Ferrovanadium	M-394	0.35-3.50 C, 1.25-12 Si, 30-60 V, bal. Fe							In manufacture of steel	Vancoram Four Grades
5016	Ferro Silicon	M-394	15-95 Si, bal. Fe							In manufacture of steel	Vancoram-6 Grades
5017	Vancoram Ferro Chromium High Carbon	M-394	4-6 C, 66-70 Cr, bal. Fe							In manufacture of steel and stainless alloys	
5018	Vancoram Alsifer	M-394	20 Al, 40 Si, 40 Fe							Deoxidizer in manufacture of steel	
5019	Vancoram Titanium 70% Cr.	M-394	68-73 Ti, 10-15 Al, bal. Fe							Alloying element for non-ferrous alloys	
5020	Vancoram Aluminum Vanadium	M-394	10-80 V, bal. Al							In manufacture of non-ferrous alloys	Vancoram Three grades
5021	Vancoram Aluminum Iron Vanadium	M-394	75 Al, 2.25 V, bal. Fe							In manufacture of non-ferrous alloys	(Discontinued)
5022	Vancoram Copper Nickel Vanadium	M-394	30 Cu, 10 Ni, 60 V							In manufacture of non-ferrous alloys	Vancoram
5023	Vancoram Copper Aluminum Vanadium	M-394	25 Cu, 10 Al, 65 V 35 Cu, 45 Al, 20 V							In manufacture of non-ferrous alloys	Vancoram Two Grades
5024	Vancoram Copper Manganese Vanadium	M-394	25 Cu, 15 Mn, 60 V							In manufacture of non-ferrous alloys	Vancoram
5025	Vancoram Manganese Vanadium	M-394	40 V, 60 Mn							In manufacture of non-ferrous alloys	(Discontinued)
5026	Vancoram Nickel Vanadium	M-394	40 V, 60 Ni							In manufacture of non-ferrous alloys	Vancoram

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5027	Silicon Vanadium	M–394	40 V, 60 Si							In manufacture of non-ferrous alloys	Vancoram
5028	Silicon Aluminum Vanadium	M–394	80 Si, 10 Al, 10 V							In manufacture of non-ferrous alloys	(Discontinued)
5029	Aluminum Chromium	M–394	10 Cr, 90 Al or 20 Cr, 80 Al							In manufacture of non-ferrous alloys	Vancoram 10% and 20% Grades
5030	Aluminum Molybdenum	M–394	25 Mo, 75 Al							In manufacture of non-ferrous alloys	Vancoram
5031	Aluminum Manganese	M–394	30 Mn, 70 Al							In manufacture of non-ferrous alloys	Vancoram
5032	Manganese Boron	M–394	20 B, 80 Mn							In manufacture of non-ferrous alloys	Vancoram
5033	Chromium Boron	M–394	20 B, 80 Cr							In manufacture of non-ferrous alloys	Vancoram
5034	Duralumin G	M–338	3.5-4.5 Cu, 0.7-1.5 Mn, 1.4-1.8 Mg, bal. Al	Sheet Extruded	65000 69000	40000 45000	15-8 15			Light alloy parts	
5035	Atsco	M–353	C, alloy, bal. Fe							Tools	
5036	National	M–432	C, 18 W, Cr, V, bal. Fe							High speed steel cutters and tools	High speed steel
5037	P-D Tungsten	M–432	C, 9.5 W, alloy, bal. Fe							Hot work and hot punch die	High speed steel for maximum red-hardness
5038	Cartun	M–432	1.35 C, 2.75 W, bal. Fe							Fast finishing tools	
5039	C-4 Hot Die Steel	M–432	0.95 C, 4 Cr, bal. Fe							Hot work dies, gripper dies, bolt and rivet header dies	
5040	HC-HC	M–432	1.85 C, 12.25 Cr, bal. Fe							Punches and dies	
5041	Pennant	M–432	0.90 C, 1.6 Mn, 0.20 V, bal. Fe							Tools, blanking and forming dies, broaches, taps, reamers	Non-shrinkable
5042	Delsteel Alloy	M–432	0.50 C, 0.70 Si, 0.35 Mn, 0.55 Mo, 0.25 V, bal. Fe							Chisels, punches, rivet sets	
5043	Delaware Extra	M–432	0.60-1.5 C, bal. Fe							Tools and parts	
5044	Delaware Standard	M–432	C, bal. Fe							Tools and parts	
5045	Drillalloy	M–432	0.65 C, 0.70 Mn, 0.40 Mo, bal. Fe							Mine drills	
5046	Beacon	M–433	C, bal. Fe							Tools	
5047	Pyramid Special	M–433	C, bal. Fe							Tools	
5048	Special A.S.V.	M–57	0.95-1.1 C, bal. Fe							Tools, cold heading dies, punches, stamping and blanking dies	Water hardening
5049	Best (Firth-Sterling)	M–57	1.05 C, 0.30 Mn, bal. Fe							Tools	
5050	Silver Star	M–57	1.05 C, bal. Fe							Tools	
5051	L.T. Steel	M–57	0.35 C, 10 W, 3.25 Cr, 0.4 V, bal. Fe							Tools, forming dies	Hot work steel
5052	X.D.M. Steel	M–57	0.45 C, 18 W, 4 Cr, 0 5 bal. Fe							Tools, extrusion and hot work dies	Hot work steel
5053	Standard (Halcomb)	M–260	C, bal. Fe	Water harden						Tools, chisels, rivet sets, hammers, sledges, shear blades	Water hardening
5054	Halcomb 999	M–260	.8 C, 14 W, 4 Cr, 2 V, 5 Co, bal. Fe	Oil-air						Heavy work on hard stock	High speed steel
5055	Green Label	M–343	0.8-1.1 C, bal. Fe							Tools depending on temper	"Hellers Extra Tool"
5056	Pure-Ore Production Hi-Cr, Hi-C	M–335	C, Cr, bal. Fe							Tools, dies	
5057	Extrusion Die	M–73	C, W, bal. Fe							Extrusion dies, tools	
5058	Antag Chisel	M–85	C, bal. Fe							Chisels, tools	Discontinued
5059	Staminal	M–85	.5 C, 1.0 Si, 2.7 Ni, .3 Mo, .4 Cr, bal. Fe							Hollow drills	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5060	Multole	M-85	.57 C, .7 Mn, 1.95 Si, bal. Fe							Tools, punches	Retains keen cutting edge
5061	Salvo	M-85	0.6 C, 1 Cr, 2 Ni, 0.2 V, bal. Fe							Rivet sets, tools	Tough, great depth hardness
5062	Krupp Carbon	M-371	C, bal. Fe							Tools	
5063	Krupp Special	M-371	C, alloy, bal. Fe							Tools	
5064	Krupp High Speed	M-371	C, W, alloy, bal. Fe							High speed tools and cutters	High speed steel
5065	Krupp Non-Deforming	M-371	C, alloy, bal. Fe							Tools, dies	Non-deforming
5066	MiRyCal Chisel	M-434	0.45 C, 1.0-1.25 W, 0.85-0.95 Cr, 0.15-0.20 Mo, 0.2-0.3 Mn, bal. Fe							Battering tools, chipping chisels, beading tools, rivet busters, cold sets, swages, track chisels, hot dies	
5067	Ryolite Special High Speed Tool Steel	M-240	Co, C, W, Cr, bal. Fe							High speed tools and cutters	High speed steel
5068	Whelco High Speed	M-119	0.70 C, 18 W, 3.85 Cr, 1.0 V, bal. Fe							High speed tools and cutters	High speed steel
5069	Red Label (Ward's)	M-389	C, bal. Fe							Tools	Discontinued
5070	Amsco F-1H	M-9	0.4-0.6 C, 16 Cr, 35 Ni, bal. Fe							Furnace parts	Heat resisting
5071	Amsco F-1HH	M-9	0.60-0.85 C, 16 Cr, 35 Ni, bal. Fe							Furnace parts	Heat resisting
5072	Amsco F-3H	M-9	0.4-0.6 C, 28 Cr, 2 Ni, bal. Fe							Furnace parts	Heat resisting
5073	Amsco F-3HH	M-9	0.6-0.85 C, 28 Cr, 2 Ni, bal. Fe							Furnace parts	Heat resisting
5074	Amsco F-7H	M-9	0.5 C, 24 Cr, 12 Ni, bal. Fe							Furnace parts	Heat resistant
5075	Amsco F-10	M-9	0.4 C, 28 Cr, 12 Ni, bal. Fe							Furnace parts, dampers, valves, beams	Heat resistant
5076	Amsco F-10H	M-9	0.4-0.6 C, 28 Cr, 12 Ni, bal. Fe							Furnace parts	Heat resistant
5077	Amsco F-10HH	M-9	0.6-0.85 C, 28 Cr, 12 Ni, bal. Fe							Furnace parts	Heat resistant
5078	Fahralloy F-12	M-9	1.0 C, 28 Cr, 10 Ni, bal. Fe							Furnace parts	Heat resistant
5079	B. & W. No. 400	M-447	0.15 C, 4-6 Cr, bal. Fe		100000		15-20			Oil refinery equipment	
5080	B. & W. No. 401	M-447	0.25 C, 4-6 Cr, bal. Fe		100000		15-20			Oil refinery equipment	
5081	B. & W. No. 402	M-447	0.10 C, 4-6 Cr, bal. Fe		100000		15-20			Oil refinery equipment	
5082	B. & W. No. 420	M-17 M-447	0.25 C, 4-6 Cr, 0.75-1.25 W, bal. Fe		100000		15-20			Oil refinery equipment	
5083	B. & W. No. 450	M-17 M-447	0.12 C, 0.25 Ni, 12-14 Cr, bal. Fe		100000		15-20			Oil refinery equipment	
5084	B. & W. No. 600	M-17 M-447	0.16 C, 17-19 Cr, 7.5-10.5 Ni, bal. Fe		80000 100000		60 40			Corrosion resisting parts	Austenitic alloy. High corrosion resistant
5085	B. & W. No. 610	M-17 M-447	0.16 C, 17-19 Cr, 7.5-10.5 Ni, bal. Fe, 2-3 Si		80000 100000		60 40			Corrosion resisting parts	Austenitic. High corrosion resistance
5086	B. & W. No. 640	M-447	0.16 C, 17-19 Cr, 7.5-10.5 Ni, 2.5-3.5 Mo, bal. Fe		80000 100000		60 40			Corrosion resisting parts	Resists mineral acids. Austenitic. Corrosion resistant
5087	B. & W. No. 642	M-447	0.07 C, 17-19 Cr, 7.5-10.5 Ni, 2.5-3.5 Mo, bal. Fe		80000 100000		60 40			Corrosion resisting parts	Resists mineral acids. Austenitic. Corrosion resistant
5088	B. & W. No. 650	M-17 M-447	0.16 C, 22-25 Cr, 10-13 Ni, bal. Fe		80000 100000		60 40			For sulfite paper industry apparatus	Heat and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5089	B. & W. No. 661	M–17 M–447	0.3-0.6 C, 22-25 Cr, 10-13 Ni, 2.0-2.5 Si, bal. Fe							Oil still tube supports	Heat and corrosion resistant to 1800 °F.
5090	B. & W. No. 700	M–17 M–447	0.4-0.6 C, 16-20 Cr, 62-68 Ni, bal. Fe							Heat resisting parts	Heat resistant
5091	B. & W. No. 701	M–17 M–447	1.0-1.25 C, 16-20 Cr, 60-65 Ni, bal. Fe							Heat resisting parts	Heat resistant
5092	B. & W. No. 800	M–17 M–447	1.0-1.5 C, 24-26 Cr, 10-12 Ni, bal. Fe							Heat resisting parts	Heat resistant
5093	B. & W. No. 902	M–17 M–447	0.10 C, 17-19 Cr, bal. Fe		85000	45000	15	20	150	Corrosion and HNO_3 resisting parts	Corrosion resistant
5094	B. & W. No. 910	M–17 M–447	0.25 C, 17-19 Cr, bal. Fe							Corrosion and HNO_3 resisting parts	Corrosion resistant
5095	B. & W. No. 912	M–17 M–447	0.10 C, 17-19 Cr, bal. Fe							Corrosion and HNO_3 resisting parts	Corrosion resistant
5096	B. & W. No. 950	M–17 M–447	0.25 C, 26-30 Cr, bal. Fe							Corrosion and HNO_3 resisting parts	Corrosion resistant
5097	B. & W. No. 1101	M–17	C, 24-26 Cr, 19-23 Ni, bal. Fe		24500		27	36.4		Heat resisting castings	Heat resistant to 2000 °F.
		M–447		At 2000 °F.	8700		28.5	45.8			
5098	B. & W. No. 1102	M–17	.15 max. C, 24-26 Cr, 19-23	At 1500 °F.	24500		27	36.4		Heat resisting castings	Heat resistant to 2000 °F.
		M–447	Ni, bal. Fe	At 2000 °F.	8700		28.5	45.8			
5099	B. & W. No. 1200	M–17 M–447	0.14 C, 7-9 Cr, 18-21 Ni, bal. Fe							Corrosion resisting parts	Stainless
5100	B. & W. No. 1300	M–17 M–447	0.50 C, 15-17 Cr, 35-38 Ni, bal. Fe							Heat and corrosion resisting parts, furnace parts	Heat and corrosion resistant
5101	B. & W. No. 1400	M–17 M–447	0.35-0.50 C, 1.25-1.75 Cr, 14-16 W, bal. Fe							High speed tools and cutters	High speed steel
5102	B. & W. No. 1500	M–17 M–447	0.35 C, 26-28.5 Cr, 7.5-9.5 Ni, bal. Fe							Furnace parts, heat and corrosion resisting parts	Heat and corrosion resisting
5103	Bethadur No. 442	M–24	.35 C, 18-23 Cr, bal. Fe							Nitric acid industry	Corrosion and heat resistant
5104	Bethadur No. 440	M–24	.65 C, 15-18 Cr, bal. Fe	Oil treated	258000	195000	3	6	495	Balls for ball bearings, ball races, cutlery, valves, instruments, hardened machine parts	Corrosion, heat and abrasion resistant after hardening
5105	Bethalon No. 303	M–24	.08-.20 C, 17-19 Cr, 8 Ni, Mo, S, Se, bal. Fe	Soft	95000	57000	35	45	152	Stainless parts, automatic and screw machine parts	Free machining. Stainless
5106	Braeburn Stainless	M–140	0.35 C, 13 Cr, bal. Fe							Corrosion resisting parts, chemical equipment	Corrosion resistant
5107	Bescoloy	M–424	C, bal. Fe							Piercer points	
5108	Calite-Nirosta KA4	M–30	0.16 C, 18 Cr, 8 Ni, 2.0 Mo, bal. Fe							Equipment and apparatus in paper and pulp industries	Discontinued
5109	No-Kor-O-18-8-M	M–435	0.10 C, 18 Cr, 12 Ni, 2 Mo, 1.3 Mn, bal. Fe							Equipment and apparatus in paper and pulp industries	Formerly "KA4"
5110	No-Kor-O-18-8-S	M–435	0.07 C, 18 Cr, 9 Ni, bal. Fe							Tubes, stainless parts	Formerly "KA2S"
5111	No-Kor-O-18-8	M–435	0.10 C, 18 Cr, 9 Ni, bal. Fe							General stainless applications	Formerly "KA2"
5112	No-Kor-O-KA2-HS	M–435	0.10 C, 18 Cr, 8 Ni, high Si, bal. Fe							Stainless parts	Discontinued
5113	No-Kor-O-HR	M–435	0.25 C, 25 Cr, bal. Fe							Heat and corrosion resisting parts	Discontinued
5114	No-Kor-O-18-2	M–435	0.15 C, 18 Cr, 2 Ni, bal. Fe							Heat and corrosion resisting parts	Formerly "RA"
5115	No-Kor-O-18	M–435	0.10 C, 18 Cr, bal. Fe							Golf club heads, valve parts, pump rods	Formerly "A"
5116	No-Kor-O-12	M–435	0.10 C, 12 Cr, bal. Fe							Golf club heads, valve parts, pump rods	Formerly "S"

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5117	No-Kor-O-14	M-435	0.35 C, 14 Cr, bal. Fe							Cutlery and dental instruments	*Formerly "Cutlery"*
5118	Carpenter Stainless Steel No. 7	M-32	0.15 C, 27 Cr, 4 Ni, bal. Fe		98000	75000	23	42	228	Corrosion and heat resisting parts	Stainless, scale resistant
5119	Pyrasteel No. 20	M-146	C, 20 Cr, 35 Ni, bal. Fe							Heat resistant parts, furnace parts	Corrosion and heat resistant
5120	Pyrasteel No. 14	M-146	C, 7-10 Cr, 15-20 Ni, bal. Fe							Corrosion and heat resistant parts	Corrosion and heat resistant
5121	Chrome Alloy Products KA-2	M-146 M-436	0.13 C, 18.5 Cr, 9 Ni, bal. Fe							Stainless parts	Corrosion and heat resistant
5122	Chrome Alloy Products KA-2S	M-146 M-436	0.06 C, 20 Cr, 9 Ni, bal. Fe							Stainless parts	Corrosion and heat resistant
5123	Chrome Alloy Products KA-2 Mo	M-146 M-436	0.14 C, 20 Cr, 9 Ni, 3 Mo, bal. Fe							Stainless parts	Corrosion and heat resistant
5124	Chrome Alloy Products KNC-3	M-146 M-436	0.17 C, 25 Cr, 19 Ni, 1.75 Si, bal. Fe							Furnace parts	Corrosion and heat resistant
5125	Chrome Alloy Products Stainless No. 7	M-146 M-436	0.25 C, 20.5 Cr, 1 Cu, bal. Fe							Stainless parts	Stainless
5126	Nevastain RA (Cincinnati Steel Casting Co.)	M-437	0.10 C, 16 Cr, 1 Cu, 1 Si, bal. Fe							Rustless and stainless parts	Stainless
5127	Stainex No. 1	M-35	0.35 C, 13.5 Cr, 0.35 Si, bal. Fe	Annealed						Stainless parts	Heat and corrosion resistant
5128	Stainex No. 2	M-35	0.65 C, 17 Cr, 0.35 Si, bal. Fe	Annealed						Stainless parts	Heat and corrosion resistant
5129	Stainex No. 3	M-35	0.10 C, 13 Cr, 0.40 Si, bal. Fe	Annealed						Stainless parts	Heat and corrosion resistant
5130	Sweetaloy KA-4	M-36	0.20 C, 18 Cr, 8 Ni, 3 Mo, bal. Fe							Stainless parts	Corrosion resistant
5131	Sweetaloy KNC-3	M-36	0.20 C, 25 Cr, 20 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5132	Sweetaloy CA-5	M-36	0.15-0.35 C, 4.0-6.5 Cr, 0.40-0.65 Mo, bal. Fe		110000	75000	18	30		Corrosion resistant parts	Corrosion resistant
5133	A. R. Stainless	M-153	0.20 C, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Stainless. Discon.
5134	N.C. Heat Resisting	M-153	0.25 C, 28 Cr, 8 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Discon.
5135	Lo Cro 46	M-38	0.20 C, 4-6 Cr, bal. Fe							Corrosion resisting parts	Corrosion resistant
5136	Lo Cro 46 W	M-38 M-50	0.20 max. C, 4-6 Cr, 0.75-1.25 W, bal. Fe							High temp. studs, bolts	Corrosion resistant
5137	Lo Cro 46 Mo	M-38	0.20 max. C, 4-6 Cr, 0.4-0.6 Mo, bal. Fe							Corrosion resisting parts	Corrosion resistant
5138	Rezistal KA-2-ST	M-38	0.10 max. C, 17-19 Cr, 8-9.5 Ni, 0.35 Ti, bal. Fe	Annealed	85000 95000	30000 40000	60 55	75 65	130 170	Stainless parts, welded parts	Stainless
5139	Rezistal 2600-S	M-38	0.15 max. C, 7.5-9 Cr, 21.5-23 Ni, 1-1.5 Cu, bal. Fe	Annealed	85000 95000	45000 55000	40 30	55 50	165 200	Heat and corrosion resistant parts	Heat and corrosion resistant
5140	Pireks-Reactal	M-40	0.6 C, 20 Cr, 65 Ni, 2 Si, bal. Fe							Furnace parts, carburizing and annealing boxes	Heat resistant
5141	Nichrome S	M-44	25 Ni, 15 Cr, bal. Fe							Heating elements, carburizing boxes	Corrosion and heat resistant
5142	Durco KA-2	M-46	0.10 min. C, 18 Cr, 8 Ni, 1.0 Si, 0.6 max. Mn, bal. Fe		70000	30000	40 45	40 45	150	Stainless parts, chemical plant and food handling equipment	Corrosion resistant
5143	Durco KA-2-Mo	M-46	0.15 min. C, 18-22 Cr, 7-10.5 Ni, 2-4 Mo, 1.0 max. Si, bal. Fe		70000	30000	40 45	40 45	150	Stainless parts, chemical plant and paper mill equipment	Corrosion resistant to acetic and phosphoric acids
5144	Durco 26-10	M-46	0.15 C, 26 Cr, 10 Ni, 1.0 Si, 0.6 Mn, bal. Fe		70000	30000	40 45	40 45	150	Heat and corrosion resistant parts, chemical plant and food handling equipment	Heat and corrosion resistant. Obsolete

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5145	Esco Alloy No. 40	M-438	0.16 C, 20 Cr, 9 Ni, bal. Fe							Stainless parts	Stainless
5146	Esco Alloy No. 45	M-438	0.20 max. C, 18-22 Cr, 7.9 Ni, 3 Mo, bal. Fe							Stainless parts	Stainless
5147	Esco Nirosta KNC-3	M-438	0.20 C, 25 Cr, 19 Ni, bal. Fe							Furnace parts, retorts	Stainless. Discontinued
5148	Firth Sterling Stainless Type BHH	M-57	1.05 C, 17.5 Cr, bal. Fe							Ball races, valve parts, bearing surfaces, machine parts	Heat and corrosion resistant. Hard grade
5149	Silcrome 21	M-76	C, 18-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5150	Fernite No. 1	M-439	C, 15 Cr, 65 Ni, bal. Fe	Sand cast						Heat resistant parts	Heat and corrosion resistant
5151	Fernite No. 2	M-439	C, 15 Cr, 35 Ni, bal. Fe	Sand cast						Heat resistant parts	Heat and corrosion resistant
5152	Fernite No. 3	M-439	C, 12 Cr, 24 Ni, bal. Fe	Sand cast						Heat resistant parts	Heat and corrosion resistant
5153	Fernite No. 4	M-439	28 Cr, 22 Ni, bal. Fe	Sand cast						Heat resistant parts	Heat and corrosion resistant
5154	Fernite No. 5	M-439	21 Cr, 12 Ni, bal. Fe	Sand cast						Heat resistant parts	Heat and corrosion resistant
5155	Fernite No. 6	M-439	18 Cr, 8 Ni, bal. Fe	Sand cast						Stainless parts	Heat and corrosion resistant
5156	Fernite No. 7	M-439	Low C, 28 Cr, bal. Fe	Sand cast						Heat resistant parts	Heat resistant
5157	Fernite No. 8	M-439	C, 14 Cr, bal. Fe	Sand cast						Corrosion resistant parts	Corrosion resistant
5158	Fernite No. 9	M-439	High C, 28 Cr, bal. Fe	Sand cast						Heat and corrosion resistant parts	Heat and corrosion resistant
5159	Economet	M-59	C, 8-10 Cr, 29-31 Ni, bal. Fe							Heat resistant parts	Heat resistant
5160	Halcomb Grade A Stainless	M-260	0.35 C, 13 Cr, bal. Fe	At 200°C.	225000	186000	9	25	548	Ball bearings, paper knives,	Corrosion resistant
				At 700°C.	125000	91000	22	59	294	cutlery, surgical instruments	Discontinued
5161	Halcomb Grade B Stainless	M-260	0.75 C, 17 Cr, bal. Fe							Cutlery and dental instruments	Corrosion resistant Discontinued
5162	Halcomb Grade B High Carbon Stainless	M-260	1.0 C, 17 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
5163	Halcomb Stainless Iron No. 12	M-260	0.12 max. C, 13 Cr, bal. Fe	Annealed	67500	34500	39	72	137	Cutlery, dental instruments	Corrosion resistant Discontinued
				Water quenched	174000	135000	14	42	332		
5164	Halcomb FM-2 Free Machining	M-260	0.12 max. C, 15 Cr, S, Mo, bal. Fe	Oil harden						Valves, bolts, nuts, golf heads	Discontinued
5165	Halcomb Stainless No. 16	M-260	0.10 max. C, 17 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
5166	Halcomb Stainless No. 18	M-260	0.10 max. C, 19 Cr, bal. Fe	Annealed	72000		35	70	170	Cooking utensils, table tops, hardware, automobile head lamps	Corrosion resistant Discontinued
5167	Halcomb Stainless No. 24	M-260	0.24 C, 26 Cr, bal. Fe							Heat and corrosion resistant parts, chemical plant equipment	Corrosion and heat resistant Discontinued
5168	Halcomb Lo Chro W Stud	M-260	0.25 C, 6 Cr, 1 W, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
5169	Rezistal NCR-238	M-260	0.15 C, 8 Cr, 23 Ni, 1 Cu, bal. Fe							Water fittings, beater blades, evaporators, shafting	Heat and corrosion resistant
5170	Industrial No. 12	M-440	0.12 max. C, 11.5-13 Cr, bal. Fe		175000	160000	15	60	375	Corrosion resistant parts	Corrosion resistant
					40000	25000	35	75	150		
5171	Industrial No. 512 Free Machining	M-440	0.12 max. C, 11.5-13 Cr, 0.3-0.4 S, bal. Fe		175000	160000	15	60	375	Corrosion resistant parts	Corrosion resistant
					40000	25000	35	75	150		
5172	Industrial No. 188	M-440	0.15 max. C, 17.5-18.5 Cr, 8.5-9.5 Ni, bal. Fe		113000	84000	40	60	223	Stainless parts	Stainless
					90000	35000	61	68	135		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5173	Industrial No. 188-U	M-440	0.07 max. C, 17.5-18.5 Cr, 8.5-9.5 Ni, bal. Fe		113000	84000	40	60	223	Stainless parts	Stainless
					90000	35000	61	68	135		
5174	Industrial No. 35	M-440	0.30-0.35 C, 13.5-14.5 Cr, bal. Fe		250000	223000	4	8	512	Corrosion resistant parts, cutlery	Corrosion resistant
					143000	115000	13	42	302		
5175	Industrial No. 65	M-440	0.60-0.70 C, 16-17 Cr, bal. Fe		250000	223000	4	8	512	Corrosion resistant parts, cutlery	Corrosion resistant
					143000	115000	13	42	302		
5176	Industrial No. 100	M-440	0.90-1.0 C, 17-17.5 Cr, bal. Fe							Corrosion resistant parts, valve parts	Corrosion resistant
5177	Industrial Cro-Tung	M-440	0.30 max. C, 4.5-6.5 Cr, 0.75-1.0 W, bal. Fe		193000	167000	5	6	490	Corrosion resistant parts	Corrosion resistant
					100000	85000	24	62	210		
5178	Jessop Corrosion Resistant "R-1"	M-261	0.15 max. C, 12 Cr, 1 max. Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
5179	Jessop Corrosion Resistant "R-2"	M-261	0.30 C, 14 Cr, 1 max. Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
5180	Jessop Corrosion Resistant "R-3"	M-261	0.12 C, 18 Cr, 11 max. Ni, bal. Fe							Stainless parts	Stainless
5181	Jessop Corrosion Resistant "R-4"	M-261	0.25 C, 18 Cr, 1 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
5182	Nevastain 25-12	M-76	0.25 max. C, 24 Cr, 12 Ni, bal. Fe							Heat and corrosion resistant parts	See Silcrome 25-12
5183	Silcrome KM-1	M-76	0.20 max. C, 14 Cr, 1.75 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
5184	Scovill No. 100 Alloy	M-102	64 Cu, 18 Ni, 18 Zn	Soft	55000	21000	48			Resistance wire springs, cutlery, hardware	"Scovill 18% Nickel-Silver"
				Hard	96000	93000	6				
5185	Scovill No. 105 Alloy	M-102	64 Cu, 10 Ni, 26 Zn	Soft	55000	210000	54			Resistance wire springs, cutlery, hardware	"Scovill 10% Nickel-Silver"
				Hard	102000	100000	7				
5186	Scovill No. 118 Alloy	M-102	64 Cu, 1 Pb, 12 Ni, 23 Zn	Soft	60000	28000	43			Watch blanks, screw machine parts	"Scovill 12% Nickel-Silver"
				Hard	104000	101000	4				
5187	Scovill 7% Nickel-Silver	M-102	65 Cu, 7 Ni, 28 Zn	Soft	54000	24000	65			Wire products	
				Hard	98000		4				
5188	Duralumin "B"	M-338	3.5-4.5 Cu, 0.4-0.7 Mn, 0.4-0.7 Mg, bal. Al	Untreated	40000	30000		18	60	Light alloy parts	Iz-15
				Treated	55000	40000	15	20	115		
5189	Silcrome 2, 12	M-76	0.20 C, 25 Cr, 12 Ni, bal. Fe	Annealed	95000	48000	42	50	167	Corrosion and heat resistant parts	Heat and corrosion resistant
5190	Midvaloy 976	M-85	C, 9.7 Cr, 1.5 Ni, 2.3 Al, bal. Fe							Corrosion resistant parts, exhaust valves	Corrosion resistant
5191	NA-1	M-189	0.10-0.50 C, 28 Cr, 10 Ni, bal. Fe		85000	40000	9	10	200	Heat and corrosion resistant parts	Heat and corrosion resistant
5192	NA-4-M	M-189	0.10-0.30 C, 18 Cr, 8 Ni, 3 Mo, bal. Fe							Stainless parts	Stainless, corrosion resistant
5193	Newco	M-442	0.10-0.30 C, 13 Cr, bal. Fe							Corrosion resistant parts	Discontinued
5194	Otisel No. 2	M-331	0.10-0.15 C, 12-16 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
5195	Otisel No. 3	M-331	0.10-0.15 C, 15-18 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
5196	Otisel No. 4	M-331	0.20 max. C, 20-30 Cr, 12-20 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5197	Otisel No. 5	M-331	0.25 max. C, 26-30 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5198	Poldi AK-1	M-96b	0.10 C, 13 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
5199	Poldi AK-2	M-96b	0.20 C, 16 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
5200	Poldi AK-5	M-96b	0.50 C, 15.5 Cr, 0.40 Mo, bal. Fe							Corrosion resistant parts	Corrosion resistant
5201	Poldi AK-H	M-96b	1.0 C, 16 Cr, 1 Mo, 1.3 Co, bal. Fe							Corrosion resistant parts	Corrosion resistant
5202	Shawinigan Nirosta KA-2-Mo	M-443	0.10-0.15 C, 18-20 Cr, 8.0-10 Ni, 2.5-3.5 Mo, 0.5 Si, 0.4 Mn, bal. Fe	Annealed	85000	45000	46	60	180	Apparatus in the sulfite industry and chemical plants with strong acids	Corrosion resistant
5203	Diamond S-1	M-288	0.30 C, 18 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant

Serial No.	Alloy	Mfg. No.	Compostion	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5204	Diamond T	M–288	0.30 C, 12 Cr, 25 Ni, bal. Fe							Heat resistant parts	Heat resistant
5205	Standard Alloy HR-9	M–105	C, 18 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
5206	Tiska Nirosta KA-2	M–271	0.16 max. C, 18 Cr, 8 Ni, bal. Fe, 1.0 Mn, 2.0 Si		65000	25000	60	60	130	Stainless parts, valves, fittings, marine parts	Superseded by Tisco No. 101
					75000	35000	50	45	145		
5207	Tiska Nirosta KA-2-S	M–271	0.07 max. C, 18 Cr, 8 Ni, bal. Fe, 1.0 Mn, 2.0 Si		65000	25000	60	60	130	Stainless parts, valves, fittings, marine parts	Superseded by Tisco No. 102
					75000	35000	50	45	145		
5208	Tiska Nirosta KA-2-H	M–271	0.16 min. C, 18 Cr, 8 Ni, bal. Fe, 1.0 Mn, 2.0 Si		65000	25000	60	60	130	Stainless parts, valves, fittings, marine parts	Superseded by Tisco No. 103
					75000	35000	50	45	145		
5209	Tiska Nirosta KA-2-Mo	M–271	0.16 C, 18-22 Cr, 7-10 Ni, 2-4 Mo, 1.0 Mn, bal. Fe							Stainless parts, valves, fittings	Superseded by Tisco No. 104
5210	Tiska Nirosta KA-2S-Mo	M–271	0.07 C, 18-22 Cr, 7-10 Ni, 2-4 Mo, 1.0 Mn, bal. Fe							Stainless parts, valves, fittings	Discontinued
5211	Tiska Nirosta KA-2-H-Mo	M–271	0.16 C, 18-22 Cr, 7-10 Ni, 2-4 Mo, 1.0 Mn, bal. Fe							Stainless parts, valves, fittings	Superseded by Tisco No. 106
5212	Tiska Nirosta KNC-3	M–271	0.20 max. C, 25 Cr, 19 Ni, bal. Fe, 1.0 Mn, 2.0 Si	At 20°C.	85300	38000	15	15	160	Heat and corrosion resistant parts	Superseded by Tisco No. 109
				At 900°C.	17500	17000	25	25			
5213	Texalloy Heat Resistant	M–444	C, 18 Cr, 8 Ni, bal. Fe							Stainless and heat resistant parts	Stainless and heat resistant. Discon.
5214	Stainless Steel (Thomas Steel Co.)	M–445	C, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Stainless. Discon.
5215	Timken 18-8-S	M–376	0.07 max. C, 17-20 Cr, 7-10 Ni, bal. Fe							Stainless parts, high temp. service	Stainless
5216	Timken 18-8	M–376	0.16 max. C, 17-20 Cr, 7-10 Ni, bal. Fe							Stainless parts, high temp. service	Stainless
5217	Timken Iron-Chromium	M–376	0.10 max. C, 16-18 Cr, bal. Fe							Stainless parts, high temp. serv.	Stainless
5218	U.H.B. Stainless 1	M–111	0.10 C, 13.5 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
5219	U.H.B. Stainless 2	M–111	0.10 C, 17.5 Cr, 1 Si, bal. Fe							Corrosion resistant parts	Corrosion resistant
5220	U.H.B. Stainless 3	M–111	0.10 C, 18 Cr, 8 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
5221	U.H.B. Stainless 4	M–111	0.10 C, 18 Cr, 8 Ni, 1.3 Mo, bal. Fe							Stainless parts	Stainless
5222	U.H.B. Stainless 5	M–111	0.20 C, 24 Cr, 1 Si, bal. Fe							Corrosion resistant parts	Corrosion resistant
5223	U.H.B. Stainless 6	M–111	0.35 C, 13.5 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
5224	U.H.B. Stainless 7	M–111	0.95 C, 14 Cr, 1 Mn, bal. Fe							Corrosion resistant parts	Corrosion resistant
5225	U.S.S. 12 Z		0.10 max. C, 12-14 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
5226	Colonial 795 F	M–115	1.0 C, 17.5 Cr, 1 Ni, 0.15 S, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
5227	Vulcan Stainless Type A	M–275	0.12 min. C, 9-16 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
5228	Vulcan Stainless Iron C-2	M–275	0.12 max. C, 15 max. Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
5229	Ship Brand Blue Label	M–446	0.10 C, 13.5 Cr, bal. Fe	Heat treated	200000					Springs	Corrosion resistant (Discontinued)
				Rolled	100000						
5230	Ship Brand Red Label	M–446	0.35 C, 13.5 Cr, bal. Fe	Rolled	100000					Springs	Corrosion resistant
5231	Ship Brand Orange Label	M–446	0.09 C, 18 Cr, 8 Ni, bal. Fe	Rolled	120000					Springs	Corrosion resistant
				Heat treated	190000						
					290000						
5232	Whelco A	M–119	0.10 C, 13.5 Cr, 0.25 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant (Discontinued)
5233	Whelco B	M–119	0.15 C, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Stainless (Discontinued)
5234	Whelco No. 1	M–119	0.12 max. C, 13 Cr, 0.25 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant (Discontinued)
5235	Whelco No. 2	M–119	0.25 max. C, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Stainless (Discontinued)
5236	Whelco No. 3	M–119	0.40 C, 8 Cr, 19 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant (Discontinued)

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5237	Whelco No. 4	M-119	0.12 max. C, 17-21 Cr, 0.25 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant (Discontinued)
5238	Whelco No. 6	M-119	0.40 C, 13.5 Cr, 0.25 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant (Discontinued)
5239	Whelco No. 7	M-119	0.65 C, 17 Cr, 0.25 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant (Discontinued)
5240	Whelco No. 8	M-119	1.15 C, 17 Cr, 0.25 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant (Discontinued)
5241	Whelco No. 9	M-119	0.30 C, 26 Cr, 0.25 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant (Discontinued)
5242	Firth Brown A-1	M-56	0.12-0.15 C, bal. Fe		54000 63000					Case-hardened railway and general forgings	Case-hardening steel
5243	Firth Brown A-2	M-56	0.22-0.26 C, bal. Fe		63000 72000					Marine shafting, boiler drums, crank axles, high pressure reaction chambers	
5244	Firth Brown A-3	M-56	0.28-0.32 C, bal. Fe		69500 78500					Boiler drums, locomotive piston rods, marine shafting, gears, rotors, shafts	
5245	Firth Brown A-4	M-56	0.32-0.40 C, bal. Fe		78500 89600					Mine shafting, locomotive crank pins, shafts, rotors	
5246	Firth Brown A-5	M-56	0.40-0.50 C, bal. Fe		89600 112000					Turbo-electric disks, shafts, rotors, locomotive crank pins	
5247	Firth Brown A-6	M-56	0.55-0.65 C, bal. Fe		100800 123000					Die blocks	
5248	Firth Brown A-7	M-56	0.60-0.70 C, bal. Fe		134000 157000					Diesel engine cylinder liners, forged rings for ball mills	
5249	Firth Brown B-20	M-56	C, 1.4 Mn, bal. Fe		78400 112000					Medium tensile shafts and gears	
5250	Firth Brown B-21	M-56	High C, 1.0 Ni, bal. Fe						196 255	Die blocks	
5251	Firth Brown B-22	M-56	C, 3.5 Ni, bal. Fe		89600 123000					Alternator rotors, and marine gear wheel rims, shafts in electrical and turbine equipment	
5252	Firth Brown B-23	M-56	High C, 1.5 Ni, Cr, bal. Fe						207 285	Die blocks	
5253	Firth Brown B-24	M-56	C, 3.5 Ni, Cr, bal. Fe		112000 140000					Die blocks, shafts	
5254	Firth Brown B-25 (Atlas S.P. Steel)	M-56	C, 3.5 Ni, Mo, bal. Fe		123000 145000					Heavy road vehicle axles	
5255	Firth Brown B-26	M-56	0.4-0.5 C, Ni, Cr, Mo, bal. Fe		123000 145000					High pressure steam and air vessels, shafts, axles	
5256	Firth Brown B-27	M-56	High C, Ni, Cr, Mo, bal. Fe						269 364	Die blocks	
5257	Firth Brown B-28 (Firth Roll Steel) (Atlas Die Ring Steel)	M-56	C, Cr, bal. Fe						321 402	Rolls, die rings	
5258	Firth Brown B-29 (Firth Shoe & Die Steel)	M-56	C, Cr, bal. Fe							Shoes and dies for ore reduction stamp batteries	
5259	Firth Brown B-30 (Firth S.H.B.) (Atlas Ball Race Steel)	M-56	C, Cr, bal. Fe							Ball races, balls, rollers	
5260	Firth Brown C-40 (Atlas A.T.C.-20)	M-56	0.20 C, bal. Fe		56000 78000					Wire, tubes, parts for automobiles and airplanes	
5261	Firth Brown C-42 (Atlas A.T.C. 40)	M-56	0.40 C, bal. Fe		78000 98000					Airplane and automobile parts, wire, tubes	
5262	Firth Brown C-44 Firth F. T.-50) (Atlas A.T.C. 55)	M-56	0.5-0.6 C, bal. Fe		100000 123000					Aircraft cylinders	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5263	Firth Brown C-45 (Atlas A.T.C. 75)	M–56	0.7-0.8 C, bal. Fe						196 255	Clutch plates	
5264	Firth Brown D-60 (Atlas A.T.M.N.)	M–56	C, 1.4 Mn, bal. Fe		89000 112000					Automobile crankshafts, front axles, swivel axles, spindles	
5265	Firth Brown D-62 (Firth F.N. 3.5) (Atlas A.T.N.X.),	M–56	C, 3.5 Ni, bal. Fe		123000 145500					Aircraft and automobile connecting rods and axles	
5266	Firth Brown D-63 (Firth F.N. 5)	M–56	C, 5 Ni, bal. Fe		90000 123000					Turbine blading and shrouding strip	
5267	Firth Brown D-65 (Atlas A.T.C.V.)	M–56	C, Cr, V, bal. Fe		112000 145500					Machine parts, flat valves	
5268	Firth Brown E-80 (Duratlas)	M–56	C, 2.5 Ni, Cr, Mo, bal. Fe		134000 224000					Automobile crankshafts, axles gears	
5269	Firth Brown E-82 (Firth Bolt Steel)	M–56	C, 3.5 Ni, Cr, Mo, bal. Fe		145000 168000					Bolts, flanges	
5270	Firth Brown E-83 (Atlas N.C. 100)	M–56	C, Ni, Cr, bal. Fe		224000					Gears	
5271	Firth Brown F-103 (Atlas N.C.C.H.)	M–56	C, 3 Ni, Cr, bal. Fe		123000					Automobile camshafts, overhead valve gear, timing wheels	
5272	Firth Brown G-120 (Nitralloy Grade 1)	M–56	0.45-0.55 C, Cr, Al, bal. Fe		156000 202000					Nitrided rolls, die blocks	Nitriding stee
5273	Firth Brown G-121 (Nitralloy Grade 3)	M–56	0.35-0.45 C, Cr, Al, bal. Fe		123000 145000					Nitrided rolls, brick press plates, gudgeon pins, crankshafts, camshafts	Nitriding steel
5274	Firth Brown G-122 (Nitralloy Grade 5)	M–56	0.26-0.35 C, Cr, Al, bal. Fe		89000 123000					Pump rods, crankshafts, camshafts	Nitriding steel
5275	Firth Brown G-123 (Nitralloy Grade 7)	M–56	0.20-0.26 C, Cr, Al, bal. Fe		78000 100000					Elevator parts, low stressed nitrided parts	Nitriding steel
5276	Firth Brown H-140	M–56	C, bal. Fe							Laminated springs	
5277	Firth Brown H-141	M–56	C, bal. Fe							Helical springs	Oil hardening
5278	Firth Brown H-142	M–56	C, Cr, bal. Fe							Springs	
5279	Firth Brown H-143	M–56	C, Cr, bal. Fe							Helical springs	
5280	Firth Brown H-144	M–56	C, Cr, V, bal. Fe							Springs	
5281	Firth Brown H-145	M–56	C, Si, Mn, bal. Fe		67000 83000					Spring	Hardened by heat treatment
5282	Firth-Vickers Stainless Iron (Firth Brown I-160)	M–56 M–521	Low C, 12-15 Cr, bal. Fe	Oil treated	68000 83000	40000 56000	40 30	60 50	150 180	Turbine blading, shrouding strip, aircraft fittings, golf club heads	Magnetic, stainless (Firth F.I. Stainless)
5283	Firth-Vickers Stainless Steel Type FG (Firth Brown I-161)	M–56 M–521	Medium C, 12-14 Cr, bal. Fe	Oil treated	90000 112000	56000 78500	30 20	60 50	220 240	High stressed turbine blading, high pressure steam valves, nuts, bolts, dies for molding rubber	Magnetic, stainless (Firth F.C. Stainless)
5284	Firth Vickers Stainless Steel Type FH	M–56 M–521	Medium C, 12-14 Cr, bal. Fe						450 550	Cutlery, surgical instruments, knives, edge tools, rolls, springs, ball bearings and races	Magnetic, stainless Firth Brown I-162 Firth F.H. Stainless
5285	Firth Brown I-163 (Saitie)	M–56 M–521	C, 18 Cr, 2 Ni, bal. Fe		112000 134000					Pump spindles, propeller shafts bolts, nuts, seaplane fittings	Magnetic, stainless
5286	Firth-Vickers Staybrite F.S.T.	M–56 M–521	C, 18 Cr, 8 Ni, alloys, bal. Fe	Softened	83000 101000	34000 41000	60 40	60 40	160 180	Vats, tanks, ship fittings, lamps, reflectors	Non-magnetic, stainless. (Firth-Brown I-164)
5287	Firth-Vickers Staybrite D.D.Q.	M–56 M–521	C, 12 Cr, 12 Ni, bal. Fe	Softened	78000 90000	32000 37000	60 40	60 40	130 150	Domestic table and hollow ware, decorative purposes	Rust and acid resisting. Non-magnetic when soft. (Firth-Brown I-165)

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5288	Firth-Vickers Staybrite F.M.B.	M-56 M-521	C, 18 Cr, 8 Ni, alloys, bal. Fe	Softened	90000 112000	36000 42500	60 40	60 40	160 190	Chemical apparatus to resist acetic and other acids at elevated temperatures	Rust and acid resisting. Non-magnetic (Firth-Brown I-166)
5289	Firth-Vickers Staybrite F.D.P.	M-56 M-521	C, 18 Cr, 8 Ni, alloys, bal. Fe	Softened	90000 112000	36000 42500	60 40	60 40	170 200	Aircraft fittings, chemical plant of welded construction where heat treatment is impossible	Rust and acid resisting. *Non-magnetic* (Firth-Brown I-167)
5290	Firth-Vickers F.A.S.	M-56 M-521	Med. C, 13 Cr, bal. Fe	Oil treated	112000 123000	78500 90000	22 18	43 35	210 260	Aircraft and automobile valves	Heat and corrosion resistant. (Firth-Brown J-180)
5291	Firth-Vickers S.L.V.	M-56 M-521	C, 8 Cr, 3.5 Si, bal. Fe	Oil treated	145600 156800	100000 112000	20 15	43 35	255 285	Valves for automobile and aircraft engines	Heat and corrosion resistant. (Firth-Brown J-181)
5292	Firth-Vickers Vesuvius	M-56 M-521	High C, 30 Cr, bal. Fe	Oil treated	78000 101000	58000 85000	25 15	40 30	175 225	Furnace parts, fire bars, stokers, grids	Heat and corrosion resistant. (Firth-Brown J-182)
5293	Firth Brown J-183 (Vesuvius Forgings)	M-56	Low C, 30 Cr, bal. Fe							Furnace parts, annealing and carburizing parts, trays	Corrosion and heat resistant. Discon.
5294	Firth-Vickers (H.R. Crown Max.)	M-56 M-521	C, Ni, Cr, W, bal. Fe	Softened	101000 123000	56000	35 25	50 40	205 230	Furnace parts, mechanical stokers, exhaust valves, annealing boxes	Corrosion and heat resistant. (Firth-Brown J-184)
5295	Firth Brown J-185	M-56	C, high Ni, Cr, W, bal. Fe							Furnace parts, mechanical stokers, exhaust valves, heat treating boxes	Heat and corrosion resistant. Discon.
5296	Firth Brown L-223 (Firth "T" Brand)	M-56	C, bal. Fe							Smiths tools, set screws, keys	Electric steel
5297	Firth Brown L-224 (Firth "U" Brand)	M-56	C, bal. Fe							Hot working and battering tools, bolt and rivet headers, hot drop forging dies, rivet sets	Electric steel
5298	Firth Brown L-225 (Firth Textile Spindle)	M-56	C, bal. Fe							Textile spindles	Crucible steel
5299	Firth Brown M-241 (Firth T.M.S.)	M-56	C, alloy, bal. Fe							Taps and dies, punches, jigs	Non-shrinking electric steel
5300	Firth Brown M-242 (Firth M.C.T.)	M-56	C, alloy, bal. Fe							Taps and dies, punches, jigs	Non-shrinking crucible steel
5301	Firth Brown M-243 (Trutap)	M-56	C, alloy, bal. Fe							Taps and dies, punches, tools	Non-shrinking electric steel
5302	Firth Brown M-244 (Atlas Self-Hardening Chisel)	M-56	C, Ni, Cr, bal. Fe							Hand and pneumatic chisels	
5303	Firth Brown M-245 (Firth Extra W.C.S.)	M-56	C, 1.0 W, bal. Fe							Hand and pneumatic tools	Crucible steel
5304	Firth Brown M-246 (Firth W.C.S.)	M-56	C, 1.0 W, bal. Fe							Hand and pneumatic tools	Crucible steel
5305	Firth Brown M-247 (Firth T.D.C.) (Brown's Special X Punch)	M-56	C, 1.0 W, bal. Fe							Hand and pneumatic tools	Electric steel
5306	Firth Brown M-248 Firth Hacksaw Steel	M-56	C, W, bal. Fe							Hacksaws	
5307	Firth Brown M-249 (Firth Extra Superior)	M-56	C, 3.5 W, bal. Fe							Special roll turning tools, tools for rifling gun barrels, boring cylinders and expanding tubes	Crucible steel
5308	Firth Brown M-250 (Wolfram C.S.)	M-56	C, 3.5 W, bal. Fe							Special roll turning tools, tools for rifling gun barrels, boring cylinders, expanding tubes	Crucible steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5309	Firth Brown M-251 (Lascut)	M-56	C, 3.5 W, bal. Fe							Special roll turning tools, tools for rifling gun barrels, boring cylinders, expanding tubes	Electric steel
5310	Firth Brown M-252 (Firth 5 C.S.)	M-56	C, 5 W, bal. Fe							Cold drawing dies for wire and for roll turning tools	Crucible steel
5311	Firth Brown M-253 (Firth C.Y.W.)	M-56	C, 3.5 Cr, bal. Fe							Hot working dies and coal cutters	
5312	Firth Brown M-255 (Firth Extra Hard Sheet)	M-56	C, Cr, W, bal. Fe							Cold metal saws	Crucible steel
5313	Firth Brown M-256 (Firth C.C.W.)	M-56	C, low W, Cr, bal. Fe							Hand and pneumatic chisels, rivet snaps, punches, coal picks, caulking tools	Crucible steel
5314	Firth Brown M-258 (Stanslog)	M-56	C, low W, Cr, bal. Fe							Hand and pneumatic chisels, rivet snaps, punches, coal picks, caulking tools	Electric steel
5315	Firth Brown M-259 (Firth B.R.B.)	M-56	C, medium W, Cr, bal. Fe							Heavy duty barrel boring tools, rifling tools	Crucible steel
5316	Firth Brown M-260 (C. D. D.)	M-56	C, medium W, Cr, bal. Fe							Dies for working of brass and copper	Crucible steel
5317	Firth Brown M-262 (Dylasta)	M-56	C, high W, Cr, bal. Fe							Hot and cold stamping dies for brass and copper, hot rivet unit and bolt dies, extruding dies	Electric steel
5318	Firth Brown 0-275 (Firth N.M.C.)	M-56	C, Ni, Mn, Cr, bal. Fe		67000 123000					Cylinder liners, alternator rotor caps and wedges, piston skirts	Non-magnetic Coef. exp.-0.000021 per °C.
5319	Firth Brown P-280 (Foundry Aa)	M-56	C, bal. Fe							Crane magnets, cast steel magnet yokes	Magnet steel. High permeability
5320	Firth Brown P-281 (Tungsten Magnet) (Atlas Tungsten Magnet)	M-56	C, 6 W, bal. Fe							Aircraft and automobile magnetos, telephone, telegraph and radio apparatus	Magnet steel. High remanence and coercive force.
5321	Firth Brown P-282 (Tungsten Chrome Magnet)	M-56	C, Cr, 6 W, bal. Fe							Aircraft and automobile magnetos, telephone, telegraph and radio apparatus	Magnet steel. High remanence and coercive force
5322	Firth Brown P-283 (Cobalt Magnet)	M-56	C, Co, bal. Fe							Aircraft and automobile magnetos, telephone, telegraph and radio apparatus	High coercive force
5323	Firth Brown Q-300	M-56	0.45-0.50 C, bal. Fe		94000 98000					Railway tires	
5324	Firth Brown Q-301	M-56	0.55-0.60 C, bal. Fe		112000 123000					Railway tires	
5325	Firth Brown Q-302	M-56	0.65-0.70 C, bal. Fe		125000 141000					Railway tires	
5326	Firth Brown Q-303	M-56	C, Mn, Mo, bal. Fe		100000 138000					Railway tires	
5327	Firth Brown Q-304	M-56	0.50-0.55 C, Cr, bal. Fe		112000 123000					Railway tires	
5328	Firth Brown Q-305	M-56	0.55-0.65 C, Cr, bal. Fe		125000 139000					Railway tires	
5329	Firth Brown Q-306	M-56	0.60-0.70 C, Cr, bal. Fe		141000 155000					Railway tires	
5330	Firth Brown Q-307	M-56	0.65-0.75 C, Cr, bal. Fe		145000 180000					Railway tires	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5331	Firth Brown Q-308	M-56	0.65-0.75 C, 1.25 Ni, Cr, bal. Fe		159000					Railway tires	
5332	Firth Brown R-320	M-56	C, bal. Fe		78000 90000					Railway axles	
5333	Firth Brown R-321	M-56	C, bal. Fe		90000 101000					Railway axles	
5334	Firth Brown R-322	M-56	C, 3.5 Ni, bal. Fe		101000 112000					Railway axles	
5335	Firth Brown R-323	M-56	C, alloy, bal. Fe		101000 112000					Railway axles	
5336	Firth Brown S-340 (Foundry A)	M-56	0.20 C, bal. Fe		58000 67000					Locomotive gear centers, railway and marine castings for low strength	
5337	Firth Brown S-341 (Foundry B Mild)	M-56	0.28 C, bal. Fe		63000 72000					Marine and automobile castings for medium strength	
5338	Firth Brown S-342 (Foundry B)	M-56	0.32 C, bal. Fe		67000 78500					Railway gear centers, marine and general castings for medium strength	
5339	Firth Brown S-343 (Foundry C)	M-56	0.40 C, bal. Fe		78500 89500					High tensile castings for railway, marine and general purposes	
5340	Firth Brown S-344 (Foundry D)	M-56	0.60 C, bal. Fe		89500 101000					Cast steel die blocks	
5341	Firth Brown S-345 (Foundry E)	M-56	0.75 C, bal. Fe		112000 123000					Cast steel die blocks	
5342	Firth Brown T-360 (Foundry "A, Mn")	M-56	0.25 C, Mn, bal. Fe		78000 89500					Transmission gears	Resists shock and abrasion
5343	Firth Brown T-361 (Foundry "C-M")	M-56	0.45 C, Mn, bal. Fe		89500 112000					Transmission gears	Resists shock and abrasion
5344	Firth Brown T-362 (Foundry N.C.)	M-56	C, Ni, Cr, bal. Fe		101000 112000					Transmission gears	Resists shock and abrasion
5345	Firth Brown T 363 (Foundry N.C. Mo)	M-56	C, Ni, Cr, Mo, bal. Fe		112000 134000					Transmission gears	Resists shock and abrasion
5346	Firth Brown T-364 (Foundry C-Cr)	M-56	C, Cr, bal. Fe		101000 123000					Transmission gears	Resists shock and abrasion
5347	Firth Brown T-365 (Foundry A-Mo)	M-56	0.20 C, Mo, bal. Fe		72000 85000					Cast steel mooring cables	
5348	Firth Brown T-366 (Foundry B, Mo.)	M-56	0.30 C, Mo, bal. Fe		80000 98000					Cast steel turbine casings, high pressure steam chests	
5349	Firth Brown T-367 (Foundry A, Mn, Mo)	M-56	C, Mn, Mo, bal. Fe		90000 112000					Piling work	Shock resistant
5350	Firth Brown T-368 (Adamant T.M.)	M-56	0.50 C, Cr, bal. Fe							Crusher plates, lining plates for pulverizers and grinders	
5351	Firth Brown T-369 (Adamant A)	M-56	0.70 C, Cr, bal. Fe							Crusher plates, lining plates for pulverizers and grinders	
5352	Firth Brown T-370 (Adamant G-R)	M-56	0.75 C, Cr, bal. Fe							Cast steel crusher plates, liners for pulverizers and grinders	
5353	Firth Brown T-371 (Adamant H.P.)	M-56	0.90 C, Cr, bal. Fe							Crusher plates, liners for pulverizers and grinders	
5354	Firth Brown T-372 (Adamant Extra)	M-56	0.75 C, Cr, Mo, bal. Fe							Crusher plates, liners for pulverizers and grinders	
5355	Firth Brown T-373 (Foundry Pilger Roll)	M-56	1.0 C, Cr, Mo, bal. Fe						300 320	Cast steel pilger rolls	
5356	Firth Brown T-374 (Foundry Mn 12)	M-56	C, 12 Mn, bal. Fe						200 240	Tramway crossings, crushing and grinding machinery	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5357	Jessop No. 27-V	M–69	1.25 C, 0.60 Cr, 1.0 W, 0.20 V, bal. Fe	Annealed					200	Milling saw plates	
5358	Jessop No. 29-V	M–69	0.90 C, 1.2 Cr, 0.25 V, bal. Fe	Annealed					200	Milling saw plates, metal band saw	
5359	Jessop No. 96-KC	M–69	C, 1.5 Ni, 0.30 Cr, bal. Fe	Heat treated	190000 200000	160000 170000	 12			Woodsaws, circular and band saws	Rockwell "C"-42
5360	Jessop No. 139-B	M–69	C, 2.5 Ni, 0.30 Cr, bal. Fe	Heat treated	210000 220000	190000 200000	 6			Woodsaws, circular and band saws	Rockwell "C"-45
5361	Jessop Heat-Resisting No. 5	M–69	0.20 C, 24-28 Cr, 12-14 Ni, bal. Fe	Annealed	100000 110000	45000 60000	60 50	70 60	160	Furnace parts	Heat and corrosion resistant to 2100 °F.
5362a	Jessop 181 Nickel Steel	M–69	C, 36 Ni, bal. Fe	Hot rolled	65000 85000	40000 60000	45 30			Thermostatic elements	Rockwell "B"-82-86
5362b	Jessop 181 Nickel Steel	M–69	C, 40 Ni, bal. Fe							Thermostatic elements	
5363	C.N.S.	M–69	1.5 C, 11-12 Cr, 0.8 Mo, 0.20 V, bal. Fe							Blanking, forming, drawing dies, punches, shear blades, cold work dies	Air-hardening, non-shrinkable
5364	Durco KA-2 S-Mo	M–46	0.07 max. C, 18 Cr, 8 Ni, 1.0 max. Si, 0.60 max. Mn, 2-4 Mo, bal. Fe		70000	30000	40 45	40 45	150	For handling hot sulfite liquors in the pulp industries and H_3PO_4	Corrosion resistant, stainless
5365	Aluminum Bronze 5%	M–8	95 Cu, 5 Al	Hard Soft	105000 52000		5 70			Diaphragms to withstand pressure, condenser tubes	M.P.-1060 °C.
5366	Super-Safety	M–449	C, alloy, bal. Fe							Steel stamps	
5367	Durimet K	M–46	0.25 C, 16 Ni, 11 Cr, 1.25 Cu, bal. Fe		100000 110000	35000 40000	45 40	45 40		Ventilation ducts	Resists corrosive fumes. Obsolete
5368	Durimet L	M–46	0.07 C, 19.5-23 Ni, 18.8-21.5 Cr, 2.75-3.75 Si, 0.5-0.75 Mn, 0.25-0.45 Cu, bal. Fe		70000	30000	40 50	40 50	150	Heat and corrosion resistant parts, chemical apparatus, pickling tanks, valves, pumps	Heat and corrosion resistant. Austenitic. Obsolete
5369	Sealalloy		Bi alloy							For sealing metal to glass	
5370	Calite D	M–30	C, alloy, bal. Fe							Carburizing boxes	Heat resistant, Cast alloy. Discontinued
5371	Calite R	M–30	C, alloy, bal. Fe							Apparatus to resist corrosion of boiling H_2SO_4	Acid resistant Discontinued
5372	Carpenter No. 2-317	M–32	0.15 C, Cr, Ni, bal. Fe							Case-hardened parts, gears, crankshafts	Case-hardening steel
5373	Carpenter No. 2-408	M–32	0.15 C, Cr, Ni, bal. Fe							Case-hardened pinions, shafts and parts for automotive and machine tool construction	Case-hardening
5374	Carpenter No. 158	M–32	0.10C, 1.5 Cr, 3.5 Ni, bal. Fe							High duty clash gears, shafts, clutch parts	Case-hardening steel
5375	Troxeit Grade 85	M–53	Cu, W						150	Large welding dies, spot welding electrodes	Discontinued
5376	Troxeit Grade 95	M–53	Cu-W						200	Projection welding tips and faces, spot welding, butt welding dies	Discontinued
5377	Silcrome 25-20	M–76	C. 25 Cr, 20 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5378	Silumin	M–116	12-13.5 Si, bal. Al	Hard	36000		2			Cylinders	Wrought
5379	Carpenter No. 3-720	M–32	0.30 C, 0.90 Cr, 0.20 V, bal. Fe							Studs, bolts	Tough
5380	Carpenter No. 2-720	M–32	0.18 C, 0.90 Cr, 0.20 V, bal. Fe							Case-hardened parts	Case-hardening steel
5381	Carpenter No. 436	M–32	0.15 C, 1.75 Ni, 0.25 Mo, bal. Fe							Case-hardened parts	Free machining
5382	Zeron Metal		C, 0.8-1.0 Mn, bal. Fe		70000 80000	55000 60000	16 14		170 180	Wrenches, hardware, fittings	Heat treated malleable cast iron

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5383	Duranalium	M-457	5-10 Mg, bal. Al							Light alloy parts, aircraft castings	Corrosion resistant
5384	Hydronalium Hy-7	M-78	7 Mg, .45 Mn, bal. Al	Rolled	52000	32000	12		115	Light alloy parts, seaplane pontoons and propellers	Resists sea-water Corrosion
5385	Lumen Alloy No. 42	M-77	87.75 Cu, 10 Sn, 1.75 Ni, 0.25 Pb, 0.25 P	Cast	57000 58000	30500 33750	17 26		90 115	Gears	For severe service
5386	Silal	M-494	2.5 C, 1.0 max. Al 5 Si, Mn, bal. Fe	Cast	20000				160	Stove and furnace parts, fire bars	Silicon cast iron. Scale resistant. Heat resistant
5387	Tri-Ply	M-114	Three-ply composite steel with steel center and Uniloy backing							Heat and corrosion resistant parts	Stainless clad steels
5388	Wissco No. 1 M	M-120	0.12 C, 12-15 Cr, S, Se or Mo, bal. Fe							Stainless wire	Free machining
5389	Wissco No. 4 M	M-120	0.08-0.20 C, 17-19 Cr, 7-9 Ni, P, S or Se, bal. Fe							Stainless wire	Free machining
5390	Cyclops M-T	M-39	0.75 C, 1.0 V, 1.5 W, 7 Mo, bal. Fe							Tools	See Motung
5391	O.F.H.C. Copper	M-558	99.98 Cu							Electrical equipment	Oxygen free, high conductivity
5392	Westeeco No. 35-15	M-468	C, 35 Cr, 15 Ni, bal. Fe							Furnace parts, heat resisting castings	Heat resistant
5393	TAM Cupro-Titanium	M-109	25-30 Ti, 0.2 max. Fe, Si, C, bal. Cu							Used in adding Ti to Cu alloys	
5394	Fahrite N-5	M-95	C, 59-62 Ni, 10-14 Cr, bal. Fe		58000	45000	3	2	190	Carburizing boxes, retorts, furnace parts	Heat resistant
5395	Fahrite N-7	M-95	C, 25-30 Cr, 3 max. Ni, bal. Fe		80000	55000	5	5	200	Apparatus to resist high temperature corrosion where excess sulfur is present	Heat and corrosion resistant
5396	Super Holfos Bronze	M-169	Cu, Sn, P	Centrifugally cast	35000 50000		10 5		90 125	Worm wheels	
5397	Holfos [illegible] Chill Bar [illegible]ade	M-169	12-13 Sn, 0.6-1.0 P, bal. Cu		32000 45000		3 1		95 125	High duty bearings, rock drill jackhammer, guide and rifle nuts	Chilled bar grade
5398	Delta A Ufriction Metal	M-450	Cu alloy							Lining of bearings, bolts, nuts, castings	
5399	Cr[illegible]ite	M-451	C, alloy, bal. Fe							Chill rolls	
5400	Duquesne Special	M-451	C, Cr, Mo, bal. Fe							Rolls	Subjected to severe service
5401	Dynamic Steel C-2	M-451	Low C, Mn, Ni, bal. Fe		85000	52500	30	57		Tractor frames, locomotive castings	Resists shock and impact. Iz-45
5402	Dynamic Steel C-3	M-451	Medium C, Mn, Ni, bal. Fe		96000	68000	24	48		Sprockets, spindles, wheel centers, cross-heads	Wear resistant. Resists shock and impact
5403	Dynamic Steel C-6	M-451	C, high Cr, bal. Fe							Sand mills, rock crushers	Abrasion resistant
5404	Molybdenite	M-451	C, Cr, Mo, bal. Fe							Mill pinions, guides, rolls	
5405	Cromaloy	M-408	61 Ni, 15 Cr, 4 Mn, 20 Fe		107500					Electric heating devices	Heat resistant to 950°C.
5406	Hydril Bearing Metal	M-42	70 Cu, 30 Pb		10000					Bearings	
5407	Telconstan	M-108	Cu-Ni							Electrical resistances, shunts, motor starters	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5408	Silcrome 28	M-76	C, 23-28 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5409	"F" Alloy	M-311	2.5 Cu, 20 Zn, 0.5 Mg, 0.5 Mn, 0.75 Si, bal. Al	Heat treated	8100	57000	19			Aircraft parts, structures	Die casting
5410	Barr Alloy No. 00-C M H Alloy No. 00C	M-212	84 Cu, 16 Sn	Cast	25000 35000	20000 28000	1 2		80 100	Bearings for turn tables and movable bridges	Compression of 0.1%-18000
5411	Barr Alloy No. 1 MH Alloy No. 1	M-212	88 Cu, 8-10 Sn, 2-4 Zn	Cast	40000 50000	18000 22000	20 40	20 30	65 74	Steam and hydraulic castings, air valves, small gears	U.S.N. "G" Bronze "Gun Metal" "SAE No. 62"
5412	Barr Alloy No. 4 MH Alloy No. 4	M-212	80 Cu, 10 Sn, 10 Pb	Cast	30000 50000	19000 21000	20 10	20 10	55 65	High speed bearings	For high pressures.
5413	Barr Alloy No. 5 MH Alloy No. 5	M-212	85 Cu, 5 Sn, 5 Pb, 5 Zn	Cast	30000 38000	15000 19000	15 20	15 20	50 59	Bearings, pumps, steam valves carburetors	"Ounce Metal"
5414	Barr Alloy No. 9 MH Alloy No. 9	M-212	58 Cu, 40 Zn, 1.5 Fe, 0.5-1.5 Al, 0.-0.25 Mn	Grade A Grade B	70000 80000 80000 90000	30000 34000 40000 45000	25 40 15 25		100 120	Propeller blades and hubs, valve stems, engine framing	Compression of 0.1%-20000
5415	Barr Alloy No. 11 MH Alloy No. 11	M-212	89 Cu, 10 Al, 1 Fe	Cast Heat treated	65000 80000 75000 95000	23000 27000 55000 65000	20 27 3 15	20 27	93 100 140 200	Gears, feed nuts, bearings	Resists wear, repeated shock and corrosion
5416	Barr Alloy No. 14 MH Alloy No. 14	M-212	90 Cu, 6.5 Sn, 1.5 Pb, 2.0 Zn	Cast	34000 40000	16000 19000	23 35	23 53	50 60	Plain bearings, backs of babbitt-lined shells	Low coef. friction and expansion
5417	Barr Alloy No. 15 MH Alloy No. 15	M-212	88.5 Cu, 11 Sn, 0.25 Pb, 0.25 P	Sand cast Chill cast	33000 40000 50000	21000 24000 30000	10 15 6	8 15	70 80 100	Worm gears mating with hardened worms	"SAE-65". Compression of 0.1%-17000
5418	Barr Alloy No. 20 MH Alloy No. 20	M-212	65 Cu, 23 Zn, 2 Fe, 3 Mn, 7 Al		90000 100000	50000 60000	20 5		180 200	General castings	Compression of 0.1%-65000
5419	Barr Alloy No. 25 B MH Alloy No. 25B	M-212	69 Cu, 5 Sn, 25 Pb, 1 Ni		20000 24000	14000 16000	16 12			General castings, bearings	Acid resisting
5420	Barr Alloy No. 48 MH Alloy No. 48	M-212	84 Cu, 10 Sn, 2.5 Pb, 3.5 Ni	Sand cast	40000 50000	25000 28000	25 15	20 10	80 93	Gears	Compression of 0.1%-20000-24000
5421	D-2	M-338	3.0 max. Mg, 1.5 Mn, bal. Al	Annealed Hard rolled	28000 40000		24 5			Light alloy parts, panelling	Can be cold worked. Corrosion resistant
5422	Duralumin H	M-338	0.75 Mn, 1.0 Si, 0.6 Mg, bal. Al	Heat treated	50000 55000		10 16			Light alloy parts, formed sections and extruded rods	Age-hardening alloy. Corrosion resistant
5423	Elektron AZ-855	M-338	8.5 Al, 1.0 Zn, 0.2 Mn, bal. Mg	Forged	45000 55000	22400 34000	14 8	20 18	70 80	Air screw forgings, extruded and forged light alloy parts	Age-hardening alloy. Corrosion resistant
5424	Croterite IV	M-179	Ni, Al, Mn, bal. Cu	Annealed Hardened	50000 100000	18000	48 20		95	Paper mill equipment, pump rods, piston rods, turbine blading	Tough, corrosion resistant
5425	Croterite V	M-179	Al, bal. Cu	Cast Hard rolled	65000 90000	25000 40000	35 30	25 50	100 140	Pump rods, piston rods, valves impellers, exhaust manifolds, worm wheels, gears	Resists high temperatures and corrosion
5426	Immadium III	M-179	Cu alloys	Rolled, extruded	67000 74000	34000	30 33		130	Hydraulic tubes, cylinders, rams, ship fittings, pump rods valve spindles, valves	Corrosion resistant
5427	Immadium B.B.	M-179	Cu alloy		94000		18			Hydraulic tubes, cylinders, rams, ship fittings, pumps, rods, valve spindles, valves	Discontinued
5428	Parsons Silver Bronze	M-179	Ni, bal. Cu	Cast Rolled Extruded	67000 76000 89000		31 30 22		145 155	Ship fittings, automobile accessories, railings, sanitary fittings	Non-oxidizable. Incorrodible
5429	Damaxine Bronze	M-179	Cu-Sn alloy	Cast						Solid bearings, slide valves, piston rings, worm wheels, hot roll neck bearings	Resists wear and abrasion, Series of P-bronzes

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5430	Architectural. Bronze C-94	M–179	Cu alloy	Extruded, rolled	86000	38000	25		145	Casements, hand rails, show cases, panels, architectural	Corrosion resistant
5431	Alufont II	M–249	4 Cu, 2.0 Si, 0.6 Mn, 0.2 Mg, 0.15 Ti, bal. Al	Heat treated	33000 55000	27000 45000				Castings where high strength, but no high corrosion resistance is required	High fluidity
5432	Peraluman 2	M–249 M–624	2.15 Mg, 1.4 Mn, bal. Al	Soft	31000 36000	15000 21000	20 16			Panelling in architecture, ship building, automotive parts	Corrosion resistant
				Hard	50000 65000	45000 58000	5 2				
5433	Kupfer-Silumin	M–299	12 Si, 0.8 Cu, 0.3 Mn, bal. Al	Sand cast	25000	14000	2–4		60	Wheels, rolls, engine blocks, motor housing	
5434a	Silumin-Beta	M–299	12 Si, 0.3 Mg, 0.5 Mn, bal. Al	Sand cast	25000	14000	2–4		60	Starting material for Silumin-Gamma	
5434b	Silumin-Gamma	M–299	12 Si, 0.3 Mg, 0.5 Mn, bal. Al	Sand cast	28000	16000				Dynamos, motors	Tough, corrosion resistant
5435	Chase "444" Bronze	M–33	88 Cu, 4 Pb, 4 Sn, 4 Zn		50000 90000	25000 60000	35 7			Bearings, condenser tubes	Corrosion resistant to brine, alkalis
5436	Chase Valve Stem Bronze	M–33	57 Cu, 3.5 Pb, 39.5 Zn		70000	40000	15			Valve stems	Discontinued
5437	Chase Architectural Bronze	M–33	58 Cu, 3 Pb, 39 Zn		60000	25000	25			Extruded architectural shapes	Hot workable
5438	Chase Free Turning Brass	M–33	62 Cu, 3.5 Pb, 34.5 Zn		50000 70000	25000 50000	40 15			Screw machine work	Free cutting
5439	Chase Manganese Bronze	M–33	57.5 Cu, 0.9 Sn, 40.6 Zn, 1.0 Fe, 0.5 Mn		60000 85000	40000 68000	40 15			High strength bolts	
5440	Chase Clock Brass	M–33	64 Cu, 1.75 Pb, 34.25 Zn		75000		7			Stampings, meter and clock parts	Free milling
5441	Chase Forging Brass	M–33	60 Cu, 1.75 Pb, 38.25 Zn		50000 60000	20000 35000	40 20			General forgings	Hot workable
5442	Chase Admiralty Brass	M–33	71 Cu, 1.0 Sn, 28 Zn	Annealed	60000		47			Condenser tubing and pipe	
5443	Chase Nickel Aluminum Bronze	M–33	92 Cu, 4 Ni, 4 Al	Annealed Hard	70000 120000	30000 90000	48 3			Condenser tubing, pipe and corrosion resistant purposes	
5444	Chase Olympic Bronze "B"	M–33	97.75 Cu, 1.5 Zn, 1.75 Si	Annealed Hard	52000 140000	25000 90000		70 5		Screw machine work, bolts, nuts, screws, welding rods, cable, hardware	Resists "season cracking"
5445	Chase Olympic Bronze "C"	M–33	94.75 Cu, 1.0 Zn, 4.25 Si	Sand cast Wrought	50000 115000	15000		13		High strength sand castings, bolts, nuts, screws, welding rods hardware, cable	Resists "season cracking"
5446	Chase Nickel Silver (10%)	M–33	45 Cu, 2 Pb, 10 Ni, bal. Zn		75000 85000			20 10		Extruded shapes for architectural purposes	
5447	Copper-Nickel (4%)	M–121	96 Cu, 4 Ni							Locomotive fire box stays	
5448	Stones "608" Superheat Bronze	M–452	7 Ni, bal. Cu							Used for parts exposed to superheated steam bucket wheels, pistons, locomotive slide valve, cocks	Resists corrosion and erosion
5449	Stones Z-Metal	M–452	Ni bronze							Fire box stays	
5450	Aeonite	M–453	Ni-Cu							Sanitary appliances	White metal
5451	No. 7 Alloy (Mather & Platt)	M–454	3.0 C, 4-5 Cu, 12-14 Ni, 1.0-1.2 Mn, 4-6 Cr, 1.2-1.5 Si, bal. Fe		25000 30000				200 220	Valves, centrifugal pumps	Austenitic cast iron. Abrasion and corrosion resistant
5452	Superloy No. 4	M–246	C, Cr, Ni, Mo, bal. Fe							Highly stressed gears and castings	Wear resistant
5453	Superloy No. 7	M–246	C, 12 Mn, bal. Fe							Liner plates, crusher jaws, dipper teeth, hammer mills	Wear resistant
5454	Dowmetal B	M–43	87.9 Mg, 12 Al, 0.1 Mn	Sand Cast	19000 23000	15000 17000	1 0		57 61	Heat treated castings requiring high yield strength and hardness	C.U.S.-45000-49000 S.S.-15000-17000

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5455	Beryllium-Copper	M-255	2.5-3.0 Be, bal. Cu							To introduce Be in Cu alloys	
5456	Beryllium-Nickel	M-255	10 Be, bal. Ni							To introduce Be in Cu-Ni alloys	
5457	Beryllium-Iron	M-255	10 Be, bal. Fe							To introduce Be in Cu-Fe alloys	
5458	Permite No. 2001 (Kant Skore Piston Alloy)	M-6	9-11 Cu, 0.5 Fe, 1.25 Si, 0.25 Zn, 0.35 Mg, 0.10 Mn, bal. Al	Heat treated	20000		2		65	Pistons.	Discontinued
					38000		0		140		
				Cast	25000		0.5		85		
5459	Permite No. 1003 (Low Expansion Alloy)	M-6	1.0 Cu, 1.0 Fe, 13.5 Si, 0.25 Zn, 1.0 Mg, 0.10 Mn, 2.5 Ni, bal. Al	Heat treated	28000		0.5		100	Low expansion alloy	Coef. exp.-0.0000110
					35000		1.0		90		
				Cast	25000		1.0		85		
5460	Permite No. 1004 (2004)	M-6	6-8 Cu, 1.5 Fe, 2.0 Si, 2.5 Zn, 0.2 Mg, 0.2 Mn, bal. Al	Chill cast	23000		1.0		80	General castings	Coef. exp.-0.000013
				Sand cast	20000		1.0		60		
					16000		2.5				
5461	Permite No. 2005	M-6	6-8.5 Cu, 0.75 Fe, 0.50 Si, 0.25 Zn, bal. Al	Sand cast	20000		2.0		65	General castings	
5462	Permite No. 1006 (2006)	M-6	11-13.5 Cu, 0.75 Fe, 0.5 Si, 0.25 Zn, bal. Al	Chill cast	25000		1.0		100	Leak proof castings	
				Sand cast	23000		1.0		90		
5463	Permite No. 1007 (2007)	M-6	6-8 Cu, 1.0 Fe, 1-2 Si, 0.25 Zn, 0.20 Mg, 0.20 Mn, bal. Al	Chill cast	26000		2.5		75	General castings	
				Sand cast	24000		2.0		70		
5464	Permite No. 1008 (2008)	M-6	4-5 Cu, 1.2 Fe, 2-3 Si, 0.25 Zn, bal. Al	Chill cast	25000		2.0		70	General castings	
				Heat treated	35000		4.0		70		
					38000		1.0		100		
5465	Permite No. 1009 (2009)	M-6	4-5 Cu, 0.5 Fe, 0.5 Si, bal. Al	Sand cast	25000		2			General castings	
				Heat treated	28000		6.0		60		
					36000		1.0		75		
5466	Permite 2010	M-6	4-5 Cu, 1.0 Fe, 1.0 Si, 0.25 Zn, 0.20 Mg, bal. Al	Sand cast	27000		2.0		50	General castings	
				Heat treated	28000		5.0		100		
					38000		1.0		60		
5467	Permite 1011 (2011)	M-6	0.75 Fe, 4-5 Si, 0.5 Zn, 0.1 Mg, bal. Al	Chill cast	21000		2.5		50	General castings	
				Sand cast	17000		3.0		45	Corrosion resistant	
5468	Permite No. 2012	M-6	0.75 Fe, 9-11 Si, 0.5 Zn, 0.1 Mg, bal. Al	Sand cast	23000		5.0		50	General castings	
5469	Permite No. 2013	M-6	0.75 Fe, 13 Si, 0.5 Zn, 0.1 Mg, bal. Al	Sand cast	28000		8.0		50	General castings	
5470	Permite No. 1014 (2014) (Y-alloy)	M-6	4.0 Cu, 0.75 Fe, 0.75 Si, 0.2 Zn, 1-1.5 Mg, 2.0 Ni, bal. Al	Sand cast	23000		0.5		90	General castings	Coef. exp.-0.0000136
				Heat treated	30000		0		110		
5471	Permite No. 1015 (2015)	M-6	2.5 Cu, 0.75 Fe, 1.0 Si, 30-31 Zn, bal. Al	Sand cast	25000		3		70	General castings	
				Chill cast	30000		3		70		
5472	Permite No. 1016	M-6	10 Cu, 1.0 Fe, 3-4 Si, 0.25 Zn, 0.20 Mg, bal. Al	Chill cast	22000		1.0		85	General castings	
5473	Permite No. 2017 (Pattern Alloy)	M-6	6-8 Cu, 1.0 Fe, 1.0 Si, 2.5 Zn, 1.0 Sn, bal. Al	Sand cast	18000		2.0		70	General castings	
5474	Permite No. 2018	M-6	2.5 Cu, 0.5-2 Mn, bal. Al	Sand cast	20000		8			General castings	High ductility
				Heat treated	28000		6				
					30000		4				
5475	Permite No. 1019 (2019)	M-6	1.25 Cu, 1.0 Fe, 4.5-5.5 Si, 0.25 Zn, 0.5 Mg, bal. Al	Heat treated	27000		4.5		60	General castings	
					35000		1.0		90		
5476	Permite No. 2020	M-6	1.0 Fe, 6.5-7.5 Si, 0.25 Zn, 0.35 Mg, bal. Al	Heat treated	26000		5		55	General castings	
					30000		3		70		
5477	Permite No. 2021	M-6	0.1 Cu, 0.5 Fe, 0.5 Si, 3-4 Mg, bal. Al	Sand cast	22000		6		50	General castings	
										Corrosion resistant	
5478	Permite No. 2022	M-6	0.1 Cu, 0.5 Fe, 0.5 Si, 5-6 Mg, bal. Al	Sand cast	25000		4		60	General castings	
										Corrosion resistant	
5479	Permite No. 2023	M-6	0.1 Cu, 0.5 Fe, 0.5 Si, 9-10 Mg, bal. Al	Sand cast	27000		3		60	General castings	
				Heat treated	38000		11		75	Corrosion resistant	
5480	Tisco No. 17	M-271	0.10-0.19 C, 0.6-0.8 Mn, 0.25-0.50 Si, bal. Fe	Annealed	60000	30000	25	40	116	Motor frames, case-hardened castings, drag links	Free machining, high permeability
					70000	40000	35	60	136		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5481	Tisco No. 18	M-271	0.20-0.29 C, 0.6-0.8 Mn, 0.25-0.50 Si, bal. Fe	Annealed	65000 75000	35000 45000	25 35	30 50	126 146	Commercial castings	
5482	Tisco No. 19	M-271	0.30-0.39 C, 0.6-0.8 Mn, 0.25-0.50 Si, bal. Fe	Annealed	70000 85000	40000 50000	20 30	20 40	126 156	Commercial castings	
5483	Tisco No. 20	M-271	0.40-0.44 C, 0.6-0.8 Mn, 0.25-0.50 Si, bal. Fe	Annealed	80000 95000	43000 53000	18 28	18 38	146 166	Frogs, track crossings, railway track switches	
5484	Tisco No. 21	M-271	0.45-0.55 C, 0.60-0.80 Mn, 0.25-0.50 Si, bal. Fe	Annealed	85000 100000	45000 55000	15 25	15 35	156 176	Track work, frogs, crossings, railway track switches	
5485	Tisco No 22	M-271	0.20-0.30 C, 1.15-1.75 Mn, 0.25-0.50 Si, bal. Fe	Heat treated	80000 90000	50000 60000	25 35	50 65	172 192	Tractor and moving machinery parts	Shock and fatigue resistant
5486	Tisco No. 23	M-271	0.20-0.30 C, 1.15-1.75 Mn, 0.25-0.50 Si, bal. Fe	Normalized	75000 86000	40000 50000	25 35	40 55	140 160	Tractor and moving machinery parts	Shock and fatigue resistant
5487	Tisco No. 1	M-271	1.0-1.4 C, 11-14 Mn, 1.0 max. Si, bal. Fe	Cast Hot rolled	80000 110000 160000	35000 45000	15 35 40	15 35 30	180 200 120	Chains, crushers, gears, crusher rolls, sprockets, liners, wearing plates, drums	Does not resist severe fatigue stresses. Wear resistant
5488	Tisco No. 65	M-271	0.2-0.3 C, 0.8-1.0 Mn, 0.3-0.5 Si, 0.75-1.0 Ni, bal. Fe		65000 75000	40000 50000	20 35	40 65	130 150	Tractor and moving machinery parts	Shock and fatigue resistant
5489	Tisco No. 40	M-271	0.27-0.37 C, 0.6-0.8 Mn, 0.3-0.5 Si, 0.65-0.85 Cr, bal. Fe	Annealed	78000 92000	42000 55000	20 30	30 45	180 350	Tractor shoes	Obsolete
5490	Tisco No. 41	M-271	0.45-0.55 C, 0.6-0.8 Mn, 0.3-0.5 Si, 1.0-1.25 Cr, bal. Fe	Heat treated	115000 130000	60000 80000	6 12	8 20	220 235	Liners for ball mills	Hard, wear resistant with moderate toughness
5491	Tisco No 53	M-271	0.15-0.35 C, 0.45-0.85 Mn, 0.20-0.60 Si, 4.0-6.5 Cr, 0.4-0.65 Mo, bal. Fe		110000 125000	75000 90000	16 20	30 55	215 255	Oil still valves and fittings	Resists H_2S gas. Low creep at high temp.
5492	Tisco No 71	M-271	0.3-0.4 C, 0.6-0.8 Mn, 0.3-0.5 Si, 0.6-0.8 Cr, 1.5-1.75 Ni, bal. Fe	Cast	95000 110000	55000 65000	15 25	20 40	197 217	Pinions and racks for steam shovel	
5493	Tisco No. 70	M-271	0.3-0.4 C, 0.6-0.8 Mn, 0.3-0.5 Si, 0.8-1.0 Cr, 2.5-3.0 Ni, bal. Fe	Cast	95000 120000	65000 85000	10 15	10 15	210 230	Pinions and gears	Resists wear and repeated high stresses
5494	Tisco No 72	M-271	0.45-0.55 C, 0.6-0.8 Mn, 0.3-0.5 Si, 0.8-1.0 Cr, 2.75-3.25 Ni, bal. Fe	Cast	95000 115000	55000 75000	12 22	15 40	207 227	Track work, frogs, crossings, and railway track switches	
5495	Tisco No. 50	M-271	0.45-0.55 C, 0.8-1.0 Mn, 0.3-0.5 Si, 0.9-1.0 Cr, 0.25-0.35 Mo, bal. Fe	Cast	130000 150000	95000 115000	5 12	8 25	250 280	Roll shells	
5496	Tisco No 51	M-271	0.75-0.85 C, 0.7-0.9 Mn, 0.3-0.5 Si, 1.5-2.0 Cr, 0.35-0.45 Mo, bal. Fe	Cast	140000 170000	90000 115000	2 5	4 8	300 400	Ball mill liners	Resists abrasive wear with little shock
5497	Tisco No. 81	M-271	0.5-0.6 C, 0.6-0.8 Mn, 0.4-0.6 Si, 1.4-1.6 Cr, 1.75-2.25 Ni, 0.3-0.4 Mo, bal. Fe						300 650	Centrifugal pumps handling sand	Hard and brittle. Air hardening
5498	Tisco No. 90	M-271	3.0-3.5 C, 0.4-0.7 Mn, 0.4-0.7 Si, 1.25-1.75 Cr, 4.0-4.50 Ni, bal. Fe		25000				550 600	Wearing parts	Hard, abrasive resistant cast iron "Ni-Hard"
5499	Tisco Nirosta 28-11	M-271	0.30 max. C, 1.0 max. Mn, 0.5-1.5 Si, 26-30 Cr, 8-12 Ni, bal. Fe		75000 85000	45000 50000	12 18	8 12	150 160	Heat and corrosion resistant parts	Now Tisco No. 107
5500	Tisco "Tappi" Corrosion Resisting Steel	M-271	0.13-0.35 C, 16-23 Cr, 7-11 Ni, Mo, bal. Fe		70000 75000		60 50	60 45	130 160	Machinery parts in paper and pulp machinery	Now Tisco No. 110
5501	Tisco Low Chrome Iron	M-271	0.10 max. C, 0.4-6 Mn, 2.0 max. Si, 11.5-16.0 Cr, bal. Fe	Cast	70000 90000	40000 55000	18 24	25 45	160 180	Apparatus and vessels to resist alkaline liquors, food stuffs, steam and some acids	Now Tisco No. 132

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5502	Tisco Medium Chrome Iron	M-271	0.10 max. C, 0.4-0.6 Mn, 2.0 max. Si, 16-19 Cr, bal. Fe		75000 100000	45000 60000	10 20	15 35	190 210	Apparatus and vessels to resist HNO_3, food stuffs, sea water, steam	Now Tisco No. 131
5503	Tisco High Chrome Iron	M-271	0.10 max. C, 0.4-0.6 Mn, 2.0 max. Si, 26-30 Cr, bal. Fe		40000 60000	30000 40000	3 0	5 0	200 220	Apparatus to resist sulfur rich atmospheres at high temp.	Now Tisco No. 130
5504	Tisco 150	M-271	2.5-3.0 C, 0.5 max. Mn, 2.0 max. Si, 28-32 Cr, 1.0-1.5 Ni, bal. Fe						400 600	Centrifugal pumps handling sand and other materials in acid mine waters	Discontinued
5505	Bedel Quatre Trefles	M-455	C, W, Cr, V, Co, bal. Fe							High speed cutters	High speed steel for extra hard pieces at high speed
5506	Bedel Triple Trefle E.S.	M-455	C, W, Cr, V, 6 Co, bal. Fe							High speed cutters	Super high speed steel
5507	Bedel No. 644	M-455	C, W, Cr, V, bal. Fe							High speed cutters	High speed steel
5508	Bedel Triple Trefle F.R.	M-455	C, high W, high Cr, bal. Fe							Taps, forming tools, bores, finishing tools	High speed steel
5509	Bedel Triple Trefle	M-455	C, 18 W, Cr, bal. Fe							Heavy roughing and milling cutters	High speed steel
5510	Bedel Double Trefle	M-455	C, 14 W, Cr, bal. Fe							General, medium speed cutters	High speed steel
5511	Bedel "Diamont Bedel"	M-455	C, 4 W, 4 Cr, V, bal. Fe							Cutting tools	
5512	Bedel Un Trefle Couronne	M-455	C, 5-6 W, Cr, bal. Fe							Hot punches and dies for screw machines	
5513	Bedel Un Trefle 1	M-455	C, 2-3 W, Cr, V, bal. Fe							Hot and cold forging punches, dies	
5514	Bedel Un Trefle 2	M-455	C, 4 Ni, Cr, Mo, bal. Fe							Hot stamping dies and punches pipe mandrel, shear blades	
5515	Bedel Un Trefle 3	M-455	C, Cr, Ni, bal. Fe							Pneumatic chisels, hot slicing	
5516	Bedel Special Y.2	M-455	C, 3 Ni, 0.7 Cr, bal. Fe							Pneumatic or hydraulic rivet sets	
5517	Bedel Special Y.5	M-455	C, 2 W, 1 V, bal. Fe							Pneumatic chisels, punches, shear blades	
5518	Bedel Special OZ	M-455	C, 10 W, Cr, V, bal. Fe							Hot forging tools, stamping and punching, hot shear blades	
5519	Bedel Chrome 4	M-455	C, 2-3 Cr, bal. Fe							Cold stamping dies and punches	Non-deforming
5520	Bedel Special X	M-455	C, Cr, V, bal. Fe							Calipers, gages, dies, punches	Non-deforming
5521	Bedel Special F	M-455	C, 4 W, Cr, Mo, bal. Fe							Wire drawing dies, cold drawn wire dies	Non-deforming
5522	Bedel Special FL	M-455	C, 13 Cr, bal. Fe							Wire drawing dies for cold-drawn hard steel	Non-deforming
5523	Bedel Special 000	M-455	C, 13 Cr, bal. Fe							Dies, punches, rolling mill rolls	Non-deforming
5524	Bedel Special FA	M-455	C, 13 Cr, Ni, Mo, V, bal. Fe							Dies and punches	Non-deforming
5525	Bedel Special FB	M-455	C, bal. Fe, 13 Cr, Mo, V							Dies and punches	Non-deforming
5526	Bedel Special FK	M-455	C, 13 Cr, Mo, V, bal. Fe							Dies and punches	Non-deforming
5527	Bedel 3 Couronnes 0	M-455	C, bal. Fe							Wood tools used without hardening	Crucible steel
5528	Bedel 3 Couronnes 1	M-455	C, bal. Fe							Saws for hard wood, lathe tools	Crucible steel
5529	Bedel 3 Couronnes 2	M-455	C, bal. Fe							General cutlery, taps, chisels, mandrels, razors, metals saws	Crucible steel
5530	Bedel 3 Couronnes 3	M-455	C, bal. Fe							Drills, borers, chisels, engraving tools, needle dies, stone tools	Crucible steel
5531	Bedel 3 Couronnes 4	M-455	C, bal. Fe							Hot and cold shear blades, hammers, cutting and stamping dies	Crucible steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5532	Bedel 3 Couronnes 5	M-455	C, bal. Fe							Forge-tools, surgical instruments	Crucible steel
5533	Bedel 2 Couronnes 0	M-455	C, bal. Fe							Wood tools used without hardening	Crucible steel
5534	Bedel 2 Couronnes 1	M-455	C, bal. Fe							Saws for hard wood, lathe tools	Crucible steel
5535	Bedel 2 Couronnes 2	M-455	C, bal. Fe							General cutlery, chisels, mandrels, razors, metal saws	Crucible steel
5536	Bedel 2 Couronnes 3	M-455	C, bal. Fe							Drills, borers, mining bars, chisels, punches, stone tools	Crucible steel
5537	Bedel 2 Couronnes 4	M-455	C, bal. Fe							Shear blades, cutting and stamping dies, hammers	Crucible steel
5538	Bedel 2 Couronnes 5	M-455	C, bal. Fe							Surgical instruments, forge-tools	Crucible steel
5539	Bedel 1 Couronnes 0	M-455	C, bal. Fe							Wood tools without hardening	Crucible steel
5540	Bedel 1 Couronnes 1	M-455	C, bal. Fe							Saws, lathe tools	Crucible steel
5541	Bedel 1 Couronnes 2	M-455	C, bal. Fe							Cutlery, taps, chisels, mandrels, razors, metal saws	Crucible steel
5542	Bedel 1 Couronnes 3	M-455	C, bal. Fe							Drills, borers, mining bars, chisels, engraving tools, stone tools, needle dies	Crucible steel
5543	Bedel 1 Couronnes 4	M-455	C, bal. Fe							Rams, shear blades, dies, hammers	Crucible steel
5544	Bedel 1 Couronnes 5	M-455	C, bal. Fe							Surgical instruments, forge-tools	Crucible steel
5545	Bedel C.3	M-455	Low C, 2.5 Ni, bal. Fe	Annealed	85000	78000	20			Aviation and marine case-hardened parts	Case-hardening steel
5546	Bedel C.5	M-455	Low C, 5 Ni, bal. Fe	Annealed	90000	78000	20			Aviation and marine case-hardening parts	Case-hardening steel
5547	Bedel BK 3 B	M-455	Low C, 3.5 Ni, Cr, bal. Fe	Annealed Heat treated	78000 135000	58000 128000	30 11			Crankshafts, general case-hardened parts for severe service	Case-hardening steel
5548	Bedel CK	M-455	Low C, 3 Ni, Cr, bal. Fe	Annealed Heat-treated	85000 164000	143000	9			Crankshafts, general case-hardened parts for severe service	Case-hardening steel
5549	Bedel BNAV 3	M-455	Low C, 4 Ni, Cr, Mo, bal. Fe	Annealed Heat treated	107000 143000	135000	14			Crankshafts, general case-hardened parts for severe service	Case-hardening steel
5550	Bedel No. 600 C	M-455	Low C, 1.5 Ni, Cr, Mo, V, bal. Fe	Heat treated	150000 177000	143000 157000	12			Crankshafts, general case-hardened parts for severe service	Case-hardening steel
5551	Bedel BCN	M-455	.4 C, Cr, 2-3 Ni, bal. Fe	Heat treated	242000 135000	213000 121000	10 15			General engineering construction	Oil hardening
5552	Bedel BCN 3 S 2	M-455	High C, Cr, 3 Ni, bal. Fe	Heat treated	270000	242000	6			General engineering construction	Oil hardening
5553	Bedel BNAVO	M-455	C, Cr, 3 Ni, Mo, bal. Fe	Heat treated	228000	199000	9			General engineering construction	Oil hardening
5554	Bedel BNAV 2	M-455	Medium C, Cr, 4 Ni, Mo, bal. Fe	Heat treated	242000	228000	9			Aircraft motor crankshafts	Oil hardening
5555	Bedel BCN 4 S	M-455	C, Cr, 4 Ni, bal. Fe	Air hardened	270000 260000	235000 220000	6 8			General engineering construction	Air hardening
5556	Bedel BNAV 1	M-455	C, Cr, 4 Ni, Mo, bal. Fe	Heat treated	315000	260000	6			General engineering construction	Air hardening
5557	Bedel 1 Trefle 5	M-455	C, Cr, 4.5 Ni, Mo, bal. Fe	Heat treated	157000	135000	15			Valves operating at high temperatures	
5558	Bedel INO 2	M-455	Medium C, 13 Cr, bal. Fe	Heat treated	170000	157000	5			Marine valves	
5559	Bedel INO 3	M-455	C, 13 Cr, V, bal. Fe	Heat treated	135000	110000	10			Automobile valves	
5560	Bedel SOC	M-455	C, 13 Cr, Mo, Co, bal Fe	Heat treated	145000	135000	6			Valves operating at temperatures up to 800 °C.	Very oxidation resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5561	Bedel SOC 2	M-455	C, 20 Cr, high Co, bal. Fe	Heat treated	135000	115000	7.5			Valves operating at temperatures up to 800°C.	Very oxidation resistant
5562	Bedel INO 12	M-455	C, 20 Cr, 8 Ni, Mo, bal. Fe							Valves operating up to 900°C.	Austenitic, heat resistant
5563	Bedel INO 31	M-455	C, 14 Cr, 15 Ni, W, Mo, bal Fe							Valves operating up to 900°C.	Austenitic, heat resistant
5564	Bedel INO 32	M-455	C, 15 Cr, 20 Ni, Mo, bal. Fe							Valves operating up to 900°C.	Austenitic, heat resistant
5565	Bedel INO 33	M-455	C, 25 Ni, 10 Cr, W, bal. Fe							Valves operating up to 900°C.	Austenitic, heat resistant
5566	Bedel R.B. 6	M-455	C, 2.5 Cr, 0.5 Ni, bal. Fe							Bearings, dies, punches	Not shock resistant
5567	Bedel R.B. 7	M-455	High C, 1.5 Cr, bal. Fe							Bearings, dies, punches	Not shock resistant
5568	Bedel M.G.B.S.	M-455	C, 5-6 W, Cr, bal. Fe							Magnets	Magnet steel
5569	Bedel M.G.B.A.	M-455	C, Co, bal. Fe							Magnets	Magnet steel
5570	Bedel M.G.B.C.	M-455	C, 35 Co, 8 W, bal. Fe							Magnets	Magnet steel
5571	Bedel I.N.O. 11	M-455	C, 6 Ni, 25 Cr, bal. Fe							Rolled or forged parts, pump and furnace parts, valves	Heat and corrosion resistant. Non-hardenable
5572	Bedel I.N.O. 13	M-455	C, 8 Ni, 20 Cr, bal. Fe							Carburizing boxes, recuperator tubes, salt bath pots	Heat and corrosion resistant. Non-hardenable
5573	Bedel INO 14	M-455	C, 6 Ni, 25 Cr, bal. Fe							Carburizing boxes, recuperator tubes, salt bath pots	Heat and corrosion resistant. Non-hardenable
5574	Bedel INO 15	M-455	C, 6 Ni, 25 Cr, bal. Fe							Carburizing boxes, recuperator tubes, salt bath pots	Heat and corrosion resistant. Non-hardenable
5575	Bedel INO 16	M-455	C, 6 Ni, 25 Cr, Si, bal. Fe							Carburizing boxes, recuperator tubes, salt bath pots	Heat and corrosion resistant. Non-hardenable
5576	Bedel INO 20	M-455	C, 25 Cr, 20 Ni, bal. Fe							Pump, furnace and valve parts, carburizing boxes	Heat and corrosion resistant. Non-hardenable
5577	Bedel INO 21	M-455	C, high Ni, high Cr, bal. Fe							Pump, furnace and valve parts, carburizing boxes	Heat and corrosion resistant. Non-hardenable
5578	Bedel INO 22	M-455	C, 25 Cr, 20 Ni, bal. Fe							Pump, furnace and valve parts, carburizing boxes	Heat and corrosion resistant. Non-hardenable
5579	Bedel INO 23	M-455	C, 20 Cr, 20 Ni, Si, bal. Fe							Pump, furnace and valve parts, carburizing boxes	Heat and corrosion resistant. Non-hardenable
5580	Bedel INO 40	M-455	C, 35 Ni, 15 Cr, bal. Fe							Turbine blading, marine parts	Max. heat and corrosion resistant
5581	Bedel INO 41	M-455	C, 40 Ni, 10 Cr, bal. Fe							Marine parts	Max. heat and corrosion resistant
5582	Bedel INO 50	M-455	C, 15 Cr, 50 Ni, bal. Fe							Carburizing boxes, furnace parts	Max. heat and corrosion resistant
5583	Bedel INO 51	M-455	C, 50 Ni, 15 Cr, bal. Fe							Carburizing boxes, furnace parts	Max. heat and corrosion resistant
5584	Bedel INO 6	M-455	C, 17 Cr, V, bal. Fe							Cutlery, surgical instruments	High heat and corrosion resistant
5585	Bedel BN 23	M-455	C, 25 Ni, Cr, bal. Fe		100000		45			Chemical plant equipment	Non-magnetic. Corrosion and acid resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5586	Bedel BN 33	M–455	C, 33 Ni, Cr, bal. Fe		115000		30			Chemical plant equipment	High acid and corrosion resistant
5587	Silcrome 46 M	M–76	0.25 max. C, 4-6 Cr, 0.50 Mo, bal. Fe	Annealed Heat treated	68000 117000	29000 101000	32 18	70 64	142 262	Machinery parts	Scaling temp.-1000 °F. Iz-67-72
5588	Silcrome RA	M–76	0.12 C, 16 Cr, 1.0 Si, 1.0 Cu, bal. Fe	Annealed Heat treated	80000 110000	40000 65000	35 25	65 55	160 241	Corrosion resisting parts	Corrosion resistant. Scaling temp.-1500 °F
5589	Silcrome RA-EZ	M–76	0.12 C, 16 Cr, 1.0 Si, 1.0 Cu, bal. Fe							Corrosion resisting screw machine parts	Easy machining Discontinued
5590	B.N.F. Lead Alloy No. 3	M–396	0.15 Cd, 0.4 Sn, bal. Pb							Sheathing of ship cables	
5591	Normalloy	M–394	C, Mn, Cr, V, bal. Fe							Crankshafts	"Vancoram" Normalized alloy steel
5592	Silbereisen No. 6	M–383 M–403	1.7-2.5 Si, 0.4-0.7 Mn, 2.8 max. C, 1-2 Ni, 0.5-1.0 Cr, bal. Fe							Cast iron cylinders, pump bodies, acid resisting castings	
5593	Silbereisen No. 7	M–383 M–403	1.7-2.5 Si, 0.4-0.7 Mn, 2.8 max. C, 1-2 Ni, 0.5-1.0 Cr, bal. Fe							Cast iron cylinders, pump bodies, acid resisting castings	
5594	Migra Iron No. 2	M–383 M–403	1-3 Si, 0.4-0.9 Mn, 3.8-4.1 C, bal. Fe							Pistons and cylinders	
5595	Migra Iron No. 3	M–383 M–403	1-3 Si, 3.8-4.1 C, 1-2 Ni, 0.5-1.0 Cr, 1.0-1.5 Mn, bal. Fe							Pistons and cylinders	
5596	L-IV	M–116	4 Cu, 2 Si, bal. Al	Heat treated	43000	36000	4			Light alloy parts	Same as "Lautal"
5597	Nichrotherm NCT-1	M–72	0.15 C, 15 Ni, 20 Cr, bal. Fe	Untreated	100000 114000	78000 93000	35 25	55 45		Furnace parts, crucibles, autoclaves, recuperators	Heat and corrosion resistant to 1050 °C.
5598	Nichrotherm NCT-3	M–72	0.15 C, 20 Ni, 25 Cr, bal. Fe	Untreated	100000 114000	65000 78000	35 25	55 45		Furnace parts, crucibles, autoclaves, recuperators	Heat and corrosion resistant to 1200 °C.
5599	Nichrotherm NCT-6	M–72	0.15 C, 60 Ni, 15 Cr, bal. Fe	Untreated	85000 100000	35000 50000	35 25	55 45		Furnace parts, crucibles, autoclaves, recuperators	Heat and corrosion resistant to 1150 °C.
5600	Nichrotherm NCT-6A	M–72	Fe, Cr, Ni							Furnace parts, crucibles, autoclaves, recuperators	Heat and corrosion resistant to 1150 °C.
5601	Bohler Amutit	M–27	C, alloy, bal. Fe							Stay bolt taps, screw taps, gages, broaches, reamers, milling cutters	
5602	Bohler Autinit N.G.	M–27	C, alloy, bal. Fe							Rifle barrels	Resists rust and heat
5603	Bohler AS-2	M–27	C, Cr, Ni, bal. Fe							Chemical plant equipment, vessels, corrosion resisting parts	Austenitic, corrosion and acid resistant
5604	Bohler AS-4	M–27	C, Cr, Ni, bal. Fe							Valve seats, valve cones and spindles, piston rods, connecting rods, shafts	Austenitic. Corrosion and acid resistant
5605	Bohler AS-8	M–27	C, Cr, Ni, bal. Fe							Valve seats, kitchen utensils, corrosion resisting parts	Austenitic. Corrosion and acid resistant
5606	Bohler Auto Extra N.C.	M–27	0.30 C, 0.75 Cr, 3.5 Ni, bal. Fe							Crankshafts, axles, valves, connecting rods, gears	
5607	Bohler Auto First Quality N.C.	M–27	0.30 C, 0.50 Cr, 1.5 Ni, bal. Fe							Crankshafts, axles, connecting rods, gears	
5608	Bohler Auto MS	M–27	0.5 C, Mn, Si, bal. Fe							Crankshafts, connecting rods, axles, cranks, levers	
5609	Bohler Auto Special PA	M–27	0.35 C, 1.25 Cr, 4.45 Ni, bal. Fe							Crankshafts, gear shafts, axles, steering gear parts	
5610	Bohler Bats	M–27	C, bal. Fe							Bats for threshing machines	
5611	Bohler B-Elite	M–27	C, bal. Fe							Welding wire and electrodes	For electric arc welding
5612	Bohler B-Elite U	M–27	C, bal. Fe							Welding wire and electrodes	For electric arc welding

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5613	Bohler B-Elite 18	M-27	C, bal. Fe							Welding wire and electrodes	For electric arc welding
5614	Bohler BH	M-27	C, bal. Fe							Welding wire and electrodes	For electric arc welding
5615	Bohler BH-Extra	M-27	C, bal. Fe							Welding wire and electrodes	For electric arc welding
5616	Bohler BHW	M-27	C, bal. Fe							Welding wire and electrodes	For electric arc welding
5617	Bohler Blade Steel	M-27	C, bal. Fe							Blades	
5618	Bohler BM	M-27	C, bal. Fe							Welding wire and electrodes	For arc welding
5619	Bohler Boreas	M-27	C, bal. Fe							For drawing plates of steel wire and hard bronze wire	
5620	Bohler Brownie	M-27	C, bal. Fe							Mining drills	For work on medium hard rocks
5621	Bohler Brownie Extra	M-27	C, bal. Fe							Mining drills	For work on hardest rocks
5622	Bohler B-Special	M-27	C, bal. Fe							Welding wire	For gas welding
5623	Bohler BW	M-27	C, bal. Fe							Welding electrodes	For electric arc welding
5624	Bohler BW-VII	M-27	C, bal. Fe							Welding wire	For gas welding
5625	Bohler BW-IX	M-27	C, bal. Fe							Welding wire	For gas welding
5626	Bohler CC	M-27	C, Co, W, Cr, V, bal. Fe							Super high speed cutters	High speed steel
5627	Bohler CC Special	M-27	0.65 C, 4.1 Cr, 18.5 W, 1.35 V, 18.5 Co, 0.8 Mo, bal. Fe							Super high speed cutters	High speed steel
5628	Bohler Celist	M-27	C, Co, W, Cr, bal. Fe							Cutting tools	Does not require heat treatment for hardening
5629	Bohler Chronos	M-27	C, alloy, bal. Fe							Rails, crusher mantles, cams, tappets, guide rails, gravel mills	Abrasion resistant
5630	Bohler COH	M-27	C, Co, bal. Fe							Magnets	Magnetic steel
5631	Bohler COK	M-27	0.95 C, 0.30 Mn, 8.5 Cr, 15.5 Co, 1.0 Mo, bal. Fe							Magnets, regulators for furnace installations	Magnet steel
5632	Bohler COM	M-27	C, Co, bal. Fe							Half ring and horseshoe magnets	Magnet steel
5633	Bohler Crucible	M-27	C, bal. Fe							Tools	Crucible quality steel
5634	Bohler CS	M-27	C, Cr, Si, bal. Fe							Springs operating at high temperatures	Resists high temperatures
5635	Bohler ENA	M-27	0.16 max. C, 1.5 Ni, bal. Fe							Gears, cams, cam shafts	Case-hardening steel
5636	Bohler ES	M-27	0.17 max. C, Mn, Si, bal. Fe							Gears, cams, cam shafts	Case-hardening steel
5637	Bohler ESC	M-27	0.15 max. C, 0.75 Cr, bal. Fe							Gears, cams, cam shafts	Case-hardening steel
5638	Bohler ES Special	M-27	0.16 max. C, 0.70 Cr, 3.5 Ni, bal. Fe							Gears, chain wheels, cam shafts, bolts	Case-hardening steel
5639	Bohler Extra H	M-27	C, bal. Fe							Nail machine dies and cutters, cutting dies, coining dies	
5640	Bohler Extra Hard	M-27	C, alloy, bal. Fe							Cutting tools, razors, surgical instruments, chisels, drawing mandrels	
5641	Bohler Extra K	M-27	C, alloy, bal. Fe							Cold rolls, press discs, rams, cams	
5642	Bohler Extra Middling Hard	M-27	C, bal. Fe							Milling cutters, file cutters, stone picks, knives, cams	
5643	Bohler Extra Tough	M-27	1.12 C, 0.25 Si, 0.23 max. Mn, bal. Fe							Taps, threading dies, reamers, mint dies	
5644	Bohler FM	M-27	0.15 C, 0.2 Si, 1.5 Cr, 0.4 Mn, bal. Fe							Staybolt taps, screw dies, gages, milling cutters, reamers, drills, rulers	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5645	Bohler GA	M-27	C, bal. Fe							Welding wire or electrodes	For gas or electric welding
5646	Bohler GNM	M-27	C, alloy, bal. Fe							Drop forging dies, swages	
5647	Bohler GSI	M-27	C, alloy, bal. Fe							Drop forging dies for soft materials	
5648	Bohler Hard Core	M-27	C, bal. Fe							*Core insertions*	
5649	Bohler Invar Steel	M-27	C, alloy, bal. Fe							Component parts of barometers and optical instruments	Low coef. exp.
5650	Bohler Jar Steel	M-27	C, bal. Fe							Machinery parts	
5651	Bohler K-3	M-27	C, Cr, bal. Fe							Magnets	Magnet steel
5652	Bohler K-3 S	M-27	C, alloy, bal. Fe							Plug and ring gages, rolls for rubbers	
5653	Bohler K-100	M-27	C, alloy, bal. Fe							Balls and rollers for ball races and ball bearings	
5654	Bohler K-100/1	M-27	C, alloy, bal. Fe							Mint and medal dies, press dies, rolls	
5655	Bohler K-100 S	M-27	C, alloy, bal. Fe							Gears, cams, rams, slides, spindles	
5656	Bohler KK	M-27	C, alloy, bal. Fe							Ball bearings and balls, ball races	
5657	Bohler Knife Steel	M-27	C, bal. Fe							Knives	
5658	Bohler KP	M-27	C, alloy, bal. Fe							High duty cold drawing and pressing dies, bending punches, drawing mandrels	
5659	Bohler KW-10	M-27	C, high Cr, bal. Fe							Turbine blades, valve seats, pumps, shafts, piston rods, connecting rods	Rust and abrasion resisting
5660	Bohler KW-60	M-27	C, high Cr, bal. Fe							Knives, scissors, surgical instruments, gages, calipers, valve seats, piston rods	Rust and abrasion resisting
5661	Bohler Lightning	M-27	C, alloy, bal. Fe							Rifle barrels	
5662	Bohler Martin Steel	M-27	0.05-1.1 C, bal. Fe							General	
5663	Bohler ME	M-27	0.70 C, 0.25 max. Si, 0.34 Mn, 5.8 W, bal. Fe							Magnets	Magnet steel
5664	Bohler ME-6	M-27	C, W, bal. Fe							Meter magnets	Magnet steel
5665	Bohler ML	M-27	C, alloy, bal. Fe							Rifle barrels	
5666	Bohler Middling Hard	M-27	1.15 C, 0.25 max. Si, 0.23 Mn, bal. Fe							Turning tools, milling cutters, crown hammers, knives, mint dies	
5667	Bohler Molette	M-27	C, bal. Fe							For female and embossed relief molettes	Case-hardening steel
5668	Bohler MST	M-27	C, alloy, bal. Fe							Stay bolt taps, broaches, reamers, gages, cutting dies	
5669	Bohler NBS	M-27	C, alloy, bal. Fe							Table ware dies, *hollow* stamping dies, swaging dies	Air hardening
5670	Bohler NBSN	M-27	C, alloy, bal. Fe							Table ware dies, *hollow* stamping dies, swaging dies	Oil hardening
5671	Bohler Needle Die Steel	M-27	C, alloy, bal. Fe							Dies	
5672	Bohler Ni	M-27	0.25 C, 1.55 Ni, bal. Fe							Shafts, axles, connecting rods, cranks, levers	
5673	Bohler NW	M-27	C, alloy, bal. Fe							Drop forging dies, hot press swages, clipping tools, heavy anvil blocks	Air hardening
5674	Bohler Panther	M-27	C, bal. Fe							General	
5675	Bohler PPA	M-27	0.16 C, 1.0 Cr, 4.45 Ni, bal. Fe							Gears, chain wheels, cams, cam shafts, bolts	Case-hardening steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5676	Bohler Remanenceless Steel	M-27	C, bal. Fe							Electrical equipment	
5677	Bohler Special KN	M-27	C, alloy, bal. Fe							Cutting dies, cold shears, roll punches, anvil plates, beater rolls, pressure tools	Cold and hot working steel
5678	Bohler Special KV	M-27	C, Cr, V, bal. Fe							Wire drawing plates	
5679	Bohler Special W-43	M-27	C, alloy, bal. Fe							Rifle barrels	
5680	Bohler SSW	M-27	C, W, bal. Fe								
5681	Bohler Super Rapid Extra	M-27	0.72 C, 4.1 Cr, 18.5 W, 1.2 V, bal. Fe							High speed cutters	High speed steel
5682	Bohler Super Rapid Extra 214	M-27	0.70 C, 4.0 Cr, 19.5 W, 1.55 V, 2.4 Co, bal. Fe							High speed cutters	High speed steel
5683	Bohler Super Rapid Extra HV	M-27	C, W, Cr, V, bal. Fe							Milling cutters	Abrasive resistant, high speed steel
5684	Bohler Super Rapid Extra 500	M-27	0.72 C, 3.9 Cr, 17.5 W, 1.25 V, 4.7 Mo, 0.5 Mn, bal. Fe							High speed cutters	High speed steel
5685	Bohler Tough	M-27	0.85 C, 0.25 max. Si, 0.30 Mn, bal. Fe							Cold chisels, hammers, shear blades, punches, press dies, knives	
5686	Bohler TW	M-27	C, alloy, bal. Fe							Twist drills, taps, files	
5687	Bohler TWV	M-27	C, alloy, bal. Fe							Circular knives, drawing rings, cartridge shell dies, piercing punches	Water hardening
5688	Bohler TWW	M-27	C, alloy, bal. Fe							Milling cutters, saw blades	
5689	Bohler US	M-27	C, alloy, bal. Fe							Die casting dies	
5690	Bohler WB	M-27	C, alloy, bal. Fe							Drop forging dies	
5691	Bohler WON	M-27	C, alloy, bal. Fe							Stamping tools, mint and medal dies, cold beater tools, special dies	Water hardening
5692	Bohler WPD	M-27	C, alloy, bal. Fe							Hot press tools, press jaws, hot rolling mandrels, hollow punches	
5693	Bohler WPZ	M-27	C, alloy, bal. Fe							Extrusion dies	
5694	Bohler Z-II	M-27	C, bal. Fe							Wire drawing cast steel plates	
5695	Bohler ZCS	M-27	0.5 C, 0.9 Si, 1.15 Cr, bal. Fe							Crankshafts, gears, connecting rods	Oil hardening
5696	Bohler ZE	M-27	C, bal. Fe							Wire drawing cast steel plates	
5697	Bohler ZNM	M-27	C, alloy, bal. Fe							Gears	Air or oil hardening
5698	Bohler 2 M	M-27	C, Mn, bal. Fe							Leaf springs	
5699	Bohler No. 2 Si	M-27	C, Si, bal. Fe							Valves, springs	Good resistance to scaling
5700	Bohler No. 3 Nw	M-27	0.14 C, 3.0 Ni, bal. Fe							Gears, cams, cam shafts	Case-hardening steel
5701	Bohler No. 5 Nm	M-27	0.25 C, 5.0 Ni, bal. Fe							Auto parts, crankshafts	
5702	Bohler No. 36 N	M-27	C, alloy, bal. Fe							Component parts of barometers and optical instruments	Low coef. exp.
5703	Bohler No. 90	M-27	0.90 C, 0.20 max. Si, 0.30 Mn, bal. Fe							Cold heading and forming dies for heavy duty	
5704	Bohler No. 701	M-27	C, alloy, bal. Fe							Exhaust valves	Resists scaling up to 900 °C.
5705	Bohler No. 711	M-27	50 Fe, 50 other metals							For hard facing work, well drill bits, cutting tools	Does not require heat treatment for hardening
5706	Nichrotherm NCT-8	M-72	0.15 C, 80 Ni, 17 Cr, bal. Fe	Untreated	85000 100000	35000 50000	25 35	45 55		Furnace parts, crucibles, autoclaves, recuperators	Heat and corrosion resistant. Austenitic, max. temp.-1300 °C.

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5707	Ferrotherm FF 6	M-72	0.15 C, 6 Cr, bal. Fe	Heat treated	78000	50000	18	50		Furnace parts, crucibles, autoclaves, recuperators	Heat and corrosion resistant to 800°C.
5708	Ferrotherm FF 18	M-72	0.15 C, 18 Cr, bal. Fe	Annealed	78000	50000	12	12		Furnace parts, crucibles, autoclaves, recuperators	Heat and corrosion resistant to 1000°C.
5709	Ferrotherm FF 30	M-72	0.15 C, 30 Cr, bal. Fe	Annealed	78000	58000	12	8		Furnace parts, crucibles, autoclaves, recuperators	Heat and corrosion resistant to 1200°C.
5710	Ferrotherm FF 112	M-72	1.0 C, 12 Cr, bal. Fe							Furnace parts, crucibles, autoclaves, recuperators	Heat and corrosion resistant to 850°C.
5711	Ferrotherm FF 118	M-72	1.0 C, 18 Cr, bal. Fe							Furnace parts, crucibles, autoclaves, recuperators	Heat and corrosion resistant to 1000°C.
5712	Ferrotherm FF 128	M-72	1.0 C, 28 Cr, bal. Fe							Furnace parts, crucibles, autoclaves, recuperators	Heat and corrosion resistant to 1100°C.
5713	Ferrotherm FF 228	M-72	2.0 C, 28 Cr, bal. Fe							Furnace parts, crucibles, autoclaves, recuperators	Heat and corrosion resistant to 1100°C.
5714	Krupp-V2A-Extra	M-72	0.10 C, 8 Ni, 18 Cr, bal. Fe	Heat treated	83000	29000	45	55		Furnace parts, crucibles, autoclaves, recuperators, chemical equipment	Austenitic, heat and corrosion resistant to 800°C.
5715	Inoxyda Bronze		1-9 Al, 82-89 Cu, 0-1 Zn							Steam fittings	Corrosion resistant
5716	Eutectal	M-620	1.5 Cu, 0.8 Mn, 1.58 MgSi, 0.35 Ti, 0.25 Si, bal. Al	Heat treated	38000		4		98	Light alloy parts	
5717	Constructal 2	M-116	1.2 Cu, 0.26 Fe, 0.5 Mn, 0.92 Mg, 0.56 Si, 0.5 Ti, bal. Al		54000 60000		18 25		95 115	Light alloy forgings	
5718	Constructal 8	M-116	7 Zn, 2.5 Mg, 0.2 Si, 1 Mn, bal. Al		67000 74000		15 18		120 140	Light alloy structural parts	
5719	Constructal 87		0.28 Fe, 1.24 Mn, 6.87 Zn, 1.62 Mg, 0.75 Si, bal. Al							Light alloy structural parts	
5720	Clamers Alloy		25-5 Ni, 5-25 Co, bal. Fe							Electrical machinery	Heat and corrosion resistant
5721	Bull's Metal	M-719	56.5 Cu, 1.2 Fe, 0.8 Sn, 41.2 Zn							Marine hardware, propellers	Corrosion resistant
5722	Bull Alloy		18.3 Sb, 0.6 Fe, 80.9 Pb							Bearings	
5723	Borcher's "A"		65-68 Ni, 30 Cr, 0.5-5.0 Au, 0.25-1.5 Ag							Resistances, heat and corrosion resistant parts	Heat and corrosion resistant
5724	Borcher's "B"		52-68 Ni, 30 Cr, 0.15-1.5 Ag, bal. Au							Heat and corrosion resistant parts	Heat and corrosion resistant
5725	Baudrins Metal No. 2		0.5 Al, 75 Cu, 1.5 Fe, 16 Ni, 2.75 Sn, 2.25 Zn, 2 Co							Ornamental and corrosion resistant parts	Corrosion resistant
5726	Baudrins Metal No. 1		72 Cu, 16.6 Ni, 2.5 Sn, 7.1 Zn, 1.8 Co							Ornamental and corrosion resistant parts	Corrosion resistant
5727	Ambro		2 Al, 76 Cu, 22 Zn							Condenser tubes	
5728	Aeterna		60.4 Cu, 0.2 Pb, 0.1 Mn, 0.3 Sn, 39 Zn							Marine hardware	
5729	Aalener Zinc Alloy		3 Sb, 3.5 Cu, 21.6 Pb, 20.5 Sn, 51.4 Zn							Solder, bearings	
5730	Caro Solid Drawn Tube		91.6 Cu, 8.5 Sn, 0.19 P							Tubes	Corrosion resistant
5731	B.B.D.C. Standard Alloy		88.5 Cu, 0.25 Pb, 1 Ni, 10 Sn, 0.25 P							Gears, bearings	
5732	Ajax Nickalloy Bronze, Grade 23	M-123	61 Cu, 13 Zn, 23 Ni, 3 Al	Chill cast	80000	60000	5		130	Automobile trimming, typewriter parts, milking machine parts	Corrosion resistant
5733	Aphit		70 Cu, 20 Ni, 5.5 Zn, 4.5 Cd							Condenser tubes, chemical equipment	Corrosion resistant
5734	Renault Alloy		88 Al, 2 Cu, 10 Zn							Light alloy parts	
5735	Duranic	French	96 Al, 2 Mn, 2 Ni		23000 26000		1.0 2.5		60 70	Light alloy parts	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5736	Cothias Alloy		93 Al, 6.5 Cu, 0.5 Zn							Light weight castings	
5737	Akron		63 Cu, 1 Sn, 36 Zn							Fittings, hardware	Corrosion resistant
5738	A.D.R.	M-104	42 Ni, bal. Fe							Used in construction of rotary converters	Low coef. of expansion
5739	Carobronze	M-251	91.2 Cu, 8.5 Sn, 0.3 P		60000 95000		50 20		90 190	Solid cold drawn tubes, bushes for highly stressed bearings	Resists corrosion
5740	Double Six Super Die Steel	M-210	C, alloys, bal. Fe							Dies, punches, gages, mandrels, press tools, bushings, cutters	
5741	Egalite Aluminum Alloy		Al alloy							Light alloy parts	Subject to special process while in molten state
5742	Elverite "B"	M-447	C, Ni, Cr, bal. Fe							Wear resisting cast parts in pulverizers, crushers, stamp mills, conveyors	Chilled cast iron
5743	Emperor Chrome Nickel Alloy	M-107	C, high Ni, Cr, bal. Fe							Furnace parts	Heat resistant
5744	Government Bronze (Scovill No. 99 Alloy)	M-102	95 Cu, 5 Sn	Soft Hard	50000 95000	22000 94000	58 5			Springs, switches	Rockwell "B"-32-93
5745	Handy & Harman Coin Silver	M-63	90 Ag, 10 Cu							Coins	
5746	Handy & Harman Silver Solder "E.T.C."	M-63	50 Ag, 15.5 Cu, 16.5 Zn, 18 Cd							Silver solder, brazing	Superseded by "Easy- Flo"
5747	Hebonite		C, alloy, bal. Fe							Heat resisting parts	Heat resistant
5748	Allegheny 22	M-1 M-240	0.08-0.20 C, 19-22 Cr, 9-12 Ni, bal. Fe							Digesters, pipes, tanks, agitators, autoclaves, strainers	High corrosion resistance
5749	Houghton's Shaving Packing		5.97 Sn, trace Cu, 94.02 Pb							Piston rod packing for steam engines	
5750	Improvite	M-346	66-68 Ni, 3-4 Si, 28-31 Cu							For introducing Ni and Cu into cast iron	
5751	Magnalium Alloy No. 1		95.5 Al, 1.75 Mg, 1.75 Cu, 1.0 Ni							Light alloy parts	Cast alloy
5752	Magnalium Alloy No. 2		95.5 Al, 1.75 Mg, 1.75 Cu, 1.0 Pb							Light alloy parts	Cast alloy
5753	S-M Alloy	M-244	Al alloy							Al welding rod for welding and soldering of Al	
5754	F.C.C. Oil Hardening	M-76	0.85 C, 1.0-1.25 Mn, 0.4-0.6 Cr, 0.4-0.6 W, 0.2-0.3 V, bal. Fe	Oil harden						Cams, dies, tools	Oil hardening
5755	Nitralloy "L"	M-115	0.7 C, 0.5 Mn, 1 Al, 1.25 Cr, 0.75 Mo, 0.15 V, 1.0 W, bal. Fe							Hot working dies	Nitriding steel Nitride at 950-975° F Discontinued
5756	Rely "YZ"	M-420	91.5 Sn, 3.5 Sb, 4.3 Cu, 0.5 Ni							Bearings	
5757	NI-HARD	M-460	C, 4.5 Ni, 1.5 Cr, 1.5 Mn, bal. Fe	Chilled					600 750	Abrasion resisting applications, crushers, rolls, feeder vanes	Cast iron. Abrasion resisting, formerly "Super Manga Iron"
5758	Krokoloy	M-157	C-Cr-Co, bal. Fe							Dies for forming, blanking, drawing and coining, shear blades	Cast to shape. Air hardening
5759	Q-Alloy, Grade A +	M-59	66-68 Ni, 19-21 Cr, bal. Fe	Cast	80000 90000	50000 45000				Carburizing boxes, retorts, solution pots, furnace parts	Heat resistant to 2200° F.
5760	Q-Alloy X-7	M-59	24-26 Cr, 11-13 Ni, bal. Fe	Cast	70000	40000	16		207	Furnace parts subjected to sulfur gases. Tube supports, coke oven, walking beam parts	Heat resistant
5761	Q-Alloy CN-1 Mo	M-59	24-26 Cr, 11-13 Ni, 1.5-3.0 Mo, bal. Fe							Pulp industry exposed to hot sulfite liquors and bleaches	Corrosion and heat resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5762	N.C.M.	M-499	0.1-0.2 C, 4.0-4.5 Ni, 1.25-1.5 Cr, 0.15-0.30 Mo, bal. Fe	Heat treated	200000	165000	15	47	418	Case-hardened parts for abrasion resistance	Case-hardening steel. Iz-26
5763	Ryanite	M-464	C-Cr-Ni-bal. Fe	Cast	38000				225	Dies, brake drums, dies for sheet metal fabrication	Cast iron
					40000				250		
				Heat treated	60000				425		
					70000				450		
5764	ST-52	Ger.	0.12-0.15 C, 0.5-1.1 Si, 0.75-1.6 Mn, 0.25-1.0 Cu, 0-0.6 Cr, 0-0.25 Mo, bal. Fe		89600	65000	24			Structural parts	Excellent for welding
5765	Sandvik 8	M-101	0.40 C, bal. Fe	Normalized	82000	57000	32	50	170	Construction parts	
5766	B.S.I. (B.S.S.)	M-504	All specifications								British Standards Specifications
5767	Wompco	M-463	0.90 combined C, 2.90 total C, 0.115 S, 0.74 Mn, 2.01 Si, bal. Fe		39600		0	0	213	Cast iron castings, cylinders, gears	Cast iron. S.S.-55000
					50000		0	0	230		
5768	U.S.S. Manganese-Nickel-Copper	M-604	.25 max. C., 1.5 max. Mn, .5-1.0 Ni, .25-.50 Cu, bal. Fe	Rolled	70000	50000	22			Road and agricultural equipment	
5769	U.S.S. Lynore	M-604	.20 Cu, Cr, Ni, bal. Fe							Structural parts	Sheets
5770	U.S.S. Vitrenamel	M-604	Fe alloy							Enameling purposes	Sheets
5771	Kunial Alloys	M-282	Cu-Zn alloys							Engineering applications	Can be heat treated
5772	Duronze II	M-141	3 Si, bal. Cu	Sand cast	50000		40	50		Pole line hardware, marine hardware, water storage tanks, chemical vats, range boilers	Strong, hot forging alloy. Corrosion resistant
				Annealed	70000		55	65			
5773	Duronze III	M-141	2 Si, 7 Al, bal. Cu	Forged	90000					Boat shafting, pump rods, gears, for forgings, pinions	Corrosion resistant
				Annealed	85000		20				
5774	Cupaloy	M-118	Cu-Cr, alloy	Hardened	60000	5500	17	60	140	Commutators, slip rings	High conductivity
5775	Timken 4-6 Chrome-Molybdenum	M-376	0.15 C, max. 0.50 Mn, 0.50 Si, 0.4-0.6 Mo, bal. Fe, 4.0-6.0 Cr	At 850°F.	66600	26000	39.0	80.4		Still tubes, oil refinery tubing	Case-hardening steel
				At 1400°F.	13300	7250	65.0	95.9			Resists oil corrosion
5776	Timken 17-22	M-376	0.45 C, 0.45 Mn, 1.25 Cr, 0.75 Si, 0.90 W, 0.30 V, bal. Fe	At 70°F.	74400	40000	30	73	149	Forgings, high temp. bolts,	Air hardening
				Normalized	140100	127800	20.0	54.7	285		
5777	Timken DM-15	M-376	0.15 C, 0.45 Mn, 1.0 Si, 1.25 Cr, 0.50 Mo, bal. Fe	At 850°F.	66500	35200	36.5	72.7		Tubes, case-hardened parts oil refinery tubes	Case-hardened steel High creep strength
				At 1400°F.	13800	7000	72.0	98.5			
5778	Timken DM-45	M-376	0.45 C, 0.55 Mn, 1.25 Cr, 0.50 Mo, 0.65 Si, bal. Fe	Normalized	146500	108500	17.5	47.4	285	Gears, forgings, high temp. bolts	Air hardening
5779	Timken Fine Grained Carbon-Molybdenum	M-376	0.15 C, 0.45 Mn, 0.50 Mo, bal. Fe	At 850°F.	64000	32500	37.0	62.7		Oil refinery tubing, still tubes	Case-hardening steel Ch.-40-64
				At 1400°F.	11700	5900	82.5	89.0			
5780	Timken MM-9	M-376	0.15 max. C, 1.1-1.4 Mn, 0.15-0.30 Si, 0.2-0.3 Mo, bal. Fe	At 850°F.	72100	51200	36.0	71.8		Gears, pinions, shafts, high temperature steam service	Case-hardening steel High strength
				At 1400°F.	13400	6100	80.5	86.5			
5781	Timken SAE-4615	M-376	0.10-0.20 C, 0.3-0.6 Mn, 0.15-0.30 Si, 1.5-2.0 Ni, 0.20-0.30 Mo, bal. Fe	At 850°F.	72400	52500	37.5	70.0		Gears, pinions, shafts, high temperature steam service	Case-hardening steel Corrosion resistant
				At 1200°F.	24800	12000	59.3	79.9			
5782	Isteg Steel	M-471	C, bal. Fe							Reinforcing steel	Mild steel, prestressed
5783	Union Special Carburizing Steel	M-397	0.10-0.20 C, 0.6-0.9 Mn, 0.2-0.3 Si, bal. Fe	Turned	75000	55000	25	55	170	Bearings, gears, pinions, shafts, piston pins	Case-hardening steel
				Cold drawn	90000	75000	15	50	187		
5784	Anka Steel	M-472	0.2 C, 0.6 Si, 0.6 Mn, 6-10 Ni, 16-20 Cr, bal. Fe							Valves, tanks, chemical equipment, domestic fittings and utensils, decorations	Austenitic steel. Stainless
5785	Timken CNM-40	M-376	0.40 C, 0.65 Mn, 1.75 Ni, 0.60 Cr, 0.35 Mo, bal. Fe	Oil quenched	145200	135000	20	58	285	Gears, pinions, general forgings, high temp. bolts	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5786	0.30-0.40 Carbon Union Hymo	M-397	0.30-0.40 C, 1.35-1.65 Mn, bal. Fe	Water quenched	195000 103000	178000 75000	6 24	28 65	400 200	Gears, shafts	Machining steel
5787	Hylastic	M-473	0.30 C, 1.6 Mn, 0.10 V, 0.4 Si, bal. Fe	Normalized	100000 90000	76000 60000	28 25	58 50	180	Railroad and structural work where high physicals are required	Iz-40
5788	D.G. Alloy	M-2a	88 Cu, 7.5 Sn, 2.5 Ni, 2 Zn				25 15		70 80	Shafts, staybolts, bearings, stuffing boxes	
5789	A.R. Alloy	M-2a	Cu-Sn-Pb				10 5		50 60	Bearings for cold rolling mills, landing gears for airplanes	
5790	Cecolloy A	M-474	3.0 T.C., 0.5 Mo, 0.60 Ni, bal. Fe		40000 60000					Anvils, frames for forges, forming dies, steam cylinder liners, large valves	Series of synthetic alloys. Made in air furnaces.
5791	Chromaloid	M-538	Cr coated zinc							Plumbing, fixtures, hardware	Bonded Zn base
5792	Acimet C-1	M-480	90 Cu, 10 Al, 0.06 max. C	Heat treated	70000	28000	20	20	100	For acetic acid equipment castings, pumps, impeller shafts for rubber pumps	
5793	Acimet C-2	M-480	85 Cu, 5 Sn, 5 Pb, 5 Zn		30000 33000	18000 20000	20	20	50 60	Fittings and pumps for brewery, distilleries, alcohol plants, etc.	
5794	Acimet C-3	M-480	60 Cu, 2 Pb, 38 Zn		50000 75000	18000	40			For close grained forged oil fittings	
5795	Acimet C-4	M-480	58 Cu, 0.5 Al, 0.5 Sn, 39 Zn, 0.75 max. Fe, 0.75 max. Mn		70000 75000	35000	20	20	100 110	Impeller shaft and gland fittings for rubber and plastic pumps for handling HCl	
5796	Acimet Hard Lead Alloy	M-480	94.5-95 Pb, 4.5-5.5 Sb		2800	1600	75	90		Valves, pumps, fittings, castings handling corrosive chemicals	M.P.-495 °F.
5797	Alcoa 52S	M-4	2.5 Mg, 0.25 Cr, bal. Al	Soft Hard	29000 41000	14000 35000	25 7		45 85	Camera cases, deck housings, marine applications, gasoline tanks	Resists corrosion as pure Al
5798	Allegheny Metal "A"	M-1	17-19 Cr, 7-9 Ni, 0.11 max. C, bal. Fe	Annealed	75000		50	60	130	Chemical engineering equipment	Stainless, Austenitic
5799	Allegheny Metal "A-Mo"	M-1	17-19 Cr, 7-9 Ni, 2-4 Mo, 0.11 max. C, bal. Fe	Annealed	85000		50	60	145	Chemical engineering equipment	Stainless
5800	Allegheny Metal "A-Ti"	M-1	17-19 Cr, 7-9 Ni, 0.2 max. C, 1.0 Ti, bal. Fe	Annealed	75000		50	60	130	Chemical engineering equipment. High temp. service	Stainless, Austenitic Range 800-1500 °F.
5801	Allegheny Metal "B"	M-1	18-20 Cr, 8-10 Ni, 0.08-0.20 C, bal. Fe	Annealed	80000		50	60	135	Chemical engineering equipment	Stainless, Austenitic
5802	Allegheny Metal "B-Ti"	M-1	18-20 Cr, 8-10 Ni, 0.2 max. C, 1.0 Ti, bal. Fe	Annealed	75000		50	60	130	Chemical engineering equipment. High temp. service	Stainless, Austenitic
5803	Allegheny Metal "C"	M-1	17-19 Cr, 7-9 Ni, 0.08-0.20 C, bal. Fe	Annealed	80000		50	60	135	Chemical engineering equipment	Stainless
5804	Allegheny Ohmaloy	M-1	12-14 Cr, 0.5 max. Ni, 0.12 max. C, 4-4.5 Al, bal. Fe	Annealed	85000		30	60	185	Chemical engineering equipment. Furnace resistors	Corrosion resistant
5805	Allegheny 20-10	M-1	C, 20 Cr, 10 Ni, bal. Fe							Applications requiring max. resistance to corrosion coupled with faculty of fabrication	Corrosion resistant, stainless
5806	Allegheny 22	M-1	19-22 Cr, 9-12 Ni, 0.08-0.20 C, bal. Fe	Annealed	80000		50	60	140	Chemical engineering equipment, sulfite paper industry	Stainless and corrosion resistant
5807	Allegheny 22 Sp	M-1	19-22 Cr, 9-12 Ni, 0.11 max. C, bal. Fe	Annealed	75000		50	60	135	Chemical engineering equipment	Stainless and corrosion resistant
5808	Allegheny 25-20	M-1	24-26 Cr, 19-21 Ni, 0.25 max. C, bal. Fe	Annealed	85000		50	60	150	Chemical engineering equipment, furnace parts	Stainless and corrosion resistant
5809	Allegheny 33 FM	M-1	12-15 Cr, 0.12 max. C, 0.4 max. S, bal. Fe	Annealed	73000		35	75	150	Chemical engineering equipment	Corrosion resistant Free machining

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5810	Allegheny 33 N.H. Non-Hardening	M-1	11.5-13.5 Cr, 0.5 max. Ni, 0.08 max. C, 0.1-0.25 Al, bal. Fe	Annealed	70000	39000	30	68	143	Chemical engineering equipment	Corrosion resistant
5811	Allegheny 33 Turbine	M-1	11.5-13 Cr, 0.12 max. C, bal. Fe	Heat treated	100000		25	70	200	Turbine blades, chemical engineering equipment	Corrosion resistant Iz-60 min.
5812	Allegheny 33 W	M-1	12-15 Cr, 0.12 max. C, 2.5-3.5 W, bal. Fe	Annealed	87000	64000	29	64	170	Chemical engineering equipment. High temp. service	Corrosion resistant
5813	Allegheny 66 W	M-1	15-18 Cr, 0.12 max. C, 2.5-3.5 W, bal. Fe	Annealed	80000	50000	26	50	170	Chemical engineering equipment. High temp. service	Corrosion resistant
5814	Allegheny 67	M-1	18-23 Cr, 0.35 max. C, bal. Fe	Annealed	82000	52000	25	55	163	Chemical engineering equipment	Corrosion resistant
5815	Allegheny Metal FM Free Machining	M-1	17-19 Cr, 7-9 Ni, 0.08-0.20 C, 0.30 S, bal. Fe	Annealed	75000	25000	50	60	130	Chemical engineering equipment	Corrosion resistant, Free machining
5816	Alpax	M-75	10-13.5 Si, bal. Fe	Sand cast	24000	9000	6-8		55	Light corrosion resisting castings	
				Chill cast	30500	12500	10-12		65		
5817	Alpax Alpha	M-75	10-13.5 Si, 1.2 max. Mg + Mn, bal. Al	Sand cast	22500	9000	2-4		64	Light corrosion resisting castings	
				Chill cast			3-5		70		
5818	Alpax Beta	M-75	10-13.5 Si, 1.2 max. Mg + Mn, bal. Al	Sand cast	24000	16000	2-3		75	Light corrosion resisting castings	Precipitation Treat.
				Chill cast	34000	20000	2-4		85		
5819	Alpax Gamma	M-75	10-13.5 Si, 1.2 max. Mg + Mn, bal. Al	Sand cast	38000	32000	1-2		95	Light corrosion resisting castings	Solution and precipitation treatment
				Chill cast	36000		1-3		100		
5820	Aluminum AW-15	M-493	1.5 Mn, bal. Al	Hard worked	37000		3		59	For deep drawing, stamping and pressing	Weldable. Corrosion resistant
				Annealed	17000		27		32		
5821	Ampco No. 12	M-13	88.2 Cu, 8.6 Al, 2.9 Fe, 0.30 special agents		55000	22000	22	22	115	Bushings, machine parts	Corrosion resistant
					65000	27000	27	27	121		
5822	Ampco No. 16	M-13	86.2 Cu, 10.2 Al, 3.3 Fe, 0.30 special agents		70000	32000	18	16	137	Bushings, gears, machine parts, trolley wheels, trolley shoes	Corrosion and shock resistant
					80000	37000	22	20	149		
5823	Ampco No. 18	M-13	84.6 Cu, 11.3 Al, 3.7 Fe, 0.4 special agents		77000	37000	10	6	167	Acid equipment, gears, worm wheels, trolley wheels, trolley shoes	Corrosion and shock resistant
					85000	42000	14	10	179		
5824	Ampco No. 20	M-13	83.13 Cu, 12.4 Al, 4.07 Fe, 0.4 special agents		83000	40000	4		229	Cams, rollers, safety tools, welding jaws	Corrosion resistant
					90000	43000	6		241		
5825	Ampco No. 21	M-13	82.34 Cu, 13.02 Al, 4.14 Fe, 0.5 special agents		88000	42000	3		285	Forming dies, slides, gears, valves, bushings	Corrosion resistant
					95000	44000	5		302		
5826	Ampco No. 22	M-13	81.67 Cu, 13.42 Al, 4.41 Fe, 0.5 special agents		93000	42000	1		321	Forming and drawing dies for stainless steel	Corrosion resistant
					100000	45000	4		341		
5827	Amsco F-6	M-9	G, 12-15 Cr, 58-64 Ni, bal. Fe							Furnace parts, heat treating boxes, retorts	Corrosion and heat resistant
5828	Angel	M-485	C, alloy, bal. Fe							High speed tools	High speed steel
5829	Anti-Acid Metal	M-346	75 Cu, 10 Sn, 15 Pb							Chemical apparatus	Acid resistant
5830	Archangel	M-485	C, alloy, bal. Fe							High speed tools	High speed steel
5831	Ardoloy	M-306	C, W, Co, Tungsten carbide							Tools, cutting tools, dies	Same as "Carboloy"
5832	Armco 17 Stainless Steel	M-10	.12 max. C, 16-18 Cr, bal. Fe		75000	40000	27			Stainless parts	Stainless and corrosion resistant
5833	Armco 18-8 Stainless Steel	M-10	0.12 max. C, 0.50 max. Si, 8-10 Ni, -0.60 Mn, 17-20 Cr, bal. Fe		85000	45000	60			Stainless and corrosion resistant parts	Corrosion resistant
5834	Armco 20-10 Stainless Steel	M-10	C, 20 Cr, 10 Ni, bal. Fe							Stainless and corrosion resistant parts	Stainless and corrosion resistant
5835	Atlas No. 89 A-2	M-13	94 Cu, 5 Al, 1 Fe	Cast	40000	15000	40	50	60	Bushings and machine parts	Obsolete
					50000	20000	30	35	80		
5836	Atlas No. 89 E-1	M-13	88.7 Cu, 10.3 Al, 1 Fe	Cast	70000	40000	18	22	131	Welding jaws, chains, gears, bearings, cams, wear plates	Obsolete
					80000	45000	12	15	143		
5837	Atlas No. 89 E-2	M-13	88.2 Cu, 10.8 Al, 1 Fe	Cast	73000	43000	16	20	160	Welding blocks, wear surfaces, chains	Obsolete
					83000	48000	10	16	180		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5838	Atlas No. 89 E-3	M-13	87.5 Cu, 11.5 Al, 1 Fe	Cast	75000 80000	45000 50000	12 7	14 9	202 229	Welding blocks, wearing surfaces, chains	Obsolete
5839	Atlas No. 89 E-4	M-13	86.6 Cu, 12.4 Al, 1 Fe	Cast	65000 75000	55000 65000	9 3	10 5	255 302	Welding blocks, chains, wearing surfaces	Obsolete
5840	Atlas No. 89 E-5	M-13	86 Cu, 13.8 Al, 1 Fe	Cast	60000 70000	60000 65000	4 2	6 3	302 332	Welding blocks, wearing surfaces, chains	Obsolete
5841	Avesta 249	M-332	0.10 max. C, 16.5-18 Cr, bal. Fe		60000	35000	35		160	Nitric acid industry, heat resisting goods, annealing boxes, recuperators	Corrosion resistant
5842	Avesta 249 H	M-332	0.25 max. C, 16.5-18 Cr, bal. Fe		74000	44000	35		190	Nitric acid industry, tool and machine parts, castings	Corrosion resistant
5843	Avesta 254	M-332	0.10 max. C, 18-19 Cr, 21-22 Ni, bal. Fe		81000	32000	54		160	Heat resisting goods, case-hardening pots, furnace parts	Stainless and corrosion resistant
5844	Aviol	Russ.	0.7 Si, 0.6 Mg, bal. Al	Annealed	17000	700	27		40	Aircraft parts	
5845	B. & W. 441	M-447 M-17	0.25 C, 4-6 Cr, 0.60 Mo, bal. Fe		100000	50000	25	50	200	Oil still headers, castings	Moderate corrosion resistance
5846	B. & W. 900	M-447 M-17	0.25 C, 17-19 Cr, bal. Fe		95000	45000	10	15	200	Castings and pump parts, flanges, nozzles	Corrosion resistant Nitric acid, sea water and mine waters
5847	Bakadie	M-140	Low C, Ni, Mo, bal. Fe	Annealed					130	Bakelite molds, dies	
5848	Bazar	M-135	10 Ni, Zn, bal. Cu							Domestic utensils, ornaments	Nickel Silver
5849	Bethadur 304	M-24	.11 max. C, 17-19 Cr, 7-9.5 Ni, bal. Fe							For welded construction—annealed	Non-magnetic, austenitic, cor. resist.
5850	Bethadur 305	M-24	.08-.20 C, 18-20 Cr, 8-10 Ni, bal. Fe							For welded construction followed by corrective treatment	Non-magnetic, austenitic, cor. resist.
5851	Bethadur 306	M-24	.11 max. C, 18-20 Cr, 8-10 Ni, bal. Fe							For welded construction—unannealed	Non-magnetic, austenitic, cor. resist.
5852	Bethadur 307	M-24	.08-.20 C, 19-22 Cr, 9-12 Ni, bal. Fe							For welded construction followed by corrective treatment	Non-magnetic, austenitic, cor. resist.
5853	Bethadur 308	M-24	.11 max. C, 19-22 Cr, 9-12 Ni, bal. Fe							For welded construction—unannealed	Non-magnetic, austenitic, cor. resist.
5854	Beth-Cu-Loy	M-24	C, bal. Fe, .3 Cu							Sheet metal construction, roofing, siding	Resists atmospheric corrosion
5855	Bethadur 501A	M-24	.23 C, 4-6 Cr, bal. Fe							Chemical engineering equipment, refinery parts	Stainless, heat resist.
5856	Bethlehem 88-80	M-24	C, 2.5 Cr, Mo, bal. Fe							Castings, ball mill liners, crushers, rolls, screen plates	Resists severe abrasion
5857	Big J	M-477	C, alloy, bal. Fe							High speed tools	High speed steel
5858	(Burgess-Parr) No. 85 Alloy	M-29	Special alloy							Chemical apparatus	Acid resistant
5859	Brymill BRM-1	M-478	Low C, bal. Fe							For case-hardened parts	Case-hardening steel
5860	Brymill BRM-2	M-478	Low C, bal. Fe	Annealed	47000		50			Deep pressings	Deep stamping steel
5861	Brymill BRM-4	M-478	0.20-0.25 C, bal. Fe	Drawn	82900		17	45		Shafting, general engineering applications	
5862	Brymill BRM-5	M-478	0.25-0.35 C, bal. Fe	Drawn	89600		15	40		Bolts, studs, jack spindles	
5863	Brymill BRM-6	M-478	0.35-0.45 C, bal. Fe	Drawn	103000		10	35		Axles, shafts, racks, clutch plates, chain links	
5864	Brymill CH-1	M-478	Low C, bal. Fe	Hardened	78000		30	55		For case-hardened parts	Case-hardening steel Iz-60
5865	Brymill CH-2	M-478	Low C, bal. Fe	Hardened	98500		20	50		For case-hardened parts	Free cutting, case-hardening steel. Iz-50
5866	Brymill CH-8	M-478	Low C, 3 Ni, bal. Fe	Hardened	107500		30	50		For case-hardened parts	Case-hardening steel Iz-60
5867	Brymill CH-10	M-478	Low C, bal. Fe	Hardened	98500		30	60		For case-hardened parts	Case-hardening steel Iz-65

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5868	Brymill DH-11	M-478	C, 1 Ni, bal. Fe							Shafts, axles, gears, machinery parts	
5869	Brymill DH-13	M-478	C, 3 Ni, bal. Fe	Heat treated	112000		25	55		Crankshafts, stub axles, valves bolts, pins	Shock resistant Iz-60
5870	Brymill FC-3 (Scooter)	M-478	C, bal. Fe	Drawn	89600		15	45		General purposes	Free-cutting steel
5871	Brymill X	M-478	Low C, bal. Fe	Annealed	45000		55			Stampings and pressings	Deep stamping steel
5872	Calite NCT-3	M-30	C, 25 Cr, 18 Ni, bal. Fe	Cast	78000		10	7		Parts to resist heat and corrosion, furnace parts	Heat and corrosion resistant
5873	Calite S-28	M-30	C, 28 min. Cr, bal. Fe							Corrosion applications	Corrosion resistant Obsolete
5874	Camloy	M-490	25-35 Ni, 10-20 Cr, bal. Fe, (about 50% Fe)		90000 112000		40 35			*Marine* parts, valves and tubing for superheated steam, turbine blading, fittings, tanks	Stainless and heat resisting
5875	Carmet	M-76	Carbides							Tools	Cemented carbides (discontinued)
5876	Carpenter V-Chrome Steel	M-32	0.4-0.6 C, 4-6 Cr, Mo or W optional, bal. Fe							Heat resisting parts	Scale resistance
5877	Centrard	M-494	2.7 C, 1.5-1.75 Cr, 1.5-1.75 Al, bal. Fe	Annealed	45000 56000				250	Cylinder liners, general parts to resist severe abrasion	Nitrogen hardened alloy cast iron
5878	Ceralumin "C"	M-452	1.5-2.5 Cu, 0.5-1.5 Ni, 0.4-1.0 Mg, 0.8-1.5 Fe, bal. Al	Aged	63000	55000	9			Castings (light alloy)	Can be heat treated and aged
5879	Chase Cupro-Nickel, 70-30	M-33	70 Cu, 30 Ni		50000		30			Condenser tubes	Corrosion resistant to alkalis, sea-water
5880	Chase Cupro-Nickel 80-20	M-33	80 Cu, 20 Ni			45000	35			Condenser tubes	Corrosion resistant to dilute *HCl*, sulfates, sulfites, alkalis Discontinued
5881	Chase Nickel Silver 20%	M-33	75 Cu, 5 Zn, 20 Ni		50000		35			Condenser tubes	Corrosion resistant to brine, alkalis, dilute HCl.
5882	Hoskins 670	M-65	12 Ni, 24 Cr, bal. Fe	Cast	85000		30			Cast structures	Resists sulphur
5883	Cochrome	M-503	C, Mo, Cr, bal. Fe							Valve and valve fittings, castings, for 250 lb. steam pressure	Iron castings
5884	Corvic Bronze	M-33	98.5 Cu, 1.5 Sn							Chemical engineering equipment	
5885	Cramp Alloy No. 5	M-309	79.3 Cu, 10 Sn, 10 Pb, 0.70 P		28000 32000	18000 19000	4 8		70	Bearings for medium speeds and light loads, cross-head and mill bearings	
5886	Cramp Alloy No. 7	M-309	75 Cu, 18 Pb, 7 Sn		17000 32000	8000 12000	7 10		45 50	For bearings of low compressive load and where lubrication is poor	Acid corrosion resistant
	Cramp Alloy No. 12	M-309	87:75 Cu, 6.25 Sn, 4 Zn, 1.5 Pb, 0.5 Ni		32000 38000	16000 18000	20 25		40 50	Valves, fittings, cocks, pressure castings	Similar to U.S. Navy Composition "M"
5888	Cramp Alloy No. 13	M-309	83 Cu, 13.5 Sn, 3.5 Zn		23000 32000	13000 15000	4 2		55 65	Bearings for heavy duty as for bridges, trunnions, machines, center disks	Corrosion resistant to weak sulfurous acid
5889	Cramp Alloy No. 45 (Parsons Mn Bronze)	M-309	55-60 Cu, 38-42 Zn, 0.20 max. Pb, 1.5 max. Al, 3.5 max. Mn, 1.5 max. Sn, 0.4-2.0 Fe		65000 75000	33000 38000	30 20		100	Ship propellers, heavy duty bushings, bearings, spur and bevel gears, valve stems, valve bodies	
5890	Cramp Alloy No. 49 (Super strength Bronze)	M-309	80-70 Cu, 20-30 Zn		90000 115000	45000 68000	25 10		185 240	Housing nuts, trunnion bearings, expansion plates, worms, worm wheels, spur and bevel gears, valve stems	Resists high compressive loads and shock
5891	Cramp Alloy No. 54 (Parsons White Brass	M-309	Sn base alloy		12250				32 38	Bearings for heavy duty service, main and cross-head bearings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5892	Cramp Alloy No. 69 (Hydraulic Metal)	M-309	86.5 Cu, 11 Sn, 2 Zn, 0.50 Pb		35000 40000	16500 18500	10 8		60 65	Valve bodies, sleeves, pump parts, cylinder bodies, bearings	For high hydraulic pressures
5893	Cramp Alloy No. 71 (Cramp's Nickel Bronze)	M-309	87.5 Cu, 11 Sn, 1.5 Ni		45000 50000	25000 27000	20 15		85 95	Worms, worm gears, bevel and spur gears, high speed bearings, bushings, wearing parts	For high contact speeds and heavy loads
5894	Cramp Alloy No. 78	M-309	87-89 Cu, 10-12 Al, 1.0-4.0 Fe		65000 95000	47000 57000	20 4		130 190	Acid resistant containers and parts	Resistant to acid corrosion at high temp.
5895	Cramp Alloy No. 91	M-309	87.5 Cu, 8 Sn, 4 Zn, 0.5 Ni		35000 45000	17500 21000	30 20		60 70	Shaft liners, bushings, pump parts, valve fittings, flanges, connections	Similar to "Composition G"
5896	Cramp Alloy No. 97 (Cramp Copper Alloy)	M-309	99-99.8 Cu		17000 22000	5000 7000	40 30			Electrical installations for high conductivity	Elec. cond.-75-85%
5897	Cramp Alloy No. 100 (P.M.G. Metal)	M-309	78 Cu, 2 Zn, 20 special alloy		45000 58000	22000 28000	30 18		90 100	Marine parts, tail shaft liners, stem bushings, valves, valve parts, pump casings, gears, pressure vessels, bearings	Good corrosion resistance to acids
5898	Cramp Alloy No. 101 (Parsons Turbadium)	M-309	47-52 Cu, 40-46 Zn, 1.0-2.5 Ni		65000 75000	33000 40000	18 15		90	Pump impellers, turbine runners, buckets for water wheels	Resists erosive action of water
5899	Drittel Silver	Ger.	66.6 Al, 33.3 Ag							Ornamental trade	
5900	Cramps Elfur Iron No. 2	M-309	3.1-3.5 C, 1.0-1.4 Si, 0.3-0.4 P, 0.7-0.8 Mn, 1.25-1.75 Ni, bal. Fe		35000 40000				185 215	Engine liners, cylinders, plugs	Tr.S.-2300-2800 Tr. D.-0.23-0.25
5901	Cramp Elfur Iron No. 4	M-309	3.15-3.50 C, 1.25-1.75 Si, 0.2-0.3 P, 0.6-0.8 Mn, bal. Fe		30000 35000					Piston, piston bodies, casings	Tr.S.-2300-2800 Tr.D.-0.22-0.24
5902	Cramps Elfur Iron No. 5	M-309	3.25-3.75 C, 2-2.5 Si, 0.4-0.6 P, 0.6-0.8 Mn, bal. Fe		27500 35500				145 180	Parts for diesel engines, bodies, bearings, levers	Tr.S.-2000-2500 Tr.D.-0.20-0.22
5903	Cramps Elfur Iron No. 6	M-309	3.25-3.75 C, 1.9-2.4 Si, 0.25-0.35 P, 0.50-0.65 Mn, 0.20-0.50 Ni, bal. Fe		30000 35000				175 200	Locomotive casings, piston valves, piston rings, packing rings	Tr.S.-2100-2600 Tr.D.-0.22-0.24
5904	Cramps Elfur Iron No. 7	M-309	3.0-3.5 C, 1.2-1.4 Si, 0.25-0.35 P, 0.6-0.8 Mn, 0.75-1.25 Ni, bal. Fe		32000 37000				180 220	Locomotive cylinder bushings, hydraulic cylinders, crank cases	Tr.S.-2200-2700 Tr.D.-0.22-0.24
5905	Cramps Elfur Iron No. 8 (Ni-Resist)	M-309	2.5-3.25 C, 1.0-2.0 Si, 0.04-0.30 P, 0.75-1.25 Mn, 12-15 Ni, 1-3 Cr, 5-7 Cu, bal. Fe		20000 35000				125 200	Heat resistant and corrosion resistant parts	Corrosion resistant Tr.S.-2000-2500
5906	Cramps Elfur Iron No. 9	M-309	3.25-3.75 C, 1.75-2.25 Si, 0.20-0.30 P, 0.6-0.8 Mn, 2-3 Ni, 0.2-0.4 Cr, bal. Fe		30000 37000				150 190	Oil pump cylinder bushings, liners, sleeves	Tr.S.-2000-2500 Tr.D.-0.23-0.25
5907	Cramps Elfur Iron No. 11	M-309	3.0-3.5 C, 1.75-2.25 Si, 0.25-0.35 P, 0.65-0.75 Mn, 1.0-2.0 Ni, bal. Fe		30000 35000				175 185	Diesel engine piston skirts	Tr.S.-2000-2400 Tr.D.-0.22-0.24
5908	Cu-Lead-Ite No. 1	M-481	70 Cu, 20 Pb, 10 Sn	Cast	31000		11	12	68	Nuts, parts for pneumatic tools subjected to severe pounding and abuse	Tough, hard casting
5909	Cu-Lead-Ite No. 2	M-481	68 Cu, 25 Pb, 7 Sn	Cast	25000		16	15	48	For severe service such as bearings in rolling mills, wire mills, diesel engines, ball mills and gyratory crushers	
5910	Cu-Lead-Ite No. 3	M-481	65 Cu, 30 Pb, 5 Sn	Cast	23200		17	18	43	For all round bearing service in high speed engines, locomotives, mills and railroads	
5911	Cu-Lead-Ite No. 4	M-481	60 Cu, 38 Pb, 2 Sn	Cast	18500		14	15	38	For bearings for all small machinery, deep well pumps, conveyors, connecting rods, automobiles and trucks	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5912	Cu-Lead-Ite No. 5	M-481	50 Cu, 50 Pb	Cast	6000		20	21	14	For railroad locomotives, piston packers, metallic packing, bibs, etc.	Withstands superheated steam
5913	Cu-Lead-Ite No. 6	M-481	66 Cu, 34 Pb	Cast	8910		15	16	28	For small high speed machinery, pumps, electric drills, loose pulleys, small tools	
5914	Darwin	M-487 M-40	C, alloy, bal. Fe							High speed tools, hack-saw blades, tools, cutters	Super high speed steel
5915	Darwin's Cobalt Fast Work	M-487	C, Co, Cr, Mo, bal. Fe							Press tools	
5916	Darwin's Duror	M-487	C, alloy, bal. Fe							Files	
5917	Darwin's Extra	M-487	C, alloy, bal. Fe							Files	
5918	Darwin's Triple Life	M-487	C, alloy, bal. Fe							Files	
5919	Darwin's Vanadia	M-487	C, W, alloy, bal. Fe							Hacksaw blades	
5920	Defirust, Turbine	M-100	C, 11.5-13 Cr, bal. Fe	Tempered	105000	77000	23	68	212	Turbine blades, valves, structural and machine parts	Corrosion resistant
5921	Defistain, Machining	M-100	C, 18-20 Cr, 8-10 Ni, 0.30 S, bal. Fe	Annealed Cold drawn	90000 100000	35000 85000	53 35	64 50	150 215	Valve and pump parts	Free machining, stainless
5922a	Defistain, Special	M-100	0.07 max. C, 19 Cr, 9 Ni, bal. Fe	Annealed	90000	35000	65	70	142	For welded structures especially if annealing after welding is impracticable	Stainless, corrosion resistant
5922b	Defistain, Special	M-100	0.20 max. C, 19 Cr, 9 Ni	Annealed	90000	45000	60	65	150		
5923	Dopploy	M-479	2.0 Si, 0.8 Mn, 3.0 total C, 18.5 Ni, 2.5 Cr, bal. Fe		35000					For casting jacketed kettles, agitators, etc.	Corrosion resistant
5924	Dowmetal H	M-43	5.5-6.5 Al, 0.18 min. Mn, 2.7-3.3 Zn, bal. Mg	Sand cast Heat treated	33000 42000	13000 21000	4-8 3-7		50 72	Light alloy sand castings	Corrosion resistant to salt water
5925	Dowmetal J	M-43	6.5 Al, 0.2 Mn, 0.75 Zn, bal. Mg	Extruded	41000 45000	28000 33000	20 15		51 58	Forgings, bars, rods, light alloy parts	
5926	Durco	M-46	C, high Cr, high Ni, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resistant. Discon.
5927	Durco 26-12	M-46	0.15 T.C., 26 Cr, 12 Ni, 1.0 Si, 0.6 Mn, bal. Fe		70000	30000	40 45	40 45	150	Chemical plant equipment. Food handling equipment. Apparatus for nitric acid	Stainless, corrosion resistant. Obsolete
5928	Durco 30-15	M-46	0.15 T.C., 30 Cr, 15 Ni, 1.0 Si, 0.6 Mn, bal. Fe							Chemical plant equipment. Food handling equipment. Apparatus for nitric acid	Stainless, corrosion resistant. Obsolete
5929	Nickeldur	M-308	80 Cu, 10 Pb, 5 Ni, 5 Sn		19000				85	Centrifugal cast liner	Nickel bronze
5930	Duro-Gloss Free Machining	M-69	0.12 max. C, 0.60 max. Mn, 12-15 Cr, bal. Fe	Annealed	80000	45000	35	65	160	Bolts, nuts, screws, spindles bushings	
5931	Enduro 20-10	M-97	0.08-0.20 C, 19-22 Cr, 9-12 Ni, bal. Fe	Annealed	85000	40000	45			Heat and corrosion resisting purposes	Heat and corrosion resistant
5932	Enduro 20-10 S	M-97	0.08 max. C, 19-22 Cr, 9-12 Ni, bal. Fe	Annealed	85000	40000	45			Heat and corrosion resisting purposes	Heat and corrosion resistant
5933	Everdur (B)-1015	M-8	98.25 Cu, 1.5 Si, 0.25 Mn	Hard Soft	70000 40000		15 60			Tubes, rod, sheet, bolt stock	For strength, ductility and resistance to corrosion
5934	Resisto-loy	M-507								Shovel teeth, dredging tools, trim and body dies, clinker tools, plow shares	Hard surfacing metal
5935	Fahrite N-1 A	M-95	C, 37-40 Ni, 17-21 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5936	Fahrite N-6	M-95	C, 65-68 Ni, 15-19 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5937	Fahrite N-6-Mo	M-95	C, Ni, Cr, Mo, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5938	Fahrite N-7 A	M-95	C, under 3 Ni, 31-35 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5939	Fahrite N-7 B	M–95	C, under 3 Ni, 16-24 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5940	Fahrite N-8	M–95	C, 24-27 Ni, 18-22 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5941	Fahrite N-9	M–95	C, 19-21 Ni, 28-32 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5942	Fahrite N-9 A	M–95	C, 29-31 Ni, 28-32 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5943	Fahrite N-10	M–95	C, 19-21 Ni, 23-27 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5944	Fahrite N-11	M–95	C, 29-32 Ni, 8-12 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
5945	Fairleys	M–491	C, alloy, bal. Fe							High speed tools and cutters	High speed steel
5946	Fecraloy	M–61	13 Cr, 4 Al, bal. Fe	Cold Rolled	128000	103800	5			High resistance work, rheostats	
5947	Fernico	M–60	54 Fe, 28 Ni, 18 Co							Metal to glass joints, electric lamps, vacuum tubes	Same coef. expansion as glass
5948	Finis	M–485	C, alloy, bal. Fe							High speed tools and cutters	High speed steel
5949	Franco	M–492	C, alloy, bal. Fe							High speed tools and cutters	High speed steel
5950	Galahad	M–62	13-20 Cr, 0-3 Ni, 0-0.4 C, bal. Fe							Corrosion resisting parts Cutlery	Rustless and wear resistant
5951	Gasid No. 12	M–481	86 Cu, 9 Sn, 3 Zn		30000		22	20	125	For high pressure acid pumps in oil refineries	Corrosion resistant to hot HCl
5952	Gasid No. 15	M–481	89 Cu, 7 Al, 2.5 Fe		42000		20 30	32	193	Chemical apparatus and equipment	Corrosion and resistant. Acid resistant.
5953	Ajax Pressure Bronze Grade "S"	M–123	85 Cu, 5 Pb, 5 Sn, 5 Zn	Chill cast	38000	19000	30		53	Castings for highest pressures	
5954	Hardenite	M–502	C, alloy, bal. Fe							Tools	
5955	Has-All	M–497	C, alloy, bal. Fe							High speed tools	High speed steel
5956	Hi-Gloss Free Machining	M–69	0.12 max. C, 1.20 max. Mn, 0.25 Se, 18 Cr, 8 Ni, bal. Fe	Annealed	95000	45000	53	65	160	Stainless bolts, nuts, screws, spindles, bushings	Stainless. Iz-80
5957	Hypocrode	M–494	C, 12.5-14.5 Ni, 6.5-7.5 Cu, 4.75-5.75 Cr, bal. Fe		25000 30000				150	Hydraulic parts, pump bodies, impellers, plungers, liners, furnace parts, burners, fire bars	Austenitic cast iron Corrosion, heat and erosion resistant
5958	Tormol	M–430	C, Ni, Cr, Mo, bal. Fe	Rolled	58000	45000	35	60		Gears, shafts	
5959	Indus	M–499	C, alloy, bal. Fe							High speed tools	High speed steel
5960	Jackmanized Steel	M–477	C, bal. Fe							Dredger bucket pins, bushes, tin rolls	
5961	Jacksberg	M–477	C, alloy, bal. Fe							High speed tools and cutters	High speed steel
5962	Jessop Alloy 104	M–69	0.10-0.20 C, 5 Cr, 1.0 W, bal. Fe	Annealed Heat treated	60000 143000	25000 126000	30 20	67	170 270	Bolts, bushes, pipes	Corrosion and heat resistant
5963	Lesco Reg. Stainless	M–73	0.3-0.4 C, 13-14 Cr, bal. Fe							Chemical engineering equipment	Stainless
5964	Lesco 25-12	M–73	0.2 max. C, 24-26 Cr, 11-13 Ni, bal. Fe							Chemical engineering equipment	Stainless
5965	Marine Bronze No. 8	M–481	Cu, Mn, Zn, Sn, Al	Cast	65000		20 25	29	150	Marine propellers, ship parts, etc. subjected to salt water corrosions	Resists corrosion
5966	Michiana 49	M–184	C, 18 Cr, 8 Ni, bal. Fe							Chemical engineering equipment	Stainless
5967	Michiana 111	M–184	C, 25 Cr, 12 Ni, 3.5 Mo, bal. Fe							Chemical engineering equipment	Stainless, heat resistant
5968	Milwaloy 7	M–475	0.30-0.40 C, 1.50-1.75 Cr, 0.60-0.70 V, bal. Fe							For nitriding	Nitralloy steel
5969	Milwaloy 13	M–475	0.08-0.12 C, 12-14 Cr, bal. Fe							Stainless parts	Stainless

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
5970	Milwaloy 18	M-475	0.30-0.45, 13-15 Ni, 3.9-4.5 Mn, bal. Fe							Circuit breakers, switches	Austenitic, non-magnetic
5971	Milwaloy 26	M-475	0.08-0.12 C, 18-20 Cr, 8-10 Ni							Corrosion resistant parts	A Krupp-Nirosta Steel. 18-8
5972	Milwaloy 38	M-475	0.12-0.15 C, 28-30 Cr, 8-10 Ni, bal. Fe							Corrosion resistant parts	A Krupp-Nirosta 29-9 steel.
5973	Milwaloy 50	M-475	0.30-0.40 C, 15-18 Cr, 32-36 Ni, bal. Fe							Furnace parts to resist high temperatures	Heat and corrosion resisting
5974	Misco 30-30	M-84	C, 30 Cr, 30 Ni, bal. Fe							Chemical engineering equipment	Heat and corrosion resistant
5975	Molymet	M-61	45 Ni, 45 Fe, 10 Mo							Radio grid wire	
5976	Mungoose	M-135	Cu, 12-15 Ni, Zn							Domestic utensils, ornaments	Nickel silver
5977	NA-18	M-189	17-21 Cr, 0.30 max. C, bal. Fe						200	Corrosion resisting parts	Corrosion resistant
5978	Nationalloy 1	M-483	0.4 max. C, 18 min. Cr, 8 min. Ni, bal. Fe							Chemical engineering equipment	Stainless
5979	Nationalloy 2	M-483	0.5 max. C, 6 min. Cr, 18 min. Ni, bal. Fe							Chemical engineering equipment	Stainless
5980	Nationalloy 3	M-483	0.2 max. C, 12-13.5 Cr, bal. Fe							Chemical engineering equipment	Stainless
5981	Lake's Metal		87 Pb, 6 Sn, 7 Sb							Bearings for heavy loads	
5982	NS-5	M-264	Non-ferrous		100000	82500	2		300	Valve seats and disks	Wear, abrasion and corrosion resistant
5983	Olympic Tool Steel	M-484	C, alloy, bal. Fe							High speed tools and cutters	High speed steel
5984	Park Gate	M-488	C, alloy, bal. Fe							High speed tools and cutters	High speed steel
5985	Rotas	M-498	C, bal. Fe							Case-hardened parts	Case-hardening steel
5986	Rustless 25-12	M-100	0.20 max. C, 22-24 Cr, 12-15 Ni, 2.0 max. Mn, bal. Fe	Annealed	95000	50000	50	60	170	For high temperature service and severe chemical corrosion	Heat and corrosion resistant
5987	Tri-Mo No. 19	M-341	1.5 C, 12 Cr, 0.2 V, 0.9 Mo, bal. Fe							Tools, dies	Wear resistant
5988	Bethlehem Penco No. 20	M-341	1.3 C, 4 W, 0.4 Mo, bal. Fe							Tools, dies	
5989	Hot Work No. 22	M-341	0.4 C, 3 Cr, 9 W, 0.2 V, bal. Fe							Tools, dies	Hot work steel
5990	Saville Permabrite	M-486	0.10-0.14 C, Cr, Ni, bal. Fe							Stainless steel parts	Austenitic super-stainless
5991	Saville Rustless Iron	M-486	0.15 C, Cr, Ni, bal. Fe							Stainless parts	Stainless, dead soft type
5992	Saville Stainless Steel	M-486	0.28-0.32 C, Cr, Ni, bal. Fe							Stainless parts	Stainless, hardening quality
5993	Sil-O-Acid No. 7	M-481	Cu, Co, Si, Mg	Cast	52000		21	20	78	Acid proof parts	Resists acetic, carbolic, sulfuric and tartaric acids
5994	Sta-Gloss B	M-69	0.60 C, 0.35 Mn, 17 Cr, bal. Fe	Heat treated	280000	240000	3	3	525	Knives, surgical instruments, rolls, piston rods, valves	Stainless, corrosion resistant
5995	Scimitars	M-135	Cu, 18 Ni, Zn							Domestic utensils, ornaments	Nickel silver
5996	Spedex	M-135	8-20 Ni, Zn, bal. Cu							Keys, electroplaters, sundries, gas and electric meters, carburetors, screws	Nickel silver. Free Machining
5997	Steb Metal	M-496	Ag, Cu							For enameling and electrical contacts	Silver rolled into copper
5998	Stainless Steel A	M-293	0.12 min. C, 8-16 Cr, bal. Fe	Hardened	260000		10		512	Cutlery, springs, balls, bearing races, surgical instruments, hypodermic needles	Stainless and corrosion resistant
5999	Stainless Steel B	M-293	0.12 min. C, 16-18 Cr, bal. Fe	Hardened					601	Cutlery, bearing races, surgical instruments	Stainless and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6000	Stainless Iron C-1	M-293	0.12 max. C, 15 max. Cr, bal. Fe		70000 190000		35 16		140 387	Stampings, automobile trim moldings, machine parts, cheap cutlery	Corrosion resistant
6001	Stainless Iron C-2	M-293	0.12 max. C, 15-18 Cr, bal. Fe		90000 75000		28		170	Exterior trim for buildings and automobiles, cold rivets, nitric acid equipment, stampings	Corrosion resistant
6002	Stainless Iron C-3	M-293	0.35 max. C, 18-23 Cr, bal. Fe		100000		22		196	Screw machine products, wire paper mill products, chemica apparatus	Corrosion resistant
6003	Stainless Iron C-4	M-293	0.35 max. C, 23-30 Cr, bal. Fe		95000		18		187	Furnace parts, valve parts, conveyor chain bolts and nuts, heat resisting parts	Corrosion and heat resistant
6004	Super Jacksberg	M-477	C, alloy, bal. Fe							High speed tools and cutters	High speed steel
6005	Sweetaloy 17-Mo Cooper S-17 Mo	M-36	0.20 max. C, 18 Cr, 8 Ni, 3 Mo, bal. Fe							Stainless, heat and corrosion resisting parts	Corrosion and heat resistant
6006	Sweetaloy 17 S Cooper S-17-S	M-36	0.10 C, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Stainless, corrosion resistant
6007	Sweetaloy 17 Se	M-36	C, 18 Cr, 8 Ni, 0.30 Se, bal. Fe							Stainless parts	Stainless, corrosion resistant, free machining
6008	Sweetaloy 17 S-Mo Cooper S-17 S-Mo	M-36	0.10 max. C, 18 Cr, 8 Ni, 3 Mo, bal. Fe							Stainless, heat and corrosion resisting parts	Corrosion resistant, stainless
6009	Sweetaloy 21 A Cooper S-21A	M-36	0.25 C, 25 Ni, 15 Ct, Mo, Li, bal. Fe							Heat and corrosion resisting parts	Corrosion resistant to hot H_2SO_4
6010	Taurus Bronze Mark I	M-476	87.7 Cu, 12 Sn, 0.3 P	Sand cast	24700 40300	15700 24700	25 5			High quality gear bronze	Iz-25-40
6011	Taurus Bronze Mark II	M-476	89.7 Cu, 10 Sn, 0.3 P	Sand cast	27000 47000	15700 22300	28 6			Bearings requiring some plasticity	Iz-27-44
6012	Taurus Bronze Mark III	M-476	86 Cu, 14 Sn, trace P	Sand cast	29000 33200	24700 29000	3 1			Bearings for turn tables, movable bridges, etc.	Iz-13-17
6013	Taurus Bronze Mark IV	M-476	88.25 Cu, 10.5 Sn, 0.25 P, 1.0 Ni	Sand cast	31300 49000	17800 31300	30 8			Sand castings requiring high strength, toughness and wearing qualities	Iz-40-60
6014	Taurus Bronze Mark V	M-476	88 Cu, 11.2 Sn, 0.3 P, 0.5 Ni	Centrifugal	40300 49000	27000 36000	5 15			Gear bronze	Iz-24-32
6015	Taurus Bronze Mark VI	M-476	88 Cu, 10 Sn, 2 Zn	Sand cast	31300 44700	17800 22300	10 25			General bronze castings	Similar to "Admiralty Metal"
6016	Taurus Bronze Mark VII	M-476	81.7 Cu, 12 Sn, 0.3 P, 1 Ni, 5 Pb	Sand cast	29000 40300	22300 31300	4 10			Cogging and rolling mill bearings, heavy duty bearings	Iz-40-50
6017	Taurus Bronze Mark VIII	M-476	80.7 Cu, 10 Sn, 0.3 P, 1 Ni, 8 Pb	Sand cast	31300 37800	22300 27000	6 12			Bearings, running against hard shafts	Iz-80-90
6018	Taurus Bronze Mark IX	M-476	76.7 Cu, 10 Sn, 0.3 P, 1 Ni, 12 Pb	Sand cast	31300 37800	20700 27000	8 13			Heavy duty plastic bronze bearings	Iz-60-80
6019	Taurus Bronze Mark X	M-476	84 Cu, 8 Sn, 4 Pb, 4 Zn	Sand cast	29000 42600	13500 15700	18 26			Dense general purpose castings, pump bodies, etc.	Iz-90-120
6020	Taurus Bronze Mark XI	M-476	85 Cu, 5 Sn, 5 Pb, 5 Zn	Sand cast	29000 40300	13500 15700	20 30			Castings not requiring hardness, bushes and bearings	Iz-70-120
6021	Taurus Bronze Mark XII	M-476	88 Cu, 6 Sn, 6 Zn	Sand cast	36000 42600	15700 17800	30 60			Light, thin section, tough castings	Iz-120
6022	Tophet D	M-61	34 Ni, 20 Cr, .15 C, bal. Fe	Annealed	75000		20			Moderate temperature service	Used up to 1600°F.
6023	Toreador	M-489	C, alloy, bal. Fe							High speed tools	High speed steel
6024	Toreador Supra	M-489	C, alloy, bal. Fe							High speed tools	High speed steel
6025	Uniloy 4-6 Cr	M-114	0.25 max. C, 5 Cr, bal. Fe							Chemical engineering equipment	
6026	Uniloy 1860	M-114	0.60 C, 18 Cr, bal. Fe							Chemical engineering equipment	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6027	U.S.S. 4/6 Cr-Mo	M-604	0.20 max. C, 4-6 Cr, 0.3-0.6 Mn, 0.15-0.5 Si, 0.45-0.65 Mo, bal. Fe	Annealed	65000	25000	30	50	187	Condensers, hot oil lines, oil still tubes	Corrosion resistant.
				Heat treated	175000	110000	8				High creep strength to 1200°F.
6028	U.S.S. 4/6 Cr-Ti	M-604	0.15 max. C, 4-6 Cr, 0.5 Mn, 0.50 Si, 0.6-0.9 Ti, bal. Fe		60000	30000	40			Corrosion resisting parts	Corrosion resistant
6029	U.S.S. 18-8 Mo	M-604	0.10 max. C, 1.75 max. Mn, 0.75 max. Si, 10-14 Ni, 16-18 Cr, 2.5 Mo, bal. Fe	Annealed	85000	35000	50	50	217	Textile industry, paper and pulp mill equip., tubes	Corrosion resistant, stainless
6030	Veriloy	M-44	0.35-0.45 C, 20-22 Ni, 10-12 Cr, bal. Fe							Chemical engineering equipment, furnace parts	Heat and corrosion resistant to 1500°F.
6031	Warman 6 M	M-277	5-7 Cr, 0.5-0.7 Mo, 0.18 min. C, bal. Fe	Heat treated	125000	100000	18	42		Corrosion resisting parts	Corrosion resistant
6032	Warman 13	M-277	11-14 Cr, 0.12 min. C, bal. Fe	Heat treated	90000	60000	24	50		Corrosion resisting parts	Corrosion resistant
6033	Warman Calmar 18-8 M	M-277	17-20 Cr, 7-10 Ni, 3-4.5 Mo, 0.16 min. C, bal. Fe							Stainless, heat and corrosion resisting parts	Stainless, corrosion and heat resistant
6034	Warman Caloxo 8-18	M-277	7-10 Cr, 17-20 Ni, 0.16 min. C, bal. Fe							Stainless, corrosion resisting parts	Corrosion resistant, stainless
6035	Warman Caloxo 15-25	M-277	14-17 Cr, 23-27 Ni, 3.0-4.5 Mo, 0.20 min. C, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resistant
6036	Warman Caloxo 15-25 M	M-277	14-17 Cr, 23-27 Ni, 3.0-4.5 Mo, 0.20 min. C, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resistant
6037	Warman Caloxo 15-35	M-277	14-17 Cr, 33-37 Ni, 0.20 min. C, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resistant
6038	Warman Caloxo 18-2	M-277	16-20 Cr, 1.5-2.5 Ni, 0.20 min. C, bal. Fe							Corrosion resisting parts	Corrosion resistant
6039	Colesco		77 Pb, 8 Sn, 14 Sb, 1 Cu							Bearings	
6040	Warman Caloxo 25-20 M	M-277	23-27 Cr, 17-21 Ni, 3.0-4.5 Mo, 0.20 min. C, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resistant
6041	Caloxo 26	M-277	25-30 Cr, 0.25 min. C, bal. Fe							Corrosion resisting parts	Corrosion resistant
6042	Caloxo 26-4	M-277	25-30 Cr, 2.5-4.0 Ni, 0.25 min. C, bal. Fe							Heat and corrosion resisting parts	Corrosion and heat resistant
6043	Caloxo 28-1x	M-277	27-30 Cr, 8-12 Ni, 0.25 max. C, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resistant
6044	Caloxo 28-10M	M-277	27-30 Cr, 8-12 Ni, 3-4.5 Mo, 0.25 min. C, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resistant
6045	Wear-Proof Mac Hempite	M-229	0.45 C, 1.25 Mn, 0.35 Mo, bal. Fe	Hardened					700	Gears, pinions, mill couplings, boxes, cams	Wear and shock resistant
6046	Everdur No. 1026 (Webert Alloy)	M-8	81.5 Cu, 4.25 Si, 14.25 Zn, trace Mn		90000		10			Pressure die castings	Renamed "Everdur No. 1026"
6047	Wizard	M-498	C, alloy, bal. Fe							High speed tools	High speed steel
6048	Thermalloy "E"	M-47	0.3-0.6 C, 8-12 Ni, 24-28 Cr, 0.8 Mn, 1.5 Si, bal. Fe							Cement mill and oil still parts, mushroom valves, skid rails, annealing boxes	Heat and corrosion resistant
6049	Thermalloy No. 50	M-47	0.5-0.7 C, 33-37 Ni, 14-16 Cr, 1 Mn, 1 Si, bal. Fe							Heat treating furnaces, rollers, rails, grids, hearth plates, chain belts	Heat and corrosion resistant
6050	Thermalloy No. 72	M-47	0.5-0.7 C, 58-62 Ni, 12-15 Cr, 1.5 Mn, 1.5 Si, bal. Fe							Retorts, castings	Heat and corrosion resistant
6051	Electron A.8	M-106	8 max. Al, 3.0 max. Zn, 0.4 max. Mn, bal. Mg	Cast	22400		6	7	45	Sand and permanent mold castings	Iz-3-4
		M-78					10	9	60		
6052	Electron AZ-102	M-106	11 Al, 2.25 Zn, 0.7 Mn, 1.5 max. impurities, bal. Mg							Extrusions, welding, rods	
		M-78									
6053	Electron M.G. 5	M-106	95 Al, 5 Mg, 0.5 max. impurities	Extruded	33000	13000	16	60		Rivets and wire	
					36000	14000	22	70		Seaplane pistons and propellers	Resists sea water corrosion
6054	Electron AZ-855	M-106	8.5-9.0 Al, 0.2-0.6 Zn, 0.1 Mn, 0.5 max. impur. bal. Mg	Forged	45500	29700	15	15	65	Forgings	Iz-4-6
		M-78					8	10	75		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El	% R.A.	Brin. No.	Uses	Remarks
6055	Electron ZS-32	M-106 M-78	Mg alloy	Forged			7	15 5	53	Forgings, pistons	
6056	Genesee KA-2	M-500	C, 18 Cr, 8 Ni, bal. Fe							Chemical engineering equipment	Stainless
6057	Genesee Ni-Hard	M-500	C, 2 Cr, 4.5 Ni, bal. Fe							Chemical engineering equipment	
6058	Genesee Ni-Resist	M-500	C, 2 Cr, 13 Ni, 6 Cu, bal. Fe							Chemical engineering equipment	
6059	Genesee 212	M-500	0.2 max. C, 12-16 Cr, bal. Fe							Chemical engineering equipment	Corrosion resistant
6060	Genesee 255	M-500	C, 4-6 Cr, 0.5 Mo, bal. Fe							Chemical engineering equipment	
6061	Genesee 280	M-500	C, 28 Cr, 10 Ni, bal. Fe							Corrosion and heat resisting parts	Heat and corrosion resistant
6062	Genesee 303	M-500	C, 25 Cr, 20 Ni, bal. Fe							Corrosion and heat resistant parts	Heat and corrosion resistant
6063	Genesee 315	M-500	C, 1.5 Cr, 3 Ni, bal. Fe							Chemical engineering equipment	
6064	Genesee 405	M-500	0.45 C, 1 Cr, 0.75 Ni, 1.5 Mn, 0.3 Mo, bal. Fe							Chemical engineering equipment	
6065	Genesee 412	M-500	C, 11-14 Mn, bal. Fe							Chemical engineering equipment	Wear and abrasion resistant
6066	Genesee 460	M-500	0.6 C, 1 Cr, 3 Ni, 0.3 Mo, bal. Fe							Chemical engineering equipment	
6067	Nickel-Silic-On	M-461	Ni, Si	Cold rolled	70000 85000	60000 70000	25 15	55 45	149 170	Pistons	
6068	Kuplus	M-448	C, bal. Fe							Weather-resisting constructional steel, rails, railway cars, wagon frames.	Mild steel
6069	Tungay		Zn, Si, Al, Ni, bal. Cu							Corrosion resistant parts	Alloyed by special process
6070	Volvit	M-462	9 Sn, 91 Cu							Bearings	
6071	Chromador Steel	M-470	0.30 max. C, 0.7-1.0 Mn, 0.7-1.0 Cr, 0.25-0.50 Cu, bal. Fe	Rolled	83000 98500	52000	17	40	160 200	Structural work, tanks, rivets	High tensile steel. Resists corrosion
6072	Kunial Brass	M282a	70 Cu, Ni, Al, bal. Zn	Heat treated strip (72 Cu)	108000	81000	11		240	Nuts, bolts, valves, primers fuse bodies, keys	Hardened and strengthened by heat treatment
6073	Kunial Copper	M282a	90 Cu, Ni, Al							General, tubes, wire, plate, sheets	Temper hardening
6074	Kunial Nickel Silver	M282a	Cu, Ni, other elements							Hardware, utensils	
6075	Kunial Bronze	M282a	Cu, Sn, other elements							Hardware, plumbing, pipes	
6076	Enduro 20-23	M-97	0.20 max. C, 18-23 Cr, 0.50 max. Si, bal. Fe							Stainless parts, still and condenser tubes, pump parts, fittings, valves	Stainless, heat and corrosion resistant
6077	Union McQuaid-Ehn	M-397	0.15-0.25 C, 0.3-0.6 Mn, 0.045 P, 0.055 S, bal. Fe	Cold rolled	70000 85000	60000 70000	25 15	55 45	149 170	Carburizing steel for quality carburized parts	Discontinued
6078	Union Free-Cut Bessemer	M-397	0.08-0.16 C, 0.6-0.9 Mn, 0.09-0.13 P, 0.10-0.18 S, bal. Fe	Cold rolled	80000 95000	70000 80000	25 15	50 40	170 196	Automatic screw machine parts	Free machining steel
6079	Union Supercut	M-397	0.10 max. C, 0.6-0.9 Mn, 0.08-0.11 P, 0.2-0.3 S, bal. Fe	Cold rolled	80000 95000	70000 80000	25 15	50 40	170 196	Automatic screw machine parts	Free machining steel
6080	Duralloy	M-465	1-3.5 Ni, 1-2 Cr, C, bal. Fe							Castings	Cast steel
6081	Hioloy 0-3	M-95	C, Ni, Cr, bal. Fe, or C, Ni, Cr, Mo, bal. Fe							Castings for oil refinery equipment	Formerly "Hioloy S.W."

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6082	Macalloy	M-34	C, Ni, Cr, Mo, bal. Fe								
6083	Manganal	M-374	0.60-0.90 C, 11-14 Mn, 2.5-3.5 Ni, bal. Fe		155000	60000	55	35		Welding rod, and for resurfacing broken and worn high Mn steel parts	Abrasion resistant
6084	Pennaloy "A"	M-466	C, Ni, Cr, Mo, bal. Fe	Medium					225 250	Castings for abrasion resistance, bucket lips and teeth	Abrasion resistant
6085	Super-Duct F-3	M-440	C, Ni, Cr, Mo, bal. Fe							Machinery parts	High strength and tough
6086	Tigerloy	M-467	C, Ni, Mo, bal. Fe	Heat treated	100000	60000	25	45	207	Castings	Impact resistant
6087	Westeeco No. 5	M-468	C, 55-60 Ni, 15-18 Cr, bal. Fe							Heat resisting castings	Heat resistant
6088	Industrial No. 188-M	M-440	C, 18 Cr, 8 Ni, 2-4 Mo, bal. Fe							Stainless and corrosion resistant parts and equipment	Stainless and corrosion resistant
6089	Brillum	M-469								Pistons	Light alloy
6090	Le Provinox	French	C, alloy, bal. Fe		50000 57000	35000 45000	36			General engineering applications	Semi-non-oxidizing steel
6091	Stainless Invar	Japan	5 Co, 31.5 Ni, 63.5 Fe							Stainless and corrosion resistant parts and equipment	Stainless, corrosion resistant
6092	Shawinigan SSS	M-443	C, 35 Ni, 15 Cr, bal. Fe							Heat and corrosion resistant castings and equipment	
6093	Webbite (TAM)	M-109	5-7 Ti, bal. Al							To add Ti to Al alloys. Alloy for improving aluminum alloys	
6094	Brown-Bayleys No. 33	M-472	Medium C, Cr, Si, bal. Fe							Internal combustion engine valves	Heat and corrosion resistant
6095	Brown-Bayleys BB 4 K	M-472	Low C, 18-22 Cr, 7-12 Ni, other alloys, bal. Fe		89600					*Chemical plant equipment* resisting sulfurous acetic and sulfuric acids	Resists severe chemical corrosion
6096	Brearly "A"	M-472	Low C, 12-14 Cr, bal. Fe		67000 90000					Turbine blading and shrouding, tubes, tanks, cooking utensils, art metal work	Corrosion resistant
6097	Brearly "K"	M-472	Low C, 16-18 Cr, bal. Fe		67000 90000					Chemical plant, particularly for HNO_3	Corrosion resistant
6098	Cutlery	M-472	0.30-0.40 C, 12-14 Cr, bal. Fe		123000 157000				500	*Cutting tools, high tensile* engineering requirements	*Corrosion resistant*
6099	Engineering	M-472	0.20-0.30 C, 12-14 Cr, bal. Fe		100000 157000					Hydraulic and steam equipment, valves, valve seats and stems, pumping and piston rods	Corrosion resistant
6100	Hotspur	M-472	Medium C, 12-14 Cr, 7-25 Ni, other alloys, bal. Fe		89600					Heat resisting parts	Heat and oxidation resistant
6101	Inventor	M-472	0.13-0.20 C, 12-14 Cr, bal. Fe		90000 123000					Highly stressed turbine blading, dental and surgical instruments, general engineering purposes	Corrosion resistant
6102	Kalloy	M-472	High C, 30 Cr, bal. Fe							Furnace parts, skids, retorts, carburizing and annealing boxes, baffle plates	Heat resistant to 100°C.
6103	Lowscore	M-472	Low C, 20-25 Cr, bal. Fe		60500					Heat resisting parts and equipment	Heat and corrosion resistant to 1000°C.
6104	Pyralloy	M-472	Medium C, 12-16 Cr, bal. Fe		69000					Furnace parts, valves for internal combustion engines	Heat and corrosion resistant to 800°C.
6105	Brown Baileys QS	M-472	Medium C, 6-8 Cr, 1 Si, bal. Fe							Valves for internal combustion engines	Heat and corrosion resistant
6106	Brown Baileys QSS	M-472	Medium C, 6-8 Cr, 3 Si, bal. Fe							Valves for internal combustion engines	Heat and corrosion resistant
6107	Twoscore	M-472	0.25 max. C, 16-18 Cr, 1-3 Ni, bal. Fe		100000 168000					Spindles, propeller shafts, rams, seaplane parts	Corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6108	Weldanka	M-472	Low C, 18-25 Cr, 7-12 Ni + alloys, bal. Fe		78500					Turbine blading, chemical and aircraft parts, paper and pulp industry	High resistance to corrosion and heat
6109	Furodit No. 8	M-501	Low C, 6 Cr, 2 Al, bal. Fe		49800 57000		35 27	70		Heat resisting parts	Heat resistant to 1470°F.
6110	Furodit "S"	M-501	Low C, 27 Cr, 1 Mo, bal. Fe		52700 64000		30 18	60 50		Heat and corrosion resisting parts	Heat and corrosion resistant
6111	Furodit "SS"	M-501	Low C, 29 Cr, 2 Mo, 1-2 Ta, bal. Fe		57000 71000		30 16	60 50		Heat and corrosion resisting parts	Heat and corrosion resistant
6112	Furodit "Z"	M-501	Low C, 25 Cr, bal. Fe		52700 64000		30 18	60 50		Heat resisting parts	Heat resistant to 2010°F.
6113	Furodit "Z Special"	M-501	Low C, 25 Cr, 2 Tal, bal. Fe		57000 68500		25 15	60 50		Heat resistant parts	Heat resistant to 2100°F.
6114	Maxilvry A.D.S.	M-210	C, Cr, Ni, bal. Fe, Cu							For deep stamping parts	Stainless
6115	Maxilvry "A.M."	M-210	C, Cr, Ni, bal. Fe, Cu, Mo							Chemical equipment to resist H_2SO_4	Stainless
6116	Maxilvry "A.T."	M-210	C, Cr, Ni, bal. Fe							Tubes	Stainless
6117	Maxilvry "A.W."	M-210	C, Cr, Ni, bal. Fe, W, Cu							Welded stainless steel parts	Stainless
6118	Maxilvry "A.W.P."	M-210	C, Cr, Ni, bal. Fe, Cu, W, Ti							Welded stainless steel parts	Stainless
6119	Hy-Ten "A" No. 15	M-119	0.15 C, Ni, Mo, bal. Fe	Heat treated	115000	85000	24 30	62 70	235	Carburized arbors, cam shafts piston pins, ratchets, worms, valve tappets, pinions	Similar to SAE 4615
6120	Hy-Ten SAE 2315	M-119	0.15 C, 3.5 Ni, bal. Fe	Heat treated	100000 110000	70000 80000	33 32	65 60	200 220	Carburized automotive parts, cams, cam shafts, arbors, gears, spindles, worms, clutches	Case-hardening steel Iz-70-72. Obsolete
6121	Hy-Ten SAE 3140	M-119	0.40 C, 1.5 Ni, 0.75 Cr, bal. Fe	Heat treated	125000 190000	100000 150000	21 11	60 44	380 250	Heavy duty shafts, axles, tough gears, spindles, bolts	Iz-57-39. Obsolete
6122	Hy-Ten SAE 4150	M-119	0.50 C, Cr, Mo, bal. Fe	Heat treated	152000 132000	136000 118000	10 18	33 59	318 580	Shafts, axles, gears, spindles, clutches	Resists shock and torsion stresses. Obsolete
6123	Hy-Ten SAE 4615	M-119	0.10-0.20 C, 1.5-2.0 Ni, 0.2-0.3 Mo, bal. Fe							Carburized gears, worms, spindles, clutches, automotive parts	Case-hardening steel Obsolete
6124	Hy-Ten SAE 6145	M-119	0.45 C, Cr, V, bal. Fe	Heat treated	210000 260000	180000 225000	17 8	43 25	420 525	Axles, shafts, clash gears, clutches	Shock-resistant Obsolete
6125	Widia "N"	M-371 M-72	88 W, 5 C, 6 Co							Machining gray cast-iron, brass, non-ferrous	Best combination of hardness and toughness
6126	Widia "H"	M-371 M-72	W C							Machining hard materials, chilled castings, glass	Cemented carbide
6127	Widia "S"	M-371 M-72	W C							Machining light work, used for light tools as broaches, reamers, forming tools	Cemented carbide
6128	Widia "M-68"	M-371 M-72	W C							For precision boring, used only for light work	Hard grade cemented carbide. Discontinued
6129	Widia "X"	M-371 M-72	W C, Ti C							For machining alloy steels of over 275 Brinell	Cemented carbide
6130	Widia "XX"	M-371 M-72	W C, Ti C							For machining mild and soft steels up to 275 Brinell	Cemented carbide
6131	Carboloy Grade 44 A	M-31	WC+Co		205000					Used for machining cast iron, non-ferrous and non-metallics	Sintered tungsten-carbide alloy
6132	Carboloy Grade 55 A	M-31	WC+Co		295000					Used for heavy hogging cuts, and interrupted cuts on cast iron and some non-ferrous	Sintered tungsten-carbide alloy
6133	Carboloy Grade 77 A	M-31	WC+TaC+Co		200000					For light cuts on steel	Sintered tungsten-carbide alloy
6134	Carboloy Grade 77 B	M-31	WC+TaC+Co		250000					For heavy cuts on steel	Sintered WC alloy

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6135	Carboloy Grade 831 A	M-31	WC, Co, Ti		125000					For finish cuts, precision boring on hard steel	Sintered WC alloy
6136	Carboloy Grade 883	M-31	WC, Co		190000					Machining cast iron, non-ferrous and non-metallics	Sintered WC alloy
6137	Carboloy Grade 905	M-31	WC, Co		170000					For light finishing cuts on cast iron and non-ferrous and non-metallics	Sintered WC alloy
6138	Carboloy Grade 906	M-31	WC, Co		250000					For heavy *hogging* cuts and interrupted cuts on cast iron and some non-ferrous	Sintered WC alloy
6139	Carboloy Grade 907	M-31,	WC+TaC+Co							For light cuts on steel	Sintered WC alloy
6140	Finkl Cold-Hot	M-55	0.9 C, .7 Cr, .2 Mo, .5 Ni, bal. Fe							Cold and hot trimming dies	Heat resistant, tough
6141	Finkl Fi-Carbo	M-55	High C, bal. Fe							Dies for hot trimming drop forgings of simple sections	Water hardening
6142	Finkl, Grade F	M-55	High C, Mn, bal. Fe						229 352	Dies for short runs of simple forgings, sow blocks	Treated dies Sc-30-35
6143	Finkl Mo-Cro-Ni	M-55	C, Cr, Mo, Ni, bal. Fe							Dies for hot trimming medium and heavy section drop forgings	Heat resistant
6144	Molybdie Grade FG	M-55	High C, alloy, bal. Fe							Coining and straightening dies	High resistance to abrasion
6145	Molybdie Grade FM	M-55	C, Cr, Ni, Mo, bal. Fe							Dies for stainless steel forgings Dies adapted for the limited production of all types of drop forgings	Resistant to heat abrasion
6146	Molybdie Grade FS	M-55	.55 C, .7 Mn, .9 Cr, 1.5 Ni, .3 Mo, bal. Fe							Die blocks for the production of large drop forgings of heavy sections	Wear resistant. Heat treated but not quenched
6147	Molybdie Grade FX	M-55	.55 C, .7 Mn, .9 Cr, 1.5 Nl, .3 Mo, bal. Fe						269 429	Tempered die blocks, inserts sow blocks, forging machine dies, half roll dies, dies for drop forgings	Resistant to heat effects. Hardens deeply
6148	Molybdie Ni Mo	M-55	C, Cr, Ni, Mo, bal. Fe							Piston rods and heads	High impact and fatigue
6149	Molybdie Grade WG	M-55	C, Cr, Ni, Mo, bal. Fe							Cutlery, dies, dies for shallow impression forgings	Will not distort on hardening Discon.
6150	Midvaloy "A"	M-85	Low C, 19 Cr, 35 Ni, bal. Fe							Corrosion and heat resistant parts, furnaces	Now called Midvaloy 18-35 A
6151	Midvaloy "B"	M-85	1.0 C, 23 Cr, 11 Ni, bal. Fe							Corrosion and heat resistant parts, grids	Now called Midvaloy 25-10-B
6152	D.I.N. Alloys	M-505	All compositions								Alloys to specifications of the D.I.N. (German Industries Standards)
6153	Sormite	M-515	30 Cr, 4.5 Si, 1.1 Mn, 3.2 C, 5.3 Ni, bal. Fe							To replace certain Stellite alloys, hard facing	Hard alloy, wear and corrosion resistant
6154	Smena No. 2	M-515								To replace stellite for resurfacing	Hard alloy, wear and corrosion resistant
6155	Erhard Bronze	Ger.	Zn, Cu, Al							Ornamental fittings	
6156	Ajax Pressure Bronze Grade "X"	M-123	86 Cu, 4 Pb, 4 Sn, 6 Zn	Chill cast	40000	19000	35		53	Castings for highest pressures	
6157	S.A.E. Steel No. X-1015		0.10-0.20 C, 0.70-1.0 Mn, 0.045 max. P, 0.055 max. S, bal. Fe							Automobile parts, body and and fender stock, oil pans, transmission covers	Carburizing steel
6158	S.A.E. Steel No. X-1020		0.15-0.25 C, 0.70-1.0 Mn, 0.045 max. P, 0.055 max. S, bal. Fe							Automobile parts, wrist pins, cam shafts, fan blades	Carburizing steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6159	S.A.E. Steel No. X-1025		0.20-0.30 C, 0.70-1.0 Mn, 0.045 max. P, 0.055 max. S, bal. Fe							Automobile parts, hub and rim bolts, studs	
6160	S.A.E. Steel No. X-1040		0.35-0.45 C, 0.4-0.70 Mn, 0.045 max. P, 0.055 max. S, bal. Fe							Automobile parts, tubing, crankshafts, connecting rods, axles	Deep hardening not required
6161	S.A.E. Steel No. X-1045		0.40-0.50 C, 0.4-0.70 Mn, 0.045 max. P, 0.055 max. S, bal. Fe							Automobile parts, crankshafts, ring gears, axle and spline shafts	Deep hardening not required
6162	S.A.E. Steel No. X-1050		0.45-0.55 C, 0.40-0.70 Mn, 0.045 max. P, 0.055 max. S, bal. Fe							Automobile parts, crankshafts, ring gears, axle and spline shafts	
6163	S.A.E. Steel No. X-1055		0.50-0.60 C, 0.9-1.2 Mn, 0.040 max. P, 0.055 max. S, bal. Fe							Automobile parts, crankshafts, axles and spline shafts	
6164	S.A.E. Steel No. 1060		0.55-0.70 C, 0.60-0.90 Mn, 0.040 max. P, 0.055 max. S, bal. Fe							Drop forging dies, blacksmith tools, hot work tools	Hard and tough tool steel
6165	S.A.E. Steel No. 1065		0.60-0.75 C, 0.60-0.90 Mn, 0.040 max. P, 0.055 max. S, bal. Fe							Forging dies, rivet sets	
6166	S.A.E. Steel No. X-1065		0.60-0.75 C, 0.90-1.20 Mn, 0.040 max. P, 0.055 max. S, bal. Fe							Deep hardening tools, coil springs	
6167	S.A.E. Steel No. 1070		0.65-0.80 C, 0.60-0.90 Mn, 0.040 max. P, 0.055 max. S, bal. Fe							Forging dies and rivet sets	
6168	S.A.E. Steel No. 1075		0.70-0.85 C, 0.60-0.90 Mn, 0.040 max. P, 0.055 max. S, bal. Fe							Chisels, hammers, crow bars, rock drills, blanking dies	
6169	S.A.E. Steel No. 1080		0.75-0.90 C, 0.60-0.90 Mn, 0.040 max. P, 0.055 max. S, bal. Fe							Cold chisels, hammers, crow bars, rock drills, blanking dies	
6170	S.A.E. Steel No. 1085		0.80-0.95 C, 0.60-0.90 Mn, 0.040 max. P, 0.055 max. S, bal. Fe							Cold chisels, shear blades, punches	
6171	S.A.E. Steel No. 1090		0.85-1.00 C, 0.60-0.90 Mn, 0.040 max. P, 0.055 max. S, bal. Fe							Shear blades, cold punches, drop dies, mining drills	
6172	S.A.E. Steel No. X-1112		0.08-0.16 C, 0.60-0.90 Mn, 0.09-0.13 P, 0.20-0.30 S, bal. Fe							Screw machine parts, nuts, bolts	
6173	S.A.E. Steel No. 1115		0.10-0.20 C, 0.70-1.00 Mn, 0.045-max. P, 0.075-0.15 S, bal. Fe							Machine parts, screw stock	
6174	S.A.E. Steel No. X-1314		0.10-0.20 C, 1.0-1.3 Mn, 0.045 max. P, 0.075-0.15 S, bal. Fe							Automobile parts, case-hardened parts	Carburizing steel
6175	S.A.E. Steel No. X-1330		0.25-0.35 C, 1.35-1.65 Mn, 0.045 max. P, 0.075-0.15 S, bal. Fe							Automobile parts, gears, shafts	
6176	S.A.E. Steel No. X-1335		0.30-0.40 C, 1.35-1.65 Mn, 0.045 max. P, 0.075-0.15 S, bal. Fe							Automobile parts, gears, shafts	
6177	S.A.E. Steel No. X-1340		0.35-0.45 C, 1.35-1.65 Mn, 0.045 max. P, 0.075-0.15 S, bal. Fe							Automobile parts, gears, shafts, axles	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6178	S.A.E. Steel No. T-1330		0.25-0.35 C, 1.6-1.9 Mn, 0.040 max. P, 0.050 max. S, bal. Fe	Water quenched	163000 93000	138000 68000	13 26	42 62	331 187	Automobile parts, gears, shafts, axles	
6179	S.A.E. Steel No. T-1335		0.30-0.40 C, 1.6-1.9 Mn, 0.040 max. P, 0.050 max. S, bal. Fe							Automobile parts, gears, shafts, axles	Oil hardening
6180	S.A.E. Steel No. T-1340		0.35-0.45 C, 1.6-1.9 Mn, 0.040 max. P, 0.050 max. S, bal. Fe	Oil quenched	162000 102000	135000 70000	10 20	40 60	331 207	Automobile parts, gears, shafts, axles	Oil hardening
6181	S.A.E. Steel No. T-1345		0.40-0.50 C, 1.6-1.9 Mn, 0.040 max. P, 0.050 max. S, bal. Fe							Automobile parts, gears, shafts, axles	Oil hardening
6182	S.A.E. Steel No. T-1350		0.45-0.55 C, 1.6-1.9 Mn, 0.040 max. P, 0.050 max. S, bal. Fe							Automobile parts, gears, shafts, axles	Oil hardening
6183	S.A.E. Steel No. X-3140		0.35-0.45 C, 0.6-0.9 Mn, 0.040 max. P, 0.050 max. S, 1.0-1.5 Ni, 0.60-0.90 Cr, bal. Fe							Automobile parts, axle shafts, crank shafts, steering knuckles, connecting rod	
6184	S.A.E. Steel No. 30905		0.08 max. C, 0.20-0.70 Mn, 0.75 max. Si, 0.03 max. P, 0.03 max. S, 17-20 Cr, 8-10 Ni, bal. Fe							Head lamps, automobile bright work	Stainless
6185	S.A.E. Steel No. 30915		0.09-0.20 C, 0.20-0.70 Mn, 0.75 max. Si, 0.03 max. P, 0.03 max. S, 17-20 Cr, 8-10 Ni, bal. Fe							Head lamps, radiator shells	Stainless, deep drawn
6186	S.A.E. Steel No. X-4130		0.25-0.35 C, 0.40-0.60 Mn, 0.040 max. P, 0.050 max. S, 0.80-1.10 Cr, 0.15-0.25 Mo, bal. Fe							Aircraft fuselage construction, high strength welded assemblies, axles, steering knuckles	
6187	S.A.E. Steel No. 4135		0.30-0.40 C, 0.40-0.60 Mn, 0.040 max. P, 0.050 max. S, 0.50-0.80 Cr, 0.15-0.25 Mo, bal. Fe							High strength welded assemblies, axles, propeller shafts, forgings	
6188	S.A.E. Steel No. 4340		0.35-0.45 C, 0.50-0.80 Mn, 0.040 max. P, 0.050 max. S, 0.50-0.80 Cr, 1.5-2.0 Ni, 0.3-0.4 Mo, bal. Fe	Oil quenched	210000 120000	190000 95000	11 20	40 60	415 241	High strength forgings, gears, axle shafts	Oil hardening
6189	S.A.E. Steel No. 4345		0.40-0.50 C, 0.50-0.80 Mn, 0.040 max. P, 0.050 max. S, 0.60-0.90 Cr, 1.5-2.0 Ni, 0.15-0.25 Mo, bal. Fe							High strength forgings, large gears, shafting, axles	
6190	S.A.E. Steel No. 4620		0.15-0.20 C, 0.40-0.70 Mn, 0.40 max. P, 0.050 max. S, 1.52-2.0 Ni, 0.20-0.30 Mo, bal. Fe							Case-hardened gears, shafts, cams	Carburizing steel. High fatigue resistance
6191	S.A.E. Steel No. 4640		0.35-0.45 C, 0.50-0.80 Mn, 0.040 max. P, 0.050 max. S, 1.65-2.0 Ni, 0.20-0.30 Mo, bal. Fe	Oil quenched	178000 115000	147000 88000	10 22	45 62	363 229	Transmission gears, splined shafts, railroad roller bearings	High fatigue resistance
6192	S.A.E. Steel No. 4815		0.10-0.20 C, 0.30-0.60 Mn, 0.040 max. P, 0.050 max. S, 3.25-3.75 Ni, 0.20-0.30 Mo, bal. Fe							Case-hardened parts, gears, roller bearings, studs, bolts	Carburizing steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6193	S.A.E. Steel No. 4820		0.15-0.20 C, 0.40-0.60 Mn, 0.040 max. P, 0.050 max. S, 3.25-3.75 Ni, 0.20-0.30 Mo, bal. Fe							Automobile parts, roller bearings, studs, bolts, gears	Carburizing steel
6194	S.A.E. Steel No. 51210		0.12 max. C, 0.60 max. Mn, 0.50 max. Si, 0.030 max. P, 0.030 max. S, 11.5-13.0 Cr, bal. Fe							Automobile valves, bright work, tubing, nuts, rivets, screening	Corrosion and heat resistant
6195	S.A.E. Steel No. X-51410		0.12 max. C, 0.60 max. Mn, 0.50 max. Si, 0.030 max. P, 0.15-0.50 Si, 13-15 Cr, bal. Fe							Decorative trim, tubing, nuts, rivets, screening, shafting	Corrosion and heat resistant. Free machining
6196	S.A.E. Steel No. 51335		0.25-0.40 C, 0.60 max. Mn, 0.50 max. Si, 0.030 max. P, 0.030 max. S, 12-14 Cr, bal. Fe							Ball bearings, cutlery, bushings, valves	Heat and corrosion resistant
6197	S.A.E. Steel No. 51510		0.12 max. C, 0.60 max. Mn, 0.50 max. Si, 0.030 max. P, 0.030 max. S, 14-16 Cr, bal. Fe							Ornamental trim, automobile trim	Heat and corrosion resistant
6198	S.A.E. Steel No. 51710		0.12 max. C, 0.60 max. Mn, 0.50 max. Si, 0.030 max. P, 0.030 max. S, 16-18 Cr, bal. Fe							Heat resisting parts, bright work	Heat and corrosion resistant
6199	S.A.E. Steel No. 9255		0.50-0.60 C, 0.60-0.90 Mn, 0.040 max. P, 0.050 max. S, 1.8-2.2 Si, bal. Fe							Automobile springs, leaf springs	
6200	Broternal		Cu, Al plus another metal		90000		20			Condenser tubes and telescopic periscope tubes	Zinc free alloy. High corrosion resistant
6201	S.A.E. No. 322		4.5-5.5 Si, 1.0-1.5 Cu, 0.4-0.6 Mg, 0.5 max. Fe, bal. Al	Mold cast	31000 36000		4.5 2.5			Castings for water cooled cylinder heads of automotive or airplane engine	Resists corrosion
				Sand cast	27000 36000		4 2				
6202	S.A.E. No. 320		3.25-4.25 Mg, 0.60 max. Mn, 0.30 max. Fe, 0.25 max. Si, 0.10 max. Cu, bal. Al	Sand cast	22000		6			Castings, carburetor casis, cast pipe fittings	High corrosion resistance. Easy to machine
6203	S.A.E. No. 321		11.25-15.0 Si, 0.7-1.3 Mg, 1-3 Ni, 0.5-1.5 Cu, 1.3 max. Fe, bal. Al							Castings, pistons for automobile engines, cam shaft bearings, valve tappet guides	Resists corrosion and wear
6204	S.A.E. No. 323		6.5-7.5 Si, 0.2-0.4 Mg, 0.5 max. Fe, 0.2 max. Cu, bal. Al	Sand cast	26000 30000		5 3			Castings of high strength	Resists corrosion
6205	S.A.E. No. 324		9.25-11.25 Mg, 0.20 max. Cu, 0.30 max. Fe, 0.20 max. Si, bal. Al	Sand cast	40000		11			Castings, trucks, end sills and other parts of railway cars	Resists severe abuse
6206	S.A.E. No. 304		4.5-6.0 Si, 0.6 max. Cu, 2.0 max. Fe, 0.75 max. Zn, 0.3 max. Mn, 0.1 max. Mg, 0.5 max. Ni, 0.1 max. Sn, bal. Al	Cast	29000		3.5			Die castings, aircraft engine parts, marine parts	Resists salt water corrosion
6207	S.A.E. No. 305		11-13 Si, 0.6 max. Cu, 2.0 max. Fe, 0.75 max. Zn, 0.3 max. Mn, 0.1 max. Mg, 0.5 max. Ni, 0.1 max. Sn, bal. Al	Cast	33000		1.5			Die castings of thin wall or complicated design	Resists salt water corrosion. Ch-2.0
6208	S.A.E. No. 307		4.5-5.5 Si, 3.5-4.5 Cu, 2.25 max. Fe, 0.75 max. Zn, 0.3 max. Mn, 0.1 max. Mg, 0.5 max. Ni, 0.1 max. Sn, bal. Al	Cast	32000		2.0			Die castings of general purpose	Ch-2.5

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6209	S.A.E. No. 309		1.0-2.5 Si, 3.5-4.5 Cu, 3.5-4.5 Ni, 2.5 max. Fe, 0.75 max. Zn, 0.3 max. Mn, 0.1 max. Mg, 0.1 max. Sn, bal. Al	Cast	31000		1.5			Die castings, polished parts	Ch-2.0
6210	S.A.E. No. 312		1-2 Si, 7-9 Cu, 2.5 max. Fe, 1.0 max. Zn, 0.3 max. Mn, 0.1 max. Mg, 0.1 max. Sn, 0.5 max. Ni, bal. Al	Cast	33000		1.0			Die castings of general purpose	Ch-1.5
6211	S.A.E. No. 20		0.9-1.4 Mg, 0.9-1.4 Mn, 0.2 max. Cu, 96 min. Al.	Soft sheet Hard sheet	29000 38000	10000 34000	18–10 2–1			Panels on trucks and busses, airplane cowling and tubes, fuel and oil pipes in airplanes	Wrought. Known as "4 S"
6212	S.A.E. No. 24		3.6-4.7 Cu, 1.25-1.75 Mg, 0.3-0.9 Mn, 92 min. Al	Soft Rolled	35000 65000	 50000	12 8–10			Aircraft construction, tubes, plates, sheets, rivets	Wrought. Known as "24 S"
6213	S.A.E. No. 25		99.0 min. Al	Soft Hard	15500 22000	40000 19000	30–15 4–1			Sheets, bars, rods, plates, wire, tubing, pipe	Wrought. Commercial aluminum
6214	S.A.E. No. 640		85.25-87.75 Cu, 10-12 Sn, 1-1.5 Pb, 0.2-0.3 P, 0.75-1.25 Ni, 0.30 max. Fe, 0.2 max. Sb	Cast	33000	16500	10		90	Cones of synchronizer gears, castings	
6215	S.A.E. No. 701		88-95 Cu, 4.5-10.0 Al, 4.0 max. Fe, 2.0 max. Ni+Sn, +Mn, 0.25 max. Zn+Pb	Wrought	80000 72000	40000 35000	15 20			Diaphragms, gears, forgings, valve seats, bushings	Formerly S.A.E. No. 69. Corrosion resistant
6216a	S.A.E. No. 79 Grade A		83-86 Cu, 0.15 max. Pb, 0.06 max. Fe, bal. Zn	¼ Hard	43000 53000					Radiators, lamps	
6216b	S.A.E. No. 79 Grade B		79-82 Cu, 0.20 max. Pb, 0.05 max. Fe, bal. Zn	¼ Hard	46000 56000					Radiators, lamps	
6217	S.A.E. No. 921		2.5-3.5 Cu, 3.5-4.5 Al, 0.02-0.12 Mg, 0.10 max. Fe, bal. Zn	Die cast	44000		9		80	Die castings, hardware, radiator caps, housings, covers, lamp brackets	C.U.S.-93100 S.S.-45800
6218	S.A.E. 903		3.5-4.5 Al, 0.10 max. Cu, 0.08 Mg, 0.10 max. Fe, bal. Zn	Die cast	36000		5		63	Die castings, hardware, radiator caps, housings, covers,	C.U.S.-60500 S.S.-30900
6219	S.A.E. No. 32510		C, bal. Fe	Cast	50000	32500	10			General automotive, agricultural implement, railroad and general machinery purposes	Malleable cast iron
6220	S.A.E. No. 35018		C, bal. Fe	Cast	53000	35000	18			General automotive, agricultural implement, railroad and general machinery purposes	Malleable cast iron
6221	S.A.E. No. 110		3.30-3.60 C, 0.50-0.70 Mn, 0.30 max. P, 0.13 max. S, 2.40-2.60 Si, bal. Fe						163 192	Miscellaneous soft iron castings	Plain cast iron
6222	S.A.E. No. 111		3.10-3.40 T.C., 0.30-0.60 C.C. 0.60 max. Mn, 0.20 max. P, 0.13 max. S, 2.10-2.30 Si, bal. Fe		30000				163 207	Cylinders, flywheels, transmission cases	Plain cast iron Tr.S.-1800 min. Tr.D.-0.20 min.
6223	S.A.E. No. 112		3.30-3.60 T.C., 0.60 max. Mn, 0.45-0.75 P, 0.10 max. S, 2.80-3.00 Si, bal. Fe							Piston rings	Plain cast iron
6224	S.A.E. No. 120		3.10-3.40 T.C., 0.55-0.75 C.C. 0.50-0.70 Mn, 0.20 max. P, 0.12 max. S, 2.15-2.35 Si, bal. Fe, plus alloy		35000				207 241	Cylinders	Alloy cast iron Tr.S.-2200 min. Tr.D.-0.20 min.
6225	S.A.E. No. 121		3.10-3.40 T.C., 0.50-0.70 C.C., 0.60-0.80 Mn, 0.20 max. P, 0.12 max. S, 2.25-2.45 Si, bal. Fe, plus alloy		40000				179 212	Cylinders	Alloy cast iron Tr.S.-2700 min. Tr.D.-0.27-0.37

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6226	S.A.E. No. 122		2.85-3.15 T.C., 0.55-0.75 C. C., 0.65-0.85 Mn, 0.15 max. P, 0.12 max. S, 1.95-2.15 Si, Si, bal. Fe, plus alloy		45000				217 248	Cylinders	Alloy cast iron Tr.S.-3300 min. Tr.D.-0.30 -0.36
6227	S.A.E No. 123		3.10-3.40 T.C., 0.73-0.93 C. C., 0.55-0.75 Mn, 0.20 max. P, 0.12 max. S, 1.90-2.10 Si, bal. Fe, plus alloy		37500				212 241	Cylinder liners	Alloy cast iron Tr.S.-2400 min. Tr.D.-0.20-0.30
6228	S.A.E. No. 124		3.00-3.30 T.C., 0.40-0.60 C. C., 0.50-0.70 Mn, 0.20 max. P, 0.12 max. S, 1.90-2.10 Si, bal. Fe, plus alloy						187 228	Brake drums, sprockets, clutch plates	Alloy cast iron
6229	S.A.E. No. 125		3.10-3.40 T.C., 0.55-0.75 C. C., 0.50-0.70 Mn, 0.20 max. P, 0.12 max. S, 1.90-2.10 Si, bal. Fe, plus alloy		37500				207 241	Brake drums, sprockets, clutch plates	Alloy cast iron Tr.S.-2500 Tr.D.-0.24-0.34
6230	S.A.E. No. 126		2.65-2.95 T.C., 0.50-0.70 C. C., 0.40-0.60 Mn, 0.20 max. P, 0.12 max. S, 2.20-2.40 Si, bal. Fe, plus alloy		45000				228 269	Brake drums, sprockets, clutch plates	Alloy cast iron
6231	S.A.E. No. 127		3.25-3.55 T.C. 0.30-0.50 C. C., 0.50-0.70 Mn, 0.20 max. P, 0.12 max. S, 2.20-2.40 Si, bal. Fe, plus alloy						187 227	Pistons	Alloy cast iron
6232	Calloy (Calal)	M-511	8-26 Ca, bal. Al							For the deoxidation of steel	
6233	Hoskins 651	M-65	Pure Ni		60000		40 50			Radio industry and for high temp. coef. res. purposes	Res.-50 ohms
6234	Bohnalite X-1 S	M-138	4 Al, 0.3 Mn, bal. Mg	Extruded	40000	26000	15		48	Extruded shapes and sheets	C.U.S.-58000 S.S.-20000
6235	Bohnalite X-2	M-138	10 Al, 0.1 Mn, bal. Mg	Sand cast	29000	20000	1		63	Light alloy castings	High strength
6236	Bohnalite X-3 S	M-138	6 Al, 0.3 Mn, bal. Mg	Extruded	42000	30000	14		53	Light alloy parts	C.U.S.-61000 S.S.-21000
6237	Bohnalite X-4	M-138	2 Al, 0.2 Mn, 4 Cu, 2 Cd, bal. Mg	Sand cast	24000	8000	6		40	Light alloy pistons	C.U.S.-39000 S.S. 15000
6238	Bohnalite X-7	M-138	12 Al, 0.1 Mn, bal. Mg	Sand cast and heat treated	29000	21000	0.5		75	Pistons, castings	High hardness
6239	Bohnalite X-11 S	M-138	1 Mn, 6 Sn, bal. Mg	Forged	35000	19000	5		45	Hammer forgings	End. lim.-9000
6240	Stewart Lumite No. 5	M-514	4 Cu, 1.75 Si, 4 Ni, bal. Al	Cast	30000	19000	1.5		80	Pistons, cylinder heads	Casting alloy (Discontinued)
6241	Stewart Lumite No. 10	M-514	4 Cu, 5 Si, bal. Al	Cast	32000	18000	2		60	Cylinder heads	Casting alloy (Discontinued)
6242	Stewart Aluminum No. 12	M-514	8 Cu, 2.5 Si, bal. Al	Cast	43000	19000	2.0		80	Light castings	Casting alloy
6243	Stewart Aluminum No. 13	M-514	12.5 Si, bal. Al	Cast	36000	16000	2.0		80	Intricate castings	Casting alloy
6244	Stewart Aluminum No. 35	M-514	5 Si, bal. Al	Cast	29000	14000	3.5		55	Light castings	Casting alloy
6245	Alclad 24S	M-4	24 S core with Al coating	T RT T84 T86	64000 67000 71000 73000	43000 53000 69000 69000	18 11 7 6			Aircraft structures, wings, pontoons	Corrosion resistant
6246	Alcoa 81	M-4	3 S, 7 Cu, bal. Al	Cast	33000	25000	1		80	Castings requiring high fluidity	Die casting alloy
6247	Alcoa 132	M-4	14 Si, 1 Mg, 2.5 Ni, bal. Al	T-4	33000	1			105	Aircraft engine pistons	Castingalloy.Obsolete
6248	Timken Krupp	M-376	0.08-0.16 C, 0.30-0.60 Mn, 0.15-0.30 Si, 3.75-4.25 Ni, 1.25-1.75 Cr, bal. Fe							Carburizer gears and pinions	Tough
6249	Timken 4-6% Cr	M-376	0.15 max. C, 0.50 max. Mn, 0.50 max. Si, 4-6 Cr, bal. Fe	at 85 °F.	74400	40000	30	73	149	Machinery parts, still tubes, oil refinery tubing	Corrosion resistant to oil
6250	Timken 4-6% Cr W	M-376	0.15 max. C, 0.50 max. Mn, 0.50 max. Si, 4-6 Cr, 0.75-1.25 W, bal. Fe	at 85 °F.	66500	25000	36	71.4	130	Machinery parts, still tubes oil refinery tubing	Corrosion resistant to oil

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6251	Timken QV	M-376	0.15 max. C, 1.85-2.15 Mn, 0.15-0.30 Si, 0.25-0.35 Mo, 0.18-0.25 V, bal. Fe							Machinery parts	Corrosion resistant Discontinued
6252	Exelloy		C, 12 Cr, bal. Fe							Corrosion resisting parts	Corrosion resistant
6253	Guronite	Euro-pean	0.7-2.3 C, 30-35 Cr, 0.7-0.5 Si, bal. Fe, (optional 2.5-3.5 Mo)							Heat treating furnaces and chemical castings, pipes, pumps, fittings, valves, grates	
6254	Ryerson "Shock" Tool Steel	M-240	C, alloy, bal. Fe							Tools for hot or cold punching, shearing and bending, chisels, concrete busters, track tools	Shock resistant Special analysis
6255	Lewis Iron	M-240	C, Si, bal. Fe							Chains, hooks, staybolts, mine car parts	Wrought iron for severe service
6256	Lewis Special Iron	M-240	C, Si, bal. Fe		48000 52000		30	48		Locomotive staybolts	Wrought iron. Tough and ductile
6257	Sioux Super Cast Rings	M-512	0.45-0.55 Mo, 1.1-1.2 Si, 1.6 C, 0.6-0.7 Mn, 1.0-2.0 Ni, 0.55-0.65 Cr, bal. Fe	At 75 °F. At 1000 °F.	75000 43000	46000 33000	3.5 14	1.8 13.3		Valve seat inserts, valve seat rings	Heat and scale resistant
6258	Albertson Special	M-512	3.2-3.4 C, 0.35-0.40 Mo, 0.3-0.4 Cr, 1.75-2.0 Si, 0.6-0.7 Mn, 1.25-1.50 Ni, bal. Fe							Valve seat inserts	Alloy cast iron Discontinued
6259	Durachrome	M-513	2.0 C, 1.25 Si, 3 Cr, 5 Mo, bal. Fe							Valve seat inserts	Alloy cast iron
6260	Sumet Bronze SM-4	M-71	26-29 Pb, 1-3.5 Sn, 0.05 max. Ni, bal. Cu	Soft	18600	9560	16		33 30	For light and medium duty and high speed bearings	
6261	Sumet Bronze SM-8	M-71 M-143	24-27 Pb, 2.5-4.5 Sn, bal. Cu	Medium	20900	11400	16.1		33 37	For moderately severe service at medium or high speed bearings	C.E.L.-8300
6262	Sumet Bronze SM-10	M-71	22-25 Pb, 4.5-6.5 Sn, bal. Cu		22600		15.1		38 41	Bearings for severe service subject to shock and impact	
6263	Sumet Bronze SM-12	M-71	20-23 Pb, 6.5 8.5 Sn, bal. Cu		23000		14		41 45	Bearings for slow speed service under heavy load and impact	
6264	Sumet Bronze SM 14	M-71	12-15 Pb, 8.5-10.5 Sn, bal. Cu		27350		12		56 60	Bearings for severe service subjected to heavy shock	
6265	Sumet Bronze SM-16	M-71 M-143	18-21 Pb, 8-10 Sn, 0.3-0.7 Ni, bal. Cu		24690	17250	7.8		47 52	Bearings for heavy duty and slow speed service	
6266	Sumet Bronze SM-18	M-71	15.5-18.5 Pb, 10.5-12.5 Sn, 1-2 Ni, bal. Cu	Hard	26000		7		58 62	Bearings for extremely severe service	
6267	Ultra-Cut	M-516	C, bal. Fe, high S	Cold drawn	90000	80000	15	45	174 212	Screws, fabricated parts, bolts, bushings, spindles	Free machining Bessemer steel
6268	Pennaloy "B"	M-466		Hardened					500 600	Crusher jaws, cement mills, sand pumps	Wear resistant
6269	Pennaloy "C"	M-466		Hardened					500 600	Sand and sludge pumps	Resists mine waters
6270	Pennaloy "D"	M-466		Medium					225 240	Sand and sludge pumps, pump sleeves	Resists mine waters
6271	Nickolite	M-509	60 Cu, 3 Sn, 6 Ph, 20 Ni, 11 Zn							Typewriter parts, door knobs	Nickel silver
6272	Zenel	M-139	C, alloy, bal. Fe							Tools	
6273	Shawinigan KA2	M-443	C, 18 Cr, 8 Ni, bal. Fe							Corrosion resistant and stainless parts	Stainless
6274	Dukes Metal		40 Ni, 30 Cu, 30 Fe							Corrosion resistant and heat resistant parts	Corrosion and heat resistant
6275	Premier No. 6		0.6-0.7 C, 0.7-0.9 Cr, 0.10 max. V, bal. Fe							Hammers, dies, blacksmith tools	
6276	Electrum		55-88 Au, 15-45 Ag							Jewelry, ornaments	Corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6277	Ruselite No. 500	M–99	94.5 Al, 4 Cu, 1.25-1.50 Cr, 0.2 Mo, 0.2 Ti							Hardware, fixtures	Corrosion resistant
6278	Scleron No. 2	M–320 M–116	12 Zn, bal. Al		57000 71000		15 10			Machinery parts	Age-hardens Discontinued
6279	Scleron No. 3	M–320 M–116	0.1 Li, 3 Cu, 12 Zn, 0.5 Si, 0.6 Mn, 0.4 Fe, bal. Al	Aged	64000 57000 71000	38000	 15 10			Machinery parts	Age-hardens Discontinued
6280	Nickel Cast Iron No. 2	M–68	3.30 T.C., 1.1 Ni, 1.5 Si, 0.5 Cr, bal. Fe		34400				223	Cast gears	Wear resistant Tr.S.-4770
6281	Nickel Cast Iron No. 4	M–68	3.0 T.C., 3.0 Ni, 1.3 Si, 0.57 Cr, bal. Fe		41550				286	Wear resistant castings	Wear resistant Tr.S.-4200
6282	Evansteel, Grade II	M–146	0.3 C, 1.5-2.0 Ni, 0.75-1.0 Cr, bal. Fe		115000 125000	65000 75000	20 15	30 25	275	Tractor shoes, bucket lips, dipper teeth, sheaves	Abrasion resistant. Heat resistant to 1000°F.
6283	Evansteel, Grade III	M–146	0.3 C, 1.5-2.0 Ni, 0.75-1.0 Cr, bal. Fe		145000 160000	120000	12	10	400 500	Dipper teeth, liner plates, guard rails, pulverizer hammers	Abrasion resistant. Heat resistant to 1000°F.
6284	Firth-Vickers "S.80"	M–521	C, 18 Cr, 2 Ni, bal. Fe	Oil treated	100000 135000	78000 112000	25 15	60 45	240 280	Pump spindles, propeller shafts, seaplane and aircraft construction	Magnetic, stainless and rust resistant
6285	Bowco	M–336	C, W, Mn, Cr, V, Mo, Co, bal. Fe							Reamers, punches, dies, stamping and cutting tools	High speed steel
6286	Bowco Cobalt	M–336	C, W, Co, Mn, Cr, V, Mo, bal. Fe							Tools for trimming and heavy cutting on hard and abrasive material	High speed steel
6287	Firth-Vickers H.R. 2610	M–521	C, 26 Cr, 10 Ni, bal. Fe	Softened	101000 123000	49000 67000	35 25	55 45	190 240	Heat treating boxes, furnace muffles, baffle plates, recuperator tubes, burners	Heat resistant
6288	Firth-Vickers "Immaculate 4 W"	M–521	C, 20 Cr, 8 Ni, 4 W, bal. Fe	Softened	130000 141000	83000 94000	35 25	45 35	250 280	Exhaust valves, turbine blades, furnace parts	Heat and scale resistant
6289	"A" Metal		44 Ni, Cu, bal. Fe							Sound transmitting devices	
6290	Tego	M–528	78-83 Pb, 15-18 Sb, 1.5-3 Sn, 1-2 Cu, 0.3-0.8 As							Bearings	Antifriction
6291	West No. 9 (Duracast)	M–465	0.6-0.8 C, 0.6-0.8 Mn, 0.3-0.4 Si, 0.15-0.18 V, bal. Fe	Heat treated	80000 110000				228 600	Tools, dies	
6292	West No. 9A (Cumloy)	M–465	0.3-0.4 C, 1.25-1.50 Mn, 0.3-0.4 Si, 0.2-0.3 Mo, 0.12 V, bal. Fe	Heat treated	70000 100000				196 514	Shafts, gears, machinery parts	Tough
6293	West No. 10 (Cumloy)	M–465	0.4-0.5 C, 0.6-0.8 Mn, 0.3-0.4 Si, 0.8-1.1 Cr, 0.2-0.3 Mo, bal. Fe	Heat treated	60000 100000				196 514	Gears, shafts, machinery parts	S.A.E.-4145. Resists wear. Cannot be welded
6294	West No. 11 (Cumloy)	M–465	0.3-0.4 C, 0.8-1.1 Mn, 0.3-0.4 Si, 0.8-1.1 Cr, 0.2-0.3 Mo, bal. Fe	Heat treated	75000 110000				196 514	High strength forgings	S.A.E.-4153 wear resistant
6295	West No. 12 (Cumloy)	M–465	0.2-0.3 C, 0.6-0.8 Mn, 0.7-0.8 Si, 0.9-1.25 Cr, 0.4-0.6 Mo, bal. Fe	Heat treated	70000 90000				170 402	Machinery parts	Tough
6296	West No. 13 (Cumloy)	M–465	0.35-0.45 C, 1.0-1.25 Mn, 0.7-0.8 Si, 0.8-1.1 Cr, 0.2-0.3 Mo, bal. Fe	Heat treated	80000 120000				217 600	Dies	Cannot be welded
6297	West No. 14	M–465	0.5-0.6 C, 0.6-0.8 Mn, 0.3-0.4 Si, 1.0-1.25 Ni, 0.4-0.5 Mo, bal. Fe	Heat treated	80000 120000				217 512	Dies, blocks	Cumloy
6298	West No. 14A	M–465	0.3-0.4 C, 0.6-0.8 Mn, 0.3-0.4 Si, 1.25-1.50 Ni, 0.3-0.4 Mo, bal. Fe	Heat treated	70000 100000				196 514	Cams	Cumloy

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6299	Feralloy		14 Al, Mn, Si, bal. Fe							Corrosion and heat resistant parts	Corrosion and heat resistant
6300	Abanoid		20 Ni, bal. Cu							Castings	Nickel Silver, corrosion resistant
6301	Easy-Flo	M-63	50 Ag, 15.5 Cu, 16.5 Zn, 18 Cd							Brazing	M.P.-1175-1200°F. Corrosion resistant
6302	Silver Fox No. 21	M-430	C, high Ni, high Cr, bal. Fe	Softened	88000	29000	81	79		Table ware, cooking untesils, ornamental goods	Austenitic. Not hardened by heat treatment
6303	Kuplus, High Tensile	M-448	C, Cu, bal. Fe		80000	56000	18	45		Structural work	High yield strength
6304	Kuplus, Chrome	M-448	C, Cr, bal. Fe		80000	54000	17	45		Structural work	High yield strength
6305	Rokbore	M-430	High C, bal. Fe							Hollow mine drills	
6306	Tally-Ho 100	M-430	Low C, bal. Fe	Hardened	89000	61000	31	59		Case-hardened parts	Carburizing steel Iz-65
6307	Tally-Ho 200	M-430	Low C, alloy, bal. Fe	Hardened	191000	165000	16.5	57		Dies, inserts	Carburizing steel. Iz-32-35
					198000	179000	15.5	47			
6308	Tally-Ho 300	M-430	C, high alloy, bal. Fe	Heat treated	265000	213000	12.5	34	400	Plastic industry, dies	Oil and air-hardening. Iz-23
					250000	206000	13.5	34			
6309	Tally-Ho 400	M-430	C, Ni, Cr, bal. Fe	Heat treated	270000		10	30	450	Small dies and inserts	Oil-hardening. Iz-15
6310	B.K.L.	M-430	High C, high Cr, bal. Fe	Hardened					212 601	Dies for plastic molds	Corrosion resistant
6311	Silver Fox No. 14	M-430	C, alloy, bal. Fe	Air hardened	89500		35	70	183	Dies and molds for plastic materials	Corrosion resistant Iz-20-100
					235000		10	20	477		
6312	S.D.S.	M-430	Low C, bal. Fe		45000	27000	36	69		Cold riveting, to replace wrought iron	Iz-70-96. Dead soft welding quality
					56000	33000	30	61			
6313	Atlas No. 50	M-76	0.35-0.40 C, 9.5-11 W, 3.5 Cr, 0.40 V, bal. Fe	At 750°F.	238500		3.5	17		Hot nut tools, hot header punches and swedging dies, forming dies	Hot die steel, oil hardening
				At 1400°F.	32000		35.5	89.8			See Atlas Hot Die
6314	Ferrul		54.6 Cu, 40 Zn, 5 Pb, 0.4 Al							Bearings, intricate castings	
6315	Alpro No. 146	M-126	Ni, Cr, Fe							Gray iron improver	
6316	Alpro No. 157	M-126	50 Ni, 50 Fe							Gray iron improver	
6317	Alpro No. 15	M-126	75 Ni, 25 Cr							Gray iron improver	
6318	Alpro No. 300	M-126	8 Cu, 92 Al							General light alloy castings	
6319	Alpro No. 301	M-126	Al alloy							Castings to be forged or die pressed	
6320	Alpro No. 302	M-126	10 Cu, 90 Al							Die castings	
6321	Alpro No. 307	M-126	Al alloy							Core boxes	
6322	Alpro No. 308	M-126	Al alloy							Cast cooking utensils	
6323	Alpro No. 309	M-126	Al alloy							Pistons	
6324	Alpro No. 310	M-126	7.5-8.5 Cu, 1.5 max. Fe+Si, bal. Al							Castings	
6325	Alpro No. 311	M-126	9.5-10.5 Cu, 1.5 max. Fe+Si, bal. Al							Die castings	
6326	Alpro No. 315	M-126	7.5-8.5 Cu, 1.75-2.25 Zn, 1.75 max. Fe+Si, bal. Al							Castings	
6327	Alpro No. 320	M-126	Zn, bal. Al							Light alloy castings	
6328	Alpro No. 330	M-126	Al alloy							Match plates	Low degree of top shrinkage
6329	Alpro No. 331	M-126	Si, bal. Al							Marine castings	Resists sea-water corrosion
6330	Alpro No. 332	M-126	Si, bal. Al							General utility castings	Resists sea-water corrosion
6331	Alpro No. 333	M-126	Al alloy							High pressure castings	Tough, dense, strong
6332	Alpro No. 380	M-126	Cu, Mn, bal. Al							Light alloy parts	Modified duralumin type
6333	Alpro No. 12	M-126	10 P, 90 Cu							Cu deoxidizer	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6334	Alpro No. 112	M-126	15 P, 85 Cu							Cu deoxidizer	
6335	Murex Nickel Steel	M-529	0.29 Mo, 0.54 Mn, 0.08 Si, 0.08 C, 2-3.5 Ni, bal. Fe		86000	72000	25	64		Electrodes for welding	High impact
6336	Ferry		2 Ba, 1 Ca, 0.25 Hg, bal. Pb							Bearings, solder	
6337	Michiana No. 122	M-184	.2 C, 18 Cr, 8 Ni, 3.5 Mo, bal. Fe							In sulfite paper industry	Corrosion and heat resistant
6338	Dick's Bearing Bronze		80 Cu, 10 Sb, 9.2 Sn, 0.8 P							Bearings	
6339	K.E.-954	M-510	C, Co, Cr, bal. Fe	Air hardened					600 627	Valves for air-cooled engines	Air-hardening
6340	K.E.-241	M-510	C, Cr, Si, bal. Fe							Valves for water-cooled engines	Resists scaling to 1000 °C. Air hardening
6341	K.E.-2258	M-510	C, Ni, high Cr, bal. Fe							Valves	Stainless
6342	Blue Label	M-343	0.8-1.1 C, bal. Fe							General tools	"Heller Special Tool"
6343	Firth Sterling Meteor	M-57	1.15 C, 1.4 W, bal. Fe							Taps, punches, stamps, drills	
6344	Firthite, Grade H	M-57	WC, 6.5 Co						78Rc	Cutters on cast iron, non-ferrous metals and non-metallics	Cemented WC
6345	Firthite, Grade XS	M-57	WC							Cutters on hard materials	Cemented WC
6346	Firthite, Grade H-13	M-57	WC							Tools, dies, cutters	Cemented WC
6347	Firthite, Grade T-41	M-57	WC, 8 Co						79Rc	Tools, dies, cutters	Cemented WC
6348	Firthite, Grade XDL	M-57	C, W, bal. Fe							Extrusion and hot working dies	Hot work steel
6349	Firthite, Grade ND	M-57	C, W, bal. Fe							Hot working dies	Hot work steel
6350	Firthite, Grade AAV	M-57	C, bal. Fe							General tools	
6351	Chimo	M-57	0.50 C, 2.0 Si, 0.87 Mn, 2.3 Mo, 0.12 Cr, 0.35 V, bal. Fe							Pneumatic chipping chisels	Tough, air hardening
6352	Firth Sterling Nirosta KA2S	M-57	0.08 C, 0.4 Mn, 18 Cr, 8 Ni, bal. Fe							Stainless and corrosion resistant parts	Stainless, corrosion resistant
6353	Firth Sterling Nirosta 19-9	M-57	0.12 C, 0.4 Mn, 19 Cr, 9 Ni, bal. Fe							Marine and naval work	Stainless and corrosion resistant
6354	Stainless TX	M-57	C, Cr, Ni, bal. Fe							Turbine blades	Heat and corrosion resistant
6355	X.D.H.	M-57	0.55 C, 18 W, 4 Cr, 0.5 V, bal. Fe							Extrusion and hot working dies	Hot work steel
6356	Die Cast	M-336	C, alloy, bal. Fe							Aluminum die casting dies	Does not warp or shrink
6357	Impress	M-336	C, alloy, bal. Fe							Impression dies	Non-distorting
6358	Hylo	M-336	C, Mn, bal. Fe							Dies	Oil hardening
6359	Mol-Die	M-336	C, Mn, bal. Fe							Bakelite and rubber molds	Not affected by steam. Oil hardening
6360	Bowco Water Hardening Tubing	M-336	High C, bal. Fe							Forming and blanking dies	Water-hardening
6361	Swedish Steel No. 4	M-336	C, bal. Fe							Embossing dies, wood and machine screw cold-header dies	Water hardening
6362	Swedish Steel No. 9	M-336	C, alloy, bal. Fe							Large cold-header dies	Water hardening
6363	Swedish Steel No. 41	M-336	C, high Si, high Mn, bal. Fe							Chipping chisels	Retains keen cutting edge
6364	Circle L-A	M-74	.4 C, .7 Mn, bal. Fe							Steel castings	
6365	Firth-Sterling Nirosta F.C.	M-57	0.12 C, 0.9 Mn, 18 Cr, 8 Ni, 0.25 Se, bal. Fe							Screws, bolts, nuts, pump shafts, bushings, spindles, valve trim	Stainless, free cutting
6366	Misco "C"	M-84	0.20 max. C, 28-30 Cr, 8-10 Ni, 0.6-0.8 Si, bal. Fe	Untreated Castings	90000 95000	60000 65000	28 23	36 30		In sulfite industry, castings, valves	Corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6367	Bohn No. 100	M-138	100 Cu		20000		30		80	Conductors, electrical equipment	Conductivity copper
					25000		20		85		
6368	Bohn No. 100C	M-138	98 Cu, 2 Zn		27000	10000	35		45	Conductors, electrical equipment	Conductivity
					32000	12000	20		35		
6369	Bohn No. R-55	M-138	56-57.5 Cu, 0.15 Sn, 2-3 Pb, bal. Zn	Wrought	56000	25000	15		90	Wrought architectural parts	Wrought alloy
6370	Bohn No. R-59	M-138	58-60 Cu, 2-2.75 Pb, bal. Zn	Forged	45000	18000	25			Brass forgings, screws, studs	v.S.A.E.-No. 88
6371	Bohn No. R-59B	M-138	58.5-61.5 Cu, 0.10 Sn, 1.5-2.5 Pb, 0.30 Fe, 0.50 Al, 0.50 Ni, bal. Zn	Wrought	55000	25000	25		80	Brass forgings	v. ASTM-B-30-32 T No. 14
							40		90		
6372	Bohn No. R-59C	M-138	57.5-60 Cu, 2.25-3.25 Pb, 0.15 max. Fe, 0.2 max. Sn, bal. Zn	Wrought	55000	25000	30		100	Brass fittings	Wrought alloy
6373	Bohn No. R-59T	M-138	59-61 Cu, 0.5-1.0 Pb, bal. Zn	Wrought	45000	22000	25		85	Propeller shafts, tubing, piston rods, shafts, bushings, bearings	S.A.E.-76
							35		100		
6374	Bohn No. R-60	M-138	59-63 Cu, 0.30 max. Pb, bal. Zn	Wrought	55000	30000	35		100	Condenser tubes	v. Muntz Metal ASTM-B-56-25
6375	Bohn No. R-60N	M-138	60 Cu, 1.0 Sn, 0.2 max. max. Pb, bal. Zn	Wrought	60000	27000	30		120	Forgings and tubing	v. Naval Brass
6376	Bohn No. R-61	M-138	61 Cu, 3 Pb, 37 Zn	Wrought	50000	24000	40		85	Rods, pins, nuts, plugs, screws, valve caps and disks	Free cutting. v. S.A.E. No. 72
6377	Bohn No. 68	M-138	63-67 Cu, 1.0 max. Sn, 2-4 Pb, bal. Zn	Cast	28000	10000	30		45	Castings, radiator parts,	Yellow brass
					33000	12000	22		52	battery terminals, fittings	v. S.A.E. No. 41
6378	Bohn No. 75	M-138	75 Cu, 6 Sn, 16 Pb, bal. Zn	Cast	18000	11000	17		45	Castings, journals	Journal brass
					25000	13000	11		55		
6379	Bohn No. 79	M-138	79 min. Cu, 2.5-3.5 Sn, 6.25-7.75 Pb, 7.5 min. Zn, 0.50 max. Ni, 0.35 max. Fe	Cast	22000		15		50	Castings	Semi-red casting brass. v. ASTM-B-30-32T-No. 9
					28000		10		55		
6380	Bohn No. 85	M-138	85 Cu, 5 Sn, 5 Pb, 5 Zn	Cast	26000	15000	20		49	Castings, water pump impellers, bushings, fittings	v.-S.A.E. No. 40
					32000	18000	15		55		Red brass
6381	Bohn No. 53	M-138	53 Cu, 45 Pb, 2 Ni	Cast	6000	4000	7		25	Castings	Casting alloy
					8000	5000	5		30		
6382	Bohn No. 70	M-138	70 Cu, 30 Pb	Cast	8000	4000	9		24	Castings, aircraft bearings	U.S. Government Spec. B.
					11000	5000	4		29		
6383	Bohn No. 70D	M-138	75 Cu, 5 Sn, 20 Pb	Cast	19000	12000	16		37	Castings, bearings	Casting alloy
					23000	15000	12		45		
6384	Bohn No. 80	M-138	80 Cu, 10 Sn, 10 Pb, 0.25 max. P.	Sand cast	26000	18000	8		61	Bearings, wrist pins, bushings, piston pins	v.-S.A.E. No. 64
					32000	20000	4		70		
6385	Bohn No. 80 C	M-138	79 Cu, 9 Sn, 11 Pb, 1 Zn	Sand cast	29000	18000	10		63	Castings	v. ASTM-B-66-28
					35000	21000	6		75		
6386	Bohn No. 82	M-138	84 Cu, 16 Sn, 1.0 max. P	Sand cast	30000	25000	1.5		83	Castings	v. ASTM-B22-21, Grade B
					32000	27000	1		93		
6387	Bohn No. 82D	M-138	79 Cu, 17 Sn, 3 Zn, 1 Ni	Sand cast	30000	23000	4		115	Castings	Casting alloy
					35000	28000	1		130		
6388	Bohn No. 84	M-138	84 Cu, 5 Sn, 9 Pb, 2 max. Zn	Sand cast	25000	13000	15		44	Bronze backed bearings, connecting rod bearings	S.A.E. No. 66
					31000	16000	10		52		Bearing back bronze
6389	Bohn No. 86	M-138	86.5 Cu, 11 Sn, 1.25 Pb, 0.25 P, 1.0 Ni	Sand cast	35000	14000	8		80	Castings	Casting alloy
					42000	18000	2		95		
6390	Bohn No. 86D	M-138	84 Cu, 10 Sn, 2.5 Pb, 3.5 Ni	Sand cast	38000	12000	15		75	Castings	Casting alloy
					45000	16000	7		90		
6391	Bohn No. 87	M-138	84 min. Cu, 7.25-8.75 Sn, 1.5-2.5 Pb, 3.5-4.5 Zn, 0.03 max. P	Sand cast	35000	17000	30		60	Bearings	v. ASTM-B30-32-T No. 3
					40000	20000	15		75		
6392	Bohn No. 88	M-138	88 Cu, 10 Sn, 2 Zn	Sand cast	32000	18000	20		65	Gears, bearings, bushings, pins, fuel pump timers	"Gun Metal" v. S.A.E. No. 62
					40000	20000	15		74		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6393	Bohn No. 88C	M–138	86-89 Cu, 9-11 Sn, 1.0-2.5 Pb, 0.25 max. P	Sand cast	30000 40000	17000 20000	25 15		61 72	Bushings, bearings, fittings	Leaded Gun Metal. v. S.A.E.-63
6394	Bohn No. 89	M–138	89 Cu, 11 Sn, 0.10-0.30 P	Sand cast	30000 38000	20000 23000	8 5		67 77	Gears, worm wheels	v. S.A.E.-65
6395	Bohn No. 91	M–138	90 Cu, 6.5 Sn, 1.5 Pb, 2.0 Zn	Sand cast	34000 40000	16000 18000	25		50 57	Castings	v. ASTM-B-61-28
6396	Bohn No. R-56	M–138	56 Cu, 41 Zn, 0.15 max. Pb 3.0 hardener	Wrought	80000 90000	35000 42000	25			Wrought architectural shapes	Wrought alloy
6397	Bohn No. R-56C	M–138	56.5 Cu, 0.15 max. Sn, 1.0 hardener, bal. Zn	Wrought	60000 65000	20000 25000	50 40		70 85	Architectural shapes	Wrought alloy
6398	Bohn No. R-57	M–138	57 Cu, 9 hardener, 34 Zn	Wrought	95000 110000	40000 45000	25 20		150 180		Wrought alloy
6399	Bohn 56	M–138	56 Cu, 41 Zn, 3.0 hardener	Sand cast	70000 80000	30000 40000	35 20			Brackets, spiders, gear shifter forks, airplane tail skids	v. S.A.E. No. 43 Casting alloy
6400	Bohn 57	M–138	57 Cu, 34 Zn, 9 hardener	Sand cast	95000 105000	45000 55000	35 25				Casting alloy
6401	Bohn 58	M–138	55-64 Cu, 18 Ni, 0.35 max. Fe, bal. Zn	Cast	30000	20				Trimmings, control brackets, levers, fittings, plumbing	v. S.A.E. No. 42 Casting alloy
6402	Bohn No. R-42	M–138	44 Cu, 13 Ni, 0.2-0.3 Mn, 0.15 max. Sn, bal. Zn	Wrought	65000	35000	12				Wrought alloy
6403	Bohn No. R-45	M–138	45 Cu, 10 Ni, 0.25 max. Mn, 0.15 max. Sn, bal. Zn	Wrought	63000	26000	5		114		Wrought alloy
6404	Bohn No. R-47	M–138	47 Cu, 8 Ni, 0.25-0.50 Mn, 0.15 max. Sn, bal. Zn	Wrought	65000 70000	32000 35000	40 30		100 125		Wrought alloy
6405	Bohn No. R-90	M–138	90 Cu, 0.2 max. Sn, 1.0 max. Fe, 10 Al	Wrought	70000 80000	30000 40000	15 6			Worm wheels, gears, valve seats and guides, forgings	
6406	Bohn No. R-90A	M–138	86.5 Cu, 3.5 Fe, 10 Al	Wrought	85000	38000	25 15		135 165		
6407	Bohn No. R-90S	M–138	88 Cu, 3.5 Fe, 0.5 max. Sn, 8.5 Al	Wrought	85000	32000	25 15		120 145	Worm wheels, gears, valve parts, forgings	
6408	Bohn No. R-90M	M–138	85.5 Cu, 3.5 Fe, 11 Al	Wrought	90000	50000	1 8		165 185		Wrought alloy
6409	Bohn No. R-90H	M–138	84.5 Cu, 3.5 Fe, 12 Al	Wrought	95000	60000	4 1		180 210		Wrought alloy
6410	Bohn No. R-90V	M–138	79 Cu, 5 Fe, 11 Al, 5 Ni	Wrought	105000 125000	70000 80000	5 3		235 254	Valve seats	Wrought alloy
6411	Bohn No. 90	M–138	90 Cu, 0.2 max. Sn, 1.0 max. Fe, 10 Al	Sand cast	60000 75000	22000 26000	25 15		90 100		Casting alloy v. ASTM B-59-28, Grade B
6412	Bohn No. 90A	M–138	86.5 Cu, 10 Al, 3.5 Fe	Sand cast	80000	30000	25 15		120 150		Casting alloy.
6413	Bohn No. 90S	M–138	88 Cu, 3.5 Fe, 8.5 Al, 0.5 max. Sn	Sand cast	65000	25000	20		100	Worm wheels, gears	Casting alloy S.A.E. No. 68, Grade A
6414	Bohn No. 90M	M–138	85.5 Cu, 3.5 Fe, 11 Al	Sand cast	85000	38000	8 3		135 165		Casting alloy
6415	Bohn No. 90H	M–138	84.5 Cu, 3.5 Fe, 12 Al	Sand cast	88000	43000	5 1		160 185		Casting alloy
6416	Bohn No. 90V	M–138	79 Cu, 5 Fe, 11 Al, 5 Ni	Sand cast	90000 100000	35000 50000	10 5		175 215		Casting alloy
6417	Bohn No. 2	M–138	89.5 Sn, 2.5 Cu, 8 Sb, 0.25 max. Pb							Bearings	
6418	Bohn No. 3	M–138	89 Sn, 3.25 Cu, 7.75 Sb, 0.6 max. Pb		14900	6100	25 50		24.5	Bearings	v. ASTM B-23-26 No. 2

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6419	Bohn No. 4	M-138	91 Sn, 4.5 Cu, 4.5 Sb, 0.6 max. Pb		12900	4400	20		17	Bearings, aircraft engine linings	v. S.A.E. No. 10
							35				
6420	Bohn No. 5	M-138	87.5 Sn, 5.75 Cu, 6.75 Sb, 0.6 max. Pb		10000		25		15	Bearings, for lining connecting rod and shaft bearings	v. S.A.E. No. 11
					13000		35		25		
6421	Bohn No. 6	M-138	85 Sn, 7.5 Cu, 7.5 Sb, 0.6 max. Pb		12000		30		15	Bearings	
					15000		40		28		
6422	Bohn No. 7	M-138	3.25 Sn, 87.75 Pb, 9 Sb, 0.50 max. Cu		14600	3400			19	Bearings	v. ASTM-B-67-28
6423	Bohn No. 10-90	M-138	10 Sn, 90 Pb, 0.5 max. Sb							Solder	M.P.-310°F.
6424	Bohn No. 20-80	M-138	20 Sn, 80 Pb, 0.5 max. Sb							Solder	M.P.-357.8°F.
6425	Bohn No. 25-75	M-138	25 Sn, 75 Pb, 0.5 max. Sb							Solder	M.P.-357°F.
6426	Bohn No. 30-70	M-138	30 Sn, 70 Pb, 0.5 max. Sb							Solder	M.P.-357.8°F.
6427	Bohn No. 35-65	M-138	35 Sn, 65 Pb, 0.25 max. Sb							Solder	M.P.-357.8°F.
6428	Bohn No. 40-60	M-138	40 Sn, 60 Pb, 0.25 max. Sb							Solder	M.P.-357.8°F.
6429	Bohn No. 50-50	M-138	50 Sn, 50 Pb, 0.25 max. Sb							Solder	M.P.-357.8°F.
6430	Bohn No. 60-40	M-138	60 Sn, 40 Pb, 0.25 max. Sb							Solder	M.P.-357.8°F.
6431	Bohnalite B	M-138	4-5 Cu, 1.2 Max. Si, 1.0 max. Fe, 0.3 max. Mg, bal. Al	Heat treated	28000	14000	10		55	Airplane parts, windshield frames, engine crankcases	v. S.A.E. No. 38
					45000	27000	1		115		
6432	Bohnalite E	M-138	7-8.5 Cu, 0.5 max. Si, 1.0 max. Fe, bal. Al		18000		3.0		55	Crankcases, oil pans, hub caps, camshaft housings	v. S.A.E. No. 30
					23000	12000	1.5		65		
6433	Bohnalite F	M-138	6-8 Cu, 3.0 max. Si, 1.5 max. Fe, 2.5 Zn, bal. Al		19000	12000	2		50	Crankcases, oil pans, transmission cases	v. S.A.E. No. 33
					24000		1		70		
6434	Bohnalite I	M-138	11-13 Cu, 1.0 Si, 1.2 max. Fe, bal. Al		21000	16000	2		70	Castings	v. S.A.E. No. 32
					25000		0		75		
6435	Bohnalite J	M-138	9.25-10.75 Cu, 1.5 max. Fe, 0.35 Mg, bal. Al	Heat treated	26000	18000	1		80	Pistons, camshaft bearings, valve tappet guides	v. S.A.E. No. 34
					40000	28000	0		115		
6436	Bohnalite Q	M-138	2.25-3.25 Cu, 12.5-14.5 Zn, bal. Al		22000	19000	4		60	Crank cases, oil pans, transmission cases	v. S.A.E. No. 31
					29000		1		70		
6437	Bohnalite Q-2	M-138	2.25-3.25 Cu, 1.5 Fe, 9-11.5 Zn, bal. Al		25000		6		65	Crank cases	v. S.A.E. No. 31A
					32000	20000	2		80		
6438	Bohnalite U	M-138	0.3 max. Cu, 12.5-13.0 Si, 0.8 max. Fe, bal. Al		24000	11000	15		45	Corrosion resisting tight castings	v. S.A.E. No. 37
					31000		5		65		
6439	Bohnalite W	M-138	0.1 max. Cu, 4.5-6.0 Si, 0.8 max. Fe, 0.2 max. Zn, bal. Al		17000	7000	6		35	Automobile body parts, architectural castings	v. S.A.E. No. 35
					22000		3		65		
6440	Bohnalite W-3	M-138	1.5 Cu, 4.5-6.0 Si, 1.0 max. Fe, 0.75 Mg, bal. Al	Heat treated	27000	20000	5		60		Sand casting alloy
					40000	27000	1		100		
6441	Bohnalite W-4	M-138	0.2 max. Cu, 6.5-8.0 Si, 0.5 max. Fe, 0.3 Mg, bal. Al	Heat treated	26000	14000	5		50		Sand casting alloy
					40000	20000	3		70		
6442	Bohnalite Y	M-138	3.5-4.5 Cu, 0.4 max. Si, 1.0 max. Fe, 1.2-1.7 Mg, 1.8-2.3 Ni, bal. Al	Heat treated	35000	24000	1.0		85	Pistons, cylinder heads of aircraft engines	v. S.A.E. No. 39
					40000		0.5		115		
6443	Bohnalite Y-2	M-138	3-4 Cu, 0.5-0.75 Si, 0.75-1.75 Fe, 0.5-0.75 Mg, 0.5-0.75 Ni, bal. Al	Heat treated	32000	24000	5.0		80		Sand casting alloy
					50000	28000	0.5		115		
6444	Bohnalite C	M-138	4-5 Cu, 2.5-3.5 Si, 1.5 max. Fe, bal. Al	Mold cast	40000	20000	11		70	Permanent mold castings	
					55000	45000	1		120		
6445	Bohnalite L	M-138	0.8 Cu, 11.5 Si, 1.0 Fe, 1.0 Mg, 2.5 Ni, bal. Al	Mold cast	28000	22000	1		90		
					40000	33000	0		120		
6446	Bohnalite S	M-138	Al alloy	Wrought	12000	4000	40		20		v. S.A.E. No. 25
					15000		30		30		
6447	Bohnalite S-3	M-138	0.2 max. Cu, 1.0-1.5 Mn, bal. Al	Wrought	15000	6000	40		28	Automobile body panels, gas tanks, panelling	v. S.A.E. No. 29
					19000		25		50		
6448	Bohnalite S-17	M-138	3.5-4.5 Cu, 0.2-0.8 Mg, 0.4-0.4-1.0 Mn, bal. Al	Heat treated	58000	35000	15		100	Tubing, airplane and dirigible parts	v. S.A.E. No. 26
6449	Bohnalite S-25	M-138	4.0-4.8 Cu, 0.5-1.1 Si, 0.5-1.1 Mn, bal. Al	Heat treated	58000	35000	15		100	Connecting rods, aircraft propellers, hardware, fittings	v. S.A.E. No. 27

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6450	Bohnalite S-43	M-138	0.2 max. Cu, 4.5-6.0 Si, bal. Al	Wrought	19000	10000	18 30		35 45	Automobile body parts	v. S.A.E. No. 35
6451	Bohnalite S-51	M-138	0.6-1.2 Si, 0.5-0.9 Mg, bal. Al	Heat treated	45000	30000	14		95	Airplane engine crankcases, automobile hardware	v. S.A.E.-28
6452	Bohnalite S-53	M-138	0.05 max. Cu, 0.75-1.0 Si, 1.1-1.4 Mg, 0.25 Cr, bal. Al.	Wrought	17000 25000	10000 16000	30 18		40		
6454	Megapyr	Ger.	30 Cr, 65 Fe, 5 Al							Electrical resistances	Heat resistant to 1300°C. High elec. res. and low temp. coef.
6455	Bohnalite X-3	M-138	6 Al, 0.3 Mn, bal. Mg	Sand cast	28000 31000	7000 8000	12 9		48	High strength light alloy castings	
6456	Ermann Metal		50 Bi, 25 Sn, 25 Pb							Low fusion parts	M.P.-93°C.
6457	Bohnalite X-5	M-138	8 Al, 0.2 Mn, bal. Mg	Heat treated	31000 35000	8000 10000	12 9		50	High strength castings	
6458	Bohnalite X-6	M-138	1.5 Mn, bal. Mg	Wrought	38000 42000	22000 25000	8 5		40	Light alloy parts	Max. corrosion resistance
6459	Alcoa 108	M-4	4 Cu, 3 Si, bal. Al	Sand cast	21000	14000	2		60	Light alloy parts	Sand castings
6460	Borcher Alloy 1		30 Cr, 35 Co, 35 Ni							Chemical apparatus	Heat and corrosion resistant
6461	Borcher Alloy 2		36 Cr, 60 Fe, 4 Mo							Heat treating and annealing pots	Heat and corrosion resistant
6462	Borcher Alloy 3		65 Cr, 35 Fe							Pyrometer tubes, crucibles	Heat and corrosion resistant
6463	Borcher Alloy 4		34 Co, 34 Ni, 30 Cr, 2 Ag							Chemical apparatus	Heat and corrosion resistant
6464	Borcher Alloy 5		35 Co, 35 Ni, 30 Cr, 0.5-5.0 Mo							Heat resisting parts, annealing pots	Heat and corrosion resistant
6465	Nichrome III	M-44	85 Ni, 15 Cr		110000					Electrical resistance units, annealing pots, heating elements	Heat and corrosion resistant. Coef. Res.-0.000187 Sp. Res.-89.5
6466	Nichroloy II		40 Ni, 7 Cr, 3 Mn, bal. Fe							Resistance wire, heat treating boxes	Heat and corrosion resistant
6467	Nichroloy III		75 Ni, 16 Cr, 3 Mn, bal. Fe		105000 112000	60000 80000	45 25	65 59	180 210	Resistance wire, heat treating boxes	Heat and corrosion resistant
6468	K-Monel	M-68	66 Ni, 30 Cu, 3.5 Al, 1.5 Fe, 0.20 max. C, 5 max. other metals	Heat treated	120000 160000	80000 120000	40 15	50 20	225 350	Springs, non-magnetic parts, pump rods, check valves, marine	Corrosion resistant. Can be heat treated
6469a	Yoloy	M-531	0.08 C, 2.0 Ni, 1.0 Cu, bal. Fe	Hot rolled	67000	54000	29	62	120	Seamless pipes, shapes, bars, wire, electric welded pipe	Corrosion resistant
6469b	Yoloy	M-531	0.22 C, 2.0 Ni, 0.9 Cu, bal. Fe	Hot rolled	95000	64000	26	57	195		
6470	Bethlehem 33A	M-24	0.16 C, 1.3 Mn, S, bal. Fe	Water treated	73000 119000	48000 89000	35 19	63 55	156 241	Carburized parts, machinery parts	Free machining
6471	Bethlehem 33B	M-24	0.30 C, 1.3 Mn-S, bal. Fe	Water treated	82000 143000	52000 118000	19 15	54 48	162 293	Machinery parts	Free machining
6472	Bethlehem 33C	M-24	0.40 C, 1.3 Mn-S, bal. Fe	Annealed Oil treated Water treated	90000 142000 178000	62000 102000 161000	26 13 12	47 39 36	183 285 375	Machinery parts	Free machining
6473	M. L. Steel	M-76	0.8 C, 2 V, 18 W, 0.75 Mo, 4 Cr, bal. Fe	Oil harden						High speed tools and cutters	High speed steel
6474	Ludlum No. 602	M-76	0.50 C, 0.40 Mo, 1.5 Si, 0.12 V, bal. Fe	Hardened	330000	270000	9	28	578	Chisels, punches	Shock resistant
6475	L. S. D. Steel	M-76	1.0C, 0.30 Mo, 1.25 Cr, bal. Fe	Oil harden						Tools, dies, rollers	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6476	Caroga	M-76	0.50 C, 1.0 Cr, 0.70 Mn, 0.15 V, bal. Fe	Oil hardened						Tools, gears, springs	
6477	Tungsten Magnet	M-76	0.70 C, 0.50 Cr, 5 W, bal Fe							Magnets	
6478	Shoe Die	M-76	0.55 C, 0.65 Cr, 0.35 Mo, bal. Fe	Oil hardened						Dies	Shock resistant
6479	Alpha	M-76	High C, bal. Fe							Drills	
6480	Bronze Bearings, A.S.T.M.-B-22-21		11-20 Sn, 0-11 Pb, 0-2.25 Zn, 0-1.0 P, bal. Cu							Bearings for turntables, bridges, trunnions, machinery	Grades A, B, C, D, of different compositions
6481	BA-31	M-28	5-6 Cu, bal. Al	Cast	25000		4		65	Light alloy parts	Shock resistant
6482	Duplex C.H. No. 1	M-38	0.20 C, 3.25 Ni, 1.2 Cr, bal. Fe	Heat treated	195000	170000	15	50	321 375	Carburized parts, cam shafts, connecting rods	Case-hardening steel
6483	Duplex C.H. No. 2	M-38	0.20 C, 1.5 Ni, 1.2 Cr, bal. Fe	Heat treated	165000	140000	12	50	260 302	Carburized parts, gears, pinions	Case-hardening steel
6484	Duplex C.H. No. 3	M-38	0.20 C, 3 Ni, 0.5 Cr, bal. Fe	Heat treated	170000	155000	14	48	296 311	Carburized parts	Case-hardening steel
6485	Emperor	Ger								Bearings	
6486	Carpenter No. 500	M-32	Low C, 5 Ni, bal. Fe							Turbine blades, case-hardened gears and pinions	
6487	Carmelia Bronze		Pb, Zn, bal. Cu							Machinery bearings	
6488	Bethlehem No. 6 Nickel Steel	M-24	34-36 Ni, .05 C, bal. Fe							Heating elements, instruments	Low coef. exp.
6489	Norbide	M-532	78 B, 0.14 Fe, 21 C, (B_4C)							Wire drawing dies, drilling W C die nibs, nozzles for abrasive blasting	*Cemented boron-carbide*
6490	Vi rgo	M-533	C, alloy, bal. Fe							Molten salt containers and pots	Non-oxidizing
6491	Lunz Iron	M-534	C, alloy, bal. Fe							Glass molds	Non-warping
6492	Trenite-H	M-535	C, alloy, bal. Fe		45000		.4		250	Heat, wear, corrosion resistant parts	Heat, wear, corrosion resistant
6493	Mitchalloy D	M-536	High C, Ni, Cr, bal. Fe							Gratebars	Alloy cast iron
6494	Silbrass		4-5 Si, 10-12 Zn, bal. Cu							Corrosion resistant parts	Corrosion resistant
6495	Bethlehem pecial Gear Ste.l	M-24	C, Ni, Mo, bal. Fe							Gears, pinions, transmission units	Grain-size control
6496	Illinois Chro- Nickel-Moly	M-66	C, Cr, Ni, Mo, bal. Fe							Axles, shafts, jackshafts	Resists high torsion stresses
6497	Aluminum Alloy No. 12	M-92	7-8.5 Cu, 0.2 Zn, 1.7 max. Si + Fe + Sn, bal. Al		17000 20000	14500	1.5 1.0		50	Al foundry alloy	
6498	Mo-Max	M-614	0.64-0.84 C, 3.25-4.25 Cr, 1.25-2 W, 0.75-1.25 V, 7.5-9.5 Mo, bal. Fe							High speed tools and cutters, hot work dies, drills	High speed steel Pat. No. 1937334
6499	"A.W. 70-90" Type A	M-537	0.25 max. C, 0.7 Mn, 0.1 P, 0.5 Cu, bal. Fe		90000	70000	20			Sheets, plates	Easy to weld
6500	Rex "Z" Metal	M-566	C, alloy, bal. Fe		80000	56000	14		190	Chains, buckets, sprockets	Corrosion and abrasion resistant
6501	Atlas Hollow-Drill	M-435	.75-.85 C, bal. Fe							Hollow drills	
6502	No. "40 D" Alloy	M-28	5-14 Si, bal. Al	Hard Soft	31000 20000		5 30			Marine parts, architectural work	Corrosion resistant Discontinued
6503	B. A. / 60A Alloy	M-28	1.25 Mn, bal. Al	Hard Soft	29000 14000	25000 5000	5-3 40		28 55	Light alloy parts, tubes, sections	Corrosion resistant
6504	D-2 Alloy	M-28	2.5 Mg, bal. Al	Annealed Hard rolled	28000 44000	14000 40000	24 5		46 76	Sheets, tubes, light alloy parts	
6505	Nironite	M-229	C, alloy, bal. Fe								Special iron alloy
6506	Empire Machinery Steel	M-38	C, bal. Fe							Machinery parts	Discontinued
6507	Asculoy	M-158									
6508	Alpha	M-539	Sn alloy		14900		5 6	6.1	35	Babbitts, bearings	Babbitt metal
6509	Marine Nickel	M-540								Bearings	Babbitt metal
6510	Eureka									Babbitt, bearings	Babbitt metal
6511	Nickeline	M-88	Sn alloy						24	Babbitt, bearings	Babbitt metal

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P	% El.	% R.A.	Brin. No.	Uses	Remarks
6512	Nico	M-542	C, Cu, Ni, bal. Fe							Corrugated culverts	Rust resistant
6513	Alunyte	M-543	3.75 Mg, 96.25 Al		25000	12000	9		50	Dairy equipment	
6514	Beckett Metal	M-544	60 Cu, 5 Sn, 35 Pb		21000	13500	15	36		Bearings	
6515	Aristocrat	M-77	Sn alloy							Babbitt bearings	Discontinued
6516	Atsina	M-76	C, W, bal. Fe							Magnets, electrical machinery	Discontinued
6517	Copaloy	M-545	Babbitt							Bearings	
6518	Kinnalloy	M-546	High C, Ni, Cr, bal. Fe		40000				500	Castings	Cast iron
6519	Aluminum-oy		Al alloy							Light alloy parts	
6520	Argent	M-547	Ag-Sn		6775		3.7			Al solder	Sc-14
6521	Argus	M-548								Bearings	Antifriction babbitt
6522	Aristaloy	M-18	67-70 Ag, 25-29 Sn, 3-5 Cu, 0-1 Zn							Dental amalgams and dies	U.S.P. 1963085
6523	Plata Metal No. 5	M-567								Bearings	Babbitt metal
6524	Stabrite	M-550	Ni alloy							Castings	
6525	Alual	M-551	Al							Wire, strip	Al-Products
6526	Lohete	M-345								Thermostats	Heat resistant thermostatic metal
6527	Muraloy	M-552								Castings	Discontinued
6528	Navaloy									Bearings	Babbitt metal
6529	Nickeloid	M-553								Bearings	Babbitt metal
6530	Nickonomy	M-345	C, bal. Fe								Discontinued
6531	Nic-Motal	M-554								Bearings	Babbitt metal
6532	Ni-Copper	M-60	Ni-Cu							Wire for motor winding	Heat resistant (Disontinued)
6533	Ducol Steel	M-530	C, bal. Fe							Machinery parts	
6534	Dalzell Steel	M-530	C, bal. Fe							Machinery parts	
6535	Talisman	M-178								Bearings	Antifriction
6536	Enebra Bronze	M-557	Cu-Sn							High static and dynamic parts	Corrosion resistant
6537	Nueral 132	M-555	0.8-1.0 Cu, 13-14 Si, 1.9-2.4 Ni, bal. Al	Sand cast	32000		.3			Cylinder Heads	
6538	Magnuminium 177	M-556	8.5 max. Al, 3.5 Zn, bal. Mg	Sand cast	20000	9000	2-8		50	Die castings	M.P.-610°C.
6539	Atha No. 2600	M-38	C, 22 Ni, 8 Cr, 1.75 Si, 1 Cu, bal. Fe							Furnace parts, heat treating boxes	Heat resistant Discontinued
6540	Nichrome IV	M-44	80 Ni, 20 Cr		120000	60000	25	35	183	Heating elements, heat treating boxes, electrical resistances	Heat resistant Discontinued
6541	Johnson Bronze No. 19	M-172	70 Cu, 11 Sn, 19 Pb		17500	20700	4 12		62	Mill bearings, engine bearings, general machinery bearings	
6542	Johnson Bronze No. 25	M-172	75 Cu, 5 Sn, 19 Pb, 1.0 Ni		22500	16750	7 15		44	Bearings for pumps, cylinder sleeves, electric motors	v. Plastic Bronze
6543	Johnson Bronze No. 27	M-172	80 Cu, 10 Sn, 10 Pb		30000	19000	5 15		58	Bearings for locomotive crossheads, lathes, grinders, motors	v. S.A.E. No. 64
6544	Johnson Bronze No. 29	M-172	78 Cu, 7 Sn, 15 Pb		24000	16400	5 13		52	Bearings for acid pumps, mining machinery, rolling mills	v. S.A.E. No. 67
6545	Johnson Bronze No. 51	M-172	87 Cu, 10 Sn, 1 Pb, 2 Zn		36500	18500	10 20		67	Bearings for power shovels, concrete mixers, worm gears	
6546	Johnson Bronze No. 53	M-172	88 Cu, 10 Sn, 2 Zn		36000	19000	14 22		69	Bridge bearings, gears, gear bushings	v. S.A.E. No. 63
6547	Johnson Bronze No. 55	M-172	86 Cu, 12 Sn, 2 Zn		39200	21000	10 15		74	Bearings for heavy machinery, mine pumps, bushings	
6548	Johnson Bronze No. 66	M-172	85 Cu, 5 Sn, 1 Zn, bal. Pb		26000	14500	7 17		48	Bearings for wood turning machinery, bench lathes	
6549	Johnson Bronze No. 71	M-172	85 Cu, 5 Sn, 5 Pb, 5 Zn		29000	16500	13 27		49	Sliding valve seats, stuffing box glands, cylinder sleeves	Bronze backed babbitt
6550	Johnson Bronze No. 72	M-172	83 Cu, 7 Sn, 7 Pb, 3 Zn		29000	14600	12 22		56	Camshaft bearings, gears, bushings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6551	Aeralloy	M-237	—Pt alloy							Electrical contacts	
6552	Allen	M-242								Stainless steel dairy solder	
6553	Allen Alumiflux	M-242								Solder	
6554	Allen Extra Strong	M-242								Solder for stainless steel	
6555	Allen Non-Dulling	M-242								Solder for stainless steel	
6556	Aloy-num	M-549	Al alloy							Pistons	
6557	Jelliff Alloy A	M-231	80 Ni, 20 Cr	Annealed	120000 200000					Industrial furnace elements, voltmeter windings, electrical instruments	Max. operating temp. 2100 °F. High resistance to oxidation and corrosion.
6558	Jelliff Alloy C	M-231	60 Ni, 15 Cr, 25 Fe	Annealed	100000 175000					Heating elements, rheostats, resistors, potentiometers.	Max. operating temp. 1700 °F. Heat and corrosion resistant
6559	Jelliff Alloy D	M-231	30 Ni, 5 Cr, 65 Fe	Annealed	83000					Heavy rheostats, car heaters, heating elements	Max. operating temp. -1300 °F.
6560	Jelliff Alloy 45	M-231	45 Ni, 55 Cu	Annealed	62000					Thermocouples, resistance coils, low temperature heaters	Zero temp. coef. res. Resists oxidation and corrosion at lower temp. Max. operating temp.-950 °F.
6561	Jelliff Alloy 70	M-231	70 Ni, 30 Cu	Annealed	70000					Heating elements	Max. operating temp.-1100 °F.
6562	Nonsulite	M-184	0.36-0.50 C, 28 Cr, 8 Ni, bal. Fe							Heat and corrosion resistant parts	Now Michiana No.48
6563	Ambraloy 901	M-8	5 Al, 95 Cu		50000 90000		70 5			Screw machine, extruded and drawn parts	Corrosion resistant
6564	Anaconda Phosphor Bronze 510	M-8	4 Sn, 4 Zn, 4 Pb, bal. Cu		60000	50000	20			Bearings, bushings, valve and pump parts, gears, pinions	Free cutting, wear resistant
6565	Anaconda Leaded Copper 946	M-8	0.75 Pb, bal. Cu		30000 50000		38 10			Screw machine parts, gas welding tips	Free machining
6566	Everdur (C) 1012	M-8	3 Si, 1 Mn, 0.40 Pb, bal. Cu	Soft Hard	70000 90000	45000 60000	25 8			Screw machine parts	Free cutting, wear and corrosion resistant
6567	B. & W. Nironta KA-2	M-477	0.13-0.16 C, 16-20 Cr, 7-11 Ni, bal. Fe	Hot finished Cold drawn	85000 75000	28000 25000	50 55	45	125 120	Heat and corrosion resistant parts, tubes	Stainless, heat and corrosion resistant
6568	B. & W. Nirosta KA-2S	M-477	0.07 max. C, 16-20 Cr, 7-11 Ni, bal. Fe	Hot finished Cold drawn	85000 75000	28000 25000	50 55	45	125 120	Heat and corrosion resistant parts, tubes	Stainless, heat and corrosion resistant
6569	Commercial Drill Rod	M-76	1.1 C, 0.25 Mn, bal. Fe							Dowell pins, shafting, push rods, drills	
6570	P. M. G., Grade 8	M-319	95.5 Cu, 3.0 Si, 1.5 Fe	Cast	50000 55000	28000 32000	30 20	20 15	95 105	Marine parts, valves, pump bodies and liners, tail shaft liners	Discontinued
6571	P. M. G., Grade 30	M-319	62 Cu, 0.8 Si, 0.4 Fe, 37.8 Zn	Cold drawn	75000 95000	30000 65000	30 20	50 25	140 200	Valve stems, pump spindles, nuts, bolts, screws, shafts	Discontinued
6572	P. M. G., Grade 77	M-319	77 Cu, 2.8 Si, 0.4 Fe, 19.8 Zn	Cold drawn	80000 85000	40000 45000	45 30	50 45	150 160	Valve stems, pump spindles, shafting	Discontinued
6573	Alcoa 27 S	M-4	4.5 Cu, 0.8 Si, 0.8 Mn, 0.05 Sn, bal. Al	T	60000	50000	11		115	Wrought light alloy parts, bridges, trucks	S.S.-37000 End. Lim.-13000 (Discontinued)
6574	Alcoa A-51 S	M-4	1.0 Si, 0.6 Mg, 0.25 Cr, bal. Al	O W T	16000 35000 48000	6000 20000 40000	35 30 20		28 64 100	Wrought light alloy parts, aircraft parts, crank cases, forgings	S.S.-11-30000 End. Lim.-6-10500
6575	Alcoa A-108	M-4	4.5 Cu, 5.5 Si, bal. Al	Cast P.M.	28000	16000	2		65 80	Permanent mold castings	Intricate
6576	Alcoa B-113	M-4	7.0 Cu, 1.2 Fe, 1.7 Si, bal. Al	Cast P.M.	28000	19000	2		70 90	Permanent mold castings	General purpose

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6577	Alcoa C-113	M-4	7.0 Cu, 1.2 Fe, 4.0 Si, 2.0 Zn, bal. Al	Cast	30000	24000	1		70 90	Permanent mold castings	
6578	Alcoa 138	M-4	10.0 Cu, 1.2 Fe, 4.0 Si, 0.2 Mg, bal. Al	Cast	32000	24000	0.5		85 110	Permanent mold castings	Retains hardness at high temperatures
6579	Alcoa 144	M-4	10.0 Cu, 4.0 Si, 0.2 Mg, bal. Al	Cast	32000	24000	0.5		85 110	Permanent mold castings	
6580	Alcoa B-195	M-4	4.5 Cu, 2.5 Si, bal. Al	T4 T62	40000 45000	22000 23000	10 5.0		75 90	Permanent mold castings	
6581	Alcoa D-195	M-4	5.5 Cu, 0.7 Si, bal. Al	T4	42000	28000	6		60 80	Permanent mold castings	Obsolete
6582	Alcoa 82	M-4	14 Cu, 5 Si, bal. Al	Die cast	44000		0.2		100	Die castings	
6583	Elephant Brand Phosphor Bronze, Grade A	M-450	95.5 Cu, 3.9 Sn, 0.3 P	Rolled rod	45000 80000		50 25			Machinery parts subject to constant vibration	Very tough
6584	Elephant Brand Phosphor Bronze Grade B	M-450	96 Cu, 3.25 Sn, 0.25 Pb, 0.5 P	Rolled or drawn	45000 80000		40 12			Machine castings, pinions, cog-wheels, propeller screws, piston rods, hardware	Corrosion resistant, tough and hard
6585	Elephant Brand Phosphor Bronze, Grade C	M-450	92 Cu, 8 Sn, 0.5 P	Rolled rod	75000 106000		52 20			Valves, cocks, cylinder liners	Wear and corrosion resistant. Hard and durable
6586	Elephant Brand Phosphor Bronze, Grade D	M-450	90 Cu, 10 Sn, 0.5 P	Rolled rod	89000 135000		29 16			Gears, valves, pumps, plungers, slides, powder mill tools	Hard
6587	Elephant Brand Phosphor Bronze, Grade E	M-450	P, Sn, bal. Cu							Valves, bearings of heated rolls	Very hard
6588	Elephant Brand Phosphor Bronze, Grade F.2	M-450	P, Sn, bal. Cu							Slow moving bearings under extreme pressures	Hard
6589	Elephant Brand Phosphor Bronze, Grade G	M-450	90 Cu, 5 Sn, 5 Pb, 0.35 P							Rods, bolts	Very tough
6590	Elephant Brand Phosphor Bronze, Grade S	M-450	.7-1.0 P, 9-11 Sn, 8-11 Pb, bal. Cu	Cast	35000 40000	19000 31000	4 3		57 90	Bearings for locomotive, marine and stationary engines, roll neck bearings, piston rings	Very hard and durable
6591	Chace Bimetal	M-582								Thermostats	
6592	Abrasoweld	M-578								Hard surfacing electrode, power shovel teeth, lips and bottoms	Self-hardening deposit, resists wear and abrasion
6593	N Y	French	0.07-0.20 C, 0.35 Mn, 4-7 Ni bal. Fe	Heat treated	78000 190000	58000 156000	25 8			Construction work, mine car wheels	Compare with alloy Serial No. 6788
6594	Hartmetalle	Ger.	WC							Tools, dies	Sintered W C
6595	Fahr		Fe-Ni-Cr							Heat resistant parts	Heat resistant
6596	Melloid	M-719	Cu alloy							Marine parts, hardware, condenser tubes	Corrosion resistant Malleable bronze
6597	Hyperm 6	M-72	C, Si, bal. Fe							Magnets, electrical apparatus	Magnetic alloy, high induction
6598	Hyperm 50 Y	M-72	C, high Ni, bal. Fe							Magnets, electrical apparatus	Magnetic alloy, high permeability
6599	Hyperm 36	M-72	C, alloy, bal. Fe							Magnets, electrical apparatus	Magnetic alloy, high permeability
6600	Hyperm 4	M-72	C, 2.5-4.5 Si, bal. Fe							Precision transformers	Magnetic alloy
6601	Silmalec	M-338	0.5 Mg, 0.5 Si, bal. Al							Light alloy parts	Age-hardening alloy
6602	Delta Bronze No. VI	M-156	Sn, Zn, bal. Cu							Intricate and hydraulic castings	Superior Gun Metal Corrosion resistant
6603	Delta Bronze No. VII	M-156	Cu alloy							Valves, spindles, internal combustion engine parts	Heat and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6604	Delta Bronze No. VIII	M-156	Cu alloy							Marine parts, bearings having no casings	Shock and wear resistant
6605	Delta Bronze No. IX	M-156	Cu alloy							Bearings, antifriction lining	Low frictional resistance
6606	Delta Bronze No. IXa	M-156	Cu alloy							Bearings, antifriction lining	Low frictional resistance
6607	Delta Propeller Bronze	M-156	Cu alloy		67000		20			Propellers, propeller blades	Corrosion resistant, malleable.
6608	Hiduminium RR-66	M-426	0.5 Cu, 0.33 Ni, 4.8 Mg, 0.33 Fe, bal. Al	Annealed Cold worked	45000 60500	22000 49000	24 10		80 121	Automobile parts, airplanes, boats	Corrosion resistant
6609	Elephant Brand Hardening No. 1	M-450	4 P, 50 Sn, bal. Cu							Hardener for Cu alloys	
6610	Elephant Brand Hardening No. 2	M-450	7 P, 10 Sn, bal. Cu							Hardener for Cu alloys	
6611	Elephant Brand Phosphor-Copper	M-450	P, bal. Cu							Hardener for Cu alloys	
6612	Elephant Brand Phosphorized Anti-Friction Metal	M-450								Antifriction lining, bearings	For heavy pressure and high speeds
6613	Diamant Bronze		Cu, Al, Si								
6614	Elkaloy	M-265								Welding electrodes	Discontinued
6615	Ardal Metal	M-581	2 Cu, 1.7 Fe, .6 Ni, bal. Al			31000	17000	15		60 Bearings, pistons, wire, tubes	Cannot be hardened by heat treatment
6616	Ultraloy	M-605	C, 37.5 Cr, 7.5 Al, bal. Fe							Furnace parts	See Smith Alloy No. 10
6617	Z.A.M.	M-580	.5 Al, .25 Hg, bal. Zn							Anodes for Zn plating	Acid resistant
6618	Bain Steel	M-113	0.15-0.25 C, 0.40-0.65 Mn, 0.40-0.75 Si, 1.5-2.0 Cr, 0.6-0.8 Mo, bal. Fe	Cast	75000	45000	20	45		High temperature castings and tubing	Heat resistant
6619	Fleetweld	M 578	C, bal. Fe							Welding electrodes	Coated electrode, Ductile welds
6620	Bisco	M-334	High C, alloy, bal. Fe							Ring dies, spacers, washers tubing	Tubing, Non-deforming, oil-hardening
6621	Colonial No. 34	M-34	.6-1.2 C, .2 V, bal. Fe							Tools	
6622	Ideal	M-115	.6-1.2 C, .2 V, bal. Fe							Tools	
6623	Elvandi	M-115	.6-1.2 C, .15 V, bal. Fe							Taps, dies	Electric furnace tool steel
6624	Red Steer Vanadium	M-34 M-115	0.3 Mn, 0.20 Si, 0.18-0.25 V, bal. Fe, .6-1.2 C							Mine drills	Water hardening
6625	Monarch	M-34	0.65-0.80 C, 0.25-0.70 Mn, 0.15-0.25 Si, bal. Fe							Solid plows	Water hardening
6626	Crown	M-34	0.54-0.65 C, 0.25-0.70 Mn, 0.15-0.25 Si, bal. Fe							Solid plows	Water hardening
6627	Alto	M-34 M-115	0.8-0.9 C, 0.25-0.70 Mn, 0.15-0.25 Si, bal. Fe							Die blocks, solid plows	Water hardening
6628	Colonial Jar Steel	M-34	0.60-0.68 C, 0.60-0.75 Mn, 0.15-0.25 Si, bal. Fe							Jars, tools	Water hardening
6629	Colonial Bit Steel	M-34	0.60-0.78 C, 0.60-0.75 Mn, 0.15-0.25 Si, bal. Fe							Bits, tools	Water hardening
6630a	Ply Steel—Hard	M-34	1.0 C, 0.40 Mn, 0.20 Si, 0.35 Cr, bal. Fe							Jails, safes, vaults	Hard and soft ply steel together
6630b	Ply Steel—Soft	M-34	0.15 C, 0.24 Mn, 0.15 Si, bal. Fe							Jails, safes, vaults	
6631	E. V. M.	M-115	0.82 C, 0.35 Si, 0.25 Mn, 18.5 W, 4.3 Cr, 2.1 V, 0.65 Mo, bal. Fe							Drills, chasers, lathe tools, forming tools	High speed steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6632	C. M. Tap	M-115	1.2 C, 0.25 Si, 0.60 Mn, 0.50 Cr, bal. Fe	Oil hardened	225000 120000		6 17	7 33	550 360	Punches, broaches, reamers, taps, blanking dies	Non-deforming
6633	Croman	M-115	1.2 C, 0.85 Mn, 0.25 Si, 0.5 Cr, 0.6 Mo, bal. Fe	Oil hardened	235000 145000		6 14	7 24	575 305	Punches, broaches, reamers, taps, blanking dies	Non-deforming
6634	Beaver Die	M-115	0.55 C, 0.6 Mn, 0.2 Si, 0.75 Cr, 1.5 Ni, bal. Fe							Die blocks	Water hardening
6635	Permax	M-104	Fe, alloys, bal. Ni							Electrical equipment	High permeability, constant magnetic properties
6636	Prescoloy	M-583	C, Ni, bal. Fe		90000	60000	25	40		Truck side frames, bolsters, freight car castings	
6637	Bethlehem Silvery Mayari Iron	M-24	2.0-2.7 C, 2.5-3.5 Mn, 8-12 Si, 1 Ni, 2 Cr, bal. Fe		50000					Pig iron for high strength iron or semi-steel castings with good machinability	Alloy pig iron High grade castings
6638	Chrysiode		92 Ag, 8 Al								
6639	Anka "H"	M-472	0.13-0.20 C, 16-23 Cr 7-11 Ni, bal Fe							Heat and corrosion resistant parts	Stainless. Heat and corrosion resistant
6640	Brearley SI	M-472	0.12 max. C, 12-15 Cr, bal: Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6641	Altior Brand Antifriction Metal	M-577								Bearings	White antifriction metal
6642	Altior Brand Aluminum Solder	M-577								Al solder	
6643	Smith No. 10	M-579 M-605	37.5 Cr, 7.5 Al, bal. Fe						200 235	Electrical resistors for heating furnaces, heating elements	Heat resistant. El. Res.-1000 ohms C.M.F., Max. operating temp.-2400 °F
6644	Armco 19-9	M-10	0.20 max. C, 19 Cr, 9 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant Obsolete
6645	Chrome Cast	M-569	1.1 min. C, 16-23 Cr, bal. Fe							Heat, wear and corrosion resistant parts	Heat, wear and corrosion resistant
6646	Hoyt Marine A	M-317	Sn base alloy							Bearings for marine steam engines	Antifriction metal
6647	Hoyt Marine B	M-317	Sn base alloy							Bearings for marine steam engines	Antifriction metal
6648	Hoyt I.C.E.	M-317	Sn base alloy							Bearings for internal combustion engines	Antifriction metal
6649	Hoyt Arrow	M-317	Sn, Cu, Sb							Bearings for heavy loads and high speeds	Antifriction metal, tough
6650	Hoyt No. 1	M-317	Pb base							Bearings for heavy loads and medium speeds	Antifriction metal, tough
6651	Hoyt Star Brand	M-317	Pb base alloy							Bearings for fans, stone crushers, mining machinery	Antifriction metal
6652	Hoyt No. 3M	M-317	Pb base alloy							Bearings	Antifriction metal
6653	Hoyt No. 4A	M-317	Pb base alloy							Bearings for light pressure and medium speed	Antifriction metal
6654	Fletchers Bearing Metal		90 Al, 7 Cu, 1 Zn							Bearings	
6655	Bush Brand Bearing Metal	M-575	P, alloy, bal. Cu							Bearings	Fatigue and wear resistant
6656	Mangal	M-116	1.5 Mn, bal. Al	Annealed	17000		20			Light alloy parts	Corrosion resistant
6657	M-115		1-2 Mn, bal. Al							Light alloy parts	Corrosion resistant
6658	Corrofestal	M-981	0.5-2.0 Mg, 0.3-1.5 Si, 0-1.5 Mn, bal. Al							Light alloy parts	Corrosion resistant, hardenable
6659	Duralumin K		0.5-2.0 Mg, 0.3-1.5 Si, 0-1.5 Mn, bal. Al							Light alloy parts	Corrosion resistant, hardenable
6660	Ulmal	M-982	0.5-2.0 Mg, 0.3-1.5 Si, 0-1.5 Mn, bal. Al	Heat treated	48000 52000	38000 44000	10 14		90 100	Light alloy parts	Corrosion resistant, hardenable

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6661	Legal	M-199	0.5-2.0 Mg, 0.3-1.5 Si, 0-1.5 Mn, bal. Al							Light alloy parts	Corrosion resistant, hardenable
6662	Polital		0.5-2.0 Mg, 0.3-1.5 Si, 0-1.5 Mn, bal. Al							Light alloy parts	Corrosion resistant, hardenable
6663	Duraplate		Al alloy							Light alloy parts	Al ply alloy, bonded. Corrosion resistant
6664	Bondurplate	M-116	"Bondur" with Al or Al alloy coating	Heat treated	55000 60000	35000 40000	20 15			Light alloy parts, aircraft parts	Al ply alloy bonded. Corrosion resistant
6665	Ulminium		0.2-2.0 Mg, 3.5-5.5 Cu, 0.2-1.0 Si, 0.1-1.2 Mn, bal. Al							Light alloy parts	Duralumin type
6666	Heddur	M-983	0.2-2.0 Mg, 3.5-5.5 Cu, 0.2-1.0 Si, 0.1-1.2 Mn, bal. Al		20000 31000	10000 14000	2 4		60 80	Light alloy parts	Duralumin type
6667	Igedur	M-78	0.2-2.0 Mg, 3.5-5.5 Cu, 0.2-1.0 Si, 0.1-1.2 Mn, bal. Al							Light alloy parts	Duralumin type
6668	Superston L-189	M-452	Al, bal. Cu								Al bronze
6669	Titan-Seewasser		2-4 Mg, 1.2-1.5 Mn, 0-0.2 Sb or Ti, bal. Al							Light alloy castings	Resists sea-water corrosion
6670	L-15		2-4 Mg, 1.2-1.5 Mn, 0-0.2 Sb or Ti, bal. Al							Light alloy castings	Resists sea-water corrosion
6671	Guss Pantal		2-4 Mg, 1.2-1.5 Mn, 0-0.2 Sb or Ti, bal. Al							Light alloy castings	Resists sea-water corrosion
6672	Durolith		Zn base alloy							Die castings	*Br. P. 411557*
6673	Zimal	M-137	4 Al, 3 Cu, bal. Zn	Cast-Die	45000	36000	1		100	Carburetors, gears	Corrosion resistant
6674	Alakron	M-187	Si, bal. Al							Decorative light alloy castings	Corrosion resistant
6675	B.H.T.A. Metal	M-338	2 Cu, 1.25-1.75 Ni, 1.75-2.0 Fe, 0.8 Mg, 0.5 max. Si, bal. Al	Heat treated	60000	47000	10			Light alloy parts, forgings	Duralumin type, age-hardening
6676	Lily Phosphor Bronze	M-576	P, Sn, bal. Cu							Bushings, bearings	Chill cast
6677	V.A.G.-160		2-5 Si, 0.6 Mg, 0.7 Mn, bal. Al							Light alloy parts	Corrosion resistant
6678	F-8	M-399	3.4-3.8 T.C., 1.0-1.5 Ni, 0.5 max. Cr, Si, bal. Fe	Cast	35000				300	Piston rings, wear resistant parts for high speed engines	Wear and corrosion resistant. Formerly E-8
6679	XL Metal	M-399	3-3.5 T.C., 1.5-2.0 Si, 1.0 max. Mn, 0.5 max. Cr, bal. Fe						150 200	Piston rings for marine steam engines, steam piston rings	Castings
6680	S Metal	M-399	High C. alloy, bal. Fe							Piston rings	Discontinued
6681	F-17	M-399	3.5 T.C., 2.5 Si, bal. Fe	Cast	45000				300	Piston rings, diesel rings	Castings. Formerly E-17
6682	American Hammered Piston Ring Standard Iron	M-399	0.6-0.8 C.C., 2.8-3.1 graphite C, 0.5-0.8 Mn, 1.2-3.2 Si, bal. Fe		30000					Piston rings for autos and aero engines	Castings
6683	British Aluminum No. 4	M-28	Cu, bal. Al	Sand cast	14500		4			Light alloy parts	Shock resistant, very ductile. Discon.
6684	British Aluminum No. 6	M-28	Cu, Zn, bal. Al		29000		4			Light alloy parts	Excellent machinability. Discon.
6685	British Aluminum No. 6A	M-28	Al		36000		2			Light alloy parts	Takes high polish Discontinued
6686	British Aluminum No. 12	M-28	Cu, bal. Al		15000		2			Light alloy parts	Non-porous castings Discontinued
6687	B.A./50 Alloy	M-28	Ni, bal. Al	Chill cast	20000		13			Light alloy parts	Hard, ductile Discontinued
6688	Bonney-Floyd 4-6 Cr-Mo	M-139	0.21-0.35 C, 4-6 Cr, Mo, Cu, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6689	Hard Kote "H"	M-139	1.1 min. C, 24-30 W, 16-23 Cr, Ni, bal. Fe							Heat and corrosion resistant parts, tools, dies	Heat and corrosion resistant
6690	Hard Kote "T"	M-139	1.1 min. C, 24-30 Ni, 16-23 Cr, 16-23 W, bal. Fe							Heat and corrosion resistant parts, tools, dies	Heat and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6691	Bonney-Floyd Niresist	M-139	1.1 min. C, 16-23 Ni, 5-7 Cu, Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6692	Bonney-Floyd Stainless	M-139	0.21-0.35 C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
6693	Bonney-Floyd Stainless	M-139	0.36-0.50 C, 31-39 Ni, 16-23 Cr, Si, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant, Discon.
6694	Bonney-Floyd Stainless "N"	M-139	0.13-0.50 C, 16-23 Cr, 7-11 Ni, Mo, bal. Fe							Stainless, heat and corrosion resistant parts	Stainless, heat and corrosion resistant Discontinued
6695	Bonney-Floyd Stainless "O"	M-139	0.36-0.50 C, 12-15 Cr, Mo, Cu, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
6696	Bonney-Floyd Stainless "S"	M-139	0.13-1.1 C, 24-30 Cr, 12-15 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant, Discon.
6697	Acme Silcrome 12	M-568	0.12 max. C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Discontinued
6698	Acme Silcrome CC	M-568	0.12 max. C, 12-15 Cr, Si, Cu bal. Fe							Corrosion resistant parts	Discontinued
6699	Acme Silcrome KA2	M-568	0.2 max. C, 16-23 Cr, 7-11 Ni, bal. Fe							Stainless and corrosion resistant parts	Discontinued
6700	Acme Silcrome KA2S	M-568	0.08 max. C, 16-23 Cr, 7-11 Ni, bal. Fe							Stainless and corrosion resistant parts	Discontinued
6701	Acme Silcrome L-12	M-568	0.13-0.20 C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Discontinued
6702	Acme Silcrome M-17	M-568	0.13-0.20 C, 16-23 Cr, bal. Fe							Corrosion resistant parts	Discontinued
6703	Burloy A	M-570	0.12 max. C, 16-23 Cr, 7-11 Ni, bal. Fe							Stainless and corrosion resistant parts	Stainless, heat and corrosion resistant
6704	Burloy B	M-570	0.21-0.35 C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6705	Burloy C	M-570	0.12 max. C, 24-30 Cr, 12-15 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6706	Burloy C-1	M-570	0.36-0.50 C, Si, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6707	Fahralloy F-2-B	M-9a	0.8 min. C, 16-23 Cr, 7-11 Ni, Si, Al, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6708	Fahralloy F-5-B	M-9a	0.51-0.80 C, 49-57 Ni, 16-23 Cr, Mn, Si, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6709	Frankite E-450	M-571	1.1 min. C, 12-15 Ni, Cr, 5-7 Cu, bal. Fe		25000 35000				145 170	Heat and corrosion resistant parts	Heat and corrosion resistant
6710	Frankite E-821	M-571	0.70-1.10 C, 22-25 Cr, bal. Fe		42000 50000				200 230	Heat and corrosion resistant parts	Heat and corrosion resistant
6711	Frankite E-822	M-571	1.75-2.0 C, 22-25 Cr, bal. Fe		80000 90000				320 350	Heat and corrosion resistant parts	Heat and corrosion resistant
6712	Frankite E-831	M-571	0.80-1.10 C, 30-34 Cr, bal. Fe		45000 55000				280 300	Heat and corrosion resistant parts	Heat and corrosion resistant
6713	Frankite E-832	M-571	1.10 min. C, 31-39 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6714	Kay-Brunner Niresist	M-572	2-3 T.C., 12-15 Ni, 5-7 Cu, Cr, Mn, Si, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6715	L.F.M. 4-6 Cr-Mo	M-573	0.13-0.20 C, 4-7 Cr, Mo, bal. Fe							Corrosion resistant parts	Corrosion resistant
6716	Stanley, Grade A	M-574	0.12 max. C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6717	Stanley, Grade B	M-574	0.12 max. C, 15-18 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6718	Stanley, Grade C	M-574	0.13-0.35 C, 18-23 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6719	Stanley, Grade D	M-574	0.13-0.20 C, 17-19 Cr, 7-9 Ni, bal. Fe							Stainless, heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6720	Stanley, Grade E	M-574	0.13-0.20 C, Mn, 12-15 Cr, 5-7 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
6721	Adamant Super-Genuine Babbitt	M-178	Sn base		12850	4400			22.8	Marine, airplane, diesel and other internal combustion engine bearings	Sp. Gr-7.34 Tough

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6722	A.B.C.	M-80	High C, alloy, bal. Fe							Chisels	
6723	A.Z. Alloy	M-591								Plates for photoengraving	
6724	Alsteel	M-345	C, bal. Fe							*Auto tools*	*Discontinued*
6725	Sodium-Zinc Alloy	M-596	98 Zn, 2 Na							Non-ferrous alloy deoxidizer	Brittle
6726	Bethlehem Abrasion Resisting Steel	M-24	.35-.50 C, 1.4-2.0 Mn, bal. Fe	Oil treated	130000		15	51	235	Shovels, crushers, hoppers, coal cones, scraper blades, conveyors, mixers	
				Water treated	180000	168000	15	53			
6727	Carpenter No. 547	M-32	0.15 C, 3.5 Ni, bal. Fe							Case-hardened parts	Carburizing steel
6728	Carpenter No. 5-427	M-32	0.50 C, 1.0 Cr, 0.20 Mo, bal. Fe							Gears, splines, shafts	Shock resistant
6729	Advance	M-585	Sn, Cu, Sb							Bearings	Babbitt metal
6730	AA-1	M-586	Cu, Sn							Bearings	Discontinued
6731	Elkonite, Grade OW3	M-265	50 Cu, 50 W							Resisting welding electrode	Easy to machine
6732	Elkonite, Grade 30W3	M-265	20 Cu, 80 W						200	Dies, welding dies	Difficult to machine
6733	Elkonite, Grade 1W	M-265	Cu, W							Electrodes for welding steel	Discontinued
6734	Elkonite, Grade 5-W-3	M-265	Cu, W						200	Electrodes for welding steel	Discontinued
6735	Elkonite, Grade 20S	M-265	Ag, W						200	Electrodes for spot welding stainless steel	
6736	Elkonite, Grade 20W-3	M-265	Cu, W							Welding electrodes	
6737	Elkonite, Grade 100-W	M-265	Cu, W						280	Electrodes for spot welding copper and silver	
6738	Elkaloy A	M-265	Cu alloy	Bars	65000	60000	18	60	120	Electrodes for resisting welding of steel	85% conductivity
6739	Mallory 3	M-265	Cr, bal. Cu	Sand cast	50000	35000	25	60	110	Electrodes for welding steel,	Corrosion resistant.
				Bars	70000	60000	15	50	150	spot welding tips	High conductivity
6740	Elkonite, Grade 1W3	M-265	Cu W							Electrodes for spot welding steel	
6741	Tisco 120	M-271	0.50 C, 1.0 Mn, 2 Si, 15-18 Cr, 35-40 Ni, bal. Fe						150	Heat and corrosion resistant parts	Max. operating temp.-2000°F
6742	Moheco	M-601	2.85-3.05 T.C., 1.75-2.10 Si, 0.6-0.8 Mn, 1.75 Ni, 0.90 Cr, bal. Fe	Cast					220	Dies, drawing dies	Wear resistant
				Heat treated					525		
6743	Aceroid	M-592									
6744	Albro	M-593								Acid resisting castings	Corrosion resistant
6745	Alco	M-594								Metalware	
6746	Alemite	M-595									Die casting
6747	Alumetal	M-597								Al solder	
6748	Aluminium Genuine	M-565								Bearings	Babbitt metal
6749	Aluminweld	M-578	5 Si, bal. Al							Electrode and welding wire	For Al welding
6750	Anchor-Tite	M-598	W, C							Tools, dies	Cemented WC
6751	Aidion	M-587									Antifriction metal
6752	Nickeloid	M-538	Ni coated Zn								
6753	Velvet	M-588	Cu alloy							Bushings, babbitts, bars	
6754	Everard	M-589	C, bal. Fe							Dies, *tools*	
6755	A.A.A.A.	M-590								Bearings	Babbitt, antifriction metal
6756	Acibal									Light alloy parts	
6757	Aluneon									Light alloy parts	
6758	Grossman									Light alloy parts	
6759	Hartalumin		Al alloy							Light alloy parts	
6760	Helumin	M-834	1.8 Cu, 1.5 Fe, bal. Al	Heat treated	50000		15		50	Light alloy parts	
6761	Maradamit									Light alloy parts	
6762	Rohmium									Light alloy parts	
6763	Suprakolbenmetall		20 Si, 5 Cu, 2 Mn, 0.7 Fe, bal. Al							Light alloy parts, pistons	
6764	Telectal	M-299	1.5 Si, .1 Li, bal. Al		43000		6		80	Light alloy parts, electrical	
					47000				100	conductors	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6765	Thalassal	M-984	Si, 2.5 Mn, 2.3 Mg, .2 Sb, bal. Al	Sand cast	24000 31000					Dirigible and airplane parts, marine parts	Resists sea-water corrosion
6766	Vital	Ger.	.6 Si, .9 Cu, 1 Zn, bal. Al		60000		5			Light alloy parts	
6767	Bedel Quatre Trefles C	M-455	C, 10 Co, Mo, V, bal. Fe							Tools, dies	
6768	Bedel Triple Trefle ESD	M-455	C, 5 Co, Mo, V, bal. Fe							Tools, dies	
6769	Bedel Double Trefle E	M-455	C, 15-16 W, bal. Fe							Tools, dies	
6770	Bedel Special Z3	M-455	C, 10 W, Cr, Ni, V, bal. Fe							Tools, dies	
6771	Bedel Special Z4	M-455	C, 10 W, Cr, V, Co, bal. Fe							Tools, dies	
6772	Hoyt No. 1 Phosphor Bronze	M-317	P, Sn, bal. Cu							Chill castings	Tough, wear resistant
6773	Hoyt No. 175 Babbitt	M-317	Sn alloy						35	Bearings for locomotives, crushers and tube mills	Hard without Zn
6774	Misco 16	M-84	0.2 max. C, 16 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6775	Misco 28	M-84	0.2 max. C, 28 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6776	R.N.C.-2	M-104	Low C, 60 Ni, 11 Cr, bal. Fe							Rheostats, electrically heated apparatus	Heat resistant
6777	R.N.C-3	M-104	Low C, 80 Ni, 20 Cr							Rheostats, electrically heated apparatus	Heat resistant
6778	Imphy B.Y.-2	M-104	0.35 C, 4.25 Ni, 1.20 Cr, bal. Fe		121000	100000	12			Machinery parts, gears	
6779	Imphy A.R.C.-2702A	M-104	C, 18 Cr, 8 Ni, bal. Fe							Stainless and corrosion resistant parts	Stainless, corrosion resistant
6780	Imphy A.R.C.-2702B	M-104	C, 18 Cr, 8 Ni, Ti, bal. Fe							Welded, corrosion resistant parts not requiring heat treatment	Corrosion resistant
6781	Imphy A.R.C.-2702S	M-104	Low C, 18 Cr, 8 Ni, bal. Fe							Corrosion resistant parts	Stainless, corrosion resistant
6782	Imphy A.R.C.-2266	M-104	C, 18 Cr, 8 Ni, Mo, bal. Fe							Chemical equipment	Corrosion resistant
6783	Imphy A.R.C.-1047	M-104	C, 18 Cr, 8 Ni, W, bal. Fe							Chemical equipment	Corrosion resistant
6784	Cromimphy No. 4	M-104	C, 16-18 Cr, bal. Fe							Corrosion resistant parts, chemical equipment	Corrosion resistant
6785	Cromimphy No. 6	M-104	C, 30 Cr, bal. Fe							Heat and corrosion resistant parts, rabble arms, furnace parts	Heat and corrosion resistant
6786	Imphy N5CM	M-104	C, Si, Mn, 5 Ni, bal. Fe		69000 83000	50000 60000	30 24			Case hardened parts, gun tubes, locomotive parts	
6787	Imphy NB	M-104	C, Si, Mn, 3 Ni, bal. Fe		81000 96000	54000 67000	25 20			Crankshafts, transmission shafts, forgings	
6788	Imphy NY	M-104	C, Si, Mn, 6 Ni, bal. Fe		78000 107000	58000 85000	25 18			Axles	
6789	Imphy NC-3H2	M-104	C, 3 Ni, 1 Cr, bal. Fe		96000 108000	63000 77000	24 18			Pinions, crankshafts, forging dies, auto construction	
6790	Imphy M.C.T.1	M-104	0.1-0.2 C, Cr, Mo, bal. Fe		72000	43000	26			Gun tubes, general parts	
6791	Imphy M.C.T. 2	M-104	0.2-0.3 C, Cr, Mo, bal. Fe		93000	58000	22			Shafts, axles, aircraft fuselage	
6792	Imphy M.C.T. 3	M-104	0.3-0.4 C, Cr, Mo, bal. Fe		101000	65000	20			Crankshafts, gears, levers, axles	
6793	Thermimphy	M-104	C, Cr, Mo, V, bal. Fe		121000	93000	18			Gears, crankshafts, high temperature parts	
6794	Nicral B	M-104	C, 20 Cr, bal. Fe		128000	101000	10			Boiler parts, domestic utensils, electric irons	Corrosion resistant
6795	Nicral D	M-104	C, 22 Cr, 18 Ni, bal. Fe		100000	58000	30			Carburizing boxes, furnace supports	Heat and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6796	Nicral E	M-104	C, 30 Cr, bal. Fe		85000	58000	20			Carburizing boxes, furnace parts	Heat and corrosion resistant. Resists S gases
6797	Imphy Era-HR1	M-104	C, 18 Cr, 8 Ni, bal. Fe		114000	71000	22			Heat and corrosion resistant parts	Heat and corrosion resistant
6798	Imphy Era-HR2	M-104	C, 18 Cr, 8 Ni, bal. Fe		100000	55000	25			Heat and corrosion resistant parts	Heat and corrosion resistant
6799	Imphy 1691	M-104	C, Ni, Cr, Mo, bal. Fe	Annealed	121000	92000	18			Gears, crankshafts, still parts, bolts	Resists high temperatures
				Oil treated	144000	128000	14				
6800	Imphy MWS	M-104	C, Si, Mn, bal. Fe	Annealed	107000	69000	22			Gears, crankshafts, wearing parts	
				Heat treated	193000	171000	7				
6801	Imphy RES	M-104	C, 1.5 Si, Mn, bal. Fe	Annealed	107000	65000	20			Springs	
				Heat treated	186000	164000	7				
6802	Imphy RWS	M-104	C, Si, Mn, bal. Fe	Annealed	107000	69000	22			Motor car springs	
				Heat treated	193000	171000	7				
6803	Imphy 1640	M-104	C, Cr, bal. Fe	Annealed	101000	58000	18			Crankshafts	
				Heat treated	135000	114000	14				
6804	Hardweld	M-578	1.0 C, bal. Fe							Hard facing welding rod for manganese steel	Hard, wear resistant
6805	Stainweld-A	M-578	C, 18 Cr, 8 Ni, Cb, bal. Fe							Hard facing welding rod for corrosion resistance	Corrosion resistant
6806	Toolweld	M-578								Hard facing welding rod for cutting edges	
6807	Wearweld	M-578								Hard facing welding rod for shock and abrasion	Resists shock and abrasion
6808	Wehralloy No. 1	M-599	0.07 *max.* C, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6809	Wehralloy No. 2	M-599	0.12 *max.* C, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6810	Wehralloy No. 3	M-599	0.21-0.35 C, 24-30 Cr, 12-15 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6811	Wehralloy No. 4	M-599	0.13-0.35 C, 24-30 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6812	Wehralloy No. 5	M-599	C, Cr, Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6813	Wehralloy No. 6	M-599	0.13-0.35 C, Si, 24-30 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6814	Wehralloy No. 7	M-599	0.21-0.50 C, Si, 12-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6815	Wehralloy No. 8	M-599	0.21-0.50 C, Si, 24-30 Ni, 16-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6816	Wehralloy No. 9	M-599	0.36-0.50 C, Si, 31-39 Ni, 16-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6817	Wehralloy No. 11	M-599	0.21-0.50 C, 58-66 Ni, 16-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6818	Wehralloy No. 12	M-599	0.12 *max.* C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6819	Wehralloy No. 13	M-599	0.13-0.20 C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6820	Wehralloy No. 14	M-599	0.21-0.35 C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6821	Wehralloy No. 16	M-599	0.21-0.35 C, 16-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6822	Wehralloy No. 17	M-599	0.81-1.10 C, 16-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6823	Wehralloy No. 18	M-599	0.13-0.20 C, 24-30 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6824	Wehralloy No. 19	M-599	0.13-0.20 C, Si, 24-30 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6825	Wehralloy No. 21	M-599	0.21-0.35 C, 24-30 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6826	Wehralloy No. 22	M-599	0.13-0.20 C, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6827	Wehralloy No. 23	M-599	0.21-0.35 C, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6828	Wehralloy No. 24	M-599	0.21-0.35 C, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6829	Wehralloy No. 26	M-599	0.36-0.50 C, Si, 31-39 Ni, 16-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6830	Wehralloy No. 27	M-599	0.36-0.50 C, Si, 31-39 Ni, 16-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6831	Wehralloy No. 28	M-599	0.51-0.80 C, Si, 67-75 Ni, 16-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6832	Wehralloy No. 29	M-599	0.21-0.35 C, 5-7 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6833	Wehralloy No. 31	M-599	0.13-0.20 C, 24-30 Cr, 12-15 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6834	Wehralloy No. 43	M-599	0.13-0.20 C, 24-30 Cr, 12-15 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6835	Wehralloy Stainless 18-8	M-599	0.13-0.20 C, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Stainless
6836	Wehralloy Stainless 18-8 Special	M-599	0.07 max. C, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Stainless
6837	U.H.B. Stainless 1H	M-111	0.13-0.20 C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6838	U.H.B. Stainless 3H	M-111	0.13-0.20 C, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6839	U.H.B. Stainless 3M	M-111	0.07 max. C, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6840	U.H.B. Stainless 4H	M-111	0.13-0.20 C, Mo, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6841	U.H.B. Stainless 4M	M-111	0.07 max. C, Mo, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6842	U.H.B. Stainless 6H	M-111	0.36-0.50 C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6843	C.E.S. No. 2	M-440	0.36-0.50 C, 16-23 Ni, 7-11 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6844	Industrial No. 18	M-440	0.12 max. C, 18 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6845	Silcrome KA-2B	M-76	0.13-0.20 C, Si, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6846	Sharon Stainless 12	M-600	0.12 max. C, 12 Cr, bal. Fe	Annealed Heat treated	65000 130000	35000 95000	30 10	60 35		Corrosion resistant parts	Corrosion resistant. Resists scaling to 1100°F.
6847	Sharon Stainless 17	M-600	0.12 max. C, 17 Cr, bal. Fe	Annealed	75000	43000	28	55		Corrosion resistant parts	Corrosion resistant
6848	Sharon 18-8	M-600	0.13-0.20 C, 18 Cr, 8 Ni, bal. Fe	Annealed Cold rolled	90000 175000	30000 150000	50 10	65 45		Stainless parts	Stainless. Austenitic Resists scaling to 1550°F.
6849	Sharon 18-8S	M-600	0.07 max. C, 18 Cr, 8 Ni, bal. Fe	Annealed Cold rolled	90000 175000	30000 150000	50 10	65 45		Stainless parts	Stainless. Austenitic. Resists scaling to 1550°F.
6850	Sharon 21	M-600	0.21-0.35 C, 21 Cr, bal. Fe	Annealed	75000	45000	28	55		Corrosion resistant parts	Corrosion resistant
6851	Sharon RA	M-600	0.12 max. C, Cu, Si, 16-23 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6852	Whelco No. 5	M-119	16-23 Cr, 0.12 max. C, bal. Fe							Corrosion resistant parts	Corrosion resistant
6853	Econonet 4	M-59	0.36-0.50 C, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6854	Genalloy B	M-59	0.36-0.50 C, 31-39 Ni, 12-15 Cr, bal. Fe							Heat and corosion resistant parts	Heat and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6855	Q-Alloy A	M-59	C, 67-75 Ni, 16-23 Cr, bal. Fe	Cast	65000	34000	5		172	Heat and corrosion resistant parts	Heat and corrosion resistant
6856	Q-Alloy Chrome C-1A	M-59	0.21-0.35 C, 24-30 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6857	Q-Alloy Chrome C-2A	M-59	0.13-0.20 C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6858	Q-Alloy Chrome C-2B	M-59	0.21-0.35 C, 12-15 Cr, bal Fe							Corrosion resistant parts	Corrosion resistant
6859	Q-Alloy Chrome C-2C	M-59	0.12 max. C, 16-23 Cr, bal. Fe							Corrosion resistant parts	Heat and corrosion resistant
6860	Q-Alloy Chrome C-2D	M-59	0.13-0.20 C, 16-23 Cr, bal. Fe							Corrosion resistant parts	Heat and corrosion resistant
6861	Q-Alloy Chrome C-2E	M-59	0.21-0.35 C, 16-23 Cr, bal. Fe							Corrosion resistant parts	Heat and corrosion resistant
6862	Q-Alloy Chrome C-3A	M-59	0.81-1.10 C, 16-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6863	Q-Alloy Chrome CN1-A	M-59	0.21-0.35 C, 24-30 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6864	Q-Alloy Chrome CN1-B	M-59	0.13-0.20 C, 24-30 Cr, 12-15 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6865	Q-Alloy Chrome CN1-H	M-59	0.13-0.20 C, 24-30 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6866	Q-Alloy Chrome CN1-S	M-59	0.36-0.50 C, 24-30 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6867	Q-Alloy Chrome CN2-A	M-59	0.21-0.35 C, W, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6868	Q-Alloy Chrome J	M-59	0.12 max. C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6869	Q-Alloy Chrome KA2	M-59	0.13-0.20 C, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless
6870	Q-Alloy Chrome KA-2H	M-59	0.21-0.35 C, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Stainless
6871	Q-Alloy Chrome KA-2Mo	M-59	0.13-0.20 C, Mo, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6872	Q-Alloy Chrome KA-2S	M-59	0.12 max. C, 16-23 Cr, 7-11 Ni, bal. Fe							Stainless parts	Stainless
6873	Q-Alloy Chrome KA-4	M-59	0.21-0.35 C, Mo, 16-23 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6874	Q-Alloy Chrome KNC-3	M-59	0.13-0.20 C, Si, 24-30 Cr, 16-23 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6875	Empire No. 5	M-162	0.13-0.20 C, 5 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
6876	Empire No. 12	M-162	0.12 max. C, 12 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
6877	Empire No. 12 A	M-162	0.12 max. C, S, 12 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
6878	Empire No. 12 B	M-162	0.21-0.35 C, 12 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
6879	Empire No. 12 C	M-162	0.13-0.20 C, 12 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
6880	Empire No. 12 D	M-162	0.36-0.50 C, 12 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant Discontinued
6881	Empire No. 18A	M-162	0.13-0.20 C, 18 Cr, bal. Fe							Corrosion and heat resistant parts	Corrosion and heat resistant. Discon.
6882	Empire No. 18B	M-162	0.13-0.20 C, Si, 18 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Discon.
6883	Empire No. 18C	M-162	0.21-0.35 C, 18 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Discon.
6884	Empire No. 18 Cu	M-162	0.21-0.35 C, Cu, 18 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Discon.
6885	Empire No. 18-8 Mo	M-162	0.35 max. C, Mo, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Stainless Discontinued
6886	Empire No. 18-8 Si	M-162	0.13-0.20 C, Si, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Stainless Discontinued

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6887	Empire No. 24-12 B	M-162	0.21-0.35 C, 24 Cr, 12 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Discon.
6888	Empire No. 25-12	M-162	0.36-0.50 C, 25 Cr, 12 Ni, bal. Fe							Heat and corroison resistant parts	Heat and corrosion resistant. Discon.
6889	Empire No. 25-12W	M-162	0.36-0.50 C, W, 25 Cr, 12 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Discon.
6890	Empire No. 30A	M-162	0.13-0.20 C, 30 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Discon.
6891	Empire No. 30-20	M-162	0.13-0.20 C, 30 Cr, 20 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Discon.
6892	Empire No. 60-20A	M-162	0.13-0.20 C, 60 Ni, 20 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Discon.
6893	Disston Stainless Iron	M-357	0.10 C, 12-14 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6894	Disston Stainless Type A	M-357	0.30 C, 14 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6895	Disston Stainless Type B	M-357	0.60 C, 17 Cr, bal. Fe							Corrosion and heat resistant parts	Corrosion and heat resistant
6896	Durco 181	M-46	1.1 C, 18 Cr, bal. Fe							Corrosion and heat resistant parts	Corrosion and heat resistant
6897	Durco D-12	M-46	0.12 max. C, 12 Cr, bal. Fe							Valve and pump parts	Corrosion resistant
6898	Durco D-18	M-46	0.12 max. C, 18 Cr, bal. Fe							Pumps, valves	Corrosion resistant
6899	U.S.S. 5 W	M-604	C, 5 Cr, W, bal. Fe							Corrosion resistant parts	Corrosion resistant
6900	U.S.S. 12W	M-604	0.12 max. C, 12 Cr, W, bal. Fe							Corrosion resistant parts	Corrosion resistant.
6901	U.S.S. 16-6	M-604	0.13-0.20 C, 16 Cr, 6 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
6902	U.S.S. 17-W	M-604	0.12 max. C, 17 Cr, W, bal. Fe							Corrosion and heat resistant parts	Corrosion and heat resistant
6903	U.S.S. 18-8 S Mo-	M-604	0.11 max. C, 18 Cr, 8 Ni, 2.4 Mo, bal. Fe	Annealed	80000	35000	50		150	Stainless and heat resistant parts in pulp mills	Stainless, heat resistant
6904	U.S.S. 18-8 Ti	M-604	0.20 max. C, 18 Cr, 8 Ni, Ti, bal. Fe	Annealed	80000	35000	50		150	Stainless parts, after welding, still tubes, oil tanks	Stainless & heat resistant (1000-1600 °F.)
6905	U.S.S. 19-9S	M-604	0.11 max. C, 19 Cr, 9 Ni, bal. Fe	Annealed	90000	40000	55		150	Heat and corrosion resistant parts	Stainless, heat and corrosion resistant
6906	U.S.S. 20-10S	M-604	0.08 max. C, 20 Cr, 10 Ni, bal. Fe	Annealed	70000	30000	55		175	Chemical and petroleum processing	Heat and corrosion resistant, stainless
6907	U.S.S. 25-20	M-604	0.13-0.35 C, 25 Cr, 20 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant, stainless
6908	Tisco 101	M-271	0.13-0.16 C, 16-20 Cr, 2.0 max. Si, 1.0 max. Mn, 7-11 Ni, bal. Fe		70000 75000		60 50	60 45	130 150	Heat and corrosion resistant parts	Heat and corrosion resistant, stainless Discontinued
6909	Tisco 101A	M-271	0.13-0.16 C, 16-20 Cr, 2.0 max. Si, 1.0 max. Mn, 7-11 Ni, 0.20-0.30 Se, bal. Fe		70000 75000		60 50	60 45	130 150	Heat and corrosion resistant parts	Heat and corrosion resistant, stainless Discontinued
6910	Tisco 102	M-271	0.07 max. C, 16-20 Cr, 2.0 max. Si, 1.0 max. Mn, 7-11 Ni, bal. Fe		65000 70000		60 50	60 45	130 150	Heat and corrosion resistant parts	Heat and corrosion resistant, stainless Discontinued
6911	Tisco 102A	M-271	0.07 max. C, 16-20 Cr, 2.0 max. Si, 1.0 max. Mn, 7-11 Ni, Se, bal. Fe		65000 70000		60 50	60 45	130 150	Heat and corrosion resistant parts	Heat and corrosion resistant, stainless Discontinued
6912	Tisco 103	M-271	0.13-0.20 C, 16-20 Cr, 2.0 max. Si, 1.0 max. Mn, 7-11 Ni, bal. Fe		70000 75000		60 50	60 45	130 150	Heat and corrosion resistant parts	Heat and corrosion resistant, stainless Discontinued
6913	Tisco 103A	M-271	0.13-0.20 C, 16-20 Cr, 2.0 max. Si, 1.0 max. Mn, 7-11 Ni, Se, bal. Fe		70000 75000		60 50	60 45	130 150	Heat and corrosion resistant parts	Heat and corrosion resistant, stainless Discontinued

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6914	Tisco 104	M-271	0.13-0.16 C, 18-22 Cr, 7-11 Ni, 2-4 Mo, bal. Fe		70000 75000		60 50	60 45	130 150	Heat and corrosion resistant parts	Heat and corrosion resistant, stainless Discontinued
6915	Tisco 104A	M-271	0.13-0.16 C, 18-22 Cr, 7-11 Ni, 2-4 Mo, 0.2-0.3 Se, bal. Fe		70000 75000		60 50	60 45	130 150	Stainless parts	Stainless, heat and corrosion resistant Discontinued
6916	Tisco 105	M-271	0.07 max. C, 18-22 Cr, 7-11 Ni, 2-4 Mo, bal. Fe		65000 70000		60 50	60 45	130 150	Stainless parts	Stainless, heat and corrosion resistant Discontinued
6917	Tisco 105A	M-271	0.07 max. C, 18-22 Cr, 7-11 Ni, 2-4 Mo, 0.2-0.3 Se, bal. Fe		65000 70000		60 50	60 45	130 150	Stainless parts	Stainless, heat and corrosion resistant Discontinued
6918	Tisco 106	M-271	0.13-0.20 C, 18-22 Cr, 7-11 Ni, 2-4 Mo, bal. Fe		70000 75000		60 50	60 45	130 150	Stainless parts	Stainless, heat and corrosion resistant Discontinued
6919	Tisco 106A	M-271	0.13-0.20 C, 18-22 Cr, 7-11 Ni, 2-4 Mo, 0.2-0.3 Se, bal. Fe		70000 75000		60 50	60 45	130 150	Stainless parts	Stainless, heat and corrosion resistant
6920	Tisco 107	M-271	0.21-0.30 C, 26-30 Cr, 8-12 Ni, bal. Fe		75000 85000		18 12	12 8	150 160	Heat and corrosion resistant parts	Heat and corrosion resistant
6921	Tisco 108	M-271	0.13-0.20 C, 23-27 Cr, 17-21 Ni, bal. Fe		80000 90000		25 15	25 15	160 180	Heat and corrosion resistant parts	Heat and corrosion resistant
6922	Tisco 109	M-271	0.20 max. C, 22-26 Ni, 18-22 Cr, 1.5 max. Si, bal. Fe		60000 70000		15 10	20 30		Heat and corrosion resistant parts	Heat and corrosion resistant
6923	Tisco 110	M-271	0.13-0.35 C, 16-23 Cr, 20-23 Ni, 2-4 Mo, bal. Fe		70000 75000		65 50	65 45	130 150	Stainless parts	Stainless, heat and corrosion resistant Discontinued
6924	Tisco 130	M-271	0.10 max. C, 26-30 Cr, 0.4-0.6 Mn, 2.0 max. Si, bal. Fe		40000 60000		3 0	5 0		Heat and corrosion resistant parts	Heat and corrosion resistant
6925	Tisco 131	M-271	0.10 max. C, 16-18 Cr, 0.4-0.6 Mn, 2.0 max. Si, bal. Fe		75000 100000		12 5	15 6	190 210	Corrosion resistant parts	Corrosion resistant
6926	Tisco 132	M-271	0.10 max. C, 12-16 Cr, 0.4-0.6 Mn, 2.0 max. Si, bal. Fe		70000 90000		24 18	45 25	160 180	Corrosion resistant parts	Corrosion resistant
6927	Tisco 160	M-271	2.5-3.5 C, 1.0-1.5 Mn, 1.25-2.0 Si, 1.5-4.0 Cr, 12-15 Ni, 5-7 Cu, bal. Fe		20000 35000				120 170	Heat and corrosion resistant parts	Heat and corrosion resistant. Ni-Resist
6928	Rezistal 30	M-38	0.13-0.20 C, 21-26 Cr, 10-13 Ni, 2-3 Si, bal. Fe	Annealed	95000 105000	40000 50000	40	50	170 200	Stainless parts	Stainless and heat resistant
6929	Rezistal FM-188	M-38 M-260	0.13-0.20 C, 18 Cr, 8 Ni, Mo, Se, bal. Fe	Annealed	85000 95000	30000 40000	60 65	75 65	130 170	Stainless parts, bolts, screws	Stainless, heat and corrosion resistant
6930	Rezistal KA2-19-9	M-38 M-260	0.13-0.20 C, 19 Cr, 9 Ni, bal. Fe							Stainless parts, tanks, shafts, lamps, trim	Stainless
6931	Rezistal KA2-20-10	M-38	0.13-0.20 C, 20 Cr, 10 Ni, bal. Fe							Stainless parts	Stainless. Discon.
6932	Rezistal KA-2S-19-9	M-38	0.07 max. C, 19 Cr, 9 Ni, bal. Fe							Stainless parts	Stainless Discontinued
6933	Rezistal KA-2S-20-10	M-38	0.07 max. C, 20 Cr, 10 Ni, bal. Fe	Annealed	95000	35000	57	70	150	Stainless and heat resistant parts	Stainless Discontinued
6934	Rezistal KA-2S-Mo	M-38 M-260	0.07 max. C, 18-20 Cr, 8-12 Ni, 2.5-3.5 Mo, bal. Fe	Annealed	90000 100000	40000 50000	60 50	75 60	170 200	Corrosion and heat resistant parts, tanks, tubes	Corrosion and heat resistant
6935	Rezistal KA-2ST Special 19-9	M-38	0.07 max. C, 19 Cr, 9 Ni, 0.35 Ti, bal. Fe							Stainless parts	Stainless
6936	Rezistal Stainless B-100	M-38 M-260	0.81-1.10 C, 16-23 Cr, bal. Fe							Cutlery, instruments, ball bearings	Heat and corrosion resistant
6937	Rezistal Stainless Iron 17	M-38 M-260	0.12 max. C, 17 Cr, bal. Fe	Annealed	75000 85000	45000 55000	40 30	60 50	150 190	Corrosion resistant parts, storage tanks	Corrosion resistant
6938	Rezistal Stainless Iron 20	M-38 M-260	0.35 max. C, 20 Cr, bal. Fe	Annealed	70000 80000	45000 55000	40 30	60 50	165 185	Corrosion resistant parts, storage tanks	Corrosion resistant
6939	Rezistal Stainless Iron 27	M-38 M-260	0.21-0.35 C, 27 Cr, bal. Fe	Rolled	80000 90000	55000 65000	30 20	50 40	170 200	Heat and corrosion resistant parts	Heat and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6940	Cro-Sil No. 10	M-38	0.08-0.20 C, 10 Cr, 3 Si, bal. Fe							Corrosion resistant parts	Corrosion resistant
6941	Cro-Sil No. 14	M-38	0.08-0.20 C, 10 Cr, 3 Si, bal. Fe							Corrosion resistant parts	Corrosion resistant
6942	Stainless Iron	M-248	0.12 max. C, 12-23 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6943	Enduro 19-9S	M-97	0.07 max. C, 19 Cr, 9 Ni, bal. Fe							Stainless parts	Stainless
6944	Enduro 19-9S Ti	M-97	0.07 max. C, 19 Cr, 9 Ni, Ti, bal. Fe							Stainless parts	Stainless
6945	B & W 12-14 Cr	M-447	0.12 max. C, 12-14 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6946	B & W No. 602	M-447	0.07 max. C, 17-19 Cr, 7.5-10.5 Ni, bal. Fe							Stainless parts	Stainless
6947	B & W No. 690	M-447	0.16 max. C, 24-30 Cr, 7-11 Ni, Mo, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6948	B & W No. 692	M-447	0.10 max. C, 24-30 Cr, 7-11 Ni, Mo, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6949	Warman 5	M-277	0.13-0.20 C, 5 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6950	Warman 5 M	M-277	0.13-0.20 C, 5 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6951	Otisel K-4 Molybdenum	M-331	0.13-0.35 C, 5-7 Cr, bal. Fe, Mo							Corrosion resistant parts	Corrosion resistant
6952	Otisel K-5 Tungsten	M-331	0.13-0.35 C, 5-7 Cr, W, bal. Fe							Corrosion resistant parts	Corrosion resistant
6953	Allegheny 46 Molybdenum	M-1	0.25 max. C, 4-6 Cr, 0.4-0.6 Mo, bal. Fe	Annealed	72000	34000	35	72	143	Corrosion resistant parts, oil cracking stills	Corrosion resistant
6954	Allegheny 46 Tungsten	M-1	0.35 max. C, 5-7 Cr, W, bal. Fe							Corrosion resistant parts	Corrosion resistant
6955	Nickel, Grade A	M-68	99.4 Ni+Co, 0.10 Cu, 0.15 Fe, 0.15 Mn, 0.10 Si							Heat resistant parts	Heat resistant
6956	Nickel, Grade D	M-68	95.2 Ni, +Co, 4.5 Mn, 0.05 Cu 0.20 Fe, 0.10 Si, .1 C	Annealed	75000 90000	25000 40000	50 35	75 60	110 140	Heat resistant parts, spark plug wire	Heat resistant
6957	Superior	M-248	C, 76-84 Ni, 16-23 Cr							Heat and corrosion resistant parts	Heat and corrosion resistant
6958	Hot Work No. 23	M-341	0.45 C, 3 Cr, 14 W, 0.3 V, bal. Fe							Tools, cutters, taps, gauges, reamers	High speed steel
6959	Ambraloy 928	M-8	8 Al, 92 Cu		60000 100000		60 4			Screw machine parts, wire, rod Tools	Corrosion resistant
6960	Penco No. 3	M-341	0.8 C, bal. Fe								
6961	Empire No. 18-8 Mo, Se	M-162	0.13-0.20 C, 18 Cr, 8 Ni, Mo, Se, bal. Fe							Stainless and heat resistant parts	Stainless and heat resistant
6962	Empire No. 18-8 Se	M-162	0.20 max. C, 18 Cr, 8 Ni, Se, bal. Fe							Stainless parts	Stainless
6963	Empire No. 75-20	M-162	75 Ni, 20 Cr, 5 Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6964	Thermalloy 18-8	M-47	0.13-0.20 C, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Stainless
6965	Midvaloy Stainless FC	M-85	0.12 max. C, S, 12-15 Cr, bal. Fe	Wrought						Corrosion resistant parts	Corrosion resistant, stainless free cutting
6966	Midvaloy No. 3-3-4	M-85	0.5-0.65 C, 24-30 Cr, 24-30 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6967	Midvaloy 1700	M-85	.07-.40 C, 17 Cr, bal. Fe	Wrought	80000	50000	28	55	160	Corrosion resistant parts	Corrosion resistant
6968	Midvaloy 1735	M-85	0.21-0.50 C, 17 Cr, 35 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Discon.
6969	Midvaloy 1808 Se	M-85	.07 C, .2-.3 Se, 18 Cr, 8 Ni, bal. Fe	Wrought Cast	95000 77000	40000 40000	48 45	60 50	160	Stainless parts, machine parts	Stainless, free cutting
6970	Midvaloy 2060	M-85	0.36-0.50 C, 20 Cr, 60 Ni, bal. Fe	Cast						Heat and corrosion resistant parts, chemical industries	Heat and corrosion resistant
6971	Midvaloy 2100	M-85	0.12 max. C, 21 Cr, bal. Fe	Wrought	63000	45000	30	40		Corrosion resistant parts, furnace parts	Heat and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
6972	Midvaloy No. 21-00 Cu	M-85	0.20-0.35 C, 21 Cr, 1 Cu, bal. Fe							Heat and corrosion resistant parts, chemical industries	Heat and corrosion resistant
6973	Duro Gloss C-12	M-69	0.13-0.20 C, 12 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6974	Duro Gloss S	M-69	0.12 max. C, S, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6975	Q-Alloy B-Si	M-59	0.36-0.50 C, Si, 58-66 Ni, 16-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6976	Q-Alloy CN-1H-Mo	M-59	0.13-0.20 C, Mo, 24-30 Cr, 7-11 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6977	Esco Stainless No. 33	M-438	0.25 max. C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
6978	Esco Stainless No. 34	M-438	0.25 max. C, 16-20 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6979	Esco Stainless No. 35	M-438	0.25 max. C, 24-30 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6980	Esco Stainless No. 49	M-438	0.13-0.20 C, 16-23 Cr, 24-30 Ni, Si, bal. Fe							Heat and corrosion resistant parts	Discontinued
6981	Contraloy	M-184	C, 28 Cr, 15 Ni, bal. Fe							Heat and corrosion resistant parts	Now Michiana No. 63
6982	Michiana No. 100S	M-184	0.21-0.35 C, 24-30 Cr, 0.25 S, 12-15 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6983	Standard Alloy HR-10	M-105	0.21-0.35 C, 24-30 Cr, 7-11 Ni, Si, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6984	Standard Alloy HR-11	M-105	0.21-0.35 C, 16-23 Cr, 12-15 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6985	Cromic A	M-602	80 Ni, 20 Cr	Annealed	119000		24			Resistance wire	Heat and corrosion resistant to 2100 °F. Obsolete
6986	Cromic C	M-602	65 Ni, 15 Cr, bal. Fe	Annealed	100000		23			Resistance wire	Heat and corrosion resistant to 1650 °F. Obsolete
6987	Cromic D	M-602	0.13-0.20 C, 20 Cr, 24-30 Ni, bal. Fe							Resistance wire	Heat and corrosion resistant to 1400 °F. Obsolete
6988	Industrial No. 530	M-440	0.21-0.35 C, 12-15 Cr, S, bal. Fe							Stainless and corrosion resistant parts	Corrosion resistant
6989	Lesco No. 18-8 Mo	M-73	0.12 max. C, 18 Cr, 8 Ni, Mo, bal. Fe							Stainless parts	Stainless
6990	Lesco No. 18-8 Se	M-73	0.20 max. C, 18 Cr, 8 Ni, .15 P, .25 Se, bal. Fe							Stainless parts	Stainless
6991	Lesco Cobalt Stainless	M-73	1.10 min. C, 16-23 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6992	Miscrome KR	M-84	1.6 min. C, 24-30 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6993	Niresult	M-84	1.1 min. C, 24-30 Cr, 12-15 Ni, 5% Cu, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6994	Shawinigan HR-1	M-443	0.13-0.20 C, 24-30 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Obsolete
6995	Shawinigan HR-2	M-443	0.13-0.20 C, 24-30 Cr, 12-15 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Obsolete
6996	Shawinigan HR-3	M-443	0.30-0.50 C, 16-23 Cr, 31-39 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Obsolete
6997	Shawinigan Nirosta	M-443	0.21-0.35 C, 31-39 Cr, 12-15 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Obsolete
6998	Sharon Stainless 27	M-600	0.13-0.20 C, 27 Cr, Si, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
6999	Cobanic	M-61	55 Ni, 45 Co, .1 C, bal. Fe	Annealed	65000 80000		38			Vacuum tube filament wire	Heat and corrosion resistant
7000	Hilo, Modified	M-61	79 Ni, 18 Co, 2 Fe	Annealed	82000					Vacuum tube filaments	Heat and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7001	Stainless Steel	M-61	0.07 max. C, 16-23 Cr, 7-11 Ni, bal. Fe							Stainless parts	Stainless
7002	Tophet B	M-61	0.10-0.15 C, 68-71 Ni, 19-20.5 Cr, bal. Fe	Annealed	100000	60000	30	45		Heat and corrosion resistant parts, conveyor belts	Heat and corrosion resistant
				Drawn	160000	85000	3				
7003	Tophet X	M-61	0.13-0.20 C, 58-66 Ni, 7-11 Cr, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant, discontinued
7004	B & W No. 603	M-447	0.07 max. C, 16-23 Cr, 7-11 Ni, Ti, bal. Fe							Stainless parts	Stainless
7005	Durco 28-12	M-17 M-46	0.07 max. C, 28 Cr, 12 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant. Obsolete
7006	Hybnickel D	M-194	0.25-0.50 C, 20-30 Ni, 5-10 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
7007	Calite F	M-30	0.36-0.50 C, 24-30 Ni, 16-23 Cr, bal. Fe							Heat and corrosion resistant parts	Discontinued
7008	Pireks CC	M-40	0.66-0.80 C, 49-57 Ni, 24-30 Cr, Si, Mn, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
7009	Pireks RCC	M-40	0.21-0.35 C, 49-57 Ni, 24-30 Cr, Si, Mn, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
7010	Rezistal No. 2 CW	M-260	0.13-0.20 C, 16-23 Cr, 7-11 Ni, W, Si, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
7011	Rezistal KA-2-Mo-T	M-260	0.13-0.20 C, 16-23 Cr, 7-11 Ni, Mo, Ti, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
7012	Rezistal KA-2S-Mo-T	M-260	0.10 max. C, 16-23 Cr, 7-11 Ni, Mo, Ti, bal. Fe							Stainless parts	Stainless
7013	Rezistal KA-2ST	M-260 M-260	0.10 max. C, 16-23 Cr, 7-11 Ni, Ti, bal. Fe	Annealed	80000	35000	57	70	150	Stainless parts, tanks, tubes	Stainless
7014	Rezistal KA-2T	M-260	0.13-0.20 C, 16-23 Cr, 7-11 Ni, Ti, bal. Fe							Stainless parts	Stainless
7015	A.M. No. 2S	M-4 M-313	100 Mg	Sand cast	13000		6		30	Light weight parts, alloys	High thermal and electrical conductivity
				Annealed	27000	14000	15		40		
				Hard rolled	37000	27000	9		50		
7016	A.M. 59S	M-4	9.5-10.5 Al, 0.10 min. Mn,	Extruded	50000	38000	10		70	Light alloy parts	
		M-313	0.3 max. Zn, 0.5 max. Si, bal. Mg	Heat treated	56000	40000	3.5		85		
7017	A.M. 230	M-4 M-313	9.0-11.0 Al, 0.1 min. Mn, 0.3 max. Zn, 0.5-1.0 Si, bal. Mg	Die cast	32000	22000	1.5		63	Aircraft motor parts, switch housings, vacuum cleaner parts	Die casting alloy
7018	A.M. 403	M-4 M-313	1.2-2.0 Mn, 0.3 max. Si, bal Mg	Sand cast	14000	4500	5.0		33	Gasoline tanks, fittings	Light casting alloy
7019	Allegheny 34	M-1	0.12 max. C, 14-16 Cr, bal. Fe	Annealed	78000	42000	30	65	156	Corrosion resistant parts	Corrosion resistant
7020	Allegheny Metal B (sp)	M-1	0.11 max. C, 18-20 Cr, 8-10 Ni, bal. Fe	Annealed	75000		50	60	130	General engineering purposes	Welding grade
7021	Allegheny Metal (Type 345)	M-1	0.15 max. C, 17-19 Cr, 8-12 Ni, (Cb-6 to 10 times the C), bal. Fe	Annealed	75000		50	60	130	Corrosion resistant parts	Immune to intergranular corrosion
7022	Allegheny Metal (Type 346)	M-1	0.15 max. C, 19-20 Cr, 8-12 Ni, (Cb-6 to 10 times the C),	Annealed	75000		50	60	130	Corrosion resistant parts	Immune to intergranular corrosion
7023	Allegheny Metal (Type 347)	M-1	0.15 max. C, 17-19 Cr, 8-12 Ni, (Cb-over 10 times the C), bal. Fe	Annealed	75000		50	60	130	Corrosion resistant parts	Immune to intergranular corrosion
7024	Allegheny Metal (Type 348)	M-1	0.15 max. C, 19-20 Cr, 8-12 Ni, (Cb-over 10 times the C), the bal. Fe	Annealed	75000		50	60	130	Corrosion resistant parts	Immune to intergranular corrosion
7025	Nüral	M-555	0.2-1.0 Si, 0.2-0.5 Mn, 3.0-12.0 Mg, bal. Al	Chill cast	32000 36000		10 5			Light alloy parts	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7026	Nŭral 30	M-555	6-7.5 Cu, 0.5-2.0 Si, bal. Al	Sand cast	18000 28000		2.0 0.8			Light alloy parts	
7027	Nŭral 43	M-555	4.5-6 Si, bal. Al	Sand cast	18000 24000		5 2			Light alloy parts	
7028	Nŭral 77	M-555	4-7 Cu, 4-6 Zn, 1-3 Si, 1.5 max. Fe, bal. Al	Sand cast	18000 25000		2 0.5			Light alloy parts	
7029	Nŭral 85	M-555	4-5 Cu, 4-5 Si, bal. Al	Chill cast	28000 35000		4.5 1.0			Light alloy parts	
7030	Nŭral 85 S	M-555	4-5 Cu, 4-5 Si, 2 max. Fe, 0.5 max. Ni, bal. Al	Sand cast	20000 27000		4 1			Light alloy parts	
7031	Nŭral 93	M-555	4-4.5 Cu, 1.5-2.5 Si, 3-4.5 Ni, bal. Al	Sand cast	20000 26000		1.2 0.5			Light alloy parts	
7032	Nŭral 122	M-555	9.5-10.2 Cu, 0.15-0.35 Mg, 0.8-1.5 Fe, bal. Al	Sand cast	22000 30000		1.5 0.3			Light alloy parts	
7033	Nŭral 132 A	M-555	0.8-1.0 Cu, 12.2-12.8 Si, 0.8-1.0 Mg, 0.5 Fe, 1.9-2.4 Ni, bal. Al	Chill cast	29000 37000		1.2 0.5			Light alloy parts	
7034	Nŭral 132 B	M-555	2 Cu, 12.5 Si, 0.8-1.0 Mg, 0.5 Fe, 0.8-1.0 Ni, bal. Al	Chill cast	29000 37000		1.2 0.5			Light alloy parts	
7035	Nŭral 142	M-555	4-4.5 Cu, 1.3-1.8 Mg, 1.8-2.2 Ni, bal. Al	Sand cast	21000 28000		4 1			Light alloy parts	
7036	Nŭral 195	M-555	4-5.5 Cu, 0.5-1.5 Si, 0.4-1.0 Fe, bal. Al	Sand cast	23000 36000	14000	8 2			Light alloy parts	
7037	Nŭral 200	M-555	14-16.8 Cu, 0.5-1.0 Fe, bal. Al	Sand cast	20000 28000	18000	0.5 0.3			Light alloy parts	
7038	Cerromatrix	M-216	48 Bi, 14.5 Sn, 28.5 Pb, 9 Sb		13000		1		19	Dental alloys, fusible alloy for die mounting	Expands on cooling
7039	Sodium-Lead Alloy	M-596	98 Pb, 2 Na							Non-ferrous alloy deoxidizer	
7040	Die L	M-343	1.45-1.55 C, 12.5-14 Cr, 0.65-0.75 Co, 1.1 V, bal. Fe							Dies	
7041	Alcoa 314	M-4	13.5 Si, 4 Cu, bal. Al	Cast	31000		1		85	Permanent mold castings	
7042	A. M. 55 S	M-4	5 Mg, bal. Al		41000	18000	33		71	Rivets for fabrication of Mg alloy parts	Replaced by Alcoa 56S
7043	Permite 1002 (2002)	M-6	9-11 Cu, 0.4-0.6 Si, 0.25-0.40 0.25-0.40 Mg, 1.0-1.5 Fe, bal. Al	Cast	26000 45000	21000 35000	1.0		60 150	Light alloy parts, pistons, permanent mold castings	
7044	Permite 1018	M-6	1.0-1.5 Cu, 0.5 max. Si, 0.6 max. Fe, 0.7-1.2 Mn, bal. Al		23000 30000	3500 10000	12 8		45 70	Light alloy parts	
7045	Permite A-2023 Special	M-6	0.20 max. Si, 9.5-10.5 Mg, max. Fe, 0.4-0.6 Zn, bal. Al		27000	18000	4		60 70	Light alloy parts, pistons, permanent mold castings, pumps	
7046	Ambraloy 929	M-8	10 Al, 90 Cu		78000 125000		36 5			Rods	Corrosion resistant
7047	Amsco No. 217	M-9	Cr-W-Mn							Welding rod for hard surfacing	Abrasion resistant
7048	Asarcoloy No. 7	M-314	2.75-3.0 Ni, bal. Cd	Cast	16400	11700	19	43	33	Bearings	For severe service
7049	Chrome-Copper	M-538	Cr coated copper							Stampings, display cases, refrigerators, kitchen equipment	Pure Cu base bonded with Ni then Cr on surface
7050	Chrome Nickel Silver	M-538	Ni-Cu-Cr							For automatic fabrication, sheets and strips	Nickel silver sheet bonded with chromium, rust proof
7051	Chrome Steel	M-538	Cr bonded to steel							Floor plates, reflectors, trim and moulding, toasters	Resists heat to 1050°F. Cr bonded to steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7052	Nickel Steel	M-538	Ni bonded to steel							Floor plates, reflectors, hardware, stampings	Resists heat to 1050°F. Ni bonded to steel
7053	Apex 12	M-564	85 Cu, 5 Sn, 5 Zn, 5 Pb		24000	12000	16		48	Pump bodies, valves, for pressure or steam parts	"Ounce Metal"
7054	Apex 16	M-564	56 Cu, 41 Zn, 1 Fe, 1 Al, 0.5 Mn, 0.5 Sn		65000	32000	25		110	Valve stems, gears, ship propellers	"Manganese Bronze" tough
7055	Apex 14	M-564	85 Cu, 15 Zn							Flanges which are brazed onto copper pipe	"Brazing Brass"
7056	Apex 22	M-564	86 Cu, 8 Sn, 2 Zn, 4 Pb		28000	15000	17			Bearings for industrial equipment	
7057	Apex 24 (Composition G)	M-564	88 Cu, 10 Sn, 2 Zn		40000	22000	24			Superheated steam or hydraulic castings, gears, heavy pressure bearings	
7058	Apex 44	M-564	70 Cu, 4 Sn, 26 Pb							Self-lubricating bearing bronze	
7059	Apex 66	M-564	86 Cu, 10 Al, 4 Fe		85000	44000	18			Gears, bearings, non-sparking tools	
7060	Nickeloid	M-135	45-40 Ni, bal. Cu							Non-rusting and corrosion resistant parts	Corrosion resistant
7061	Silmet	M-135	Ni-Cu-Zn alloys							For deep stamping in electroplate trade	Deep stamping and spinning
7062	Bethalon 430F	M-24	.12 max. C, 16-18 Cr, Mo, S-Se, bal. Fe							Automatic and screw machine parts	Not to be welded. Similar to Bethadur No. 3 plus machinability
7063	Bethalon D	M-24	0.10 C, 0.3-0.5 S, 21 Cr, bal. Fe							Automatic and screw machine parts	Not to be welded. Similar to Bethadur No. 5 plus machinability
7064	Bethanized Products	M-24	Zn coated steel							Wire for severe duty and weather resistance	Can be worked and deformed.
7065	Bethco Machine Screw	M-24	C, bal. Fe							Machine screws	Special cold heading steel, special process.
7066	Bethco Wood Screw	M-24	C, bal. Fe							Wood screws	Special cold heading steel, special process.
7067	Bethlehem H.V.	M-24	C, 18 W, 4.5 Cr, 2 V, 0.75 Mo, bal. Fe							Heavy duty cutting tools	High speed steel
7068	Mayari Superheater Bolt Steel	M-24	0.25-0.35C, 1.25-1.75 Ni, 0.6-0.9 Cr, bal. Fe	Water quench tempered	115000	100000	19	55	229	Engine and superheater bolts	Heat treated
7069	Steelton L.P. Iron	M-24	0.035 max. P and S, pig iron							Steel making	For acid O.H. and electric furnaces
7070	Braeburn Cobalt	M-140	.65-.73 C, 3.75-4.25 Cr, .85-1.0 V, 17.5-18.5 W, 4-4.5 Co, .75-1.0 Mo, bal. Fe							Tools and cutters for lathe and planer work	High speed steel
7071	Mo-Cut	M-140	.60-.85 C, 3.5-4.0 Cr, 0.9-1.3 V, 1.3-1.8 W, 7.75-9.0 Mo, bal. Fe							Tools, cutters, twist drills, lathe and planer tools	High speed steel
7072	Pressurdie No. 1	M-140	.3-.4 C, .8-1.0 Si, 4.75-5.5 Cr, 1.5-.25 V, 4.75-5.5 W, .4-.6 Co, 15-.25 Mo, bal. Fe							Tools, aluminum and brass extrusion dies, punches	Hot work and hot hot forming
7073	Pressurdie No. 3	M-140	.3-.4 C, .85-1.0 Si, 4.9-5.25 Cr, .10-.15 V, .45-.60 Mo, bal. Fe							Tools, aluminum die casting dies	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7074	Superior No. 1	M-140	2.05-2.2 C, 11.5-13.5 Cr, .55-.65 V, bal. Fe							Tools, cutters, blanking dies, shear knives, ceramic tools	
7075	Superior No. 2	M-140	1.45-1.6 C, 11-12 Cr, .15-.25 V, .70-.80 Mo, bal. Fe							Tools, cutters, coining and forming and blanking dies	
7076	Triton	M-140	.50-.55 C, .90-1.1 Si, .15-.25 Cr, bal. Fe							Tools, cutters, punches, pneumatic chisels, rivet sets	
7077	Viking Extra	M-140	1.05-1.15 C, 1.25-1.40 Cr, .30-.50 Mo, bal. Fe							Tools, cutters, rollers for roller bearings, thread rolling dies	
7078	Vinco H.W.	M-140	.50-.55 C, 3.75-4.25 Cr, .85-1.0 V, 17.5-18.5 W, .15-.25 Mo, bal. Fe							Hot forming and upsetting dies, brass extrusion dies	High speed steel
7079	Atlas Double Extra	M-435	C, bal. Fe							Tools	
7080	Atlas Extra	M-435	C, bal. Fe							Tools	
7081	Atlas "Q"	M-435	1.2 C, .5 Cr, bal. Fe							Tools	
7082	Atlas Refined	M-435	C, bal. Fe	Water harden						Tools	
7083	Atlas Special Alloy	M-435	C, .18 V, bal. Fe							Tools	
7084	Atlas Triple Extra	M-435	C, W, bal. Fe	Water harden						Fast finishing tools	
7085	Badger	M-435	1.2 C, 1.5 W, .4 Cr, .2 V, bal. Fe							Tools, cutters Hot work tools	Non-deforming
7086	E. B. Alloy	M-435	C, Cr, bal. Fe								
7087	Falcon	M-435	C, Cr, W, bal. Fe							Tools	
7088	F N S	M-435	1.5 C, 12 Cr, .8 Mo, bal. Fe							Tools, dies	
7089	Hot Die	M-435	.3 C, 11 W, 3 Cr, .5 V, bal. Fe	Air hardened						Hot die tools, punches	Hot die steel
7090	Keewatin	M-435	.9 C, 1.1 Mn, .5 Cr, .5 W, bal. Fe							Tools, dies, punches	Non-deforming
7091	L X X	M-435	C, Cr, W, V, bal. Fe							Tools, dies, punches	High speed steel
7092	Monark	M-435	C, alloy, bal. Fe							Tools	Shock resisting
7093	Nipigon	M-435	.7 C, 19 W, 4 Cr, 2 V, 1 Mo, 7 Co, bal. Fe							Tools, dies	High speed steel
7094	No-Kor-O 12-F	M-435	0.10 C, 12 Cr, .25 S, bal. Fe	Annealed	100000	50000	40	60	183	Corrosion resistant parts	Free machining
7095	No-Kor-O 25-20	M-435	0.20 C, 25 Cr, 20 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
7096	N N	M-435	2.2 C, 12 Cr, bal. Fe	Oil hardened						Tools, dies	Non-deforming
7097	Trojan	M-435	.8 C, 18 W, 4 Cr, 2 V, .6 Mo, bal. Fe							Tools, dies	High speed steel
7098	Ultimo No. 6	M-435	.5 C, .7 Cr, .7 Mo, 2 Ni, bal. Fe							Tools, punches, dies	Hot work steel
7099	Calite "B-29"	M-30	C, Cr, Ni, bal. Fe	Cast	70000		5	4		Heat resisting parts, furnace parts	Heat resistant to 2050°F. Obsolete
7101	Calite "E-28"	M-30	C, 9 Ni, 26 Cr, bal. Fe	Rolled, annealed	95000		40	50		Malleable bolts, nuts, rivets, welding wire, furnace parts	Heat resistant to 1950°F.
7102	Calorized Steel	M-30	Steel coated with Al-rich surface alloy							Machinery parts, general, tubes, plates, pots, refinery tubes	Improves resistance to oxidation and scaling to 1500°F.
7103	Rita Alloy	M-354	C, Mn, Cr, Ni, bal. Fe	Oil quenched	220000		12	40	444	Structural purposes	
7104	Rita Endur	M-354	C, Si, Cr, V, Ni, Mo, bal. Fe							Hobs	
7105	D. Y. O.	M-32	0.3 C, 0.3 Mn, 0.25 Si, 4 Cr, 14.5 W, 0.5 V, bal. Fe			205000				Tools, forging dies	Red-hard, hot work steel
7106	R. D. S.	M-32	0.75 C, 0.5 Mn, 1.0 Cr, 1.75 Ni, 0.25 Si, bal. Fe	Oil hardened						Tools, taps, punches, shear blades, swaging dies, spindles	Tough
7107	Vanite	M-35	C, 18 W, 4 Cr, 2 V, .6 Mo, bal. Fe							Tools, cutters	High speed steel
7108	Cooper Stainless S-21W	M-36	0.40 max. C, 15 Cr, 25 Ni, 3.5 W, bal. Fe							Heat, erosion and corrosion resistant parts	Heat and corrosion resistant
7109	Cooper Stainless S-23	M-36	0.20 max. C, 2. Cr, 40 Ni, bal. Fe							Temperature control application	Low thermal expansion

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7110	Atha Champion	M-38	.9 C, 3.7 Cr, 1.9 V, 13.7 W, bal. Fe	Oil hardened						Tools, dies	Non-deforming
7111	Atha Chrome Roll	M-38	0.9 C, 1.35 Cr, bal. Fe							Rolls for tire rims, drawing dies	
7112	C. C. A.	M-38	1.5 C, 12 Cr, 0.8 Mo, 0.25 V, bal. Fe							Blanking dies, punches, plug gauges, wire drawing dies	
7113	Champion Tool	M-38	1.2 C, 1.25 W, bal. Fe							Reamers, taps, threading dies, punches, blanking dies	
7114	Crescent Double Special	M-38	1.3 C, 3.6 W, bal. Fe							Finishing tools, drawing dies	
7115	Crescent Extra	M-38	C, bal. Fe							Punches, dies, cutters, general tools	
7116	Crescent Rim Roll	M-38	1.0 C, 0.5 Cr, bal. Fe							Shaping rolls, drawing dies	
7117	Hy-Ten-Sl Bronze Gr. 2	M-129	60-68 Cu, 20-24 Zn, 3-7 Al, 2.5-5.0 Mn, 2-4 Fe		100000	55000	16	16	200	Pump and fan impellers, gears, valves	Wear and corrosion resistant
7118	Crescent Tool	M-38	C, bal. Fe							Punches, dies, cutters, general tools	
7119	Crusca Solid Drill	M-38	.8 C, bal. Fe							Solid drills, tools	
7120	La Belle CCV	M-38	1.0 C, .2 V, .2 Cr, bal. Fe							Dies for plow bolts, square shoulder bolts	Cold heading dies
7121	La Belle Chromonic	M-38	0.5 C, 1.25 Mn, 7 Cr, 1.5 Ni, 0.75 Mo, bal. Fe							Flying shears, gillet shears	
7122	La Belle CSD	M-38	.95 C, bal. Fe							Dies for wheel bolts and single extrusion applications	Cold heading dies
7123	La Belle Extra 2½	M-38	C, bal. Fe							Dies for small rivets and non-ferrous specialties	Cold heading dies
7124	La Belle Extra 3A	M-38	C, bal. Fe							Small screw and bolt dies	Cold heading dies
7125	La Belle Extra 3½	M-38	C, bal. Fe							Dies for bolts	Cold heading dies
7126	Max-el 1-B	M-38	0.2 C, 1 Mn, 0.2 Mo, bal. Fe	Rolled	70000	50000	30	55	156	Shafts, gears, pinions, bolts, studs	
				Heat treated	135300	114000	18	54	332		
7127	Max-el 2-B	M-38	0.4 C, 1 Mn, 0.2 Mo, bal. Fe	Rolled	90000	55000	20	45		Shafts, spindles, worms, racks, gears, pinions	
				Heat treated	119500	85000	20	53	251		
7128	Max-el 3½	M-38	0.5 C, 1.25 Mn, 0.6 Cr, 0.15 Mo, bal. Fe	Heat treated	230000	222500	9.5	36	514	Screws, racks, shafts, gears, pinions, spindles	
7129	Paragon A	M-38	0.98 C, 1.68 Mn, 0.26 V, 0.11 Cu, 0.63 Cr, bal. Fe	Oil hardened						Tools, dies	Non-deforming
7130	Peerless B	M-38	0.45 C, 15 W, 2.75 Cr, 0.4 V, bal. Fe							Extrusion dies, brass forging dies	Hot work steel
7131	Peerless C	M-38	0.35 C, 15 W, 2.75 Cr, 0.4 V, bal. Fe							Extrusion dies, die casting dies	Hot work steel
7132	Peerless D	M-38	0.45 C, 11 W, 2 Cr, 0.2 V, bal. Fe							Spike dies, brass forging dies, permanent molds	Hot work steel
7133	Rex Supervan	M-38	C, 18 W, 4 Cr, 2 V, 0.65 Mo, bal. Fe							Cutting tools for hard materials	High speed steel
7134	Rezistal KA-2	M-38	0.08-0.20 C, 18 Cr, 8 Ni, bal. Fe	Annealed	85000	30000	60	75	130	Stainless steel parts, tanks, shafts, spokes, lamps, trim	Corrosion resistant
					95000	40000	55	65	170		Non-magnetic, work-hardening
7135	Rezistal Stainless BM	M-38	1.0 max. C, 16-18 Cr, 0.50 Mo, bal. Fe							Cutlery	Corrosion and wear resistant
7136	Rezistal Stainless B100	M-38	1.0 C, 16-18 Cr, bal. Fe							Cutlery, valves, ball bearings	Corrosion and wear resistant
7137	Sanderson Double Special	M-38	1.3 C, 3.6 W, 0.25 Cr, bal. Fe							Finishing tools, drawing dies	Also Crucible Double Special
7138	Sanderson Extra	M-38	C, bal Fe							Punches, dies, cutters, general tools	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7139	Sanderson Extra 3½	M–38	C, bal. Fe							Dies	Cold heading dies
7140	Sanderson Extra 4½	M–38	C, bal. Fe							Dies for wood screws	
7141	Sanderson Special	M–38	1.1 C, .2 Cr, bal. Fe							Cutting tools, taps, reamers	
7142	Sanderson Tool	M–38	C, bal. Fe							Punches, dies, general tools	
7143	Standard Tool	M–38	C, bal. Fe							General tools	See Black Diamond
7144	Hy-Ten-Si No. 4	M–129	65 Cu, 35 Sn	Sand Cast	85000	40000	25	25	150	*Worm wheels, gears, bearings*	
7145	Climax Machinery	M–38	0.35 C, Mn, bal. Fe							Shafts, gears, pinions	
7146	Ultradie No. 2	M–39	1.5 C, 11.5 Cr, 0.8 Mo, bal. Fe							Tools, dies	
7147	Cannon Special	M–40	0.70-0.75 C, 4 Cr, 18-20 W, 0.50 Mo, 2.0-2.25 V, bal. Fe							Tools, cutters	High speed steel
7148	Cannon Vanadium	M–40	1.0 C, 4 Cr, 18-20 W, 0.5-0.8 Mo, 3.5 V, bal. Fe							Tools, cutters	High speed steel
7149	Darwin No. 1 Air hardening	M–40	1.45-1.60 C, 11-12 Cr, 0.20-0.35 V, 0.7-0.8 Mo, bal. Fe							Tools, dies	
7150	Darwin No. 505 Special	M–40	.65-.75 C, 3.75-4.25 Cr, 17-18 W, 1.5-1.75 V, 7-8 Co, 0.7-1.0 Mo, bal. Fe							Tools, cutters	High speed steel
7151	Darwin C C	M–40	.55-.65 C, .3-.4 Cr, .60-.75 W, .55-.65 Mo, .95-1.1 Si, bal. Fe							Tools	
7152	Darwin C V	M–40	1.1-1.15 C, 0.2-0.4 Cr, 0.25-0.35 V, bal. Fe							Tools	
7153	Darwin L W I.	M–40	0.40 C, 3 Cr, 9-10 W, 0.2-0.3 V, bal. Fe							Tools	
7154	Darwin "W" Brand	M–40	0.45 C, 0.85-0.95 Cr, 1.0 W, bal. Fe							Tools	
7155	Hobalite	M–40	C, bal. Fe	Air harden						Mold dies, hobs	
7156	Nimo	M–40	0.5-0.6 C, 0.3-0.5 Cr, 0.10-0.15 V, 0.4-0.5 Mo, 2.5-2.8 Ni, bal. Fe							*Tools*	
7157	Croloy Die Steel	M–357	1.5 C, 12-14 Cr, 1 V, .8 Mo, bal. Fe							Dies, gauges, broaches, wearing plates	
7158	D-29 Chisel Steel	M–357	.5 C, 1.4 Si, .4 Mo, bal. Fe							Chisels, shear blades	
7159	Do-Di	M–158	60 Cu, 37.65 Zn, 0.65 Sn, 0.82 Pb, 0.35 Fe, 0.53 Al	Cast	56000	20100	26	32	86	Marine parts	
7160	"Doler-Brass" Alloy	M–158	63-65 Cu, 34 Zn, 0.5-1.5 Si	Cast	65000 75000	30000 40000	25 20		110 120	Brass die castings	
7161	Dowmetal K	M–43	10 Al, 0.1 Mn, 0.5 Si, bal. Mg	Die cast	29000 33000	20000 22000	3 1		60 70	Die castings	
7162	Electromet Calcium-Silicon	M–48	28-35 Ca, 60-65 Si, 6 max. Fe							Metallurgical applications, deoxidizer and degasifier	Graded according to Ca content
7163	Electromet Calcium-Aluminum-Silicon	M–48	10-14 Ca, 8-12 Al, 50-53 Si							Deoxidizing and degasifying steel	
7164	Electromet Calcium-Manganese-Silicon	M–48	17-19 Ca, 8-10 Mn, 55-60 Si, 10-14 Fe							Scavenger for steel	
7165	Electromet Chromium	M–48	10 max. C, 87-98 Cr, bal. Fe							Metallurgical applications	Graded according to carbon content
7166	Electromet Chromium-Copper	M–48	8-11 Cr, 88-90 Cu, 1 max. Fe, 0.5 max. Si							Metallurgical applications	
7167	Electromet Ferro-Boron	M–48	18-25 B, 3 max. Al, 3 max. Si, bal. Fe							Deoxidizer and degasifier	
7168	Electromet Ferro-Chrome (Low Carbon)	M–48	67-72 Cr, 0.06-2 max. C, bal. Fe							Metallurgical applications	Graded according to carbon content
7169	Electromet Ferro-Chrome (High Carbon)	M–48	66-70 Cr, 4.5 min. C, bal. Fe							Metallurgical applications	Graded according to carbon content

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7170	Electromet Ferro-Chrome (High Nitrogen)	M-48	Approx. 0.75 N, 5.0 max. C, 60-71 Cr, bal. Fe							Metallurgical applications	Graded according to carbon content
7171	Electromet Ferro-Chrome (Special Foundry Grade)	M-48	Approx. 5.0 C, 62-66 Cr, bal. Fe							Metallurgical applications, ladle additions of Cr to Cast iron	
7172	Electromet Ferro-Columbium	M-48	55-60 Cb, approx. 7 Si, 0.5 max. C, bal. Fe							Additions to stainless steel	
7173	Electromet Ferro-Manganese (Standard)	M-48	78-82 Mn, 1 max. Si, 0.3 max. P, approx. 6.75 C, bal. Fe							Metallurgical applications	
7174	Electromet Ferro-Manganese (Low Carbon)	M-48	0.75 max. C, 7 max. Si, 80-85 Mn, bal. Fe							High Mn additions to low C steels, metallurgical applications	Graded according to carbon content
7175	Electromet Ferro-Manganese (Medium Carbon)	M-48	1.5 max. C, 2.5 max. Si, 80-85 Mn, bal. Fe							High Mn additions to medium C steels, metallurgical applications	
7176	Electromet Ferro-Manganese (Low Phosphorus)	M-48	78-82 Mn, 5 max. Si, 0.1 max. P, 5.5-6.5 C, bal. Fe							Metallurgical applications	
7177	Electromet Ferro-Manganese (Low Iron)	M-48	85-90 Mn, 2 max. Fe, 3 max. Si, approx. 7.0 C, bal. Fe							Metallurgical applications in non-ferrous alloys	
7178	Electromet Ferro-Manganese-Silicon	M-48	20-25 Mn, 47-54 Si, 25-30 Fe, 0.6 C							Ladle additions to cast iron for softening	
7179	Electromet Ferro-Silicon (15%)	M-48	14-20 Si, 1.0 max. C, 74-84 Fe, 0.05 max. P, 0.04 max. S							Addition of Si to steel, metallurgical applications	Graded according to Si content
7180	Electromet Ferro-Silicon (50%)	M-48	42.5-52 Si, 45-55 Fe							Metallurgical applications	Graded according to Si content
7181	Electromet Ferro-Silicon (75%)	M-48	69.5-82 Si, 15-28 Fe							Metallurgical applications, silicon steels	Graded according to Si content
7182	Electromet Ferro-Silicon (80-90%)	M-48	82-88 Si, 10-16 Fe							High silicon alloys, metallurgical applications	
7183	Electromet Ferro-Silicon 90-95%)	M-48	88-95 Si, 2-9 Fe							High silicon alloys, metallurgical applications	Graded according to Si content
7184	Electromet Ferro-Tungsten	M-48	78-82 W, 2 max. C, bal. Fe							Steel alloys, alloying	Graded according to C content
7185	Electromet Ferro-Vanadium	M-48	35-40 V, 8 max. Si, 3 max. C, bal. Fe							Metallurgical applications, steel alloys	Graded according to C and Si content
7186	Electromet Manganese	M-48	85-95 Mn, 2.5 max. Fe 1.5 max. Si, 0.2 max. C							Metallurgical applications, alloying	Graded according to C and Fe content
7187	Electromet Manganese-Boron	M-48	60-65 Mn, 20-25 B, 5 max. Fe, 4 max. Si, 5 max. Al							Deoxidizer and degasifier	
7188	Electromet Manganese-Copper	M-48	28-32 Mn, 65-70 Cu, 4 max. Fe, 0.75 max. Si							Non-ferrous metallurgical applications	Graded according to Fe content
7189	Electromet Nickel-Zirconium	M-48	40-50 Ni, 25-30 Zr, 5 max. Fe, 10 max. Si, approx. 10 Al							Deoxidizer and degasifier for Ni and Fe alloys	
7190	Electromet Silico-Manganese	M-48	3.0 max. C, 65-70 Mn, 12-25 Si, bal. Fe							Metallurgical applications	Graded according to carbon content
7191	Electromet Silicon (Refined)	M-48	96 min. Si, 2 max. Fe							Metallurgical applications for Cu and Al silicon alloys	Graded according to Fe content
7192	Electromet Silicon-Spiegel	M-48	25-30 Mn, 5-8 Si, 2-4 C, bal. Fe							Metallurgical applications	Furnished in standard and special grades
7193	Electromet Spiegeleisen	M-48	19-28 Mn, 1.0 max. Si, bal. Fe, C							Metallurgical applications	Graded according to Mn content
7194	Electromet Zirconium (12-15%)	M-48	12-15 Zr, 39-43 Si, 40-45 Fe, 0.20 max. C							Ferrous metallurgical applications	

Serial No.	Alloy	Mfg No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7195	Electromet Zirconium (35-40%)	M-48	35-40 Zr, 47-52 Si, 8-12 Fe, 0.5 max. C							Ferrous metallurgical applications	
7196	Achorn Fagersta Best	M-608	C, bal. Fe							Tools	Type C
7197	Achorn Fagersta Chisel	M-608	C, bal. Fe							Chisels	Type C
7198	Achorn Fagersta Cold Heading	M-608	C, bal. Fe							Cold heading dies	Type C
7199	Achorn Fagersta Envelope Die	M-608	C, bal. Fe							Envelope dies	Type C
7200	Achorn Fagersta Extra	M-608	C, bal. Fe							Tools	Type C
7201	Achorn Fagersta Extra Cutlery	M-608	C, alloy, bal. Fe							Cutlery tools	Type C
7202	Achorn Fagersta Finishing	M-608	C, alloy, bal. Fe							Finishing tools	Type S
7203	Achorn Fagersta High Production	M-608	C, bal. Fe							High production tools	Type N
7204	Achorn Fagersta Hot Die	M-608	C, alloy, bal. Fe							Hot die tools	Type S
7205	Achorn Fagersta Shoe Die	M-608	C, bal. Fe							Shoe dies	Type C
7206	Achorn Fagersta Silver Die	M-608	C, bal. Fe							Silver dies	Type C
7207	Achorn Fagersta Silver Die	M-608	C, bal. Fe							Rock drills	Type C
7208	Achorn Fagersta Smooth Bor Hollow	M-608	C, bal. Fe							Solid drills	Type C
7209	Achorn Fagersta Solid Drill	M-608	C, alloy, bal. Fe							Dies, tools	Type S
7210	Achorn Fagersta Special Alloy Die	M-608	C, bal. Fe							Tools	Type C
7211	Achorn Fagersta Standard	M-608	C, alloy, bal. Fe							Cutlery tools	Type C
7212	Achorn Fagersta Standard Cutlery	M-608	C, alloy, bal. Fe							Tools	Type N
7213	Achorn Fagersta Superior Oil	M-608	C, bal. Fe							Chisels	Type S
7214	Achorn Fagersta Unbreakable Chisel	M-608	C, bal. Fe							Tools	Type S
7215	Achorn Kloster White Gold	M-608	C, bal. Fe							Tools	Type H
7216	Achorn Kloster Brilliant AX	M-608	C, bal. Fe							Tools	Type H
7217	Achorn Kloster Brilliant WKE	M-608	C, bal. Fe							Tools	Type H
7218	Achorn Kloster Prior Extra	M-608	C, bal. Fe							Molding dies	Type C
7219	Empire 22 C	M-162	C, 22 Cr, 1 Cu, bal. Fe							Heat and corrosion resisting castings	Discontinued
7220	Empire 30 H	M-162	1.5 min. C, 30 Cr, special alloys, bal. Fe							Heat and corrosion resisting castings	Discontinued
7221	Empire 46	M-162	0.13-0.20 C, 5 Cr, Mo or W, bal. Fe							Castings	Discontinued
7222	Empire 1214	M-162	C, 14 Cr, bal. Fe							Corrosion resistant castings	Discontinued
7223	Empire 2010	M-162	C, 20 Cr, 10 Ni, with or without Ti or Se, bal. Fe							Heat and corrosion resistant castings	Discontinued
7224	Empire 2511	M-162	C, 25 Cr, 11 Ni, with or							Heat and corrosion resistant	Discontinued

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7225	Empire 2810	M-162	C, 28 Cr, 10 Ni, Se, W, bal. Fe							Heat and corrosion resistant castings	Discontinued
7226	Empire 2815	M-162	C, 28 Cr, 15 Ni, Se, W, bal. Fe							Heat and corrosion resistant castings	Discontinued
7227	Empire Resista	M-162	0.30 max. C, 10 Cr, 2.5 Ni, 1.5 Al, 1.75 Si, bal. Fe							Heat and corrosion resistant castings	Discontinued
7228	Empire SHA	M-162	C, 28 Cr, 36 Ni, 3 Mo, 1.5 Cu, bal. Fe							Heat and corrosion resistant castings	Discontinued
7229	Fagersta Alloy Shoe Die	M-52 M-385	C, Cr, Mo, bal. Fe							Shoe dies, cutting dies for leather and paper and rubber	
7230	Fagersta Broach	M-52 M-385	C, Cr, W, bal. Fe							Broaches	
7231	Fagersta Engravers Plate	M-52 M-385	.35 C, bal. Fe							Engravers plates	
7232	Rema Hobbing Die	M-52 M-385	C, alloy, bal. Fe							Hobbing dies for plastics	
7233	B. C. Hotwork	M-57	0.6 C, 18 W, 4 Cr, 1 V, bal. Fe							Cutters, tools, dies	High speed steel
7234	Demmler "D"	M-57	0.55 C, 0.9 Mn, 1.2 Cr, 0.2 V, bal. Fe							Tools	
7235	Diamond "M"	M-57	1.35 C, 0.3 Cr, bal. Fe							Tools, dies	
7236	Globe Drill Steel	M-57	1.25 C, 0.30 Mn, 0.10 Cr, bal. Fe							Tools, dies	
7237	N. D. Forging Steel	M-57	0.3 C, 15 W, 4 Cr, 0.5 V, bal. Fe							Tools	
7238	Red Seal Die Steel	M-57	1.0 C, 0.25 Mn, bal. Fe							Tools, dies	
7239	Special Piston Steel	M-57	1.05 C, 0.25 Mn, bal. Fe							Pistons	
7240	Special XX	M-57	1.05 C, 0.25 Mn, bal. Fe							Tools	
7241	Sterling "M" Drill Steel	M-57	1.25 C, 0.3 Mn, 0.25 Cr, bal. Fe							Drills	
7242	Sterling "V" (Punch)	M-57	0.9 C, 0.35 Mn, 0.15 Cr, 0.15 V, bal. Fe							Punches	
7243	Sterling "V" (Shear Knife)	M-57	1.0 C, 0.35 Mn, 0.50 Cr, 0.20 V, bal. Fe							Shear Knives	
7244	Sterling "V" (Tap)	M-57	1.1 C, 0.30 Mn, 0.15 Cr, 0.25 V, bal. Fe							Taps	
7245	Sterling XX	M-57	0.95 C, 0.30 Mn, 0.05 Cr, bal. Fe							Tools, dies	
7246	Tungsten Tap Steel	M-57	1.15 C, 1.4 W, 0.25 Cr, 0.15 V, bal. Fe							Taps	
7247	X. D. L. Steel	M-57	0.4 C, 15 W, 3.5 Cr, 0.5 V, bal. Fe							Cutters, tools	High speed steel
7248	F. C. C. No. 2	M-439	0.18-0.23 C, 1.4-1.6 Cr, 0.45-0.55 Mo, 1.0-1.25 Co, bal. Fe	Oil hardened						Upset insert dies	
7249	F. C. C. No. 4	M-439	0.9-1.0 C, 0.75-0.85 W, bal. Fe	Water harden						Fast finishing tools	
7250	F. C. C. No. 5	M-439	1.9-2.2 C, 11.5-12.5 Cr, 0.6-0.9 Mo, bal. Fe	Oil hardened						Draw dies, cutting edge dies	
7251	F. C. C. No. 6	M-439	0.3-0.4 C, 0.9-1.1 Cr, 0.65-0.80 Mn, 0.15-0.20 V, bal. Fe	Water harden						Zinc die casting dies	
7252	F. C. C. No. 7	M-439	0.37-0.42 C, 4.5-5.5 Cr, 0.75-0.85 Si, 0.40-0.55 Mo, bal. Fe	Oil hardened						Al die casting dies	
7253	F. C. C. No. 10	M-439	1.0-1.2 C, 1.1-1.3 Cr, 0.3-0.4 Mo, bal. Fe	Oil hardened						Cold rolling dies	
7254	F. C. C. No. 11	M-439	0.4-0.5 C, 1.45 Cr, 3.5 Ni, bal. Fe	Oil hardened						Gears	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7255	F. C. C. No. 17 (Cast-to-Shape)	M-439	0.2-0.3 C, 7.5-9.0 Cr, 0.5-0.8 Si, 0.15-0.30 Mo, 18-20 Ni, bal. Fe							Resistance grids	Stainless, cast to shape
7256	Heller 70-20-M	M-343	0.6-0.7 C, 0.15-0.25 Mo, bal. Fe	Water hardened						Pneumatic tools	Tough
7257	F. C. C. No. 20	M-439	1.3-1.4 C, .50-.65 Si, 3.25-3.60 W, 0.20 V, bal. Fe	Water hardened						Cold drawing dies	
7258	F. C. C. No. 21	M-439	0.45-0.50 C, 1.3-1.5 Cr, 0.8-1.0 Si, 1.5-2.25 W, 0.15-0.30 V, bal. Fe	Oil hardened						Aluminum dummy blocks	
7259	F. C. C. No. 23	M-439	0.35-0.42 C, 1.0-1.5 Cr, 0.6-1.1 Si, 3.75-4.25 W, 0.15-0.30 V, bal. Fe	Oil hardened						Extrusion liners	
7260	F. C. C. No. 25	M-439	0.30-0.35 C, 3.75-4.25 Cr, 1.75-2.25 Mo, 13-15 W, 2.5-3.0 Ni, bal. Fe	Oil hardened						Brass die casting dies	
7261	F. C. C. No. 26	M-439	0.35-0.42 C, 1.0-1.5 Cr, 0.6-1.1 Si, 0.45-0.55 Mo, 2.5-3.0 W, 0.15-0.30 V, bal. Fe	Oil hardened						Hot work dies	
7262	F. C. C. No. 27	M-439	0.35-0.45 C, 2.75-3.25 Cr, 1.75-2.0 Si, 2.75-3.0 Mo, 5.0-5.5 W, 0.5-0.6 V, 1.0-1.5 Co, bal. Fe	Oil hardened						Tools, chisels	
7263	F. C. C. No. 34 M	M-439	0.90-1.0 C, 0.25-0.35 Mn, 0.15-0.20 Si, bal. Fe	Water hardened						General purpose tools	
7264	F. C. C. No. 38 M	M-439	0.8-0.9 C, 0.15-0.30 Mn, 0.15-0.25 V, bal. Fe	Water hardened						Special purpose tools	
7265	F. C. C. No. 39	M-439	0.85-0.95 C, 0.4-0.6 Cr, 0.15-0.20 V, bal. Fe	Water hardened						Draw rings	
7266	F. C. C. No. 41 M	M-439	0.65-0.75 C, 3.5-4.5 Cr, 17.0-18.5 W, 1.0-1.35 V, bal. Fe	Oil hardened						Cutters, hobs	High speed steel
7267	F. C. C. No. 44	M-439	0.44-0.48 C, 4.75-5.5 Cr, 1.5-1.75 Si, 5-6 Mo, 0.15-0.25 V, 1.4-1.6 Ni, bal. Fe	Oil hardened						Brass forging dies	
7268	F. C. C. No. 46 M	M-439	0.9-1.0 C, 0.4-0.6 Cr, 1.0-1.25 Mn, 0.4-0.6 W, 0.2-0.3 V, bal. Fe	Oil hardened						Punches, dies	
7269	F. C. C. No. 47 M	M-439	1.15-1.25 C, 0.4-0.5 Cr, 1.5-1.75 W, 0.15-0.25 V, bal. Fe	Oil hardened						Fast finishing tools	
7270	F. C. C. No. 49	M-439	0.30-0.45 C, 0.75-1.0 Cr, 5.25-6.25 W, 3.5-4.25 Ni, bal. Fe							Hot piercing dies	
7271	F. C. C. No. 53	M-439	0.50-0.53 C, 3.5-4.5 Cr, 17-19 W, 0.75-1.25 V, bal. Fe	Oil hardened						Hot drawing dies	
7272	F. C. C. No. 66	M-439	1.45-1.60 C, 11.5-12.5 Cr, 0.90-1.0 Mo, 0.5-0.6 V, 3-3.5 Co, 0.3-0.4 Ni, bal. Fe	Air hardened						Forming dies—Cutting edge dies	
7273	F. C. C. No. 66 (Cast-to-Shape)	M-439	1.45-1.60 C, 11.5-12.5 Cr, 0.9-1.0 Mo, 0.5-0.6 V, 3-3.5 Co, 0.3 0.4 Ni, bal. Fe	Air hardened						Cutting edge forming dies	
7274	F. C. C. No. 5XI	M-439	0.30-0.35 C, 4.75-5.0 Cr, 1.15-1.25 Si, 1.5-1.6 Mo, 0.4-0.5 V, bal. Fe	Oil hardened						Mandrels	Discontinued
7275	F. C. C. Air-Hardening (Cast-to-Shape)	M-439	1.45-1.60 C, 11.5-12.5 Cr, 0.9-1.0 Mo, 0.5-0.6 V, 0.6-0.7 Co, 0.2-0.3 Ni, bal. Fe	Air hardened						Forming dies, cutting edge dies	Cast to shape, corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7276	F. C. C. Carbon Tool Steel (Cast-to-Shape)	M-439	0.8-1.0 C, 0.4-0.6 Mn, 0.25-0.35 Si, bal. Fe	Soft						Inserts, dies	Cast to shape
7277	F. C. C.-C. M. S. (Cast-to-Shape)	M-439	.55-.65 C, 0.8-1.2 Cr, 0.6-0.8 Mn, 0.35-0.45 Mo, 0.4-0.5 Ni, bal. Fe	Air hardened						Forming dies	Cast to shape
7278	F. C. C.-P. R. K.-33 (Cast-to-Shape)	M-439	1.45-1.6 C, 11.5-12.5 Cr, 0.9-1.0 Mo, 3-3.5 Co, 0.4-0.5 Ni, bal. Fe	Air hardened						Cutting edge forming dies	Cast to shape Discontinued
7279	F. C. C. -T. M. S. (Cast-to-Shape)	M-439	0.45-0.55 C, 1.4-1.7 Cr, 2.5-3.0 Ni, bal. Fe	Oil hardened						Forming dies	Cast to shape
7280	Alnic	M-60	25 Ni, 12 Al ,63 Fe							Permanent magnets	High coercive force Discontinued
7281	Alnico	M-60	20 Ni, 12 Al, 5 Co, 63 Fe							Permanent magnets	High coercive force
7282	Fernichrome	M-60	37 Fe, 30 Ni, 25 Co, 8 Cr							Glass to metal parts, substitute for Dommet wire	Coef. of expansion of soft glass
7383	Trodaloy No. 1	M-60	97 Cu, 2.6 Co, 0.4 Be	Heat treated	90000	45000	10	20	220	Resistance welding electrodes, soldering iron tips, springs	Age hardening
7284	Hiduminium 72	M-426	94 Al, 4 Cu, 1.2 Mg, .8 Mn	Extruded	60000		15		148	Extruded sections, solid drawn tubes	
7285	Hiduminium Du Brand	M-426	4-5 Cu., bal. Al							Light alloy parts, seamless tubes, airscrews	Age-hardening
7286	Inland Zinc-Alloy Steel	M-67	Zn coated S.A.E. 1010 Steel							Sheets for fabricated parts	Zn alloyed to steel surface
7287	Monel Metal, Cast	M-68	Approx. 67 Ni, approx. 29 Cu, 1.5-2.5 Fe, 0.5-1.0 Mn, 1.0-1.5 Si, 0.15-0.20 C	Cast	65000 100000	30000 60000	35 5	35 5		Castings	
7288	N. C. C. Pig	M-68	56 min. Ni, 23 min. Cu, 7.5 min. Cr, 1.5 max. C, 1.75 max. Si							Foundry alloy for Ni-Resist Iron	M.P.-2300°F.
7289	Nickel, Grade E	M-68	97.65 Ni and Co, 0.10 Cu, 0.2 Fe, 1.9 Mn, 0.1 C							Foundry applications	
7290	Nickel, Grade F	M-68	.25 C, 5-6 Si, 1-2 Fe, 92 Ni, .2 Cu, .025 S							For alloying cast Iron	Stainless
7291	Nickel, Grade T	M-68	97 Ni and Co, 0.07 Cu, 1.5 Fe, 0.35 Mn, 0.5 Si, 0.12 C							Foundry applications	Discontinued
7292	Johnson Bronze Graphited Bearings	M-172	Cu, graphite							Bearings	Self lubricating
7293	Johnson No. 9 Babbitt Alloy	M-172								Automobile bearings	Babbitt metal
7294	Ka Ho Loy	M-517 M-131	0.07-0.10 C, 0.2-0.3 Cu, 0.35-0.50 Mn, bal. Fe		32000 37000	18000 23000				Roofs	
7295	Silverbond	M-69	Stainless clad steel							Structural applications	Stainless
7296	Uniform Oil Hardening	M-69	0.89 C, 1.24 Mn, 0.55 Cr, 0.47 W, bal. Fe	Oil hardened						Tools, dies	Non-deforming
7297	Kinnite	M-546	High C, Cr, bal. Fe	Cast	40000				500	Abrasion resisting castings	Wear resistant
7298	Krupp Nirostaguss 1	M-72	1-2 C, 24 min. Cr, bal. Fe		58000				250	Chemical equipment, HNO_3 and pulp industries	Corrosion resistant
7299	Krupp Nirostaguss 2	M-72	1-2 C, 24 min. Cr, bal. Fe		65000				300	Chemical equipment, HNO_3 and pulp industries	Corrosion resistant
7300	Krupp Nirostaguss 3	M-72	1-2 C, 24 min. Cr, bal. Fe		72000 114000				400 500	Paper drying cylinders, chemical equipment	Corrosion resistant
7301	Krupp V2A Spezial	M-72	C, 18 Cr, 8 Ni, bal. Fe	Sheets	90000 115000	40000	40		160 200	Chemical industries, nitric acid mfg., architectural purposes	Stainless
7302	Krupp V2A Supra	M-72	C, 18 Cr, 8 Ni, bal. Fe	Sheets	78000 101000	31000	45 50		140 175	Chemical industries, nitric mfg.	Stainless, Austenitic
7303	Krupp V4A Extra	M-72	C, 18 Cr, 8 Ni, bal. Fe		85000 105000	39000	50 40		160 200	Sulphide, paper pulp and textile industries	Stainless, Austenitic

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7304	Krupp V4A Supra	M-72	C, 18 Cr, 8 Ni, bal. Fe	Sheets	78000 101000	32000	50 45		140 175	Sulphide, paper pulp and textile industries	Stainless, austenitic
7305	Krupp V12A Supra	M-72	C, Cr, Ni, bal. Fe	Sheets	78000 101000	31000	50		140 175	For high formability and deep drawing	Stainless, austenitic
7306	Krupp V-13F	M-72	C, Ni, 13 Cr, bal. Fe	Oil quenched			20		200	Heat and corrosion resistant parts	Corrosion resistant, Corrosion resistant austenitic
7307	Krupp V14A Supra	M-72	C, Cr, Ni, bal. Fe	Sheets	85000 108000	31000	50 45		140 175	Hypochlorite industries	Resists HCl, H_2SO_4
7308	Krupp V16A Supra	M-72	C, Cr, Ni, bal. Fe	Sheets	78000 101000	31000	50 45		140 175	Chemical industries	
7309	Krupp V17F	M-72	C, Ni, 17 Cr, bal. Fe	Annealed	78000 93000	50000	20			Corrosion resistant parts	Corrosion resistant
7310	Premet	M-76	30 Co, 19 W, 0.12 C, 2 V, 5 Mo, 0.2-0.5 Mn, bal. Fe							Cutting tools	
7311	Magnuminium 166	M-556	5-6 Al, 1.0 max. Zn, 0.2 max. Mn, bal. Mg		40000 45000		14 10		50 60	Light alloy forgings and stampings	
7312	Magnuminium 220	M-556	9-11 Al, 3.5 max. Zn, 0.5 max. Mn, 1.5 max. impurities, bal. Mg	Sand cast Die cast	24000 26000		2-4 2-5		50-60 50-60	Sand and die light alloy castings	Casting alloy
7313	Lithium-Calcium	M-315	50 Li, 50 Ca							Deoxidizer, metallurgical applications	
7314	Lithium-Conductivity Bronze	M-315	98 min. Cu, 2 max. Cd, Sn, Si							*High strength conductors*	*Bronze treated with* Li with increased conductivity
7315	Lithium-Copper	M-315	100 Cu	Annealed wire	31500 36500		72 60			Electrical conductors	High conductivity, oxygen free
7316	Elkonite G-13	M-265	Ag-WC						110	Contactors	High conductivity, easy to machine
7317	Elkonite G-17	M-265	40Ag, 60 Mo						150	Contactors	Easy to machine
7318	Elkonium No. 1	M-265	Ag alloy							Electrical contacts	Substitute for fine Ag
7319	Elkonium No. 13	M-265	Pd-alloy						240	Electrical contacts	
7320	Mallory HA Metal	M-265	W-alloy							Electrical contacts	
7321	Mallory HB Metal	M-265	W-alloy							Electrical contacts	
7322	Midvaloy 1300	M-85	.07-.40 C, 13 Cr, .4-.6 Mo, bal. Fe	Wrought	85000 260000	55000 240000	25 12	60 4		Cutlery, machine parts	Corrosion resistant
7323	Midvale N.D.	M-85	0.9 C, 1.5 Mn, bal. Fe	Oil hardened						Tools, dies	Non-deforming steel
7324	Smoothole	M-85	.85 C, bal. Fe							Mining hollow drills	Mandrel rolled
7325	Mitchalloy A	M-536	2.9-3.1 T.C., 2-2.5 Ni, 0.3-0.6 Cr, bal. Fe		45000 50000				240 280	Brake drums	Wear resistant
7326	Mitchalloy B	M-536	2.8-3.5 T.C., 4-5 Ni, 1.5-2.0 Cr, bal. Fe						550 650	Grinding and abrasion applications	Wear resistant
7327	Mitchalloy C	M-536	2.7-3.0 T.C., 12-15 Ni, 5-7 Cu, 1.5-4.0 Cr, bal. Fe		20000 35000				140 190	Heat and corrosion resistant parts	Austenitic
7328	Speed Case X-1525	M-495	.20 C, bal. Fe	Hot rolled Cold rolled	70000 85000	52000 80000	37.5 26	60 48	137 156	Case-hardened parts, gears, shafts, pinions	Carburizing steel
7329	Tellurium Lead	M-88	0.06 Te, .06 Cu, bal. Pb	Rolled						Pipes, chemical industry	Greater corrosion resistance to H_2SO_4
7330	More-Jones No. 1 Standard Babbitt	M-539	Pb alloy							Bearings	Babbitt metal
7331	More-Jones No. 2 Standard Babbitt	M-539								Large slow running bearings	Babbitt metal
7332	More-Jones No. 3 Standard Babbitt	M-539								Bearings	Babbitt metal
7333	More-Jones No. 4 Standard Babbitt	M-539								Severe service bearings	Babbitt metal
7334	More-Jones No. 36	M-539	Cu alloy							Car journal bearings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7335	More-Jones "A" Grade	M-539								Low grade bearings	Babbitt metal
7336	More-Jones Aluminum Babbitt	M-539	Al, bal. Sn		12100		8.8	6.6	28.6	Heavy pressure bearings	Babbitt meta C.S.-23200
7337	More-Jones Arctic Bronze	M-539	Cu alloy							Locomotive bearings	
7338	More-Jones Armature Babbitt	M-539	Sn, Cu, Ni, Sb		13600		6.1	7.0	33.8	Armature bearings, marine turbine bearings	Babbitt metal C.S.-26700
7339	More-Jones Beta Crusher Babbitt	M-539			11300		4.9	5.3	27.5	Bearings for cement mills and mines	Babbitt metal, Resists heavy loads
7340	More-Jones Crescent Babbitt	M-539	Cu, Sn, Sb		8500		1.4	2.1	25.1	Heavy duty bearings for rolling mills, paper mills	Babbitt metal C.S.-18300
7341	More-Jones Extra Copper-Hardened Babbitt	M-539	Cu, Sn, Sb		10050		3.1	5.2	27.1	Bearings	Babbitt metal C.S.-16600
7342	More-Jones Genuine Babbitt (Special)	M-539			13100		9.4	12.9	28.9	Heavy duty bearings	Babbitt metal C.S.-22200
7343	More-Jones Genuine Babbitt (Original)	M-539	88.9 Sn, 3.7 Cu, 7.4 Sb		13000		10	14	28.7	High temperature resistant bearings	Babbitt metal C.S.-21200
7344	More-Jones Hoo-Hoo	M-539	Sn, Cu, Ni, Sb		12800		11.1	16	28	Bearings	Babbitt metal C.S.-25600
7345	More-Jones Improved Babbitt	M-539	Cu, Sn, Sb		7600		1.2	1.5	24.1	General utility bearings	Babbitt metal C.S.-16500
7346	More-Jones Nickel Babbitt	M-539	Sn, Cu, Ni		12900		11.2	15.8	28.9	Bearings	High speed and high pressures. C.S.-24600
7347	More-Jones Phosphor Bronze Babbitt	M-539	P, Cu, bal. Sn		11150		5.6	7.1	28.1	Marine and stationary engine bearings	Babbitt metal C.S.-18100
7348	More-Jones Regent Babbitt	M-539	Sn, Sb							For relining railroad bearings	Babbitt metal
7349	More-Jones Rex Babbitt	M-539	Cu, Sb, 12 Sn		8050		1.2	1.8	24.8	Medium high speed and heavy pressure bearings	Babbitt metal C.S.-17100
7350	More-Jones Special Motor Babbitt	M-539	Sb, Sn		9100		2.2	3.6	26.5	Motor bearings	Babbitt metal C.S.-18000
7351	More-Jones Special No. 1 Babbitt	M-539	Sn alloy		7500		1.0	1.7	24.2	Bearings for rolling and paper mills	Babbitt metal C.S.-14200
7352	More-Jones Tiger Bronze	M-539	Cu alloy							Engine castings, bearings	
7353	More-Jones Universal Babbitt	M-539			14900		1.0	1 0	40	Bearings to resist heat	Tough babbitt metal M.P.-1100°F.
7354	Rim-Roll No. 9	M-341	1.05 C, 0.5 Cr, bal. Fe							Rolls	
7355	Argentan	M-547	Ag, Cu, Al		23660		2.3			Sheets	Sheet metal
7356	Cunic	M-602	45 Ni, 55 Cu	Annealed	62000		25			Rheostats, shunts, thermo-couples	Low temp. resistance
7357	Monox	M-602	Cu-Ni							Wire	Discontinued
7358	Silectron	M-602	Ni alloy							Spark plugs	Discontinued
7359	Vac-Melt A	M-602	74.5 Ni, 20 Cr, 1.5 Fe, 1 Mo, 3 Mn	Annealed	103000		27			Electrical apparatus	Resists heat to 2000°F. Resistance alloy Obsolete
7360	Vac-Melt AA	M-602	77.5 Ni, 20 Cr, 0.5 Fe, 2 Mn	Annealed	105000		30			Resistance alloy in electrical equipment	Resists heat to 2200°F. Obsolete
7361	Vac-Melt B7M	M-602	60 Ni, 15 Cr, 7 Mo, 2 Mn, 16 Fe	Annealed	114000		27			Resistance alloy in electrical equipment	Resists heat to 1900°F., high resistance to corrosion Obsolete
7362	Vac-Melt C	M-602	61 Ni, 18.5 Cr, 16.5 Fe, 4 Mn	Annealed	100000		22			Resistance alloy in electrical equipment	Resists heat to 1900°F. Obsolete
7363	Vascoloy Ramet Grade A	M-329 M-115	Ta C+WC+Co	Sintered	225000					Cutters to machine cast iron and non-ferrous materials	
7364	Vascoloy Ramet Grade AA	M-329 M-115	Ta C+WC+Co	Sintered	250000					Cutters for intermittent cuts and heavy duty applications	For cast iron, shock resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7365	Vascoloy Ramet Grade B	M-329 M-115	Ta C+WC+Co	Sintered	250000					Cutters for cast alloys	For cast steel
7366	Vascoloy Ramet Grade C	M-329 M-115	Ta C+W+Ni	Sintered	265000					Cutters for soft steel	
7367	Vascoloy Ramet Grade D	M-329 M-115	Ta C+W+Ni	Sintered	220000					Cutters for hard steels	For high speed operations
7368	Vascoloy Ramet Grade X	M-329 M-115	Ta C+WC+Co	Sintered	250000					Cutters for very hard steels	For cast steel
7369	Rustless 15	M-100	0.12 max. C, 14-16 Cr, bal. Fe	Annealed	75000	45000	35	70	152	Cold upset screw products, auto and refrigerator trim	Non-hardenable, weldable
				Cold drawn	110000	95000	12	65	220		
7370	Rustless RR-11	M-100	0.07 max. C, 10-12 Cr, bal. Fe	Annealed	75000	55000	28	65	170	Railroad and coal industry equipment	Corrosion resistant readily weldable
				Tempered	100000	80000	22	65	207		
7371	SKF Steel No. 46	M-267	C, Cr, W, V, bal. Fe							Tools, cutters, dies	Non-deforming
7372	Stewart White Brass No. 3	M-514	3.5-4.5 Al, 0.10 max. Cu, bal. Zn	Die cast	35000		6		70	Die castings, hardware, housings, covers, radiator caps	Obsolete
7373	Stewart White Brass No. 19	M-514	Al, Cu, bal. Zn	Die cast	45000		3		85	Die castings, hardware	Obsolete
7374	Sicromo 2½	M-376	0.15 max. C, 0.50 max. Mn, 0.5-1.0 Si, 2.25-2.75 Cr, 0.4-0.6 Mo, bal. Fe	At 85°F.	74400	40650	38.5	72.6		Refinery tubes, still tubes, condenser tubes	Resists oxidation and corrosion to oils
				At 1400°F.	12900	7500	75.0	96.0			
7375	Trenite P	M-535	C, Cr, Ni, bal. Fe		45000				300	Lead spots, heat treating equipment	Resists heat to 1650°F.
7376	Trenite WX	M-535	C, alloy, bal. Fe						500	Coal grinders, hot coke car sides and mill liners	Abrasion resistant
7377	U. H. B. Fingal	M-111	C, Cr, W, Mo, bal. Fe							Pneumatic tools	Oil or water hardening
7378	U. H. B. Regin	M-111	C, Cr, W, bal. Fe	Oil hardened						Hot work tools	Hot work steel
7379	U. H. B. Valand	M-111	C, Cr, W, V, Ni, bal. Fe	Oil hardened						Hot work tools	Hot work steel
7380	American Marine Genuine	M-565								Bearings for marine engines and locomotives	Babbitt, shock resistant
7381	Autocrat Foaming Bronze	M-565	P, Cu		34000		10		68	Bushings, bearings	Bearing bronze
7382	Beaver Babbitt	M-565								Machinery bearings	Babbitt
7383	Mangan [illegible] friction	M-565				5670				Machinery bearings	Babbitt metal C.S.-19450 Self-lubricating
7384	Master Metal	M-565	Sn, Cu							Machinery bearings	Babbitt
7385	Stonewall Babbitt	M-565			10650	7550				Bearings for heavy loads and pressures, machinery bearings	Babbitt metal
7386	Syracuse Government Genuine Babbitt	M-565				70000				Bearings to resist shock and high temp.	Babbitt metal, shock resistant
7387	U.S.S. Armature	M-604	Approx. 0.60 Si, bal. Fe							Silicon steel sheets for electrical purposes, motors, armature parts	Res. 17 Watt loss 1.98 max.
7388	U.S.S. Transformer 72	M-604	Approx. 4.0 Si, bal. Fe							Silicon steel sheets for transformers, rotating machinery, electrical purposes	Formerly "Apollo Special Electrical" Res. 57. Watt loss 0.72
7389	U.S.S. Dynamo	M-604	Approx. 3.2 Si, bal. Fe							Silicon steel sheets for electrical purposes, dynamo parts	Formerly "Dynamo Special", Res. 50
7390	U.S.S. Electrical	M-604	Approx. 1.0 Si, bal. Fe							Silicon steel sheets for electrical purposes, motors	Formerly "U. S. Electrical" Res. 24
7391	Ductillite	M-206	Tinplate								Improved tin plate Discontinued
7392	Hy-Ten A No. 1X	M-119	0.20 C, Mn, Mo, bal. Fe	Rolled	85000	55000	28	57	163	Carburized pins, cams, gears, gauges, bolts, shafts	Case-hardening steel
				Heat treated	140000	120000	10	35	311		
7393	Heller 70-20V	M-343	0.6-0.7 C, 0.15-0.25 V, bal. Fe							Pneumatic tools	Tough
7394	Purple Label	M-343	0.5-1.1 C, 0.2-0.9 Mn, bal. Fe	Water harden						Tools	
7395	Wissco 5A	M-120	0.20 max. C, 22-26 Cr, 11-13 Ni, bal. Fe							Heat resistant wire	Heat resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7396	Youngstown Galvannealed	M-531	Zn coated low carbon steel	Annealed						Roofing, siding, culverts, fence wire	Discontinued
7397	Youngstown Copperoid Steel	M-531	C, alloy, bal. Fe							Sheets for construction purposes, automobile furniture	Resists rust
7398	Do-It	M-289	0.6-0.7 C, 0.7-0.9 Mn, 1.9-2.1 Si, 0.15-0.25 Mo, bal. Fe							Shear blades	
7399	Plancher	M-289	0.6-0.7 C, 0.7-0.9 Mn, 1.9-2.1 Si, bal. Fe							Chisels, punches, shear blades	
7400	Dieweld	M-607	C, alloy, bal. Fe							High speed tool steel welding electrodes	
7401	Superweld No. 55	M-607		Deposit	65000	45000	30			Welding electrode for heavy plate welding	
7402	Superweld No. 66	M-607		Deposit	60000	45000	30			Welding electrode for light and heavy gauge material	
					70000	55000	25				
7403	Superweld No. 77	M-607		Deposit	70000	50000	25			Welding electrode for light and heavy gauge material	High speed welding
							30				
7404	Iridium Extra Special	M-613	C, W, Cr, V, bal. Fe							Cutters, tools	High speed steel
7405	Modern	M-613	C, W, Cr, V, bal. Fe							Cutters, tools	High speed steel
7406	Visto	M-614	C, W, Cr, V, bal. Fe							Cutters, tools	High speed steel
7407	Hidalgo	M-614	C, W, Cr, bal. Fe							Cutters, tools	
7408	Fortissimus	M-615	C, Cr, W, V, bal. Fe							Cutters, tools	High speed steel
7409	Panzer	M-615	C, Cr, W, V, bal. Fe							Cutters, tools	High speed steel
7410	Phoenix Hansa	M-616	C, Cr, W, V, bal. Fe							Cutters, tools	High speed steel
7411	Pluto	M-616	C, Cr, W, V, bal. Fe							Cutters, tools	High speed steel
7412	Gigant	M-617	C, Cr, W, V, bal. Fe							Cutters, tools	High speed steel
7413	Robust	M-617	C, Cr, W, bal. Fe							Tools	
7414	Ampco Beryllium Copper	M-13	97.5 Cu, 2.5 Be		90000	85000	1		350	Wire springs, forming dies,	
					125000	100000	0		420	plastic dies, non-sparking tools, airplane propeller bushings	
7415	Hiduminium R.R. 60	M-426	1.5-3.0 Cu, .3-1.5 Si, .5-1.5 Mg, 5-1.5 Fe, 2 max. Ni, .3 Ce, bal. Al							Light alloy parts	Antifriction properties
7416	Hiduminium S.R.	M-426	Al alloy							Light alloy parts, gasket sealing rings	
7417	Hiduminium Y-Alloy	M-426	Al alloy							Drop forged pistons and cylinder heads	
7418	Magnuminium 199	M-556	8.5 Al, 3.5 Zn, .4 Si, .4 Mn, bal. Mg,	Cast	25000		8		45	Sand and die light alloy	
					30000		4		55	castings	
7419	Magnuminium 266	M-556	6.6 Al, .2 Mn, 1 Zn, bal. Mg		45000		10		50	Light alloy extruded bars	Elec. Res. 14, Coef. Exp.-25x10-6
					50000		14		60	and shapes	
7420	Inland Hi-Steel	M-67	0.1 C, 0.6 Mn, 0.2 Si, 1.1 Cu, 0.55 Ni, bal. Fe		70000	55000				Structural applications,	Weldable and workable
					70000					mining and transportation	
7421	Circle L No. 11	M-74	0.75 C, 0.75 Cr, 18 Cr, bal. Fe						525	Sand pumps, corrosion resistant castings	Hard stainless steel
7422	Circle L No. 12M	M-74	0.10 C, 13 Cr, 0.25 Se, bal. Fe		85000	55000	20	35	170	Chemical apparatus	Free machining, stainless
7423	Circle L No. 18	M-74	0.07 max. C, 37.5 Cr, 7.5 Al, bal. Fe							Cast resistors	Heat resistant, brittle
7424	Circle L No. 22M	M-74	0.07 max. C, 19.5 Cr, 9 Ni, 0.25 Se, bal. Fe, 1.7 Mo	Water quench	80000	40000	45	45	160	Non-seizing parts	Free-machining, stainless steel
7425	Circle L No. 22 XM (L-222)	M-74	0.07 max. C, 19.5 Cr, 9 Ni, 3 Mo, 1.2 Si, bal. Fe	Water quench	82000	42000	35	35	170	High corrosion resistant parts to be welded without heat treatment	Stainless for welding
7426	Circle L No. 23M (L-323)	M-74	0.20 max. C, 19.5 Cr, 9 Ni, 0.25 Se, 1.7 Mo, bal. Fe	Water quench	80000	40000	40	40	160	Stainless steel castings	Free machining, stainless
7427	Circle L No. 23XM	M-74	0.20 max. C, 19.5 Cr, 9 Ni, 3 Mo, bal. Fe	Water quench	82000	42000	30	30	170	Pump and valve parts in paper mills	Stainless

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P	% El.	% R.A.	Brin. No.	Uses	Remarks
7428	Circle L No. 25M	M–74	0.20 max. C, 21 Cr, 10 Ni, 0.25 Se, bal. Fe	Water quench	80000	40000	40	40	160	Free machining stainless parts	Free machining, stainless
7429	Circle L No. 30XM	M–74	0.20 max. C, 24 Cr, 10 Ni, 3 Mo, bal. Fe		85000	45000	25	25	170	Parts for paper mill equipment	Stainless
7430	Circle L No. 34	M–74	0.07 max. C, 20 Cr, 30 Ni, 3.25 Mo, 5 Cu, 3.25 Si, bal. Fe	Cast	72000	35000	45	45	150	Parts to resist HCl and H_2SO_4	Acid resistant
7431	Circle L No. 40	M–74	0.50 C, 28 Cr, 8 Ni, bal. Fe							Heat resisting parts	Heat resistant
7432	Circle L No. 41	M–74	0.40 C, 17 Cr, 66.5 Ni, bal. Fe	Cast	80000	35000	15		160	Heat resisting parts	Heat reistant
7433	Circle L No. 42	M–74	0.40 C, 12 Cr, 60 Ni, bal. Fe	Cast	78000	33000	15		160	Heat resisting parts	Heat resistant
7434	Circle L No. 43	M–74	0.40 C, 19 Cr, 38 Ni, bal. Fe	Cast	72000	47000	15		170	Heat resisting parts	Heat resistant
7435	Circle L No. 44	M–74	0.40 C, 10 Cr, 30 Ni, bal. Fe	Cast	68000	33000	15		140	Heat resisting parts	Heat resistant
7436	Circle L No. 45	M–74	0.40 C, 20 Cr, 25 Ni, bal. Fe	Cast						Heat resisting parts	Heat resistant
7437	Circle L No. 46	M–74	0.40 C, 25 Cr, 20 Ni, bal. Fe	Cast	70000	30000	45		130	Heat resisting parts	Heat resistant
7438	Circle L No. 47	M–74	0.40 C, 30 Cr, 20 Ni, bal. Fe							Heat resisting parts	Heat resistant
7439	Circle L No. 48	M–74	0.40 C, 30 Cr, 30 Ni, bal. Fe							Heat resisting castings	Max. load carrying ability at high temp.
7440	Min-Ox Grade JR3	M–25	3.0 C, 3 Si, 3 Al, 2 Ni, 1 Cu, 1 Cr, 0.9 Mn, bal. Fe	Natural Heat treated	48000 95000				200 450	Glass molds	Heat and wear resistant
7441	Kerus	M–618	C, 14 W, bal. Fe							Punches, drills, taps, lathe and boring tools, nail dies	High speed steel
7442	Sabus	M–618	C, 22 W, bal. Fe							Glass cutting knives, drills, milling cutters, saws	Super high speed steel
7443	Wundus	M–618	C, 6 Co, 22 W, bal. Fe							Milling cutters, twist drills, turning, planing, shaping and slotting tools	For cutting hardest metals
7444	Barrow S.P. Brand Foundry Pig Iron	M–619	3.5-3.75 T.C., 1.5-4 Si, 0.2-0.03 S, 0.1-0.3 P, 1.0-1.5 Mn, bal. Fe							Foundry iron for cylinders, valves, pumps, steam chests	
7445	Alpax	M–620	4.5 Cu, 0.5 Mg, 0.4 Ti, bal. Al		36000 43000	29000 36000	2 1			Light alloy parts	
7446	A. P. 33	M–620	4.5 Cu, 0.5 Mg, 0.4 Ti, bal. Al		36000 43000	29000 36000	2 1			Light alloy parts	
7447	J. L.	M–620	4.5 Cu, bal. Al		64000		5		120	Light alloy parts	
7448	L. M.	M–620	0.75 Si, 4.75 Cu, 0.75 Mn, bal. Al		58000 65000		20 18			Light alloy parts	
7449	Alsex	M–621	0.5 Si 0.5 Mg, bal. Al	Heat treated	29000 42500	25000 35000	7 5		90	Light alloy parts, forgings	Conductivity 52% of Copper
7450	Bahhaluminium	M–621	6 Cu, bal. Al	Extruded Cold drawn	29000 36000	13000 17000	20 10		50 70	Light alloy parts, electric pantographs	
7451	Aluma	M–?	1.5 Mn, bal. Al		*14500* 18500	*7000* 9000	*40* 30			*Light alloy parts*	
7452	Magalruma	M–622	3.4 Mg, 0.15 Mn, bal. Al	Soft Hard	29000 36000 42500 50000	10000 14500 36000 42500	20 15 6 2		50 60 85 100	Light alloy parts	
7453	Sigmalumin	M–622	0.8 Si, 3.8 Cu, 0.7 Mn, bal. Al	Soft	25000 29000	11400 15900	20 15			Light alloy parts	
7454	Supermagaluma	M–622	5.4 Mg, 0.15 Mn, bal. Al	Soft Hard	36000 42500 50000 65000	14500 21000 42500 58000	25 20 6 4			Light alloy parts	
7455	Inalium	M–623	0.5 Si, 1.2 Mg, 1.7 Cd, bal. Al		26000 29000	10000 18500	22 18		50 60	Light alloy parts	
7456	Chitonal	M–624	Al alloy							Light alloy parts, ship parts	Bi-metal, coated "Avional"
7457	Jewell Alloy 42	M–171	C. alloy, bal. Fe	Minimum	70000	50000	15		180	Castings	Easily machinabe
7458	Jewell Alloy S	M–171	C. alloy, bal. Fe	Minimum	62000	42000	24		130	Castings	Easily machinable
7459	Jewell alloy V	M–171	C. alloy, bal. Fe	Minimum	85000	70000	5		250	Castings	Easily machinable

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7460	Johnson Bronze Babbitt No. 10	M-172	90 Sn, 5 Cu, 5 Sb							Bearing	Bronze babbitt
7461	Johnson Bronze Babbitt No. 11	M-172	87 Sn, 6 Cu, 7 Sb							Bearing	Bronze babbitt
7462	Johnson Bronze Babbitt No. 97	M-172	90 Sn, 2.5 Cu, 7.5 Sb							Bearing	Bronze babbitt
7463	McInnes HC-HC	M-81	2 C, 13 Cr, 1 V, bal. Fe							Dies, punches, reamers, gauges	Very tough
7464	Nitralloy No. 230	M-386	0.25-0.35 C, 0.4-0.6 Mn, 0.2-0.3 Si, 1-1.5 Al, 0.6-1.0 Mo, bal. Fe							Nitrided parts	Nitriding steel, Nitralloy N
7465	Nitralloy No. 640	M-386 M-38	0.35-0.45 C, 0.4-0.6 Mn, 0.2-0.3 Si, 1.4-1.6 Cr, 0.45 min. V, bal. Fe							Nitrided parts	Nitriding steel
7466	Niagara Brand Ferro-Chrome	M-626	66-70 Cr, bal. Fe							Metallurgical applications in steel	
7467	Niagra Brand Ferro-Silicon	M-626	15-90 Si, bal. Fe							Metallurgical applications in steel	
7468	Niagra Brand Silico Manganese	M-626	12-20 Si, 65-70 Mn, bal. Fe							Steel metallurgical applications	
7469	TAM Med. Carbon Ferro Carbon Titanium	M-109	17-21 Ti, 3-5 C, approx. 2.5 Si, approx. 1.3 Al, bal. Fe							Steel metallurgical applications	For extra low C rimming steel
7470	TAM Low Carbon Ferro-Titanium (40% Grade)	M-109	38-42 Ti, 6-9 Al, 3-5 Si, < 0.1 C, bal. Fe							Source of Ti for alloy steels	
7471	TAM Metallic Titanium	M-109	>98 Ti, < 0.2 Fe, < 0.2 Si, < 0.2 C, < 0.2 Al							For making of special Titanium alloys	
7472	Cesco Diamond Special	M-356	0.50-0.65 C, 2.0 Si, 1.0 Mn, 0.6-0.7 Mo, 0.34-0.36 V, bal. Fe	Heat treated	350000	290000	6	11	615	Chisels, concrete busters, drills, caulking and beading tools	Shock and abrasion resistant
7473	Alsiloy S-1	M-158	11.5-12.0 Si, 0.6 max. Cu, 2 max. Fe, bal. Al	Average	34000	14000	2		80	Light alloy castings	Corrosion resistant
7474	Alsiloy S-5	M-158	4-6 Si, 0.6 max. Cu, 2 max. Fe, bal. Al	Average	27000	11000	4		70	Corrosion resistant parts	High ductility and impact
7475	Esco No. 36	M-438	0.20 max. C, 26-30 Cr, 3-4 Ni, 1.5 Mo, bal. Fe							Corrosion and heat resisting parts	
7476	Esco No. 43	M-438	0.20 max. C, 22-26 Cr, 10-13 Ni, bal. Fe							Corroison and heat resisting parts	
7477	Esco No. 46	M-438	0.20 max. C, 23-27 Cr, 19-21 Ni, bal. Fe							Heat resisting parts	
7478	Phos-Copper	M-118	P, bal. Cu	Joint	35000		17			Making joints between copper or brass, brazing	Free flowing
7479	Magnolia Anti-friction Metal	M-178	Pb base babbitt		15000	3400			21.8	High speed and heavy pressure bearings, antifriction metal	Runs cool
7480	Fisco No. 2	M-627	0.3-0.4 C, 0.9-1.2 Mn, bal. Fe	Rolled	90000	65000	18	45	212	Gears, shafts, bolts, gears, lead screws, spindles	Excellent machining qualities
7481	Fisco-Mo No. 1	M-627	0.1-0.2 C, 0.4-0.7 Mn, 1.65-2.0 Ni, 0.2-0.3 Mo, bal. Fe	Oil quench	120000	90000	22	60	248	Carburized parts, arbors, gears, pinions, cams, clutches	Minimum distortion
7482	Fisco-Mo No. 3	M-627	0.45-0.55 C, 0.6-0.9 Mn, 0.8-1.1 Cr, 0.15-0.25 Mo, bal. Fe	Annealed Heat treated	100000 240000	68000 225000	25 12	55 30	183 460	Heavy duty shafts, gears, clutches	Good machining qualities
7483	Hobb Die Steel	M-627	0.07 max. C, 0.15 Mn, bal. Fe							Plastic molds, hobs	
7484	Weirite	M-628	Sn coated soft steel							Cans, roofing	Tin plate
7485	Wyco (Wyckoff) Cold Finished Steel	M-629	C, alloy, bal. Fe							Cold drawn steel products, machine tool parts	Superior surface and machinability

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7486	Nogroth	M-630	1.85 T.C., 1.05 Si, 0.16 P, 1.5 Ni, 0.33 Cr, 0.35 Mn, bal. Fe	Annealed	102000	85000	9.5		250	Pump liner, piston, valves	
7487	Climax Ferro *Molybdenum*	M-151	55-65 Mo, 1.5 max. Si, 0.10 max. C, bal. Fe							Metallurgical applications in steel and cast iron	
7488	Copperior	M-631	C, 0.2-0.3 Cu, bal. Fe							*Roofing, culverts*	S.A.E.-1010 plus Cu
7489	Konik	M-631	S.A.E. 1010-S.A.E. 1020 plus 0.1-0.3 Cu, .3-.4 Ni, 0.07-0.30 Cr	Cold drawn wire (.162" dia.)	80700	79300	2.0	43.6		Cross chains, tire chains, (case-hardened condition)	Case-hardened steel
7490	Compo	M-632	88.5 Cu, 10 Sn, 1.5 graphite	Sintered	up to 20000		5 10		20 90	Self lubricating porus bronze bushings	Porosity and oil content is 10 to 40% by volume
7491	Granite City High-Yield No. 1	M-633	C, 0.7-0.9 Mn, 0.01 max. P, 0.035 S, 0.15-0.20 Si, 0.20 min. Cu, 0.15 min. Cr, bal. Fe	Annealed	70000	55000	25			Transportation equip., cars, buses, trucks	Corrosion resistant
7492	Granite City High-Yield No. 2	M-633	C, 1.2-1.6 Mn, 0.01 max. P, 0.035 S, 0.15-0.20 Si, 0.2 min. Cu, 0.15 min. Cr, bal. Fe	Annealed	85000	70000	18			Bridges, transportation equip., cars, buses, trucks	Corrosion resistant
7493	Aloi	M-575								Singe plates in textile industry	Non-gassing, non-distorting
7494	Boltons "Special" Bearing Metal	M-575								Bearing bushings	
7495	Combarloy	M-575	Ag, bal. Cu							Commutator bars	High conductivity
7496	Durode	M-575								Spot-welding electrodes	High conductivity
7497	*Hazel Bronze*	M-575	Cu alloy							Nuts, bolts, studs	
7498	"M" Alloy	M-575								Forged parts in aero engines	Corrosion resistant
7499	"Moonstone" Bronze	M-575								Instrument terminals	Free-cutting
7500	Utility Bearing Metal	M-575								Bearing bushes	Cheap bearing metal
7501	Spuncast Holfos Bronze	M-169	12-13 Sn, 0.6-1.0 P, bal. Cu	Centrifugally Cast	40000 52000		4 1		125 135	High duty bearings, rock drill jackhammer	
7502	Elephant Brand *Phosphor Bronze Grade B-1*	M-450 M-156	93.5 Cu, 5.5 Sn, 1 Pb, 0.5 P	Rolled rod	60000 70000				25	Rods	Rolled or drawn
7503	Elephant Brand Phosphor Bronze Grade H	M-450 M-156	97.5 Cu, 2.5 Sn, 0.08 P							Sheets, wire	Rolled or drawn
7504	Elephant Brand Phosphor Bronze Grade V	M-450 M-156	87 Cu, 7 Sn, 6 Pb, 0.5 P							Rods	Rolled or drawn
7505	50-50 Permendur	M-22 M-205	50 Fe, 50 Co							Electrical apparatus working at high flux density	High permeability at high flux density
7506	Vanadium Permendur	M-22 M-205	49 Fe, 49 Co, 2 V							Electrical apparatus working at high flux density	High permeability at high flux density
7507	7.5-70 Perminvar	M-22 M-205	7.5 Co, 70 Ni, 22.5 Fe							Communication apparatus	High initial permeability
7508	Kloster Hot Work Steel	M-335	C, Cr, W, V, bal. Fe								Hot work steel
7509	Pure Ore A.D. 95	M-335	C, Cr, W, Mo, Si, bal. Fe							Jewelers dies, coining dies	
7510	Pure Ore D-52 Extrusion Die	M-335	C, Cr, W, bal. Fe							Extrusion dies	
7511	Pure Ore Die Casting	M-335	C, Cr, W, Mo, Si, bal. Fe								
7512	Pure Ore E-N-97	M-335	C, Cr, Ni, Mo, bal. Fe							For cold forging	
7513	Pure Ore Extra	M-335	High C, bal. Fe	Water harden						Tools, dies, punches, shear blades, forming dies	Tough
7514	Pure Ore No. 10	M-335	C, Cr, V, Mn, bal. Fe								
7515	Pure Ore Standard	M-335	High C, bal. Fe	Water harden						Chisels, track tools, trimmer dies, forging tools	Tough

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7516	Pure Ore Super Alloy	M-335	C, Cr, W, Mo, bal. Fe							Shear blades, punches	Shock resistant
7517	Pure Ore V-995	M-335	C, W, V, bal. Fe							Tools, dies	
7518	Pure Ore Z-457 Die Cast Steel	M-335	C, Cr, V, bal. Fe								
7519	Kloster Solid Drill	M-335	C, bal. Fe								
7520	Ram Brand Swedish Iron	M-335	0.05 max. C, 0.02 Si, 0.07 max. P, 0.005 max. S, bal. Fe				33	65 70		Chains, chain hooks, stay bolts, locomotive parts	Resists shock
7521	Pure Ore Quarry Tool Steel	M-335	C, bal. Fe							Quarry tools, planing tools, plug drills, hammers	Tough
7522	Superloy K2 Mo	M-246	C, 18 Cr, 8 Ni, 3.5 Mo, bal. Fe							Corrosion resistant parts	
7523	Wilco No. 50 Alloy	M-237	33 Rh, 67 Os							Voltage regulators	
7524	Wilco Thermometal Amplex	M-237								Thermal cutouts in circuit breakers	Bi-metal, temp. range 0-350°F.
7525	Wilco Thermometal Highflex	M-237	18 Ni, 11 Cr, .25 C, bal. Fe, and 36 Ni + Co, .12 C, bal. Fe							Temperature indicating instruments, contact making devices	Bi-metal, temp. range 0-350°F.
7526	Wilco Thermometal Highflex 45	M-237	19.4 Ni, .55 C, .9 Mn, 2.2 Cr, .1 Co, bal. Fe and 36 Ni + Co, .12 C, bal. Fe							Temperature indicating instruments, contact making devices	Bi-metal, temp. range 0-350°F.
7527	Wilco Thermometal High Heat	M-237								Thermostats, temperature controls	Bi-metal, temp. range 300-650°F.
7528	Wilco Thermometal Highheat 47	M-237								Thermostats, temperature controls	Bi-metal temp. range 300-650°F.
7529	Wilco Thermometal H. T. Constant	M-237								Thermostats, temperature controls	Bi-metal temp. range 250-600°F.
7530	Wilco Thermometal H. T. Special	M-237								Thermostats, temperature controls	Discontinued
7531	Wilco Thermometal Scoflex	M-237								Temperature indicating instruments, contact making devices	Bi-metal temp. range 0-350°F.
7532	Wilco Thermometal Standard	M-237								Temperature indicating instruments, contact making devices	Bi-metal, temp. range 0-300°F.
7533	Wilcoloy	M-237	WC							Telegraph relays	Tungsten carbide
7534	Sioux H-Hardened Rings	M-512	0.76 C, 0.54 Mn, 1.38 Si, 3.8 Cr, 5.53 Mo, bal. Fe	Hardened	200000 225000		11 9	35 28		Valve rings, valve seat inserts	Rockwell C-47
7535	Acme 18-8 Stainless Steel Type 302	M-568	0.08-0.20 C, 17-19 Cr, 7-9 Ni, bal. Fe							Stainless parts	Stainless
7536	Acme 18-8 Stainless Steel Type 304	M-568	0.11 max. C, 17-19 Cr, 7-9 Ni, bal. Fe							Stainless parts	Stainless
7537	Acme Stainless Steel Type 410	M-568	0.12 max. C, 12-14 Cr, bal. Fe							Stainless parts	Stainless
7538	Acme Stainless Steel Type 425	M-568	0.12 max. C, 14-16 Cr, bal. Fe							Stainless parts	Stainless
7539	Acme Stainless Steel Type 430	M-568	0.12 max. C, 16-18 Cr, bal. Fe							Stainless parts	Stainless
7540	F-16	M-399	3.4-3.8 T.C., 1.0-1.5 Ni, 0.5 max. Cr, 0.5 max. Mo, bal. Fe	Heat treated	40000				400 450	Hardened liners and sleeves	Formerly E-16
7541	Brass Steel	M-538	Brass coated steel							Fabricated parts	Easily formed, stamped, drawn
7542	Brass Tin	M-538	Brass coated tin							Fabricated parts	Easily formed, stamped, drawn
7543	Brassoid	M-538	Brass coated Zn							Fabricated parts	Easily formed, stamped, drawn

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7544	Chrome Brass	M-538	Cr coated Brass							Fabricated parts	Easily formed, stamped, drawn
7545	Chrome Tin	M-538	Cr coated Sn							Fabricated parts	Easily formed, stamped, drawn
7546	Copper Steel	M-538	Copper coated steel							Fabricated parts	Easily stamped, formed, drawn
7547	Copper Tin	M-538	Copper coated Sn							Fabricated parts	Easily stamped, formed, drawn
7548	Copperoid	M-538	Cu coated Zn							Fabricated parts	Easily stamped, formed, drawn
7549	Nickel Brass	M-538	Ni coated Brass							Fabricated parts	Easily stamped, formed, drawn
7550	Nickel Copper	M-538	Ni coated Cu							Fabricated parts	Easily stamped, formed, drawn
7551	Nickel Tin	M-538	Ni coated Sn							Fabricated parts	Easily stamped, formed, drawn
7552	Apex No. 12 Aluminum Standard Grade	M-130	7-8 Cu, 1.5-2.5 Si, 1.0-1.2 Fe, 1.0-1.75 Zn, bal. Al		17000 23000	14000	3 1		65	General castings, sand and permanent mold castings	
7553	Apex 50-50 Aluminum Copper Alloy	M-130	50 Al, 50 Cu, plus Fe and Si							Rich hardener	
7554	Apex 60-40 Aluminum Copper Alloy	M-130	60 Al, 40 Cu, plus Fe and Si							Rich hardeners for Zn base die cast alloys	
7555	Apex 95-5 Aluminum Silicon Alloy	M-130	4.5-6.0 Si, 1.0 Fe-Cu, 0.2 max. Zn, bal. Al		17000 21000	9000	4 2		40	Thin, intricate dense castings	Easy to cast
7556	Apex Pattern Aluminum Alloy	M-130	4-6 Cu, 2-3.5 Si, 1.5 Zn+Fe, bal. Al		16000 22000	16000	3 1		68	For matchplate and patterns	
7557	Apex Piston Alloy	M-130	9.25-10.75 Cu, 0.2 max. Zn, 0.15-0.35 Mg, 1.0-1.25 Fe, bal. Al	Chill cast	34000		1		95 125	Pistons	Heat treated
7558	Apex Pressure Aluminum Alloy	M-130	3-5 Cu, 2-4 Si, 1.2 Fe+Zn, bal. Al		17000 21000	17000	2		60	Castings requiring extreme density	
7559	Apex 11-13% Silicon Aluminum	M-130	11-13 Si, 1 Cu+Fe+Zn, bal. Al		11000 26000	11000	8 5		50	Die castings	Can be modified
7560	Apex 25-75 Silicon Aluminum Alloy	M-130	75 Al, 25 Si, plus Cu and Fe							Rich Hardener	
7561	Apex "T" Series Zinc Base Alloy	M-130	Zn base alloy							Castings	
7562	Apex No. 7 Zinc Base Alloy	M-130	4.1 Al, 2.7 Cu, bal. Zn		47000		8		83	Die castings	Iz-15
7563	Apex No. 405 Zinc Base Alloy	M-130	4.1 Al, 0.03 Mg, bal. Zn		36000		4		62	Die castings	Iz-18
7564	Apex No. 4100 Zinc Base Alloy	M-130	4.1 Al, 1.25 Cu, bal. Zn		39000		10		71	Die castings	Iz-18
7565	Apex No. 4102 Zinc Base Alloy	M-130	4.1 Al, 1.0 Cu, bal. Zn		41000		4		73	Die castings	Iz-17
7566	Molybdenum Silicon	M-347	C, Mo, Si, bal. Fe	Heat treated	100000 110000				197 228	Pistons, brake drums	
7567	Cb (Columbium)	M-53	100% Cb	Cold drawn					75	Electronic tube parts	Lowest work function of pure refractory metals
7568	Fasaloy	M-53	Ag, Cu, Co	Cold worked						Electrical contacts	
7569	Ta W (Tantalum-tungsten)	M-53	Ta plus W	Cold drawn						Electronic tube parts, rectifier electrodes, chemical applications	Harder and stiffer than pure Ta.
7570	Ta-Ni (Tantalum-Nickel)	M-53	Ni plus Ta		115000					Electronic tube parts, chemical applications	Cheaper than pure Ta.

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7571	Darwin "BKM"	M-40 M-487	C, Ni, Cr, bal. Fe							Bakelite molds	
7572	Darwin Best Warranted	M-40 M-487	High C, bal. Fe	Water harden						Tools	
7573	Darwin D-93	M-40 M-487	C, alloy, bal. Fe							Hot working dies and tools	Hot die steel
7574	Darwin "DCI"	M-40 M-487	C, alloy, bal. Fe							Electrical equipment, magnetic parts	Magnetic alloy
7575	Darwin Durex	M-40 M-487	High C, 18 W, 4 Cr, 1 V, bal. Fe							Tools, cutters, reamers, dies, gauges, punches	High speed steel
7576	Darwin Extra Quality	M-40 M-487	High C, bal. Fe	Water harden						Tools	
7577	Darwin Extra Special	M-40 M-487	High C, bal. Fe	Water harden						Tools	
7578	Darwin "OHT"	M-40 M-487	C, alloy, bal. Fe	Oil hardened						Dies	
7579	Darwin "TTS"	M-40 M-487	C, W, bal. Fe							Tools	
7580	Darwin Warranted	M-40 M-487	High C, bal. Fe	Water harden						Tools	
7581	Cecolloy B	M-474	2.8 T.C., 0.5 Mo, 0.35 Cr, bal. Fe							Liners, frames, castings, valves	Shock resistant
7582	Cecolloy C	M-474	3.0 T.C., 0.5 Mo, 1.5 Ni, bal. Fe							Liners, frames, castings, valves	Shock resistant
7583	Baral	M-511	Up to 50 Ba, bal. Al							For Getters in electrical discharge devices and vacuum tubes	Good stability in air
7584	Barmag	M-511	35 Ba, bal. Mg							For Getters in electrical discharge devices and vacuum tubes	
7585	Calloy Strontium-Aluminum	M-511	Up to 50 Sr, bal. Al							For Getters in electrical discharge devices and vacuum tubes	Good stability in air
7586	Calloy Lead-Barium	M-511								Alloys for bearings	
7587	Calloy Lead-Calcium	M-511								Alloys for bearings	
7588	Calloy Lead-Strontium	M-511								Alloys for bearings	
7589	Calloy Cadmium-Barium	M-511								Alloys for bearings	
7590	Calloy Cadmium-Calcium	M-511								Alloys for bearings	
7591	Calloy Cadmium-Strontium	M-511								Alloys for bearings	
7592	Fisco No. 4	M-627	0.45-0.55 C, 0.6-0.9 Mn, 0.8-1.1 Cr, 0.15-0.25 Mo, bal. Fe	Oil quenched	150000	130000	17	55	300 330	Shafts, gears	High impact and creep strength, pre-heat treated
7593	Magno	M-89	Low C, bal. Fe	Annealed	60000		22			Magnet cores	High permeability, low hysteresis loss
7594	Boyd-Wagner No. 4 Swedish	M-336	1.05 C, 0.5 Cr, 0.1 V, bal. Fe							Wood and machine screw cold header dies	
7595	Boyd-Wagner No. 9 Swedish	M-336	0.9 C, 0.5 Cr, bal. Fe							Large cold header dies	
7596	Boyd-Wagner No. 41 Swedish	M-336	0.7 C, 0.6 Mn, bal. Fe							Chipping chisels	
7597	Boyd-Wagner B-W Point 5	M-336	0.02 C, 0.18 Mn, trace Si, 0.012 S, 0.004 P, bal. Fe							Plastic molds, white metal die casting dies	
7598	Die Cast	M-336	0.45 C, 1.0 Si, 1.4 Cr, 2.2 W, 0.2 V, 0.3 Mo, bal. Fe							Aluminum die casting dies	Non-warping

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7599	Hy-Lo	M-336	0.85 C, 2.24 Mn, 0.1 V, bal. Fe							Dies	Non-shrinking
7600	Impress	M-336	0.45 C, 1.0 Si, 1.4 Cr, 2.2 W, 0.2 V, 0.3 Mo, bal. Fe							Impression dies	Non-deforming
7601	Moldie	M-336	0.9 C, 2.25 Mn, 0.1 V, bal. Fe							Bakelite and rubber molds	
7602	Record-Eminent	M-336	0.85 C, 18.5 W, 4.25 Cr, 2.5 V, 10.5 Co, bal. Fe							Tools, dies, cutters	High speed steel
7603	Record Select	M-336	0.8 C, 18 W, 3.75 Cr, 1.25 V, 5.5 Co, bal. Fe							Tools, dies, cutters	High speed steel
7604	La Belle Type 3	M-38	C, bal. Fe							Dies for bolts, cold heading dies	
7605	Pyro Die	M-38	0.4 C, 1.0 Cr, 0.25 V, bal. Fe							Hot work tools, header dies, chipping chisels	
7606	F.C.C. Air-Hardening No. 48M	M-439	1.48-1.6 C, 11.5-12.5 Cr, 0.7-0.9 Mo, 0.15-0.25 V, 0.7-0.8 Co, bal. Fe	Air harden						Cutting edge forming dies	Abrasion resistant
7607	F.C.C. Oil Hardening (Cast-to-shape)	M-439	0.85-0.95 C, 1.0-1.25 Mn, 0.4-0.6 W, 0.2-0.3 V, bal. Fe	Oil harden						Forming dies	Cast to shape
7608	A. W. 70-90 Type B	M-537	0.25 max. C, 0.7 Mn, 0.1 P, 0.5 Cu, bal. Fe		65000	50000	20			Structural work, transportation industry, truck and tank truck bodies	Weldable, atmospheric corrosion resistant
7609	Pantal	M-935	0.7 Si, 1.4 Mg, 0.9 Mn, 0-0.2 Ti, bal. Al	Heat treated	43000 50000	26000 36000	12 15		70 95	Light alloy parts	
7610	Dural A	M-487	C, alloy, bal. Fe							Turning tools	
7611	Dural B	M-487	C, alloy, bal. Fe							Coal cutter picks, for welding of hard facing material	Abrasion resistant
7612	Dural C	M-487	C, alloy, bal. Fe							Valve parts, dry battery manufacture	Chemical and abrasive resistance
7613	B. & W. 2	M-17	0.15 max. C, 0.3-0.6 Mn, 1.75-2.25 Cr, 0.4-0.6 Mo, 0.5 max. Si, bal. Fe	Annealed	68000	40000	35		140	Oil refinery tubes	
7614	B. & W. 5	M-17	0.15 max. C, 0.5 max. Mn, 0.5 max. Si, 4-6 Cr, 0.45-0.60 Mo, bal. Fe	Annealed	70000	30000	35		150	Oil refining tubes, steam superheater	
7615	B. & W. 9 (Croloy 9)	M-17	0.15 max. C, 0.5 max. Mn, 0.5 max. Si, 8-10 Cr, 1.25-1.75 Mo, bal. Fe	Annealed	78000	40000	30		165	Oil refining still and exchanger tubes	For service up to 1250°F.
7616	B. & W. 18	M-17	0.10 max. C, 0.5 max. Mn, 0.5 max. Si, 15-18 Cr, bal. Fe	Annealed	75000	48000	28		170	Corrosion resistant parts to HNO_3 and mixed acids	Acid and corrosion resistant
7617	B. & W. 18-8	M-17	0.07 max. C, 0.6 max. Mn, 0.75 max. Si, 16.5-20.0 Cr, 7-10.5 Ni, bal. Fe	Water quench	90000	30000	65		140	Corrosion resisting parts	Corrosion resistant
7618	B. & W. 16-3-3	M-17	0.15 max. C, 15.5-17 Cr, 12.5-14.5 Ni, 2-3.25 Mo, bal. Fe	Water quench	95000	38000	55		160	Acetic acid, sulfite liquor corrosion resistant parts	Corrosion resistant
7619	B. & W. 25-20	M-17	0.15 max. C, 1.0 max. Mn, 0.75 max. Si, 24-26 Cr, 19-21 Ni, bal. Fe	Air cooled	95000	38000	50		150	Heat resistant parts	Resists oxidation to 2100°F.
7620	B. & W. 27	M-17	0.25 max. C, 0.75 max. Mn, 0.50 max. Si, 25-30 Cr, bal. Fe	Water quench	85000	50000	22		180	Heat resistant parts	Resists oxidation to 2100°F. and sulfur atmospheres
7621	Toledo Alloy No. 3	M-634	Ni, Mo, .10-.20 C, bal. Fe		110000 115000	70000 80000	26 24	50 40		Mining equipment, carburized parts	Case-hardening steel
7622	Toledo Alloy No. 4	M-634	C, Si, Mo, bal. Fe		90000 115000	60000 75000			207 228	Coal mining equip., pug mill parts, paddles, liners	Abrasion resistant
7623	Toledo Alloy No. 6	M-634	C, alloy, bal. Fe							Dies, trimming, stamping, forming and embossing	Non-deforming, cast-to-shape

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7624	Toledo Alloy No. 7	M–634	C, Cr, V, bal. Fe		90000	60000	25	50	179	Railway locomotive parts	Tough, shock resistant
					95000	67000	22	40	200		
7625	Toledo Alloy No. 8	M–634	C, alloy, bal. Fe		110000	75000	26	50	228	Automotive and aircraft parts,	
					120000	85000	20	40	241	gears, short-run dies	
7626	Aerisweld	M–578								Welding rod for use on bronze and brass	Coated
7627	Kathode	M–578								Welding electrode	
7628	New Lightweld	M–578	C, bal. Fe							Welding electrode	Coated
7629	Stable-Arc	M–578								Welding electrode	
7630	Z. A.	M–580	Zn, Al							Electroplating anode	
7631	Vascoloy Ramet Grade AAA	M–329 M–115	Ta C+WC+Co	Sintered	170000					Cutting tools	For cast iron and non-ferrous materials
7632	Vascoloy Ramet Grade AT	M–329 M–115	Ta C+WC+Co	Sintered	215000					Cutting tools	For cast iron and non-ferrous materials
7633	Vascoloy Ramet Grade AW	M–329 M–115	Ta C+WC+Co	Sintered	295000					Cutting tools	For cast iron and non-ferrous materials
7634	Vascoloy Ramet Grade CC	M–329 M–115	Ta C+W+Ni	Sintered	275000					Cutting tools	For steel
7635	Vascoloy Ramet Grade DD	M–329 M–115	Ta C+W+Ni	Sintered	175000					Cutting tools	For steel
7636	Vascoloy Ramet Grade S	M–329 M–115	Ta C+W+Ni	Sintered	285000					Cutting tools	For steel
7637	Vascoloy Ramet Grade XX	M–329 M–115	Ta C+WC+Co	Sintered	275000					Cutting tools	For hard steel
7638	Supermetal	M–635	Coated low carbon steel							Oven linings	
7639	Ni-Bar Iron	M–637	3.3T.C., 0.6 Mn, 1.5 Si, 0.6 Cr, 1.5 Ni, bal. Fe		36000				210	Grate bars, stoker links	
7640	Stewart White Brass No. 5	M–514	2.5-3.5 Cu, 3.5-4.5 Al, bal. Zn	Die cast	44000		9		80	Die castings, hardware, radiator caps, housings, covers, lamp brackets	
7641	Auto No. 1	M–260	.5 C, 1.8 Ni, 1 Cr, bal. Fe	Oil harden						Punches, shock tools	Tough
7642	C. C. Chisel	M–260 M–38	.47 C, .7 Cr, 1.1 W, bal. Fe	Water harden						Punches, pneumatic chisels	Shock and fatigue resistant
7643	Chrome Ball Steel	M–260	1.0 C, 1.2 Cr, bal. Fe							Balls, ball bearings	R.H.-C-64-65
7644	Chrome Bearing Steel	M–260	1.0 C, 1.2 Cr, bal. Fe							Ball bearing races	R.H.-C-64-65
7645	Chrome Magnet M-31	M–260	.85 C, 2.7 Cr, bal. Fe	Oil harden						Permanent magnets	Large sections
7646	Chrome Magnet No. 154	M–260	.9 C, 3.6 Cr, bal. Fe	Oil harden						Permanent magnets for speakers, meters, etc.	High magnetic values
7647	Chrome Moly Roll	M–260	C, Cr, Mo, bal. Fe	Oil harden						Straightening and reducing rolls	Deep hardening, high toughness
7648	Chrome Vanadium Spring Wire	M–260	C, Cr, V, bal. Fe	Oil harden						Aircraft exhaust valve springs, all coil and flat springs	High fatigue resistance
7649	Cobalt Magnet Steel (17%)	M–260	C, Cr, W, Co, bal. Fe	Air harden						Permanent magnets	Machinable
7650	Cobalt Magnet Steel (35%)	M–260	C, Cr, W, Co	Oil harden						Permanent magnets	Difficult to machine
7651	C. S. M.	M–260	C, Mn, Cr, bal. Fe	Oil harden						Wrenches, valve parts, studs, bolts, chisels, springs, shafts, gears	Tough, fatigue resistant
7652	Halcomb Hot Work	M–260 M–38	.4 C, 8.7 W, 3.5 Cr, .25 V, bal. Fe	Oil-air					400	Hot forging dies, punches, grippers	Resists heat checking
7653	Halcomb L. C. T. No. 2	M–260 M–38	.45 C, 3 Cr, .15 V, 11 W, bal. Fe	Oil-air					400	Brass forging dies, extrusion dies, dummies for brass	Resists heat checking
7654	Halcomb Mix 218	M–260	C, Si, Cr, Mo, V, bal. Fe	Air harden					400	Brass extrusion mandrels, hot heading and forging dies, Al die casting dies	Tough, resists heat checking

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7655	Halcomb Super Van Dreadnought	M-260	.8 C, 18 W, 2V, 4Cr, .6 Mo, bal. Fe	Oil-air						Cutters for heavy cuts on soft stock and fast finishing	High speed steel
7656	Haldi No. 2	M-260	1.5 C, 11.5 Cr, bal. Fe	Air harden						Dies, swages, punches, shears, drawing dies	High abrasion resistant
7657	Hoballoy	M-260	.1 max C, 1.3 Ni, .6 Cr, bal. Fe							Bakelite molds	Shock resistant
7658	Krosil	M-260 M-38	.5 C, .9 Mn, 1.5 Si, .35 Mo, bal. Fe	Water harden						Rivet shearing tools, cold tie plate punches	Shock and fatigue resistant
7659	Needle Wire	M-260	.7 C, bal. Fe	Oil harden						Spring beard, latch, sewing machine needles	Tough
7660	Silico Manganese Spring Wire	M-260	.5 C, .7 Mn, 2 Si, bal. Fe	Water harden						Coil and flat springs, automatic springs	High fatigue resistance
7661	S. S. Tool	M-260	1.0 C, 1.2 Cr, .3 Mo, bal. Fe	Oil harden						Rolls, tools, blanking dies	
7662	Tungsten Magnet M-5	M-260	.7 C, 5.2 W, bal. Fe	Water harden						Permanent magnets	
7663	Tungsten Magnet M-6	M-260	.7 C, 6 W, bal. Fe	Oil harden						Permanent magnets	
7664	Wortle Die No. 1	M-260	2.1 C, 1.9 Cr, 4.3 W, bal. Fe							Cold drawing dies	
7665	Wortle Die No. 4	M-260 M-38	2.1 C, 3.2 W, bal. Fe							Cold drawing dies	For hard abrasive metals
7666	Wortle Die No. 5	M-260	2.0 C, 2 Mn, 2 Cr, 12 W, bal. Fe							Cold drawing dies	For abrasive metals
7667	Celfor	M-618	C, bal. Fe							Substitute for case-hardened steel	Shallow-hardening
7668	Diamantbronze	M-330	58 Cu, 1 Ni, 1 Mn, 1 Al, 1 Fe, bal. Zn				20			Valve gauge fittings	
7669	Elektrobronze	M-330	81 Cu, 10 Al, bal. Mn, Fe				20		160 170	Valve gauge fittings	
7670	Omanitbronze	M-330	81 Cu, 10 Al, bal. Ni, Fe				10			Valve gauge fittings	
7671	Murex-Carbon-Moly	M-529	0.12 C, 0.08 Si, 0.64 Mn, 0.48 Mo, bal. Fe		70000	54000	34	66.5		Welding electrodes	Creep strength at high temp.
7672	Murex 4-6 Chrome	M-529	C, 3.21 Cr, 0.5 Mo, bal. Fe		83000	62000	26	45		Welding electrodes	Corrosion resistant
7673	Murex-Chrome-Copper	M 529	0.4 Cr, 0.2 Cu, 0.08 Si, 0.08 C, bal. Fe		84500	63000	26	46.5		Welding electrodes	Corrosion resistant
7674	Murex Chrome-Moly	M-529	0.08 C, 0.32 Cr, 0.67 Mo, bal. Fe		80000	60000	25	62		Welding electrodes	Creep strength
7675	Murex Chromansil	M-529	0.12 C, 0.18 Cr, 0.5 Mo, 0.45-0.55 Mn, bal. Fe		81800	76800	25	61.5		Welding electrodes	High tensile
7676	Murex Manganese Steel	M-529	1.0 C, 13 Mn, 0.85 Ni, bal. Fe							Welding electrodes	Wear resistant
7677	Murex Special A	M-529	0.08 C, 0.08 Si, 0.46 Mn, 0.85 Ni, bal. Fe		73000	59000	31	63.5		Welding electrodes	High tensile
7678	Murex Stainless No. 7	M-529	0.07 C, 18 Cr, 8 Ni, bal. Fe							Welding electrodes	Stainless
7679	Murex Stainless No. 15	M-529	0.15 C, 18 Cr, 8 Ni, bal. Fe							Welding electrodes	Stainless
7680	Duralite	M 541	3 Cu, 0.7 Si, 0.5 Ni, 0.5 Mg, 1.5 Fe, bal. Al	Heat treated	55000 67000	41000 50000	18 10			Pistons, light alloy parts for auto, aircraft and diesel engines	Forgings and stampings
7681	Era A. T. V.	M-62	C, Cr, Ni, Si, W, bal. Fe		108000	60000	25	45		High duty I.C. engine valves, super-charger rotors	Heat resisting
7682	Genuine Sovereign Babbitt	M-586	86-90 Sn, bal. Cu, Sb						28.4	Internal combustion engine bearings	Upper freezing point -306 °C.
7683	45 Permalloy	M-205 M-22	45 Ni, 55 Fe							Audio frequency apparatus	High permeability and resistivity
7684	78.5 Permalloy	M-205 M-22	78.5 Ni, 21.5 Fe			•				Sensitive Direct Current apparatus	High permeability low hysteresis loss
7685	Silico-Manganese	M-394	3.0 C, 65-70 Mn, bal. Si, 2.5 C, 65-70 Mn, bal. Si, 2.0 C, 65-70 Mn, bal. Si 1.0 max. C., 65-70 Mn							Metallurgical applications in steel	Discontinued
7686	Vanadium Metal	M-394	95% V-grade 90% V-grade							Special metallurgical applications	"Vancoram"

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7687	Molybdenum Metal	M-394	100% and 97% Mo							Special metallurgical applications	"Vancoram"
7688	Tungsten Metal	M-394	100% and 97% W							Special metallurgical applications	Discontinued
7689	Ferro-Titanium-High Carbon	M-394	6-8 C, 15-18 Ti, bal. Fe							Metallurgical applications in steel	"Vancoram"
7690	Ferro-Titanium Low Carbon Grade	M-394	0.10 max. C, 20-25 Ti, 7.5 max. Al, bal. Fe							Metallurgical applications in stainless steel	"Vancoram"
7691	Highway	M-131	C, Cu, bal. Fe							Building construction	
7692	Atlas 89-A-207	M-13	94 Cu, 5 Al, 1 Fe	Treated	40000	18000	60	60	60	Machine parts requiring great ductility	Obsolete
					50000	22000	40	40	80		
7693	Atlas-89-A-3	M-13	89.2 Cu, 9.8 Al, 1 Fe	Cast	70000	25000	40	40	115	Bearings, gears, machine parts	Obsolete
					75000	32000	30	30	126		
7694	Atlas 89-A-303	M-13	89.2 Cu, 9.8 Al, 1 Fe	Normalized	68000	28000	30	30	115	Bearings, gears, machine parts	Obsolete
					80000	40000	22	25	131		
7695	Atlas 89-A-318	M-13	89.2 Cu, 9.8 Al, 1 Fe	Single treat	80000	45000	18	20	156	Welding jaws, gears, bearings, wearplates, shifter forks	Obsolete
					95000	55000	12	14	170		
7696	Atlas 89-A-323	M-13	89.2 Cu, 9.8 Al, 1 Fe	Double treat	80000	40000	30	32	143	Welding jaws, gears, bearings, wearplates, shifter forks	Obsolete
					90000	50000	22	24	156		
7697	Atlas 89-E-103	M-13	88.7 Cu, 10.3 Al, 1 Fe	Normalized	80000	38000	23	23	131	Heavy duty bronze service	Obsolete
					85000	45000	17	17	143		
7698	Atlas 89-E-106	M-13	88.7 Cu, 10.3 Al, 1 Fe	Normalized	75000	30000	18	20	131	Heavy duty bronze service	Obsolete
					80000	35000	12	14	149		
7699	Atlas 89-E-108	M-13	88.7 Cu, 10.3 Al, 1 Fe	Normalized	75000	30000	18	20	131	Heavy duty bronze service	Obsolete
					85000	40000	10	12	141		
7700	Atlas 89-E-117	M-13	88.7 Cu, 10.3 Al, 1 Fe	Single treat	90000	70000	6	7	229	Machine parts	Obsolete
					100000	80000	2	3	255		
7701	Atlas 89-E-133	M-13	88.7 Cu, 10.3 Al, 1 Fe	Triple treat	80000	45000	15	17	163	Heavy duty gear, bearing, welding jaws	Obsolete
					100000	55000	12	13	179		
7702	Atlas 89-E-135	M-13	88.7 Cu, 10.3 Al, 1 Fe	Triple treat	80000	30000	22	24	149	Heavy duty gear, bearings, welding jaws	Obsolete
					90000	40000	14	16	166		
7703	Atlas 89-E-203	M-13	88.2 Cu, 10.8 Al, 1 Fe	Corrective treatment	80000	45000	20	22	160	Machine parts	Obsolete
					85000	50000	14	16	180		
7704	Keystone Copper Steel	M-11	0.10 max. C, 0.5 max. Mn, 0.01-0.10 P, 0.05 max. S, 0.2 min. Cu, bal. Fe		35000	15000	40			Roofing, siding, railroad car construction	Atmosphere corrosion resistance
					55000	30000	25				
7705	U.S.S. 18-8 Annealed Type 302	M-11	0.12 max. C, 0.7 max. Mn, 0.75 max. Si, 17 min. Cr, 7 min. Ni, bal. Fe		80000	30000	50			Food and dairy equip.	Corrosion resistant to atmosphere & chemical reagents
7706	U.S.S. 18-8 Annealed Type 304	M-11	0.08 max. C, 0.7 max. Mn, 0.75 max. Si, 17 min. Cr, 7 min. Ni, bal. Fe		80000	30000	50			Food and dairy equip.	Corrosion resistant to atmosphere & chemical reagents
7707	U.S.S. 18-8 Annealed Type 305	M-11	0.12 max. C, 0.7 max. Mn, 0.75 max. Si, 18 min. Cr, 8 min. Ni, bal. Fe		80000	30000	50			Food and dairy equip.	Corrosion resistant to atmosphere & chemical reagents
7708	U.S.S. 18-8 Annealed Type 306	M-11	0.08 max. C, 0.7 max. Mn, 0.75 max. Si, 18 min. Cr, 8 min. Ni, bal. Fe		80000	30000	50			Food and dairy equip.	Corrosion resistant to atmosphere & chemical reagents
7709	U.S.S. 18-8-Cold-Rolled	M-11	0.12 max. C, 0.7 max. Mn, 0.75 max. Si, 17 min. Cr, 7 min. Ni, bal. Fe	¼ hard	125000	75000	25			In ship, aviation, railroad, bus line, tank truck construction	Corrosion resistant, low weight, great strength
				½ hard	150000	110000	10				
				¾ hard	175000	135000	5				
				hard	185000	140000	4				
7710	U.S.S. 18-8 Columbium Bearing Type 345	M-11	0.15 max. C, 17 min. Cr, 7 min. Ni, Cb = 6 to 10 x C, bal. Fe		80000	30000	50			Exhaust stacks, airplane gasoline tanks, welded structures	Resists intergranular corrosion

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7711	U.S.S. 18-8 Columbium Bearing Type 346	M-11	0.15 max. C, 18 min. Cr, 8 min. Ni, Cb =6 to 10 x C, bal. Fe		80000	30000	50			Exhaust stacks, airplane gasoline tanks, welded structures	Resists intergranular corrosion
7712	U.S.S. 18-8 Type 347	M-604	0.1 max. C, 17-19, Cr, 9-12, Ni, Cb =8xC, bal. Fe	Annealed	90000	40000	50			Exhaust stacks, airplane gasoline tanks, welded structures	Resists intergranular corrosion
7713	U.S.S. 18-8 Type 348	M-604	0.15 max. C, 18 min. Cr, 8 min. Ni, Cb =over 10x% C, bal. Fe		80000	30000	50			Exhaust stacks, airplane gasoline tanks, welded structures	Resists intergranular corrosion
7714	U.S.S. Transformer 60	M-604	Approx. 4.3 Si, bal. Fe							Silicon steel sheets for transformers in rotating electrical equip., radio parts	Res. 60 Watt loss 0.58 max.
7715	U.S.S. Transformer 66	M-604	Approx. 4.2 Si, bal. Fe							Silicon steel sheets for transformers in rotating electrical equip., radio parts	Res. 59 Watt loss 0.65 max.
7716	U.S.S. Radio Transformer 72	M-604	Approx. 4 Si, bal. Fe							Silicon steel sheets for radio apparatus	Res. 57 Watt loss 0.72 max.
7717	U.S.S. Motor	M-604	Approx. 2.7 Si, bal. Fe							Silicon steel sheets for rotating electrical machinery	Res. 40 Watt loss 1.04 max.
7718	U.S.S. Field Sheets	M-604	Approx. 0.25 Si, bal. Fe							Silicon steel sheets for small motors	Res. 15
7719	U.S.S. Pole Sheets	M-604	Approx. 0.60 Si, bal. Fe							Poles in rotating electrical machinery	Res. 18, formerly "Pole Steel"
7720	Carbon-Mo	M-90	0.10-0.20 C, 0.3-0.6 Mn, 0.45-0.65 Mo, 0.10-0.20 Si, bal. Fe	Hot rolled	60000	35000	40		150	Oil cracking still tubes, hot oil piping, high temp. steam piping	Superior creep strength to plain C-steel
7721	Carbon-Mo.	M-90	0.2-0.3 C, 0.75 max. Mn, 0.3 max. Si, 0.45-0.65 Mo, bal. Fe	Normalized and drawn	70000	50000	30		170	High temp. high pressure steam piping	High tensile and creep strength
7722	"U.S.S." Copper Steel	M-377	C, 0.2 min. Cu, bal. Fe	Hot rolled						Culverts, building and general fabrication	Hot rolled, annealed and galvanized sheets
7723	Copper Steel	M-377	C, 0.2 min. Cu, bal. Fe	Hot rolled						Building and general fabrication	Bars, plates, shapes
7724	Copper Steel	M-377	C, 0.20 min. Cu, bal. Fe	Hot rolled						Track bolts, spikes, tie plates	Heat treated bolts
7725	Copper Steel	M-377	C, 0.20 min. Cu, bal. Fe	Drawn						Woven wire fencing and barbed wire	Wire products
7726	Copper Ingot Iron	M-377	C, 0.20 min. Cu, bal. Fe	Hot rolled						Culverts, building, general fabrication	Hot rolled, annealed and galvanized sheets
7727	Resulphurized Stock	M-377	C, 0.075 min. S, 0.6-0.9 Mn, bal. Fe	Hot rolled						Threading steel	Bars and rods for threading purposes
7728	Structural Silicon Steel	M-377	0.4 max. C, 0.04 max. P, 0.05 max. S, 0.2 min. Si, bal. Fe	Hot rolled	80000 95000	45000		30		Derricks and bridge work	High elastic plates and shapes
7729	Intermediate Manganese Medium Carbon	M-377	0.28-0.38 C, 1.1-1.4 Mn, 0.04 max. P, 0.15-0.30 Si, bal. Fe	Hot rolled	90000	55000	18	50		Sucker rods	Bars and rods Iz-45 min.
7730	Intermediate Manganese Rail Steel	M-377	0.50-0.65 C, 1.2-1.5 Mn, 0.04 max. P, 0.10-0.23 Si, bal. Fe	Hot rolled						Railways, rails	
7731	Intermediate Manganese Abrasion Steel	M-377 M-604	0.35-0.50 C, 1.5-2.0 Mn, 0.05 max. P, 0.055 max. S, 0.15-0.30 Si, bal. Fe	Hot rolled	100000 125000				200 250	Dredge pipe, screens	Abrasion resistant, billets, sheets, plates
7732	U.S.S. 12 F.M.	M-604	0.15 max. C, 0.25-0.50 S, 12-14 Cr, Zr, Mo, P or S bal. Fe.	Annealed	70000	35000	25	50	202	Golf clubs, bolts, shafts, nuts, screws	Good machinability moderate corrosion and heat resistance

Footnote—7714—Formerly Selected Extra Apollo Special Electrical. 7715—Formerly Extra Apollo Special Electrical. 7716—Formerly Radio Apollo Special Electrical. 7717—Formerly Motor Special Electrical.

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7733	U.S.S.-18-8 F.M.	M–604	0.20 max. C, 1.2 max. Mn, 0.75 max. Si, 8-10 Ni, 17-19 Cr, 0.15-0.30 Se, bal. Fe, 0.2 P	Annealed	80000	35000	35	50	217	Bolts, nuts, shafts, couplings, piston rods, propellers	Heat and corrosion resistant and good machinability
7734	U.S.S. 19-9 Ti	M–604	0.20 max. C, 0.75 max. Mn, 0.75 max. Si, 8-12 Ni, 18-20 Cr, 4 times C-Ti, bal. Fe	Stabilized treat.	80000	35000	35	50	217	Gasoline and oil tanks for ocean vessels, seamless tubes	Heat and corrosion resistant between 1000-1600°F.
7735	U.S.S. 25-12 Ti	M–604	0.20 max. C, 2 max. Mn, 1.0 max. Si, 10-16 Ni, 20-26 Cr, 4+C=Ti, bal. Fe	Stabilized treat.	90000	40000	35	45	217	Rider sheets, preheaters, walking beams, furnace lining, furnace parts, annealing boxes	Heat and corrosion resistant between 1000-2100°F.
7736	Carbon Vanadium	M–604	0.45-0.55 C, 0.65-0.95 Mn, 0.15 min. V, bal. Fe	Normalized tempered	90000	60000	20	40		Locomotive forgings, connecting rods, piston rods, axles	High strength and shock resistant
7737	Normalloy	M–604	0.40-0.50 C, 0.9-1.3 Mn, 0.3-0.6 Cr, 0.05 min. V, bal. Fe	Normalized 2½" max. cross-section	110000	70000	15	40		Sprockets, gear hubs	For heavy duty automotive machinery
7738	Bain Tube Steel	M–604	0.10-0.20 C, 0.4-0.6 Mn, 0.45-0.75 Si, 1.5-2.0 Cr, 0.6-0.8 Mo, bal. Fe	Normalized and drawn	65000		30	65	160	Seamless tubes	For high temp. and high pressure service
7739	Bain Flange Steel	M–604	0.15-0.25 C, 0.4-0.6 Mn, 0.45-0.75 Si, 1.5-2.0 Cr, 0.6-0.8 Mo, bal. Fe	Normalized and drawn	70000		30	65	160	Flange forgings	For high temp. and high pressure piping
7740	Bain Bolt Steel	M–604	0.35-0.45 C, 0.4-0.6 Mn, 0.45-0.75 Si, 1.5-2.0 Cr, 0.6-0.8 Mo, bal. Fe	Annealed Normalized and drawn	120000		20	50	290	Stud bolts	For high temperature and high pressure flange joints
7741	U.S.S. 4/6 Cr. Mo. Ti.	M–604	0.20 max. C, 4-6 Cr, 0.45-0.65 Mo, approx. 5+C-Ti, bal. Fe	Hot rolled	65000	25000	30	50	202	Oil still tubes and apparatus	For heat and corrosion resistance and resistance to hardening
7742	Amercut B-14	M–12	0.08-0.13 C, 0.6-0.9 Mn, 0.09-0.13 P, 0.1-0.2 S, bal. Fe	Cold-finish	70000 90000	60000 80000	25 15	50 40	160 190	For automatic screw machine operations	Approx. machinability 125 ft./min.
7743	Amercut B-17	M–12	0.08-0.16 C, 0.6-0.9 Mn, 0.09-0.13 P, 0.1-0.2 S, bal. Fe	Cold-finish	80000 100000	65000 85000	20 10	50 40	170 200	For automatic screw machine operations	Approx. machinability 150 ft./min. (Discontinued)
7744	Amercut B-19	M–12	0.08-0.13 C, 0.6-0.9 Mn, 0.09-0.13 P, 0.16-.23 S bal. Fe	Cold finish	80000 100000	65000 85000	20 10	50 40	170 200	Automatic screw machine operations	Approx. machinability 180 ft./min.
7745	Amercut B-24	M–12	0.08-0.16 C, 0.6-0.9 Mn, 0.09-0.13 P, 0.2-0.3 S, bal. Fe	Cold finish	80000 100000	65000 85000	20 10	50 40	170 200	Automatic screw machine operations	Approx. machinability 195 ft./min. (Discontinued)
7746	Amercut B-28	M–12	0.08-0.13 C, 0.6-0.9 Mn, 0.09-0.13 P, 0.2-0.3 S, bal. Fe	Cold finish	80000 100000	65000 85000	20 10	50 40	170 200	Automatic screw machine operations	Approx. machinability 215 ft./min.
7747	Amercut C-1115	M–12	.13-.18 C, .7-1.0 Mn, .10-.15 S, bal. Fe	C.R.			10 20			Screw machine parts	
7748	Amercut C-1121	M–12	.18-.23 C, .7-1.0 Mn, .08-.13 S, bal. Fe	C.R.			15 25			Screw machine parts	
7749	Amercut C-1117	M–12	.14-.20 C, 1.0-1.3 Mn, .08-.13 S, bal. Fe	C.R.			15 25			Screw machine parts	
7750	Amercut C-1118	M–12	.14-.20 C, 1.3-1.6 Mn, .08-.13 S, bal. Fe	C.R.			15 25			Screw machine parts	
7751	Amercut C-1132	M–12	.27-.34 C, 1.35-1.65 Mn, .08-.13 S, bal. Fe	C.R.			15 25			Screw machine parts	
7752	Amercut C-1137	M–12	.32-.39 C, 1.35-1.65 Mn, .08-.13 S, bal. Fe	C.R.			15 25			Screw machine parts	
7753	Amercut C-1141	M–12	.37-.45 C, 1.35-1.65 Mn, .08-.13 S, bal. Fe	C.R.			15 25			Screw machine parts	

Serial No.	Alloy	Mfg. No	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7754	Amerhead C-1018	M-12	.15-.20 C, .6-.9 Mn, .04 max. P, .05 max. S, bal. Fe	C.R.						Screw machine parts	Wire
7755	Amerhead A-1330	M-12	.28-.33 C, 1.6-1.9 Mn, .04 max. P, .04 max. S, bal. Fe	C.R.						Screw machine parts	Wire
7756	Amerhead A-1335	M-12	.33-.38 C, 1.6-1.9 Mn, .04 max. S, .04 max. P, bal. Fe	C.R.						Screw machine parts	Wire
7757	Amerhead C-1137	M-12	.32-.39 C, 1.35-1.65 mn, .08-.13 S, bal. Fe	C.R.						Screw machine parts	Wire
7758	Amerhead A-2317	M-12	.15-.20 C, .4-.6 Mn, 3.25-3.75 Ni, bal. Fe	C.R.						Screw machine parts	Wire
7759	Amerhead A-2330	M-12	.28-.33 C, 3.25-3.75 Ni, .6-.8 Mn, bal. Fe	C.R.						Screw machine parts	Wire
7760	Amerhead A-3115	M-12	.13-.18 C, .4-.6 Mn, .55-.75 Cr, 1.1-1.4 Ni, bal. Fe	C.R.						Screw machine parts	Wire
7761	Amerhead A-3120	M-12	.17-.22 C, .6-.8 Mn, .55-.75C Cr, 1.1-1.4 Ni, bal. Fe	C.R.						Screw machine parts	Wire
7762	Amerhead A-3135	M-12	.33-.38 C, 5-.7 Cr, 1.1-1.4 Ni, bal. Fe	C.R.						Screw machine parts	Wire
7763	Amerhead A-4140	M-12	.38-.43 C, .7-1.0 Mn, .8-1.1 Cr, .15-.25 Mo, bal. Fe	C.R.						Screw machine parts	Wire
7764	Amerhead A-4615	M-12	.13-.18 C, 1.65-2.0 Ni, .2-.3 Mo, bal. Fe	C.R.						Screw machine parts	Wire
7765	Premier H S	M-12	0.13-0.18C, 0.3-0.6 Mn, 0.04 max. P, 0.04 max. S, 0.2-0.3 Si, 1.0-1.5 Ni, 0.45-0.75 Cr, bal. Fe	Deposited metal	70000 80000		20 10			Welding wire	Acetylene welding
7766	Alloy Gas Welding A-2317	M-12	0.1-0.2 C, 0.3-0.6 Mn, 0.04 max. P, 0.05 max. S, 0.15-0.30 Si, 3.25-3.75 Ni, bal. Fe	Deposited metal	70000 80000		20 15			Welding wire	Acetylene welding
7767	Alloy Gas Welding 2320	M-12	0.17-0.22 C, 0.30-0.60 Mn, 0.30 Si, 3.25-3.75 Ni, bal. Fe	Deposited metal	70000 80000		20 15			Welding wire	Acetylene welding
7768	Alloy Gas Welding A-2330	M-12	0.28-0.33 C, 0.5-0.8 Mn, 0.04 max. P, 0.05 max. S, 0.15-0.30 Si, 3.25-3.75 Ni, bal. Fe	Deposited metal	70000 80000		20 15			Welding wire	Acetylene welding
7769	Hard Surfacing Welding A-6120	M-12	0.17-0.22 C, 0.3-0.6 Mn, 0.04 max. P, 0.05 max. S, 0.15-0.30 Si, 0.8-1.1 Cr, 0.15 min. V, bal. Fe	Deposited metal					200 350	Welding wire (arc or acetylene)	Hard surfacing for resistance to abrasive wear
7770	U.S.S. 18-10 Cb	M-12	0.15 max. C, 0.50 max. Mn, 0.75 max. Si, 17-19 Cr, 8-12 Ni, 6 to 10xC—Cb, bal. Fe	Annealed	85000 100000	25000 40000	65 50	75 60		Welded structures in which intergranular corrosion must be avoided	Stainless

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7771	U.S.S. 5	M-12	0.1 max. C, 0.3-1.0 Mn, 0.10-1.0 Si, 4-6 Cr, bal. Fe	Annealed	60000 75000	25000 35000	40 30	75 60		For improved corrosion resistance qualities and higher strength than med. carbon steels	
7772	Carnegie-Illinois Specification No. 2	M-604	0.3-0.4 C, 0.75-1.0 Cr, 0.3-0.4 Mo, bal. Fe		92220	60270	24	46.4	175	Commercial mill castings	Tough, good machinability
7773	Carnegie-Illinois Specification No. 3	M-604	0.75-0.85 C, 1.4-1.6 Cr, 0.5-0.75 Ni, 0.3-0.4 Mo, 0.9-1.1 Mn, bal. Fe						400 500	Ore, cement, clinker, grinding equipment	Abrasion resistant
7774	Carnegie-Illinois Specification No. 4	M-604	0.3-0.4 C, 0.75-1.0 Cr, 2.5-3.0 Ni, bal. Fe		103460	63050	21	40.3	188	Mill coupling boxes, spindles, commercial mill castings	Commercial mill castings
7775	Carnegie-Illinois Specification No. 5	M-604	0.45-0.55 C, 0.85-1.0 Cr, 2.75-3.25 Ni, bal. Fe		121035	78566	18.5	29.0	232	Special trackwork, liner plates, crushing rolls	Wear resistant
7776	Carnegie-Illinois Specification No. 6	M-604	1.0-1.4 C, 10.0-14.0 Mn, bal. Fe		114350	55430	50.3	41.5	200	Special track work, rock Brushing and excavating equip., mining equip.	Great resistance to wear and impact
7777	Carnegie-Illinois Specification No. 7	M-604	0.3-0.4 C, 1.6-2.0 C, bal. Fe		96040	60500	23.5	44.9	181	Miscellaneous castings	
7778	Carnegie-Illinois Specification No. 13	M-604	0.25-0.45 C, 0.20 min. Cu, bal. Fe							Bridge castings	
7779	Carnegie-Illinois Specification No. 19	M-604	1.0-1.4 C, 10-14 Mn, 1.0 Cr, bal. Fe							Crushing and mining machine parts	High resistance to abrasion
7780	Vul-Mo	M-275	High C, 3.25-4.25 Cr, 1.25-2 W, 0.75-1.5 V, 7.5-9.5 Mo, (Co), bal. Fe							Reamers, lathe tools, drills, broaches, dies, hot work dies, cutting tools	High speed steel, wear resistant
7781	Star-Moly	M-32	High C, 3.25-4.25 Cr, 1.25-2 W, 0.75-1.5 V, 7.5-9.5 Mo, (Co), bal. Fe							Reamers, lathe tools, drills, broaches, dies, hot work dies, cutting tools	High speed steel, wear resistant
7782	Rex TMO	M-38 M-260	High C, 3.25-4.25 Cr, 1.25-2 W, 0.75-1.5 V, 7.5-9.5 Mo, (Co), bal. Fe							Reamers, lathe tools, drills, broaches, dies, hot work dies, cutting tools	High speed steel, wear resistant
7783	Tatmo	M-73	.8 C, 3.25-4.25 Cr, 1.25-2 W, 0.75-1.5 V, 7.5-9.5 Mo, (Co), bal. Fe							Reamers, lathe tools, drills, broaches, dies, hot work dies, cutting tools	High speed steel, wear resistant
7784	LMW	M-76	High C, 3.25-4.25 Cr, 1.25-2 W, 0.75-1.5 V, 7.5-9.5 Mo, (Co), bal. Fe							Reamers, lathe tools, drills, broaches, dies, hot work dies, cutting tools	High speed steel
7785	Philo Brand Ferro-Silicon 50% Grade	M-398	50 Si, 48.5 Fe, 1.5 others							Metallurgical applications	
7786	Philo Brand Ferro-Silicon 75% Grade	M-398	75 Si, 22.5 Fe, 2.5 others							Metallurgical applications	
7787	Philo Brand Ferro-Silicon 85% Grade	M-398	85 Si, 12.5 Fe, 2.5 others							Metallurgical applications	
7788	Philo Brand Ferro-Silicon 90% Grade	M-398	91 Si, 6.5 Fe, 2.5 others							Metallurgical applications	
7789	Philo Brand Ferro-Chrome	M-398	65-70 Cr, 4-6 C, under 2 Si, bal. Fe							Metallurgical applications	
7790	Philo Brand Ferro-Manganese	M-398	<7 C, <1 Si, <0.30 P, 78-82 Mn, bal. Fe							Metallurgical applications	
7791	"Titan" Manganese Steel	M-233	1.2 C, 0.5 Si, 12.5 Mn, 0.03 S, 0.05 P, bal. Fe							Wear parts	Wear resistant
7792	"Titanic" Carbon Steel	M-233	0.55-1.6 C, 0.15-0.30 Si, 0.2-0.4 Mn, bal. Fe							Cutting tools	
7793	"Tropic" Hot Die Steel	M-233	0.35 C, 0.3 Si, 0.4 Mn, 9.5 W, 3.0 Cr, 0.5 V, bal. Fe							Hot dies	Hot work steel

Serial No.	Alloy	Mfg. No.	Ref. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7794	Barrow B.X.X. Brand Pig Iron	M-619	M-619	App. 4.0 T.C., 1.5-3.0 Si, 0.02 max. S, 0.02 max. P, 0.25-1.5 Mn, bal. Fe							Metallurgical applications	
7795	Barrow B.X.X. Brand Pig Iron "Swedish"	M-619	M-619	App. 4.0 T.C., 1.0-2.5 Si, 0.012 max. S, 0.02 max. P, 0.25 max. Mn, bal. Fe							Metallurgical applications	
7796	Barrow B.X. Brand Pig Iron	M-619	M-619	App. 4.0 T.C., 1.5-4.0 Si, 0.02 max. S, 0.025 max. P, 0.25-1.5 Mn, bal. Fe							Metallurgical applications	
7797	Barrow B. H. Brand Pig Iron	M-619	M-619	App. 4.0 T.C., 1.5-4.0 Si, 0.025 max. S, 0.03 max. P 0.25-1.5 Mn, bal. Fe							Metallurgical applications	
7798	Barrow B.H.S. Brand Bessemer Haematite Pig Iron	M-619	M-619	App. 4.0 T.C., 1.5-4.5 Si, 0.03 max. S, 0.035 max. P, 0.25-1.2 Mn, bal. Fe							Metallurgical applications	
7799	Barrow Brand Foundry Haematite Pig Iron	M-619	M-619	App. 4.0 T.C., 1.5-3.0 Si, 0.02 max. S, 0.03 P, 0.90-1.25 Mn, bal. Fe							Metallurgical applications, for heat resisting castings	
7800	Barrow B.H.S. Brand Foundry Haematite Pig Iron	M-619	M-619	App. 3.85 T.C., 2.0-3.5 Si, 0.035 max. S, 0.03 max. P, 0.6-1.0 Mn, bal. Fe							Metallurgical applications	For general foundry work
7801	Barrow B.H.R. Brand (Cupola Grade)	M-619	M-619	3.25-3.45 T.C., 0.5-1.1 Si, 0.12-0.18 S, 0.045 P, 0.25 Mn, bal. Fe							Metallurgical applications, for malleable foundries	Various grades
7802	Armco Grade 16-6 Type 301	M-10	M-10	0.15-0.20 C, 16 max. Cr, 6 max. Ni, 4 max. Mn, bal. Fe							Corrosion resistant parts	Obsolete
7803	Armco Grade 16-6 Type 301 S	M-10	M-10	C, 16 Cr, 6 Ni, bal. Fe							Corrosion resistant parts	Obsolete
7804	Armco Grade 18-8 Type 302	M-10	M-10	0.08-0.20 C, 17-19 Cr, 7-9 Ni, bal. Fe							Stainless parts	Heat and corrosion resistant
7805	Armco Grade 18-8 Type 304	M-10	M-10	C, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Heat and corrosion resistant
7806	Armco Grade 19-9 Type 305	M-10	M-10	0.08-0.20 C, 18-20 Cr, 8-10 Ni, bal. Fe							Stainless parts	Obsolete
7807	Armco Grade 19-9 Type 306	M-10	M-10	0.11 max. C, 18-20 Cr, 8-10 Ni, bal. Fe							Stainless parts	Obsolete
7808	Armco Grade 20-10 Type 307	M-10	M-10	0.08-0.20 C, 19-22 Cr, 9-12 Ni, bal. Fe							Heat and corrosion resistant parts	Obsolete
7809	Armco Grade 20-10 Type 308	M-10	M-10	0.11 max. C, 19-22 Cr, 9-12 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
7810	Armco Grade 25-12 Type 309	M-10	M-10	0.20 max. C, 24-26 Cr, 11-13 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
7811	Armco Grade 17 Type 430	M-10	M-10	0.12 max. C, 16-18 Cr, bal. Fe							Corrosion resistant parts	Heat and corrosion resistant
7812	Armco Grade R A Type 434A	M-10	M-10	0.12 max. C, 16-18 Cr, 1 Si, 1 Cu, bal. Fe							Corrosion resistant parts	Obsolete
7813	Armco Grade 15 Type 425	M-10	M-10	0.12 max. C, 14-16 Cr, bal. Fe							Corrosion resistant parts	Obsolete
7814	Armco H.T. 50 Y	M-10	M-10	.12 max. C, bal. Fe	Annealed	75000	55000	20			Corrosion resistant parts	Corrosion and abrasion resistant
7815	Armco Tran-Cor 58	M-10	M-10	4.0-4.4 Si, bal. Fe							Distribution transformers, electrical purposes	
7816	Armco Tran-Cor 65	M-10	M-10	4.0-4.4 Si, bal. Fe							Electrical purposes, power and distribution transformers	Low core loss
7817	Armco Tran-Cor 72	M-10	M-10	3.0-3.4 Si, bal. Fe							Electrical purposes, large generators, transformers	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7818	Armco Intermediate Transformer	M-10	High Si, bal. Fe							Electrical purposes, transformers	Scale-free sheets
7819	Armco Special Electric	M-10	2.6-2.9 Si, bal.Fe							A.C. motors and generators, electrical purposes	Scale-free medium steel sheets
7820	Armco Electric	M-10	1.0 Si, bal. Fe							Rotating machines, electrical purposes	
7821	Armco Armature	M-10								D.C. motors	Steel sheets
7822	Armco Field Grade	M-10								*For intermittent duty* fractional H.P. motors	*Sheets*
7823	Armco Radio No. 1	M-10								Small transformers	
7824	Armco Radio No. 2	M-10								Small transformers	
7825	Armco Radio No. 3	M-10								Small transformers	
7826	Armco Radio No. 4	M-10								Chokes, electrical purposes	
7827	Armco Radio No. 5	M-10								Audio transformer cores and low induction electrical apparatus	
7828	Armco Radio No. 6	M-10								Electrical purposes	Low induction magnetic characteristics
7829	Armco Enameling Iron	M-10								For enameling purposes	Sheets
7830	Enebra Edelbronze TU-I	M-557	Bronze	Sand cast	92000 107500	43000 56000	15 8		150 190	Chemical and textile industries	
7831	Enebra Edelbronze TU-II	M-557	Bronze	Sand cast	78500 92000	28000 43000	30 20		120 150	Chemical and textile industries	
7832	Enebra Edelbronze TO	M-557	Bronze	Sand cast	71000 85000	26000 36000	30 20		120 150	Chemical and textile industries	
7833	Enebra Edelbronze NI	M-557	Bronze	Sand cast	50000 65000	21000 36000	30 20		110 130	Chemical industries	
7834	Original Monel Metal	M-557	Cu-Ni	Sand cast	56000 72000	28000 43000	30 20		120 140	Pump parts, chemical industries	
7835	Enebra Spezialbronze EH-I	M-557	Bronze		85000 100800	36000 50000	15 10		150 180	Electrical industries	
7836	Enebra Spezialbronze EH-II	M-557	Bronze		72000 85000	28000 36000	25 15		130 150	Electrical industries	
7837	Enebra Spezialbronze EH-III	M-557	Bronze		*72000* 78500	*25000* 31000	*30* 20		*110* 130	*Electrical industries*	
7838	Enebra Lagerbronze PN	M-557	Bronze		36000 51000	23000 28000	18 10		70 90	Pump parts	
7839	Enebra Lagerbronze B-33	M-557	Bronze							Machine parts, automobile and diesel engine parts	
7840	Enebra Lagerbronze BZ-25	M-557	Bronze							Machine parts, automobile and diesel engine parts	
7841	Enebra Lagerbronze BZ-20	M-557	Bronze							Machine parts, automobile and diesel engine parts	
7842	Enebra Sondermessinge S-IM	M-557	Brass		78400 93000	36000 43000	15 10		130 160	General construction	
7843	Enebra Sondermessinge S-II M	M-557	Brass		56000 72000	19000 25000	35 25		90 120	General construction	
7844	Immadium IV	M-179	Cu alloy	Extruded	70000	36000	28		125	Hydraulic fittings, bolts, valves	Suitable for tinning and soldering
7845	Parsons 2 S.A.	M-179	Sn base alloy	Cast						Bearings for internal combustion engines and steam turbines	Antifriction white metal
7846	Parsons Star	M-179	Sn base alloy	Cast						Marine main bearings, thrust blocks, steam pumps, and reciprocating engines	Antifriction white metal

Serial No	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7847	T.S.S. 3 Alloy	M-196	2.5 Mg, 0.3 Ti, 0.7 Si, bal. Al	Heat treated	33000	20600	4	5	75 90	Furniture, interior light fixtures, wire, castings	Resists sea water corrosion
7848	T.S.S. 5 Alloy	M-196	5 Mg, 0.3 Ti, bal Al	Sand cast	27000 33000	14000 14000	5.5 12	3–8 8–15	65 65	Furniture, interior light fixtures, wire, castings	Resists sea water corrosion
7849	T.S.S. 8 Alloy	M-196	7.5 Mg, 0.3 Ti, bal. Al	Heat treated	30000 37000	20000 20000	4.5 8	2–2 10–20	80 80	Furniture, interior light fixtures, wire, castings	Resists sea water corrosion
7850	B.S. Seewasser Alloy	M-196	7.5 Mg, 0.3 Mn, bal. Al	Heat treated Rolled	30000 64000	20600 45000	4 8	10 50	80 120	Furniture, interior light fixtures, wire, castings	Resists sea water corrosion
7851	T H 60B	M-625	Cu-Ni		79650	52625	20			Thick walled, seamless high pressure drums	Good strength at high temp
7852	T H 61B	M-625	Cu-Ni		85340	55470	23			Thick walled, seamless high pressure drums	Good strength at high temp.
7853	T H 62B	M-625	Cu-Ni		99560	61160	20			Thick walled, seamless high pressure drums	Good strength at high temp.
7854	Patina Steel Deizerei	M-383	0.4 Cu, Mn, Si, P, bal. Fe	Rolled	52000 64000	35000 50000	>25	>50	>100	Pickling installations and structures	High acid resistance
7855	Patina Steel Rauchgas	M-383	0.4 Cu, Mn, Si, P, bal. Fe	Rolled	52000 64000	35000 50000	>25	>50	>100	Structures exposed to smoke and acid fumes	High smoke resistance
7856	Xantal A	M-541	87.2 Cu, 9 Al, 3 Fe, 0.8 Mn	Sand cast	71000 85000		25 15				
7857	Xantal B	M-541	81 Cu, 11 Al, 4 Fe, 4 Ni	Cast Heat treated	101000 114000		1–2 2–4				
7858	Xantal S	M-541	90.4 Cu, 7.8 Al, 0.5 Ni, 0.3 Mn, 1.0 Zn	Annealed Forged	71000 65000		50 50				
7859	Xantal M	M-541	89.5 Cu, 9 Al, 1.5 Ni	Sand cast	64000 78000		28 18				
7860	Duralite	M-541	3 Cu, 0.7 Si, 0.5 Ni, 0.5 Mg, 1.5 Fe, 0.2 Si, bal. Al	Heat treated	55000 67000	41000 51000	18 10		115 140	Pistons, auto and aircraft parts, connecting rod	
7861	Peraluman 7	M-624	7 Mg, 0.5 Mn, bal. Al	Half hard Annealed	60000 43000	43000 29000	15–20 26–30		90–95 80–90	Light alloy parts, aircraft parts	Corrosion resistant
7862	SS 1 Extra Extra	M-459	C, bal. Fe							Cutting tools	High hardness
7863	SS 2 Extra Extra	M-459	C, bal. Fe							Scrapers, hard tools, drawing dies	
7864	SS 3 Extra Extra	M-459	C, bal. Fe							Medium hard tools, milling machine tools	
7865	SS 4 Extra Extra	M-459	C, bal. Fe							Punches, edge engraving tools	Tough
7866	SS 5 Extra Extra	M-459	C, bal. Fe							Hand hammer, center punches	Tough
7867	SS 6 Extra Extra	M-459	C, bal. Fe							Hot chisels, soft tools, riveting set	
7868	ES Extra	M-459	C, bal. Fe							Tools	
7869	HS Prima	M-459	C, bal. Fe							Tools	
7870	Wolframant	M-459	C, W, Co, Cr, V, bal. Fe							Cutters, fluters	
7871	Diamant Extra	M-459	C, W, Cr, V, bal. Fe							Gun rifling tools, engraving tools	
7872	Diamant 3	M-459	C, W, bal. Fe							Fluting tools	
7873	Goliath Spezial	M-459	High C, high Cr, bal. Fe							Drawing dies	
7874	Goliath	M-459	High C, high Cr, bal. Fe							Drawing dies	
7875	Diamant 5	M-459	C, W, Cr, bal. Fe							Drawing dies	
7876	CRZ	M-459	C, Cr, bal. Fe							Drawing dies	
7877	Bora	M-459	C, high Cr, W, bal. Fe							High duty cutting tools	
7878	Veresta	M-459	C, Cr, W, Mn, bal. Fe							Cutters	
7879	Veresta Spezial	M-459	C, Cr, Mn, bal. Fe							Thread cutters, screw taps	
7880	CRM	M-459	C, Mn, Cr, bal. Fe							Engraving tools, screw dies	
7881	KS	M-459	C, Cr, bal. Fe							Screw dies	For mass production
7882	SSC	M-459	C, Cr, Co, Mo, bal. Fe							Cutters	
7883	WSP	M-459	C, W, bal. Fe							Screw tools	
7884	WSPS	M-459	C, bal. Fe							Shears, knives	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7885	CS	M-459	C, Cr, Si, bal. Fe							Shears, knives	
7886	Durax H	M-459	C, W, Cr, V, bal. Fe							Tools, cutters	
7887	Durax W2	M-459	C, W, Cr, Si, bal. Fe							Shears, cutters, tools	
7888	Durax W3	M-459	C, W, Cr, Si, bal. Fe							Riveting sets, hot chisels	
7889	Durax Spezial	M-459	C, W, Cr, bal. Fe							Screws, hot dies, knives, water cooled shears	
7890	KSN	M-459	C, bal. Fe							Cold dies	Cold work steel
7891	NPU	M-459	C, bal. Fe							Cold heading dies, stamping dies	
7892	TOS	M-459	C, bal. Fe							Knives, needle dies	
7893	Best	M-459	C, bal. Fe							Barb wire netting, stamping dies	
7894	CNK 2	M-459	C, Ni, Cr, W, bal. Fe							Resin dies, stainless cutlery	Corrosion resistant
7895	PSP	M-459	C, Ni, Cr, bal. Fe							Coining dies	
7896	CRS	M-459	C, Cr, bal. Fe							Tappets	
7897	SS 3V	M-459	C, bal. Fe							Tools	Cold work steel
7898	WC 2	M-459	C, W, Cr, Co, V, bal. Fe							Hot work tools	
7899	Spezial W	M-459	C, W, Cr, V, bal. Fe							Mandrels, hot work dies	
7900	CNS 2h	M-459	C, Cr, Ni, W, bal. Fe							Mandrels, stamps,bakelite dies	
7901	DMS	M-459	C, W, Cr, Ni, bal. Fe							Hot work steel	
7902	DCNR	M-459	C, Cr, Ni, Mo, bal. Fe							Wire cutting presses	
7903	E 612	M-459	C, Cr, W, Co, bal. Fe							Die casting dies	
7904	E 975	M-459	C, Cr, V, bal. Fe							Die casting dies	
7905	Goliath Spez. M	M-459	C, Cr, Ni, Mo, bal. Fe							Swaging dies	
7906	DMN	M-459	C, Mn, bal. Fe							Swages, dies	
7907	DMW	M-459	C, Mn, bal. Fe	Water hardened						Swages, dies	
7908	SKL	M-459	C, Cr, bal. Fe							Ball bearings	
7909	SK	M-459	C, Cr, bal. Fe							Balls	
7910	CRW	M-459	C, Cr, bal. Fe							Cold rolling steel	
7911	Kobalt Spezial	M-459	C, W, Co, Cr, V, Mo, bal. Fe							High speed cutters	High speed steel
7912	Kobalt I	M-459	C, W, Co, Cr, V, Mo, bal. Fe							High speed cutters	High speed steel
7913	Kobalt II	M-459	C, W, Co, Cr, V, Mo, bal. Fe							High speed cutters	High speed steel
7914	Kobalt III	M-459	C, W, Co, Cr, V, Mo, bal. Fe							High speed cutters	High speed steel
7915	SA 500	M-459	C, Cr, V, Mo, W, bal. Fe							Cutters	Wear resistant
7916	SA 300	M-459	C, Cr, V, Mo, W, bal. Fe							Heavy duty drills, saw segments	
7917	SA 200	M-459	C, Cr, V, Mo, W, bal. Fe							Planing and milling tools	
7918	000 Spezial 31	M-459	C, Cr, V, Mo, W, bal. Fe							Turning, shaping and slotting tools	
7919	000 Extra	M-459	C, W, Cr, V, Mo, bal. Fe							High speed cutters	High speed steel
7920	Rapid Spezial	M-459	C, W, Cr, V, Mo, bal. Fe							High speed cutters	High speed steel
7921	Cardinal Rapid	M-459	C, W, Cr, V, Mo, bal. Fe							High speed cutters	High speed steel
7922	Remanit 1510	M-459	.10 C, 15 Cr, .5 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
7923	Remanit 1610	M-459	.10 C, 16 Cr, .2 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
7924	Remanit 1520	M-459	.2 C, 15 Cr, .5 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
7925	Remanit 1530	M-459	.3 C, 15 Cr, .5 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
7926	Remanit 1530F	M-459	.3 C, 1.4 Si, 15 Cr, .5 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
7927	Remanit 1620	M-459	.2 C, 16 Cr, 2 Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
7928	Remanit 1540	M-459	.4 C, 15 Cr, .2 Mo, bal. Fe							Corrosion resistant parts, knives	Corrosion resistant
7929	Remanit 1710	M-459	.10 C, 17 Cr, .5 Ni, 1.8 Mo, bal. Fe							Corrosion resistant parts, knives	Corrosion resistant
7930	Remanit 1710A	M-459	.10 C, 17 Cr, .5 Ni, .4 Mo, .2 S, bal. Fe							Corrosion resistant parts	Corrosion resistant
7931	Remanit 1710S	M-459	.10 C, 17 Cr, .5 Ni, 1.8 Mo, .7 Ta, bal. Fe							Corrosion resistant parts	Welding quality
7932	Remanit 1740	M-459	.4 C, 17 Cr, .5 Ni, 1.5 Mo, bal. Fe							Corrosion resistant parts	Acid resistant
7933	Remanit 1790	M-459	.9 C, 17 Cr, 1.0 Mo, bal. Fe							Knives, shears	Heavy duty

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7934	Remanit 1790C	M-459	.9 C, 17 Cr, 1.5 Co, .5 Mo, .3 V, bal. Fe							Knives, shears	Heavy duty
7935	Remanit 1800M	M-459	.08 C, 9 Mn, 18 Cr, 1.5 Ni, bal. Fe							Corrosion resistant parts	Austenitic, stainless
7936	Remanit 1880	M-459	C, Cr, Ni, bal. Fe							Corrosion resistant parts	Austenitic, stainless
7937	Remanit 1880S	M-459	.09 C, 18 Cr, 8 Ni, 1.5 Ta, bal. Fe							Corrosion resistant parts	Wrought quality
7938	Remanit 1880SS	M-459	.09 C, 18 Cr, 8 Ni, 2 Mo, 1 Ta, bal. Fe							Textile industry	Corrosion resistant
7939	Remanit 2810	M-459	.10 C, 28 Cr, 1.5 Ni, 2 Mo, .7 Co, bal. Fe							Textile industry	Resists HCl and H_2SO_4
7940	Remanit 0327	M-459	.10 C, 1.2 Mn, 3.0 Si, 27 Ni, 2 Mo, 2 Cu, bal. Fe							Textile industry	Resists HCl and H_2SO_4
7941	Thermax 12	M-459	C, Cr, Ni, bal. Fe							Heat resistant parts	1200°F. max.
7942	Thermax 11	M-459	C, Cr, Ni, bal. Fe							Heat resistant parts	1100°F. max.
7943	Thermax 10	M-459	C, Cr, Ni, bal. Fe							Heat resistant parts	1000°F. max.
7944	Thermax 9S	M-459	C, Cr, Ni, bal. Fe							Heat resistant parts	950°F. max.
7945	Thermax 9	M-459	C, Cr, bal. Fe							Annealing boxes	900°F. max.
7946	Thermax 8	M-459	C, Cr, bal. Fe							Glass and porcelain industries	800°F. max.
7947	GSE	M-459	C, Cr, Ni, W, Si, bal. Fe							Valves	Austenitic
7948	GSC	M-459	C, Cr, Mo, Co, bal. Fe							Valves for internal combustion engines	
7949	GS	M-459	C, Cr, bal. Fe							Valves for internal combustion engines	
7950	DN 15	M-459	C, Ni, Mn, bal. Fe							Non-magnetic parts	Non-magnetic
7951	DN 25	M-459	C, Ni, Mn, bal. Fe							Non-magnetic parts	Non-magnetic
7952	DN 42	M-459	C, Ni, bal. Fe							Wire for electrical apparatus	
7953	DN 36	M-459	C, Ni, bal. Fe							Wire for electrical apparatus	
7954	DN 33	M-459	C, Ni, bal. Fe							Wire for electrical apparatus	
7955	DCN 80	M-459	C, Ni, bal. Fe							Electric resistance wire	
7956	DCN 60	M-459	C, Ni, bal. Fe							Electric resistance wire	
7957	Magnet C	M-459	C, Cr, bal. Fe							Magnet steel	
7958	Magnet W	M-459	C, W, bal. Fe							Magnet steel	
7959	Kobalt 125	M-459	C, Co, Cr, bal. Fe							Magnet steel	
7960	Kobalt 160	M-459	C, Co, Cr, bal. Fe							Magnet steel	
7961	Kobalt 200	M-459	C, Co, Cr, bal. Fe							Magnet steel	
7962	Kobalt 300	M-459	C, Co, Cr, bal. Fe							Magnet steel	
7963	Oerstit 500	M-459	C, 14 Al, 25 Ni, bal. Fe							Magnet steel	
7964	Oerstit 700	M-459	C, Ni, Al, bal. Fe							Magnet steel	
7965	Pantanax	M-459	C, Mn, bal. Fe							Wear resistant parts	Wear resistant
7966	LS	M-459	C, Mn, bal. Fe							Rock press plates	
7967	SA	M-459	C, Si, Mn, bal. Fe							Springs	
7968	BS 1	M-459	C, bal. Fe							Rock drills	
7969	BS 4	M-459	C, bal. Fe							Rock drills	
7970	RS 1 Spezial	M-459	C, bal. Fe							Steel trimming and weld steel	
7971	RS 2 Spezial	M-459	C, bal. Fe							Steel trimming and weld steel	
7972	RS 3	M-459	C, bal. Fe							Steel trimming and weld steel	
7973	RS 4	M-459	C, bal. Fe							Steel trimming and weld steel	
7974	TP	M-459	C, W, bal. Fe							Steel trimming and weld steel	
7975	Spezial No. 5	M-459	C, W, Cr, bal. Fe							Steel trimming and weld steel	
7976	VS Spezial Extra	M-459	C, W, V, bal. Fe							Steel trimming and weld steel	
7977	FCW Spezial	M-459	C, Cr, W, bal. Fe							Files	
7978	FCF Spezial	M-459	C, Cr, bal. Fe							Files	
7979	FC Spezial	M-459	C, Cr, bal. Fe							Files	
7980	F Spezial	M-459	C, bal. Fe							Files	
7981	F Extra	M-459	C, bal. Fe							Files	
7982	CVFS	M-459	C, Cr, Mn, bal. Fe							Springs	
7983	SC	M-459	C, Cr, Si, Mn, bal. Fe							Springs	
7984	SA/O	M-459	C, Si, Mn, bal. Fe							Springs	
7985	SA/W	M-459	C, Si, Mn, bal. Fe							Springs	
7986	SSF	M-459	C, Mn, bal. Fe							Axles, mandrels	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
7987	SSM	M-459	C, Mn, bal. Fe							Axles, mandrels	
7988	SSB	M-459	C, bal. Fe							Spindles, axles	
7989	HM	M-459	C, Mn, bal. Fe							Hand chisels	
7990	DZ	M-459	C, bal. Fe							Scales, rules	
7991	BMS Spezial	M-459	C, W, bal. Fe							Metal saws	
7992	BMS Extra	M-459	C, W, bal. Fe							Metal saws	
7993	BMS	M-459	C, bal. Fe							Metal saws	
7994	BKS Extra	M-459	C, Cr, V, bal. Fe							Wood saws	
7995	BKS Spezial	M-459	C, Mn, bal. Fe							Wood saws	
7996	BKS	M-459	C, Mn, bal. Fe							Wood saws	
7997	EW	M-459	C, bal. Fe	Water treated	72000	42000	29				
					85000	56000	22				
7998	CWM, S431	M-459	C, Cr, bal. Fe	Water treated	78500	50000	27				
					100800	72000	22				
7999	CWH	M-459	C, Cr, bal. Fe	Water treated	114000	92000	18				
					135000	114000	15				
8000	NW 1	M-459	C, Ni, bal. Fe	Water treated	78000	50000	29				
					100800	72000	22				
8001	NW 2	M-459	C, Ni, bal. Fe	Water treated	85000	65000	22				
					114000	92000	18				
8002	NW 3	M-459	C, Ni, bal. Fe	Oil treated	85000	65000	24				
					114000	85000	18				
8003	NW 5	M-459	C, Ni, bal. Fe	Oil treated	101000	72000	26				
					127000	101000	20				
8004	MOW	M-459	C, Ni, Mo, bal. Fe	Water treated	101000	85000	20				
					121000	107000	17				
8005	CNW 3	M-459	C, Cr, Ni, bal. Fe	Oil treated	107000	85000	19				
					135000	114000	14				
8006	CNW 4	M-459	C, Cr, Ni, bal. Fe	Oil treated	157000	143000	13				
					185000	171000	10				
8007	E 724Z	M-459	C, Cr, Ni, bal. Fe	Oil treated	171000	150000	13				
					193000	171000	10				
8008	CNWZ	M-459	C, Cr, Ni, bal. Fe	Oil treated	177000	157000	13				
					200000	177000	10				
8009	EMDCW	M-459	C, Cr, Mo, bal. Fe	Oil treated	114000	85000	17				
					143000	114000	11				
8010	EMDC	M-459	C, Cr, Mo, bal. Fe	Oil treated	150000	127000	11				
					177000	157000	8				
8011	EMOCh	M-459	C, Cr, Mo, bal. Fe	Oil treated	164000	143000	10				
					192000	171000	7				
8012	E 21 S	M-459	C, Cr, Ni, Mo, bal. Fe	Oil treated	150000	128000	12				
					177000	157000	9				
8013	E 22 S	M-459	C, Cr, Ni, Mo, bal. Fe	Oil treated	171000	150000	11				
					199000	177000	8				
8014	DMH	M-459	C, Mn, Si, bal. Fe				22				
							17				
8015	DN 1	M-459	C, Mn, Ni, bal. Fe				20				
							16				
8016	DN 2	M-459	C, Cr, Ni, bal. Fe				21				
							17				
8017	DN 3	M-459	C, Ni, bal. Fe				21				
							17				
8018	DN 5	M-459	C, Ni, bal. Fe				20				
							16				
8019	DCN 2W	M-459	C, Cr, Ni, bal. Fe				22				
							19				

Serial No.	Alloy	Mfg. No	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8020	DCN 3W	M-459	C, Cr, Ni, bal. Fe				20 17				
8021	DCN 3	M-459	C, Cr, Ni, bal. Fe				19 16				
8022	DCN 4	M-459	C, Cr, Ni, bal. Fe				17 15				
8023	DCN Extra	M-459	C, Cr, Ni, W, Mo, bal. Fe				16 13				
8024	DCN Spezial	M-459	C, Cr, Ni, W, Mo, V, bal. Fe				15 12				
8025	BSO	M-459	C, Cr, Mn, bal. Fe				20 15				
8026	DMOC weich	M-459	C, Cr, Mo, bal. Fe				14				
8027	BSW, DMOCn	M-459	C, Cr, Mo, bal. Fe				23 18				
8028	BSF; DMOC	M-459	C, Cr, Mo, bal. Fe				18 15				
8029	BSH	M-459	C, Cr, Mo, bal. Fe				18 14				
8030	BSZ	M-459	C, Cr, Mo, bal. Fe				17 13				
8031	D 22 S	M-459	C, Cr, Ni, Mo, bal. Fe				15 13				
8032	DMZ	M-459	C, Cr, bal. Fe				19 16				
8033	DCNA	M-459	C, Cr, Ni, bal. Fe				8 7				
8034	DCR	M-459	C, Cr, Mo, bal. Fe				10 8				
8035	DCRV	M-459	C, Cr, V, bal. Fe				10 8				
8036	DCNO	M-459	C, Cr, Ni, Mo, bal. Fe				10 8				
8037	ZOVM	M-459	C, Cr, Mo, V, bal. Fe				12				
8038	MC 30	M-459	C, Cr, Mo, bal. Fe				17				
8039	MC 40	M-459	C, Cr, Mo, bal. Fe				16				
8040	MC 70	M-459	C, Cr, bal. Fe				25				
8041	MC 100	M-459	C, Cr, Ni, Mo, bal. Fe				16				
8042	HMS Steels	M-459	C, bal. Fe							General machine parts	
8043	Elastuf Chro-Moly Steel	M-213 M-307	0.25-0.45 C, Cr, Mo, bal. Fe	Heat treated	115000 145000	95000 125000	22 16	60 45	293 340	Machine parts, shafts, gears, worms, pinions, axles, high temperature bolts	High creep strength and impact
8044	Elastuf SAE 3140	M-213 M-307	0.35-0.45 C, Cr, Ni, bal. Fe	Heat treated	115000 135000	95000 115000	22 16	55 45	262 320	Shafts, axles, bolts, studs, gears, machine parts	Tough
8045	Elastuf SAE 2335	M-213 M-307	0.30-0.40 C, 3.5 Ni, bal. Fe	Hot rolled	90000 100000	55000 65000	28 18	52 42	170 212	Machine parts	Tough
8046	Elastuf JJ	M-307	0.15-0.25 C, bal. Fe	Hot rolled	60000 70000	35000 45000	35 25	50 40	150 180	Forgings, welded parts, carburized parts	Uniform quality controlled. Formerly "Potts J.J."
8047	Thredwel	M-307	0.08-0.25 C, 0.075-0.15 S, bal. Fe	Hot rolled	50000 60000	25000 35000	35 20	60 35		Bolts, studs, machine parts	Rapid machinability
8048	Weartuf Steel	M-307	C, Mn, Si, bal. Fe	Hot rolled	115000 145000				235 300	Scraper blades, conveyor buckets, liners, mixers, hoppers, chutes, screens, dipper lips	Wear and abrasion resistant
8049	Blombit	M-621	2-7 Ag, 93-98 Cu	Forged	72000 78000		8 5		120 140	Electrodes and tips for spot welding	83-90% conductivity
8050	Spreemetall	M-621	43 Zn, 1.5 Mn, 0.5 Pb, bal. Cu	Cold rolled	86000	50000	5		140	Sheets, bars, forgings	Resists sea water corrosion

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8051	B.A./40 J	M–28	8 Si, bal. Al	Sand cast	20000 22000	9500 10000	11 6		47	Medium strength castings	Corrosion resistant
8052	Lukens Nickel Steel	M–176	0.22 max. C, 0.4-0.8 Mn, 2-2.5 Ni, 0.15-0.25 Si, bal. Fe	Rolled	70000	35000				Vessels, boiler shells, dewaxing equip., oil refinery	Resists low temp. embrittlement
8053	Lukens Chrome Nickel Steel	M–176	0.35-0.45 C, 0.3-0.6 Mn, 3.25-3.75 Ni, 1.25-1.75 Cr, bal. Fe	Heat treated					200 300	Hot rolled steel plates, wear and abrasion resistant parts	Resists abrasion
8054	Lukens Manganese-Vanadium Steel	M–176	0.18 max. C, 1.0-1.45 Mn, 0.08-0.18 V, bal. Fe	Rolled	80000 95000	50000				Structural purposes	Welds satisfactorily
8055	Lukens Inconel-Clad Steel	M–176	Inconel bonded to steel base		55000	27000				Corrosion resistant parts	10% Inconel of total plate thickness
8056	Lukens Cromansil Steel (Grade A)	M–176	0.17 max. C, 1.05-1.4 Mn, 0.3-0.6 Cr, 0.6-0.9 Si, bal. Fe	Rolled	75000 90000	45000 54000				High tensile plate work	Tough
8057	Lukens Cromansil Steel (Grade B)	M–176	0.25 max. C, 1.05-1.4 Mn, 0.3-0.6 Cr, 0.6-0.9 Si, bal. Fe	Rolled	85000 100000	47000 55000				High tensile plate work	Tough
8058	Lukens Carbon-Molybdenum Steel	M–176	0.25 max. C, 0.9 max. Mn, 0.25-0.60 Mo, bal. Fe	Rolled	65000 87000	33000 41000				Shell and vessel work, general fabrication	Good creep values at elevated temp.
8059	Jal-Ten	M–173	C, Mn, Cu, bal. Fe							Structural parts	Resists atm. corr.
8060	Alcoa 11S	M–4	5.5 Cu, .5 Pb, .5 Bi, bal. Al	T3 T8 T	49000 57000 57000	42000 44000 36000	14 14 15		95 100 110	Automatic screw machine parts	Free machining
8061	Trojan Steel No. 9½	M–307	0.9-1.0 C, bal. Fe	Annealed					180 210	Tools, dies, brakes, forming dies	Hardens well
8062	Elastuf Type A Steel No. 14	M–307 M–213	0.30-0.35 C, Cr, V, bal. Fe	Heat treated	125000 135000	115000 125000	18 12	64 59	262 325	Shafts, gears, worms, pinions, axles, machine parts	Strong and tough
8063	Nitralloy G	M–97	0.3-0.4 C, 0.4-0.7 Mn, 0.9-1.4 Cr, 0.15-0.25 Mo, 0.8-1.2 Al, bal. Fe							Nitrided parts	Nitriding steel
8064	Nitralloy H	M–97	0.2-0.3 C, 0.4-0.7 Mn, 0.8-2-1.2 Cr, 0.15-0.25 Mo, 0.8-1.2 Al, ba. Fe							Nitrided parts	Nitriding steel
8065	Nitralloy Special Sulfur	M–97	0.3-0.4 C, 0.4-0.7 Mn, 0.08-0.18 S, 0.9-1.4 Cr, 0.15-0.25 Mo, 0.9-1.4 Al, bal. Fe							Nitrided parts	Nitriding steel
8066	Enduro AA High Carbon	M–97	0.12 min. C, 15-18 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
8067	Enduro 19-9	M–97	0.08-0.20 C, 18-20 Cr, 8-10 Ni, bal. Fe							Stainless parts	Austenitic
8068	Enduro 20-25	M–97	0.25 max. C, 19-21 Cr, 24-26 Ni, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
8069	Enduro "S" Turbine Quality	M–97	0.12 max. C, 11.5-13 Cr, bal. Fe							Turbine blades	Corrosion resistant
8070	Enduro "S" High Carbon	M–97	0.12 min. C, 12-15 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
8071	Worthite	M–463	48 Fe, 24 Ni, 19 Cr, 3 Mo, 0.07 max. C, 3.5 Si	Cast	65000 75000	30000 35000	45 35	45 35	125 150	Pumps, valves, acid and alkali resisting castings	Resists H_2SO_4 and weak HCl
8072	Antaciron	M–639	14.5 Si, 84.5 Fe	Cast	15000 18000	15000 18000	0	0	450 475	Equipment to resist corrosion acids carrying abrasive solids	Finished by grinding
8073	"Mushet" Self Hardening Steel	M–233	0.05 P, 0.5 Cr, 2.5 C, 0.6 Si, 1.7 Mn, 7 W, bal. Fe							Tools, dies	Self-hardening
8074	U.S.S. 12	M–11	0.10 max. C, 0.5 Mn, 0.5 Si, 12 min. Cr, bal. Fe	(minimum)	70000	30000	20			Coal screens, oil refinement equip., turbine blades	Corrosion resistant
8075	U.S.S. 17	M–11	0.10 max. C, 0.6 Mn, 0.5 Si, 15 min. Cr, bal. Fe, 0.035 max. P, 0.03 max. S	(minimum)	70000	35000	22			Oil refinery equip., preheaters, kitchen equip.	Corrosion resistant Heat resistant below 1550°F.
8076	U.S.S. 25-12	M–11	0.30 max. C, variable Mn, S, P, Si, 12 min. Ni, 22 min. Cr, bal. Fe	Annealed	90000	40000	30			Annealing boxes, furnace conveyors, furnace linings, air preheaters	For high temp. service between 1500-2100°F.

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8077	U.S.S. 18-8 Stabilized Type 320	M-11	0.12 max. C, 0.7 Mn, 0.75 Si, 17 min. Cr, 7 min. Ni, 5-½ (C %-.02) Ti, bal. Fe	(minimum)	80000	30000	50			Exhaust stacks, airplane gasoline tanks, welded structures	Resists intergranular corrosion, stainless
8078	U.S.S. 18-8 Stabilized Type 321	M-11	0.12 max. C, 0.7 Mn, 0.75 Si, 18 min. Cr, 8 min. Ni, 5-½ (C %-.02) Ti, bal. Fe	(minimum)	80000	30000	50			Exhaust stacks, airplanes gasoline tanks, welded structures	Resists intergranular corrosion, stainless
8079	U.S.S. 18-8 Molybdenum Bearing	M-11	0.08 max. C, 0.7 max. Mn, 0.75 max. Si, 17 min. Cr, 7 min. Ni, 2-4 Mo, bal. Fe	(minimum)	80000	30000	50			Wool dyeing in the textile industry, paper and pulp mill equip.	Acid resistant, stainless
8080	U.S.S. 27	M-11	0.20 max. C, 0.6 max. Mn, 0.5 max. Si, 23 min. Cr, bal. Fe	Annealed	75000	40000	20			Furnace linings and parts, air and gas preheaters, conveyors	Toughness reduced by long periods of heating
8081	U.S.S. Cor-Ten	M-11	0.10 max. C, 0.1-0.3 Mn, 0.1-0.2 P, 0.5-1.0 Si, 0.3-0.5 Cu, 0.5-1.5 Cr, bal. Fe	Annealed	65000 75000	50000 60000	27 22			Tanks, ships, trucks, railroad cars, buses, light weight construction	4 to 6 times more resistant to atm. corrosion than mild steel
8082	U.S.S. Man-Ten	M-11	0.35 max. C, 1.25-1.7 Mn, 0.15 min. Si, 0.2 Cu, bal. Fe	Annealed	80000 90000	55000 65000	25 20			Used where high strength is desired	Resists abrasion
8083	U. S.S. 18-8 S	M-90	0.08 max. C, 2.0 max. Mn, 1.75 max. Si, 8-12 Ni, 17-20 Cr, bal. Fe	Annealed	80000 95000	35000 45000	60 40		135 185	Food-dairy-oil-chemical industries	Resistance to corrosion and oxidation,
8084	U.S.S. 18-8 Stabilized	M-90	0.10 max. C, 2.5 max. Mn, 1.75 max. Si, 8-12 Ni, 17-20 Cr, bal. Fe, 4xC = Ti	Annealed	80000 95000	35000 45000	60 40		135 185	Food-dairy-oil-chemical industries	Resistance to corrosion and oxidation adaptable to welding
8085	Bain Alloy	M-90	0.10-0.20 C, 0.6 max. Mn, 0.4-0.75 Si, 1.5-2.0 Cr, 0.6-0.8 Mo, bal. Fe	Normalized and drawn	70000	50000	30		140 160	Oil cracking still tubes, hot oil piping, steam pipes	Corrosion resistant
8086	U.S.S. Sil-Ten	M-377	0.40 max. C, 0.6 min. Mn, 0.2 min. Si, 0.0-0.2 min. Cu bal. Fe,	Hot rolled	80000 95000	45000	30 18			Structural parts	0.20 min. Cu added as ordered to increase corrosion resistance
8087	2½ Nickel Steel	M-90	0.10-0.20 C, 0.3-0.6 Mn, 0.1-0.2 Si, 2.25-2.75 Ni, bal Fe	Normalized	65000	45000	30			Piping for low temp. service (sub-zero), stationary boiler tubes	
8088	U.S.S. 18-8	M-12	0.08-.20 C, 2.0 max. Mn, 0.75 max. Si, 17-19 Cr, 7-9 Ni, bal. Fe	Annealed Cold worked	85000 100000 300000	25000 40000 250000	65 50 1	75 60 40		Corrosion resistant parts	Stainless, marked workability
8089	U.S.S. 17	M-12	0.12 max. C, 1.0 max. Mn, 1.0 max. Si, 14-18 Cr, bal. Fe	Annealed	70000 85000	35000 45000	35 25	60 50		Corrosion resistant parts, decorative purposes	Corrosion resistant
8090	U.S.S. 27	M-12	0.35 max. C, 1.0 max. Mn, 1.0 max. Si, 23-30 Cr, bal. Fe	Annealed	75000 90000	50000 60000	30 20	60 50		Heat and corrosion resistant parts	Minimum scaling at elevated temp.
8091	U.S.S. 25-12	M-12	0.20 max. C, 2.0 max. Mn, 0.75 max. Si, 22-26 Cr, 12-15 Ni, bal. Fe	Annealed	90000 105000	30000 45000	65 50	75 60		Corrosion and heat resistant parts	Increased corrosion resistance and min. scaling at high temp.
8092	U.S.S. 18-8T	M-12	0.10 max. C, 0.5 max. Mn, 0.75 max. Si, 17-19 Cr, 8-11 Ni, Ti = 4 × C, bal. Fe	Annealed	85000 100000	25000 40000	65 50	75 60		Welded structures to avoid intergranular corrosion	Stainless, austenitic
8093	U.S.S. 18-8 S Mo	M-12	0.11 max. C, 0.5 Mn, 0.75 max. Si, 17-19 Cr, 7-9 Ni, 2-4 Mo, bal. Fe	Annealed	95000 110000	35000 50000	55 40	65 50		Heat and corrosion resistant parts	Increased resistance to acid corrosion
8094	U.S.S. 4/6 Cr	M-604	0.20 max. C, 0.3-0.6 Mn, 0.15-0.50 Si, 4-6 Cr, bal. Fe	Annealed	65000	25000	30	50	187	Oil still tubes, oil still apparatus	Heat and corrosion resistance
8095	U.S.S. 12	M-604	0.15 max. C, 0.8 max. Mn, 0.75 max. Si, 11.5-14 Cr, bal. Fe	Annealed	70000	35000	25	50	202	Turbine blades, pump rods, mine pumps, valve stems, bolts, coal screens, golf clubs	Moderate corrosion and heat resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8096	U.S.S. 18-8	M-604	0.20 max. C, 0.75 max. Mn, 0.75 max. Si, 8-10 Ni, 17-19 Cr, bal. Fe	Annealed	80000	35000	40	50	207	Food containers, sinks, pipes, shafts, bolts, railroad passenger cars, inside trim, architectural	Heat and corrosion resistant
8097	U.S.S. 25-12	M-604	0.20 max. C, 2 max. Mn, 1.0 max. Si, 12-15 Ni, 22-26 Cr, bal. Fe	Annealed	90000	40000	40	45	217	Rider sheets, preheaters, walking beams, furnace lining, furnace doors, annealing boxes	Heat and corrosion resistant between 1500-2100°F.
8098	U.S.S. 19-9	M-604	0.20 max. C, 0.75 max. Mn, 0.75 max. Si, 8-10 Ni, 18-20 Cr, bal. Fe	Annealed	80000	35000	35	50	217	Trim, lockers, decking on ocean vessels	Heat and corrosion resistance higher than U.S.S. 18-8
8099	U.S.S. 20-10	M-604	0.20 max. C, 0.75 max. Mn, 0.75 max. Si, 9-12 Ni, 19-22 Cr, bal. Fe	Annealed	80000	35000	35	50	217	Trim and structural purposes, on ocean vessels	Heat and corrosion resistance higher than U.S.S. 19-9
8100	Hadfield Manganese Steel	M-604	1.0-1.35 C, 10.5-15 Mn, 0.10 max. P, 0.1-0.3 Si, bal. Fe	Quenched						Perforated screens, dipper teeth, journal box liners, wear plates, screens, rails	Abrasion resistant
8101	Cromansil	M-604	0.35 max. C, 0.9-1.5 Mn, 0.60-0.95 Si, 0.30-0.70 Cr, bal. Fe	(minimum)	90000	60000				Light weight construction	Corrosion resisting properites
8102	Bosch ME 15	M-304	78 Cu, 4 Pb, 3 Sn, bal. Zn	Sand cast	32000		15		70	Housings, fittings	
8103	Bosch Ns 1	M-304	Cu, Ni, Fe, Mn	Pressed	85000		30	30	150	For plates of nickel color	
				H Hard	100000		15	20	180		
8104	Bosch Pb 7	M-304	74 Pb, 10 Sn, 15 Sb, 1 Cu	Cast	8000				30	Bearing shells	
8105	Bosch AM-14	M-304	90 Cu, 10 Al	Pressed	85000		25		150	Parts exposed to H_2SO_4 and HNO_3	Acid resistant
8106	Bosch Al-1	M-304	4 Cu, 0.7 Mn, 0.9 Mg, bal. Al	Pressed	42500		15	20	85	Pressed parts or shapes	Duralumin type
				Heat treated	60500		15				
8107	Bosch Al-12	M-304	>99.5 Al	Pressed	14200		30		20	Pressed parts and rods	Pure Al
				¼ Drawn	17800		6		30		
8108	Bosch Al-25	M-304	5 Mg, Mn, bal. Al	Pressed	46000		15	25	85	Light alloy parts	Corrosion resistant
				Drawn	49000		7	20	95		
8109	Bosch Am 158	M-304	1.5 Mn, bal. Al	Pressed	17800		20	50	35	Rods, tubes, pressings	
				Drawn	21300		6	30	50		
8110	Ferro Molybdenum (Standard)	M-640	1.6-2.25 C, 58-65 Mo, bal. Fe							Metallurgical applications	
8111	Ferro Molybdenum (Low Carbon)	M-640	0.50 max. C, 60-70 Mo,							Metallurgical applications	
8112	Ferro Tungsten (A.S.T.M.)	M-640	0.60-0.70 C, 70-80 W, 1.0 max. Si, bal. Fe							Metallurgical applications	Sum H_2S metals less than 0.25%
8113	Ferro Tungsten (Standard)	M-640	0.60-0.70 C, 76-80 W, 0.75 max. Si, bal. Fe							Metallurgical applications	Sum H_2S metals less than 0.25%
8114	Ferro Tungsten (Low Melting)	M-640	2.5 C, 65-75 W, 1.5 max. Si, bal. Fe							Metallurgical applications	Sum H_2S metals less than 0.25%
8115	Calite BL	M-30	0.35 C, 21 Cr, 9 Ni, bal. Fe	Cast	75000		30	23		Tube supports	Heat resistant to 1800°F. Obsolete
8116	Calite BL-28	M-30	0.35 C, 26 Cr, 10 Ni, bal. Fe	Cast	75000		25	14		Furnace parts, tube supports	Heat resistant to 2000°F. Obsolete
8117	Calite N-2	M-30	0.35 C, 14 Cr, 60 Ni, bal. Fe	Cast						Carburizing boxes, furnace parts	Heat resistant to 2000°F. Obsolete
8118	Calorized 4-6 Chr. Moly	M-30	0.15 C, 0.5 Mo, 4-6 Cr, bal. Fe							Parts to resist erosion and hydrogen sulfide	35% Al-$\frac{1}{16}$" case
8119	Calorized DM Steel	M-30	0.12 C, 1.25 Cr, 0.60 Mo, 1 Si, 0.8 Mn, bal. Fe							Tubes, bolts, cracking tubes, super heaters	35% Al-$\frac{1}{16}$" case
8120	Calorized 1% Moly Steel	M-30	0.15 C, 1 Mo, bal. Fe							Tubes, bolts, gas pyrolysis, polymerization equip.	35% Al-$\frac{1}{16}$" case
8121	Titan Resistaloy Bronze	M-122	59 Cu, 2 Al, 1 Ni, 0.5 Si, 0.25 Fe, bal. Zn	Cold drawn	109750	85000	14.5	18.4	197	Shafts, bearings, bolts, nuts, studs, high tensile forgings	Resists sea water corrosion

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8122	Colmonoy	M-642	Special composition							Welding rods, hard facing rods, electrodes	Resists HCl and HNO3
8123	U.S.S. 12	M-90	0.10 max. C, 0.5 max. Mn, 0.5 max. Si, 12-14 Cr, bal. Fe	Annealed Quench and drawn	65000 125000	35000 100000	35 20		140 230	Oil and chemical industries requiring high strength and corrosion resistance	Corrosion resistant
8124	4/6 Cr Steel	M-90	0.15 max. C, 0.5 max. Mn, 0.5 max. Si, 4-6 Cr, bal. Fe	Annealed (minimum)	60000	25000	30		163 max.	Oil cracking stills, hot oil piping, high temp. steam piping	
8125	4/6 Cr Steel	M-90	0.20 max. C, 0.5 max. Mn, 0.5 max. Si, 4-6 Cr, bal. Fe	Annealed (minimum)	60000	25000	30		170 max.	Oil cracking stills, hot oil piping, high temp. steam piping	
8126	4/6 Cr-Mo Steel	M-90	0.15 max. C, 0.5 max. Mn, 0.5 max. Si, 4-6 Cr, bal. Fe, 0.45-0.65 Mo	Annealed (minimum)	60000	25000	30		163 max.	Oil cracking stills, hot oil piping, high temp. steam piping	Higher creep strength than 4/6 Cr Steel
8127	4/6 Cr-Mo Steel	M-90	0.20 max. C, 0.5 max. Mn, 0.5 max. Si, 4-6 Cr, 0.45-0.65 Mo, bal. Fe	Annealed (minimum)	60000	25000	30		170 max.	Oil cracking stills, hot oil piping, high temp. steam piping	Higher creep strength than 4/6 Cr Steel
8128	4/6 Cr-Mo-Ti Steel	M-90	0.15 max. C, 0.5 max. Mn, 0.5 max. Si, 4-6 Cr, 0.45-0.65 Mo, 4xC = Ti, bal. Fe	Annealed (minimum)	60000	25000	30		163 max.	Oil cracking still tubes, superheater tubes, high temp. steam piping	Does not air harden. Higher corrosion resistance than 4/6 Cr or 4/6 Cr-Mo Steel
8129	U.S.S. Cor-Ten	M-90	0.10 max. C, 0.10-0.30 Mn, 0.50-1.0 Si, 0.5-1.5 Cr, 0.3-0.5 Cu, bal. Fe	Normalized	70000	50000	22			Pipes where strength superior to low C steel as well as better resistance to corrosion desired	
8130	U.S.S. Man-Ten	M-90	0.35 max. C, 1.25-1.7 Mn, 0.15 min. Si, 0.20 min. Cu, bal. Fe	Hot rolled	85000	55000	20				
8131	U.S.S. Sil-Ten	M-90	0.40 max. C, 0.6 min. Mn, 0.20 min. Si, 0.20 min. Cu (if specified) bal. Fe	Hot rolled	80000 95000	45000	18				
8132	Copper Bearing Steel	M-90	0.08-0.18 C, 0.3-0.6 Mn, 0.1-0.2 Si, 0.20-0.35 Cu, bal. Fe							Pipes, boiler tubes	
8133	U.S.S.-18-18FM	M-12	0.08-0.20 C, 2.0 max. Mn, 0.10-0.16 P, 1.0 max. Si, 17-19 Cr, 8-10 Ni, 0.20-0.30 Se, bal. Fe		85000 120000	30000 60000	45 28	75 40	135 200	Corrosion resistant with free machining parts	Free machining. Corrosion resistant
8134	U.S.S. -1210 Cu	M-12	0.07-0.15 C, 0.3-0.6 Mn, 0.11 max. P, 0.060 max. S, bal. Fe, 0.20 min. Cu		60000 150000					Wire for galvanized fences	
8135	E-52100 Wire	M-12	0.95-1.1 C, 0.2-0.5 Mn, 0.03 max. P, 0.035 max. S, 0.15-0.30 Si, 1.2-1.5 Cr, bal. Fe	Annealed or cold drawn						Roller and ball bearings	
8136	U.S.S.-A9260	M-12	0.55-0.65 C, 0.6-0.9 Mn, 0.04 max. P, 0.05 max. S, 1.8-2.2 Si, bal. Fe	Annealed					200 max.	Springs	
8137	U.S.S. 17	M-604	0.12 max. C, 0.5 max. Mn, 0.5 max. Si, 14-18 Cr, bal. Fe	Annealed	85000	50000	25	50	212	Tanks for manufacture of HNO3, auto tire covers, interior decoration	Heat and corrosion resistant
8138	U.S.S. 27	M-604	0.35 max. C, 0.50 max. Mn, 0.50 max. Si, 23-27 Cr	Annealed	75000	50000	20	50	217	Furnace linings, furnace parts, gas preheaters, annealing boxes	Heat resistant 1500-2100°F.
8139	U.S.S. 18-8 Ti	M-604	0.10 max. C, 0.75 max. Mn, 0.75 max. Si, 8-11 Ni, 17-19 Cr, 4xC = Ti, bal. Fe	Annealed	85000	35000	50	50	217	Tubes for stills, smoke stacks, gasoline tanks, oil tanks, aircraft exhaust	For heat & corrosion resistance (1000-1600°F.) and when not practical to anneal after welding

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8140	Carnegie-Illinois High Nickel	M-604	C, 0.4-0.8 Mn, 0.04 max. P, 0.05 max. S, 3.0 min. Ni, bal. Fe	Annealed (minimum)	80000	50000 E.L.	22	40		Forgings	Class H under 12" diameter. A.S.T.M. A-18
8141	Carnegie-Illinois High Nickel	M-604	C, 0.4-0.8 Mn, 0.04 max. P, 0.05 max. S, 3.0 min. Ni, bal. Fe	Annealed (minimum)	80000	50000 E.L.	21	38		Forgings	Class H over 12" to 20" dia. A.S.T.M. A-18
8142	Carnegie-Illinois High Nickel	M-604	C, 0.4-0.8 Mn, 0.04 max. P, 0.05 max. S, 3.0 min. Ni, bal. Fe	Quenched & tempered	100000	70000 E.L.	20	41		Forgings	Class I up to 4" dia. A.S.T.M. A-18
8143	Carnegie-Illinois High Nickel	M-604	C, 0.4-0.8 Mn, 0.04 max. P, 0.05 max. S, 3.0 min. Ni, bal. Fe	Quenched & tempered	100000	65000 E.L.	20	41		Forgings	Class I over 4" to 7" dia. A.S.T.M. A-18
8144	Carnegie-Illinois High Nickel	M-604	C, 0.4-0.8 Mn, 0.04 max. P, 0.05 max. S, 3.0 min. Ni, bal. Fe	Quenched & tempered	90000	60000 E.L.	20	41		Forgings	Class I over 7" to 10" dia. A.S.T.M. A-18
8145	Carnegie-Illinois High Nickel	M-604	C, 0.4-0.8 Mn, 0.04 max. P, 0.05 max. S, 3.0 min. Ni, bal. Fe	Quenched & tempered	85000	55000 E.L.	20	41		Forgings	Class I not over 20" dia. A.S.T.M. A-18
8146	Carnegie-Illinois Medium Nickel	M-604	0.2-0.3 C, 0.65-0.95 Mn, 0.045 max. P, 0.05 max. S, 0.15-0.35 Si, 2.5-3 Ni, 0.15 max. Cr, bal. Fe	Normalized & tempered	80000	55000 E.L.	28	60		Forgings	Class C under 8" dia. AAR M-104-34
8147	Carnegie-Illinois Medium Nickel	M-604	0.2-0.3 C, 0.65-0.95 Mn, 0.045 max. P, 0.05 max. S, 0.15-0.35 Si, 2.5-3.0 Ni, 0.15 max. Cr, bal. Fe	Normalized & tempered	80000	55000 E.L.	28	55		Forgings	Class C-8" and over in dia. AAR M-104-34
8148	Carnegie-Illinois Low Nickel Chromium	M-604	C, Mn, 0.04 max. P, 0.05 max. S, 0.15-0.30 Si, 1.0-1.5 Ni, 0.45-0.45-0.75 Cr, bal. Fe	Quenched & tempered	100000 120000	75000 E.L.	20	50		Forgings	Class L over 2" to 7" dia. A.S.T.M. A-18
8149	Carnegie-Illinois Low Nickel Chromium	M-604	C, Mn, 0.04 max. P, 0.05 max. S, 0.15-0.30 Si, 1.0-1.5 Ni, 0.45-0.75 Cr, bal. Fe	Quenched & tempered	100000 120000	75000 E.L.	18	45		Forgings	Class L over 7" to 10" dia. A.S.T.M. A-18
8150	Carnegie-Illinois Low Nickel Chromium	M-604	0.35-0.45 C, 0.5-0.8 Mn, 0.04 max. P, 0.045 max. S, 1.0-1.5 Ni, 0.45-0.75 Cr, bal. Fe	Normalized, quenched & tempered	105000	70000 E.L.	20	50		Motor shafts	Grade A-2" & under in dia. G.E. Co. B5C9S1
8151	Carnegie-Illinois Low Nickel Chromium	M-604	0.35-0.45 C, 0.5-0.8 Mn, 0.04 max. P, 0.045 max. S, 1.0-1.5 Ni, 0.45-0.75 Cr, bal. Fe	Normalized, quenched & tempered	100000	65000 E.L.	20	50		Motor shafts	Grade A over 2" to 4" dia. G.E. Co. B5C9S1
8152	Carnegie-Illinois Low Nickel Chromium	M-604	0.35-0.45 C, 0.5-0.8 Mn, 0.04 max. P, 0.045 max. S, 1.0-1.5 Ni, 0.45-0.75 Cr, bal. Fe	Normalized quenched & tempered	95000	60000 E.L.	20	50		Motor shafts	Grade A over 4" to 7" dia. G. E. Co. B5C9S1
8153	Carnegie-Illinois High Chromium Nickel	M-604	0.6-0.8 C, 0.2-0.4 Mn, 0.04 max. P, 0.04 max. S, 0.1-0.2 Si, 2.25-2.75 Ni, 4.0-4.75 Cr, bal. Fe	Annealed						Shear blades	
8154	Carnegie-Illinois Nickel-Chromium-Molybdenum-Vanadium	M-604	0.40 max. C, 0.75 max. Mn, 0.30 max. Si, 3.25 max. Ni, 1.25 max. Cr, 0.25 max. V, 0.3-0.5 Mo, bal. Fe	Normalized & annealed	90000		15	24		Turbine Rotor	Radial body tests G.E.Co. B31A1S1
8155	Carnegie-Illinois Nickel-Chromium-Molybdenum	M-604	0.35-0.45 C, 0.5-0.8 Mn, 0.35 max. Si, 1.5-2.0 Ni, 0.5-0.8 Cr, 0.05 max. V, 0.3-0.4 Mo, bal. Fe	Annealed						Forgings	Modified Spec. G.E.Co. B5A14S3
8156	Carnegie-Illinois Nickel-Chromium-Molybdenum	M-604	0.5-0.6 C, 0.5-0.8 Mn, 0.2-0.3 Si, 1.0-1.5 Ni, 0.5-0.8 Cr, 0.20 min. Mo, bal. Fe	Annealed						Shear blades	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8157	Carnegie-Illinois Nickel-Chromium-Molybdenum	M-604	0.55-0.65 C, 0.6-0.8 Mn, 0.2-0.3 Si, 1.5-2.0 Ni, 0.8-1.1 Cr, 0.3-0.4 Mo, bal. Fe	Annealed					202 241	Forgings	
8158	Carnegie-Illinois Nickel-Vanadium-Molybdenum	M-604	0.3-0.4 C, 0.5-0.8 Mn, 0.3 max. Si, 2.5-3.25 Ni, 0.15 min. V, 0.3-0.5 Mo, bal. Fe	Normalized & annealed	90000		15	24		Forgings	Radial body tests G.E.Co. B31A1S2
8159	Carnegie-Illinois Carbon-Molybdenum	M-604	0.25 max. C, 0.04 max. P, 0.04 max. S, 0.4-0.6 Mo, bal. Fe	Annealed	60000	30000 E.L.	20	40		Forgings	G.E.Co. B5Y2S2
8160	Carnegie-Illinois Carbon-Vanadium	M-604	0.40-0.55 C, 0.65-0.95 Mn, 0.15 min. Si, 0.25 max. Ni, 0.15 max. Cr, 0.15 min. V, bal. Fe	Normalized & tempered	90000	60000	24	48		Forgings	Class B under 5" dia. AAR-M-104-34
8161	Carnegie-Illinois Carbon-Vanadium	M-604	0.40-0.55 C, 0.65-0.95 Mn, 0.15 min. Si, 0.25 max. Ni, 0.15 max. Cr, 0.15 min. V, bal. Fe	Normalized & tempered	90000	60000	22	44		Forgings	Class B-5" to 9" dia. AAR-M-104-34
8162	Carnegie-Illinois Carbon-Vanadium	M-604	0.40-0.55 C, 0.65-0.95 Mn, 0.15 min. Si, 0.25 max. Ni, 0.15 max. Cr, 0.15 min. V, bal. Fe	Normalized & tempered	90000	58000	21	42		Forgings	Class B-9" to 13" dia. AAR-M-104-34
8163	Carnegie-Illinois Carbon-Vanadium	M-604	0.45-0.55 C, 0.4-0.6 Mn, 0.18 min. V, bal. Fe	Normalized & tempered						Forgings	
8164	Carnegie-Illinois Silicon-Vanadium	M-604	0.68-0.78 C, 0.3-0.5 Mn, 0.025 max. P, 0.025 max. S, 0.50-0.70 Si, 0.15 min. V, bal. Fe	Annealed						Shear blades	
8165	Carnegie-Illinois Manganese-Vanadium	M-604	0.75-0.85 C, 1.4-1.75 Mn, 0.10-0.25 Si, 0.15-0.30 V, bal. Fe	Annealed, quenched & drawn						Shear blades	
8166	Carnegie-Illinois Chromium-Molybdenum	M-604	0.7-0.8 C, 0.5-0.8 Mn, 0.15-0.25 Si, 1.0-1.3 Cr, 0.4-0.6 Mo, bal. Fe	Annealed						Forgings	
8167	Carnegie-Illinois Carbon-Manganese	M-604	C, 1.5-2.0 Mn, 0.15-0.30 Si, bal. Fe	Quenched & tempered	100000 120000	75000 E.L.	20	50		Forgings	Over 2" to 7" Class L A.S.T.M. A-18
8168	Carnegie-Illinois Carbon-Manganese	M-604	C, 1.5-2.0 Mn, 0.15-0.30 Si, bal. Fe	Quenched & tempered	100000 120000	75000 E.L.	18	45		Forgings	Over 7" to 10" Class L A.S.T.M. A-18
8169	Carnegie-Illinois Carbon-Manganese	M-604	0.55 max. C, 1.1-1.5 Mn, 0.05 max. P, 0.05 max. S, bal. Fe	Quenched & tempered	105000	70000	22	40		Forgings	
8170	Carnegie-Illinois Carbon-Manganese-Copper	M-604	0.20-0.35 C, 1.0-1.3 Mn, 0.4-0.5 Cu, bal. Fe							Still tubes	Corrosion resisting properties
8171	Carnegie-Illinois Structural Manganese	M-604	0.40 max. C, 1.8 max. Mn, 0.10-0.30 Si, bal. Fe		90000	55000		30		Structural purposes	Kill Van Kull
8172	Carnegie-Illinois Structural Manganese	M-604	0.35 max. C, 1.8 max. Mn, 0.10-0.30 Si, bal. Fe		82000 100000	47000		30		Rivets	Kill Van Kull
8173	Carnegie-Illinois Carbon-Manganese	M-604	C, 1.4 min. Mn, 0.04 max. P, 0.05 max. S, bal. Fe		85000	48000	16			Chain links	
8174	Carnegie-Illinois Carbon-Manganese	M-604	C, 1.4 min. Mn, 0.04 max. P, 0.05 max. S, bal. Fe	Quenched & tempered	105000	60000	16			Chain links	
8175	Carnegie-Illinois Carbon-Manganese	M-604	0.35-0.50 C, 1.5-2.0 Mn, 0.05 max. P, 0.055 max. S, 0.15-0.30 Si, bal. Fe		100000 125000				200 250	Abrasion resisting parts	Add 0.2 min. Cu for corrosion resisting properties

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8176	Carnegie-Illinois Carbon-Manganese	M-604	0.35-0.50 C, 1.5-2.0 Mn, 0.05 max. P, 0.055 max. S, 0.15-0.30 Si, bal. Fe	Quenched & tempered	150000				321	Abrasion resisting parts	Add 0.2 min. Cu for corrosion resisting properties
8177	Carnegie-Illinois Structural Nickel	M-604	0.45 max. C, 0.70 max. Mn, 0.04 max. P, 0.05 max. S, 3.25 min. Ni, bal. Fe		85000 100000	50000		25		Structural	Add 0.2 min. Cu for corrosion resisting properties
8178	Carnegie-Illinois Structural Nickel	M-604	0.45 max. C, 0.70 max. Mn, 0.04 max. P, 0.05 max. S, 3.25 min. Ni, bal. Fe	Annealed	90000 105000	52000	20	35		Bridge pins	A.S.T.M. A-8
8179	Carnegie-Illinois Structural Nickel	M-604	0.45 max. C, 0.70 max. Mn, 0.04 max. P, 0.05 max. S, 3.25 min. Ni, bal. Fe		95000 110000	55000	16	25		Bridge rollers	A.S.T.M. A-8
8180	Carnegie-Illinois Structural Nickel	M-604	0.30 max. C, 0.60 max. Mn, 0.03 max. P, 0.045 max. S, 3.25 min. Ni, bal. Fe		70000 80000	45000		40		Rivets	A.S.T.M. A-8
8181	Carnegie-Illinois Structural Nickel	M-604	0.45 max. C, 0.70 max. Mn, 0.04 max. P, 0.05 max. S, 3.25 min. Ni, bal. Fe		95000 110000	55000		25		Eye bars	A.S.T.M. A-8
8182	Carnegie-Illinois Structural Nickel	M-604	0.45 max. C, 0.70 max. Mn, 0.04 max. P, 0.05 max. S, 3.25 max. Ni, bal. Fe		90000 105000	52000	20	35		Eye bars	A.S.T.M. A-8
8183	Carnegie-Illinois Chromium-Manganese-Silicon	M-604	0.17 max. C, 1.05-1.4 Mn, 0.035 max. P, 0.04 max. S, 0.6-0.9 Si, 0.3-0.6 Cr, bal. Fe		75000 90000	45000 54000				Boiler plate	Firebox quality, A.S.M.E. S-28, Grade A
8184	Carnegie-Illinois Chromium-Manganese-Silicon	M-604	0.25 max. C, 1.05-1.4 Mn, 0.035 max. P, 0.04 max. S, 0.6-0.9 Si, 0.3-0.6 Cr, bal Fe		85000 100000	46750 55000				Boiler plate	Firebox quality A.S.M.E. S-28, Grade B
8185	Carnegie-Illinois Carbon-Molybdenum	M-604	0.15-0.25 C, 0.30-0.60 Mn, 0.15-0.30 Si, 0.90-1.10 Mo, bal. Fe, 0.05 max. P, 0.05 max. S							Turbine diaphragms	
8186	Carnegie-Illinois Carbon-Molybdenum	M-604	0.20-0.25 C, 0.65-0.95 Mn, 0.04 max. P, 0.04 max. S, 0.20-0.35 Si, 0.2-0.3 Mo, bal. Fe		78950	53340	21	59.1	156	Auto forgings	(Test on ½" rounds)
8187	Carnegie-Illinois Carbon-Molybdenum	M-604	0.38-0.45 C, 0.65-0.95 Mn, 0.04 max. P, 0.04 max. S, 0.20-0.35 Si, 0.2-0.3 Mo, bal. Fe		110050	77430	13.2	48.1		Auto forgings	(Test on ½" rounds)
8188	Carnegie-Illinois Carbon-Molybdenum	M-604	0.5-0.6 C, 0.65-0.95 Mn, 0.04 max. P, 0.04 max. S, 0.20-0.35 Si, 0.2-0.3 Mo, bal. Fe							Auto forgings	
8189	Carnegie-Illinois Carbon-Molybdenum	M-604	0.6-0.7 C, 0.65-0.95 Mn, 0.04 max. P, 0.04 max. S, 0.20-0.35 Si, 0.15-0.30 Mo, bal. Fe		143700	100100	8.5	33.3		Springs	Test on 1⅜ x #7
8190	Carnegie-Illinois Manganese-Molybdenum	M-604	0.40-0.48 C, 1.3-1.6 Mn, 0.04 max. P, 0.05 max. S, 0.25 max. Si, 0.15 min. Mo, bal. Fe							Seamless drill pipe	
8191	Carnegie-Illinois Manganese-Molybdenum	M-604	0.10-0.20 C, 0.90-1.2 Mn, 0.04 max. P, 0.05 max. S, 0.15-0.30 Si, 0.35-0.50 Mo, bal. Fe		77300	55820	21.7	58.7		Structural	Test on ¾" plate

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8192	Carnegie-Illinois Manganese-Molybdenum	M-604	0.10-0.20 C, 1.3-1.6 Mn, 0.04 max. P, 0.05 max. S, 0.30-0.50 Si, 0.35-0.50 Mo, bal. Fe		97750	64200	21.5	38.6		Structural	Test on ½" plate
8193	Carnegie-Illinois Manganese-Molybdenum	M-604	0.20-0.30 C, 0.8-1.1 Mn, 0.04 max. P, 0.05 max. S, 0.10-0.20 Si, 0.20-0.30 Mo, bal. Fe		84840	49550	21.5	41.2		Structural	Test on 6x6x$\frac{11}{16}$" angle
8194	Carnegie-Illinois Manganese-Molybdenum	M-604	0.23-0.30 C, 0.90-1.2 Mn, 0.04 max. P, 0.04 max. S, 0.15-0.30 Si, 0.45-0.75 Mo, bal. Fe							Seamless tube	
8195	Carnegie-Illinois Carbon-Vanadium	M-604	0.10-0.15 C, 0.30-0.60 Mn, 0.04 max. P, 0.04 max. S, 0.10 max. Si, 0.15-0.25 V, bal. Fe								Cold rolling
8196	Carnegie-Illinois Carbon-Vanadium	M-604	0.35-0.45 C, Mn, Si, 0.15 min. V, bal. Fe							Forgings	
8197	Carnegie-Illinois Carbon-Vanadium	M-604	0.60-0.75 C, 0.4-0.7 Mn, 0.04 max. P, 0.05 max. S, 0.10 min. Si, 0.02 min. V, bal. Fe							Tools	
8198	Carnegie-Illinois Chromium-Vanadium	M-604	0.65-0.80 C, 0.25-0.40 Mn, 0.15 min. Si, 0.4-0.6 Cr, 0.15-0.20 V, bal. Fe								Strip
8199	Carnegie-Illinois High Carbon Low Chromium	M-604	1.0-1.15 C, 0.25-0.40 Mn, 0.025 max. P, 0.025 max. S, 0.15-0.30 Si, 0.10-0.20 Cr, bal. Fe							Flat wire	Cold rolled heat treated
8200	Carnegie-Illinois High Carbon Low Chromium	M-604	1.2-1.4 C, 0.40 max. Mn, 0.04 max. P, 0.05 max S, 0.18-0.30 Si, 0.2-0.4 Cr, bal. Fe							Razor blades	Cold rolled heat treated
8201	Carnegie-Illinois High Chromium Molybdenum	M-604	0.15 max. C, 0.5 max. Mn, 0.03 max. P, 0.03 max. S, 0.50 max. Si, 4-6 Cr, 0.45-0.65 Mo, 0.05 max. Al, bal. Fe		167410	107770	11.5	27.2		Still tubes	High temp. work. Test on 4¼" rounds
2082	Carnegie-Illinois Nickel Steel	M-604	0.08-0.18 C, 0.3-0.6 Mn, 0.04 max. P, 0.045 max. S, 0.05 max. Si, 0.2-0.5 Ni, bal. Fe							Seamless tube	
8203	Structural Silicon (Sil-Ten)	M-604	0.40 max. C, 0.60 min. Mn, 0.04 max. P, 0.05 max. S, 0.20 min. Si, bal. Fe		80000 95000	45000		30		Structural	Add 0.20 min. Cu for corrosion resistance.
8204	U.S.S. Man-Ten	M-377 M-604	0.25 max. C, 1.10-1.70 Mn, 0.04 max. P, 0.05 max. S, 0.15 min. Si, 0.20 min. Cu, bal. Fe		75000	50000	20			Light weight construction Truck and trailer frames	High strength
8205	U.S.S. Cor-Ten	M-604 M-377	0.12 max. C, 0.10-0.30 Mn, 0.1-0.2 P, 0.05 max. S, 0.50-1.0 Si, 0.3-0.5 Cu, 0.5-1.5 Cr, .5 max. Ni, bal. Fe		70000	50000				Light weight construction, busses, trucks	Corrosion resisting properties
8206	S.K.F. No. 48 Steel	M-267	High C, high Cr, Mo, bal. Fe	Air hardened						Cold trimming, drawing, punching, & blanking dies, gauges	Air hardening steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8207	White Label	M-365	.90-1.0C, bal. Fe							Cutting tools	
8208	A9V	I.G.F.	8.5 Al, 0.5 Zn, 0.3 Mn, bal. Mg.							Castings, light metal parts	Heat treatable
8209	Stoody 1	M-202	Co-Cr-W							Hard facing electrode	Abrasion and wear resistant
8210	Alnico	M-373	Al-Ni-Co-Fe							Magnets	
8211	AC-Amsco No. 217	M-607							600-700	Hard facing welding rod	Maintains hardness up to 1000 °F.
8212	AC-Amsco No. 459	M-607							500-600	Hard surfacing welding rod	For severe wear and abrasion
8213	Accolloy	M-653	3.5 Ni, C, bal. Fe							Chains	
8214	AC-Coated 18-8	M-607	C, 18 Cr, 8 Ni, bal. Fe coated							Stainless steel welding rod	Coated rods
8215	Acmeloy	M-654	2.75-3.25 C, 1.0-1.75 Si, .65-1.75 Mn, bal. Fe	Cast	30000				175	Cast iron castings	*High* strength corrosion, heat and wear resistant
					60000				275		
				Heat treated	75000				400		
					85000				600		
8216	Acme	M-248								Resistance metal	
8217	Acme Colorstrip	M-568	C, bal. Fe							Ornamental architecture	Cold rolled strip steel in colors
8218	Acme Satin strip	M-568	C, 18 Cr, 8 Ni, bal. Fe							Ornamental architecture	Cold rolled stainless strip steel
8219	Acme Stainless Steel Type 301X	M-568	C, Cr, Ni, bal. Fe							Stainless parts	
8220	Acmonital	Italy	C, Cr, Ni, bal. Fe							Coins	Stainless
8221	ACT Carbide	M-353	WC							Tools, cutters	
8222	AC-Weld	M-607	C, bal. Fe		65000		28			Welding rod	A.C. welding
					70000		30				
8223	Adalloy No. 3	M-655	C, alloy, bal. Fe	Cast						Steel castings	Discontinued
8224	Adams HFA	M-656		Cast					550	Hard facing electrode	Wear and shock resistant, shielded arc
				Heat treated					730		
8225	Adams HFB	M-656		Cast					653	Hard facing electrode	Wear and shock resisant, shielded arc
				Heat treated					800		
8226	Admiralty CAG	M-657	87 Cu, 9 Sn, 4 Zn or 88 Cu, 10 Sn, 2 Zn		36000	18000	20			Marine castings	Resists marine corrosion
8227	Adriatical	M-658	Cu, Cd, bal. Al							Light alloy parts	Similar to Duralumin
8228	A.E.B. Stainless	M111a	C, Cr, Ni, bal. Fe							Stainless parts	Hardenable
8229	Aeral	C.A.-S.A. France	4.5 Cu, 1.2 Mg, 0.25 Mn, 1-2 Cd, bal. Al	Cast	26000		5		70	Light metal parts	
					31000		2		80		
8230	Aeral	M-187								Light metal parts	Free cutting
8231	Aeral A	M-623	2.0-4.5 Cu, 0.2-1.5 Mg, 2.5 max. Si, 0.8 max. Fe, 0.4 max. Ti, 0.5-2.5 Cd, 0.5 max. Mn, bal. Al	Solution treated	28000	22000	5			Sand and chill castings	Heat treatable
					34000	24000	3				
8232	Hy-Ten-Sl Bronze Gr. 3	M-129	60-68 Cu, 20-24 Zn, 3-7 Al, 2.5-5.0 Mn, 2-4 Fe		90000	45000	20	20	175	Impellers, gears, valves	Wear and corrosion resistant
8233	Aero-12-3	M-38	1.45 C, 12.75 Cr, 0.65 Mo, bal. Fe							Dies, cutters	
8234	P. & H. Harcote	M-828								Welding electrode	Abrasion and wear resistant
8235	Aeron	M-320	1.8 Cu, 0.8 Mn,		54000	26000	18		90	Light alloy parts	Heat treatable
		M-299	1.0 Si, bal. Al		60000	34000	25		120		
8236	Aeterna	M-660									
8237	Agathon Armature	M-97	Si, bal. Fe								
8238	Agathon Dynamo	M-97	Si, bal. Fe								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8239	Agathon Electric	M-97	Si, bal. Fe								
8240	Agathon Special Electric	M-97	Si, bal. Fe								
8241	Agile Yellow Rod	M-661	67 Ni, 31 Cu, .2 B						190	Welding, electrode for cast iron	
8242	Agricola	M-221	70 Cu, 30 Pb							Diesel engine bearings, seals	
8243	Airco	M-662								Welding rod	
8244	A.H.	M-24	C, alloy, bal. Fe							Cutters, tools, dies	Air hardening, tough, wear resistant
8245	Airco Electrode	M-663	.13-.18 C, bal. Fe		55000					Welding electrode for low carbon and mild steels	Coated
8246	Airco No. 1	M-663								Gas welding rod	High ductility
8247	Airco KA2S	M-663	0.07 max. C, .50 Mn, .03 P, .03 S, .75 Si, 17-20 Cr, 8-12 Ni, bal. Fe		87000		36			Stainless steel welding rod	Shielded arc
8248	Airco KA2SM0	M-663	0.07 max. C, .20-.50 Mn, 0.75 max. Si, 17-19 Cr, 7-11 Ni, 2-4 Mo, bal. Fe		87000		36			Stainless steel welding rod	Shielded arc
8249	Airco 25-12	M-663	0.20 max. C, 2.0 max. Mn, .75 max. Si, 22-28 Cr, 12-16 Ni, bal. Fe		87000		36			Stainless steel welding rod	Shielded arc
8250	Airco No. 48	M-663			45000					Welding electrode	Shock and fatigue resistant
8251	Airco No. 55	M-663								Welding electrode	Light coated
8252	Airco No. 57	M-663	Al							Aluminum welding rod	Flux coated
8253	Airco No. 58	M-663	Cu-Ni							Monel welding rod	Flux coated
8254	Airco No. 62	M-663								Welding electrode	Shielded arc
8255	Airco No. 70	M-663								Welding electrode for copper and copper alloys	Shielded arc
8256	Airco No. 72	M-663	C, 12-15 Mn, bal. Fe							Welding electrode for high manganese steel	Tough and hard
8257	Airco No. 76	M-663								Welding electrode	Shielded arc
8258	Airco No. 77	M-663								Welding electrode	Shielded arc
8259	Airco No. 78	M-663			75000		30			Welding electrode	Shielded arc
8260	Airco No. 82	M-663	.32 .42 C, .90-1.10 Mn, bal. Fe		80000		18			Welding electrode	Shielded arc
					95000		28				
8261	Airco No. 83	M-663			60000		35				
					75000		25			Welding electrode	Shielded arc
8262	Airco No. 84	M-663	0.17 max. C, 4.5-5.25 Ni, bal. Fe		85000					Welding electrode	Not machinable Shielded arc
8263	Airco No. 85	M-663	.85-1.10 C, .30-.60 Mn, bal. Fe						290 425	Hard surfacing electrode	Shielded arc, not machinable
8264	Airco No. 86	M-663	.25-.35 C, .55-.75 Mn, .20-.30 Cu, bal. Fe		65000		20			Welding electrode	Shielded arc
					80000		30				
8265	Airco No. 87	M-663			60000		20			Welding electrode	Shielded arc
					75000		25				
8266	Airco Stainless Ply	M-663								Stainless steel welding, electrode for stainless clad steel	Shielded arc
8267	Airex	M-35	.55 C, 2 Si, .75 Mn, bal. Fe							Chisels, tools	
8268	Air Furnace Gun Iron	M-644	3.0 T.C., 1.5 Si, .85 Mn, 1.9 Ni, .40 Cr, .65 Mo, .075 S, .180 P, bal. Fe		35000				200	Cylinder liners, castings	
					48000				600		
8269	Air-Hard	M-115	1.0 C, .30 Si, .70 Mn, 5.25 Cr, 1.1 Mo, .25 V, bal. Fe							Dies for trimming, blanking, forming, cold shears, gauges, punches	Air hardening, non-deforming wear resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8270	Airkool	M–38	1 C, 5 Cr, 1.2 V, 1.15 Mo, bal. Fe	Air cool						Dies, gauges	Air hardening, non-deforming, wear resistant
8271	Airplane Babbitt	M–665	16 Sn, 10 Sb, 72 Pb, 2 Cu, Bi							Bearings	M.P.-600-700 °F.
8272	Airque	M–140	C, alloy, bal. Fe							Dies	Air hardening, Non-deforming
8273	Ajax Aluminum Bronze	M–123	Al, bal. Cu								
8274	Ajax Anti-Acid Metal	M–123	Cu alloy								
8275	Ajax Extra Manganese Bronze	M–123	Cu alloy		75000						
8276	Ajax Hydraulic Metal	M–123	Cu alloy								
8277	Ajax Navy Tombasil	M–123	Cu-Si-Zn		54750		44			Castings	
8278	Bethadur 403	M–24	.12 max. C, 11.5-13 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
8279	Bethadur 425	M–24	.12 max. C, 16-18 Cr, bal. Fe							Corrosion resistant parts	Corrosion resistant
8280	Bethadur 501B	M–24	.16-.20 C, 4-6 Cr, .5 Mo, bal. Fe	Annealed	79000	33000	33	75	143	Oil refinery equipment	
8281	Bethadur 501C	M–24	.11-.15 C, 4-6 Cr, bal. Fe							Oil refinery equipment	
8282	Bethadur 501D	M–24	.10 max. C, 4-6 Cr, bal. Fe							Oil refinery equipment	
8283	Bethadur 502	M–24	.10 min. C, 4-6 Cr, bal. Fe							Oil refinery equipment	
8284	Hy-Ten-Sl No. 2	M–129	65 Cu, 35 Sn	Sand Cast	100000	55000	15	15	200	Gears, worm wheels, bearings	
8285	Bethlehem Air Die	M–24	C, alloy, bal. Fe							Dies	Air hardening
8286	Bethlehem Extra Special	M–24	C, 14 W, 4 Cr, 2 V, bal. Fe							Tools, cutters	High speed steel
8287	Bethlehem H.T.W.	M–24	.9 C, 1.7 Cr, .2 V, bal. Fe							Bearings, bearing races	
8288	Ajax *Nickel Plastic* Bronze	M–123	Cu alloy								
8289	Ajax No. 1	M–39	C, alloy, bal. Fe							Tools, Castings	
8290	Ajax No. 1 Manganese Bronze	M–123	Cu alloy		70000						
8291	Ajax No. 2	M–39	C, alloy, bal. Fe							Tools	
8292	Ajax Super Manganese Bronze	M–123	Cu alloy		100000					Castings	
8293	Aladdin	M–666								Welding rod	For white metal die castings
8294	Alba	M–296	30 Pd, 60 Ag, 5 Au, and other elements							Fountain pen points, dental industry	Corrosion resistant Heat treatable
8295	Alba G	M–296								Pen points, dental alloys	Corrosion resistant
8296	Alba K	M–296								Pen points, dental alloys	Corrosion resistant
8297	Alba Lot	M–296								Solder for Alba alloys	
8298	Alba O	M–296								Pen points, dental alloys	Corrosion resistant
8299	Alba P	M–296								Pen points, dental alloys	Corrosion resistant
8300	Albanoid	M–121	20 Ni, 62 Cu, 18 Zn							Architectural and sanitary cast fittings	
8301	Alclad NA17S	M–643	Al alloy								
8302	Alclad NA22S	M–643	Al alloy								
8303	Alclad NA24S	M–643	Al alloy								
8304	Alclad NA26ST	Eng.	Clad Al alloy		50000		8				
8305	Alco	M–39	C, alloy, bal. Fe							Tools	
8306	B-Carbon Vanadium	M–76	C, V, bal. Fe							Tools, cutters	
8307	Alcoa 218	M–4	8 Mg, 1.8 max. Fe, .2 max. Cu, .3 max. Mn, .1 max. Ni, bal. Al	Cast	38000	23000	5		75	Airplane wheel flanges and brake shoes	Die casting, corrosion resistant
8308	Alcoa 231	M–4	Al alloy							Light alloy parts	
8309	Alcoa X 76S	M–4	Al alloy		73000	65000	15	35	147	Aircraft propeller blades	
8310	Alcop Bronze	M–508	62 Cu, 2.5 Al, 35.5 Zn		73000	37000	35		150	Centrifugal castings, bushings, liners, bearing cages	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8311	Alcrosil S	M-376	.15 max. C, .50 max. P, .50-1.0 Si, 4-6 Cr, .45-.65 Mo, .30-.70 Al, bal. Fe		60000	25000	30		163		Corrosion resistance
8312	Alculoy No. 12	M-158	7 Cu, 3 Si, bal. Al		30000	15000	1		80	Die castings	Similar to S.A.E. 312
8313	Alculoy No. 75	M-158	7.5 Cu, 5.0 Si, bal. Al		35000	20000	85			Die castings	
8314	Alcuman										
8315	Alda	M-667								Welding rods	Copper coated
8316	Aldrei	Italy	Al-Si-Mg		42500	38000	5				
					51000	44000	9				
8317	Aldural E	Eng.	Al clad Al alloy core—3.0-4.5 Cu, 1.0 max, Si, 1.0 max. Mg, 1.2 max. Mn, 1.0, max. Fe, bal. Al		50000	38000	8			Light metal parts	
8318	Alicia										
8319	Hollup Gr. 30-S	M-275	.10-.15 C, bal. Fe		50000		8			Coated welding electrode	
8320	Aljep	France	3.8 Cu, 1.3 Mg, 1.5 Ni, 0.5 V, bal. Al								
8321	Alkadur 300										
8322	Allegheny 12	M-1	.15 max. C, .50 max. Mn, 11.5-13.5 Cr, bal. Fe	Annealed	70000	40000	38	80	140		Corrosion resistant Type No. 410
				Hardened	179000	161000	15	51	364		
8323	Allegheny 12EZ	M-1	.15 max. C, .60 max. Mn, .15 max. P, .40 max. S, 12-14 Cr, bal. Fe	Hardened	70000	40000	10	40	140		Corrosion resistant Type 416
					165000	120000	30	65	330		
8324	Allegheny 12-NH	M-1	.08 max. C, .50 max. Mn, 11.5-13.5 Cr, .10-.30 Al bal. Fe	Hot Rolled	89000	78000	12		170		Corrosion resistant Type 405
					100000	88000	13		190		
8325	Allegheny 12-TB	M-1	.15 max. C, .30-.60 Mn, 11.5-13 Cr, bal. Fe							Turbine blades	Corrosion resistant Type 403
8326	Allegheny 12-W	M-1	.15 max. C, .50 max. Mn, 12-14 Cr, bal. Fe								Corrosion resistant Type 418
8327	Allegheny 17	M-1	.12 max. C, .50 max. Mn, 16-18 Cr, bal. Fe	Annealed	63000	40000	20				Corrosion and heat resistant Type 430
					85000	55000	35				
8328	Allegheny 18-8C	M-1	C, 18 Cr, 8 Ni, Cb, bal. Fe								Stabilized stainless Type 347
8329	Allegheny 18-8S	M-1	.08 max. C, 18 Cr, 8 Ni, bal. Fe								Type 304
8330	Allegheny 28	M-1	.35 C, 1.5 max. Mn, 1.0 max. Ni, 23-30 Cr, bal. Fe	Annealed	100000	60000	25	45	200	Furnace parts, boiler baffles, kiln linings	Stainless and heat resistant Type 446
8331	Allegheny 47-50	M-1	47 Ni, bal, Fe								
8332	Allegheny Armature	M-1	.5 Si, bal. Fe								
8333	Allegheny Audio Transformer "A"	M-1	3.6 Si, bal. Fe								
8334	Allegheny Audio Transformer "B"	M-1	3.6 Si, bal. Fe								
8335	Allegheny Audio Transformer "C"	M-1	3.6 Si, bal. Fe								
8336	Allegheny Dynamo	M-1	2.5 Si, bal. Fe								
8337	Allegheny Dynamo Special	M-1	3.25 Si, bal. Fe								
8338	Allegheny Electric Metal	M-1	47 Ni, bal. Fe								
8339	Allegheny Electrical	M-1	1.0 Si, bal. Fe								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8340	Allegheny H-17	M-1	1.1 C, .50 Mn, .50 Si 17 Cr, .50 Mo, bal. Fe							Nozzles, valves	Stainless Type 440, Hardenable
8341	Allegheny L-12	M-1	.30 C, .25 Mn, .50 Si, 13 Cr, bal. Fe								Stainless Type 420, Hardenable
8342	Allegheny Metal 15-35	M-1	14-16 Cr, 33-36 Ni, .25 max. C, bal. Fe	Casting	50000 75000	40000 56000	40 60	40 60		Castings	Stainless
8343	Allegheny Metal 18-8	M-1	C, 18 Cr, 8 Ni, bal. Fe								Stainless Type 302
8344	Allegheny Metal 18-8E2	M-1	C, 18 Cr, 8 Ni, bal. Fe								Stainless Type 303
8345	Allegheny Metal 18-8M	M-1	C, 18 Cr, 8 Ni, Mo, bal. Fe								Stainless Type 316
8346	Allegheny Metal 18-8S	M-1	.08 max. C, 18-20 Cr, 8-10 Ni, bal. Fe	Casting	70000 85000	35000 46000	50 75	45 65		Castings	Stainless, resists acids
8347	Allegheny 18-8SM	M-1	.12 max. C, 16-18 Cr, 14 max. Ni, 2-3 Mo, bal. Fe		73000 85000	35000 45000	45 60	45 60			
8348	Allegheny Metal 18-11C	M-1	.08 C, 17-18.5 Cr, 10 min. Ni, 8X10C-Cb, bal. Fe	Cast	75000 90000		35 50	40 50		Castings	Stainless steel castings
8349	Allegheny 19-10M	M-1	.16 max. C, 18-20 Cr, 14 max. Ni, 3-4 Mo, bal. Fe	Cast	70000 80000	35000 45000	45 60	45 60		Stainless steel castings	Resists sulfuric, nitric and acetic acids
8350	Allegheny 19-10SM	M-1	.12 max. C, 18-20 Cr, 14 max. Ni, 3-4 Mo, bal. Fe	Cast	70000 80000	40000 60000	45 60	45 65			Stainless steel castings
8351	Allegheny 20-10S	M-1	C, Cr, Ni, bal. Fe								Stainless
8352	Allegheny 25-12S	M-1	.11 max. C, 22-26 Cr, 12-14 Ni, bal. Fe	Cast	75000 90000	40000 55000	30 50	30 50		Stainless steel castings	Resists sulfuric, nitric and acetic acids
8353	Allegheny 25-20S	M-1	.18 max. C, 24-26 Cr, 19-21 Ni, bal. Fe	Cast	60000 75000	40000 55000	40 60	40 60		Castings	Stainless steel castings
8354	Allegheny 20-25S	M-1	.11 max. C, 19-21 Cr, 24-26 Ni, bal. Fe	Cast	60000 75000	40000 55000	40 60	40 60		Castings	Stainless steel castings
8355	Allegheny 20-25SM	M-1	.11 max. C, 19-21 Cr, 24-26 Ni, 2-3 Mo, bal. Fe	Cast	60000 75000	50000 70000	40 60	40 60		Castings	Stainless steel castings
8356	Allegheny 21	M-1	C, 18-23 Cr, bal. Fe							For high temperature service	
8357	Allegheny 25-12	M-1	.20 max. C, 1.25 max. Mn, 22-26 Cr, 12-14 Ni, bal. Fe	Annealed	79000 95000	45000	51 71			Furnace parts, boiler baffles, pump parts	Austenitic, resists heat to 2000°F.
8358	Allegheny 28	M-1	C, 23-30 Cr, bal. Fe								Resists oxidation up to 2150°F.
8359	Allegheny 28-4	M-1	.25 max. C, .15 N, 25-30 Cr, 3-5 Ni, bal. Fe	Cast	70000 90000	35000 50000	10 25	10 25		Stainless steel castings	Resists nitric and acetic acids
8360	Allegheny 29-9	M-1	.20 max. C, 27-31 Cr, 8-10 Ni, bal. Fe	Cast	80000 95000	45000 70000	20 30	20 35		Stainless steel castings	Resists nitric and acetic acids
8361	Allegheny 29-9S	M-1	.12 max. C, 27-31 Cr, 8-10 Ni, bal. Fe	Cast	75000 95000	36000 46000	20 40	20 45		Castings	Stainless steel castings
8362	Allegheny-Ludlum 88	M-1								Large electrical transformers, switchboard parts	Non-magnetic, high electric resistivity Stainless
8363	Allegheny M-17	M-1	.65 C, .25 Mn, .40 Si, 17 Cr, bal. Fe								
8364	Allegheny Radio Transformer	M-1	3.8 Si, bal. Fe							Electrical equipment	
8365	Allegheny Super Dynamo	M-1	2.5 Si, bal. Fe							Electrical equipment	
8366	Allegheny Transformer A	M-1	4.25 Si, bal. Fe							Electrical equipment	
8367	Allegheny Transformer B	M-1	4.25 Si, bal. Fe							Electrical equipment	
8368	Allegheny Transformer C	M-1	4.25 Si, bal. Fe							Electrical equipment	
8369	Allenoy	M-668	C, Ni, bal. Fe							Set and tap screws	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8370	Alliace-Acier No. 26	French									
8371	Alliace-Acier No. 26L	French									
8372	Alliace-Cementic No. 26	French									
8373	Alliace-Cementic No. 26L	French									
8374	Alloy Broachrite	M-669	.4 C, Mn, bal. Fe	Drawn	100000	90000	13	45	217	Heat treated parts	Modified S.A.E.-X 1340
8375	Alloy No. 10	M-605	37.5 Cr, 7.5 Al, 55.0 Fe							Resistance elements in furnaces	Up to 2400°F.
8376	Alloy No. 20	M-508	79 Cu, 2 Ni, 5 Sn, 13-15 Pb							High speed bearings, pump liners	Centrifugal castings
8377	Alnico	M-670	Al-Ni-Co-Fe							Magnets	Cast
8378	Alnico I	M-38	.10C, 22 Ni, 12 Al, 3 Co, bal. Fe							Permanent magnets	Cast
8379	Alnico II	M-38	.10 C, 17.5 Ni, 11 Al, 13 Co, bal. Fe							Permanent magnets	Cast
8380	Alnico III	M-38	12 Al, 25 Ni, .04 Si, bal. Fe							Permanent magnets	Cast
8381	Alnico IV	M-38	12 Al, 28 Ni, .5 Co, bal. Fe							Permanent magnets	Cast
8382	Alnico V	M-38	8 Al, 14 Ni, 24 Co, bal. Fe							Permanent magnets	Cast
8383	Alpax	M-137	10-13 Si, .2 max. Ti, bal. Al	Sand Cast	23000	10000	5–10	45		Water pumps, engine parts, valve bodies	Corrosion resistant
								55			
				Chill Blast	28000	12000	8	55			
							14	65			
8384	Alpax Alpha	M-137	10-13 Si, .6 Mg, bal. Al	Cast	22000		2–4		64	Light alloy castings	High Corrosion resistance
				Chill	30000		3–5		70		
8385	Alpax Beta	M-137	10-13 Si, .6 Mg, bal. Al	Cast	26000		2–3		75	Light alloy castings	Corrosion resistant
				Chill	34000		2–4		85		
8386	Alpha Gamma	M-137	10-13 Si, .6 Mg, bal. Al	Heat treated	36000		1–2		95	Light alloy castings	Corrosion resistant
8387	Alpha Crusher	31 539	Sn base alloy							Bearings	Babbitt metal
8388	Alpha No. 2	M-85	C, alloy, bal. Fe							Cutting tools	
8389	Alplate	M-671	Al coated steel wire							Screens, electrical resistance heating elements	Corrosion resistant
8390	Alpro No. 50A	M-126	50 Cu, 50 Al							Copper hardener for Al alloys	
8391	Alpro No. 35	M-126	50 Si, 50 Al							Si hardener for Al alloys	
8392	Alprolite	M-126	Nonferrous alloy								
8393	Alray C	M-248	12 Cr, 62 Ni, bal. Fe	Annealed	95000 175000	35000	35–40	60			Corrosion and heat resistant
8394	Alray D	M-248	35 Cr, 15 Ni, bal. Fe	Annealed	75000 160000		35–40	60			Corrosion and heat resistant
8395	Alsia	M-672	20 Si, 1 Cu, 0.7 Fe, bal. Al	Cast	20000	18000	1–2		80-90	Pistons	Same as "Alusil"
8396	Alsiloy No. 1	M-158	12 Si, bal. Al	Cast	33000	14000	2		80	Die castings, light alloy parts	Corrosion resistant
8397	Alsiloy No. 3	M-158	4 Cu, 5 Si, bal. Al	Cast	30000	14000	1.5		80	Die castings, light alloy parts	
8398	Altmag	Russ'n	5-8 Mg, 0.5-1.0 Mn, 0.1-0.5 Ti, bal. Al							Light alloy parts	
8399	Alucable	M-673	.55 Si, .4 Mg, bal. Al								
8400	Alufer	Ger.									
8401	Alugir	M-674	3 Cu, .8 Mg, 1.2 Ni, bal. Al		57000 64000		16 22			Light alloy parts	Heat treatable
8402	Alumag	French	4.5 Mg, 95.5 Al							Light alloy parts	Superseded by "Duralinox"
8403	Alumag Grade 1	M-675	4-5 Mg, bal. Al							Light alloy parts	High resistance to corrosion
8404	Alumag Grade 2	M-675	8-10 Mg, bal. Al							Light alloy parts	High resistance to corrosion
8405	Alumasod	M-676	76 Sn, 23 Zn, 1 Cd							Al solder	
8406	Alumend	M-677								Aluminum welding	Si-free

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8407	Aluminark	M-118								Al welding electrode	Coated
8408	Aluminum Bronze 135	M-176	Al, bal. Cu								
8409	Aluminum Bronze 136	M-179	Al, bal. Cu								
8410	Aluminum Union No. 3S	M-644	1.5 max. Mn, bal. Al	Hard Soft	25000 14000	22000 5000				Light alloy body paneling and molding	
8411	Aluminum Union No. 14S	M-644	4.4 Cu, .35 Mg, .75 Mn, .8 Si, bal. Al	Heat treated	62000		18		130	Forged aircraft light alloy parts	Heat treatable
8412	Aluminum Union 17S	M-644	3.5-4.5 Cu, .4-.7 Mn, .4-.7 Mg, bal. Al							Light alloy parts, aircraft	Heat treatable
8413	Aluminum Union 22S	M-644	3.5-4.7 Cu, .7-1.5 Si, .4-1.0 Mg, .4-1.5 Mn, bal. Al	Heat treated	56000	44000	8			Light alloy parts, aircraft	Heat treatable
8414	Aluminum Union 24S	M-644	3.5-4.8 Cu, .8-1.8 Mg, .3-1.5 Mn, bal. Al	Heat treated	56000	35000	15			Light alloy parts, aircraft	Heat treatable
8415	Aluminum Union 27S	M-644	4.5 Cu, .8 Mn, .8 Si, .05 Sn, bal. Al	Heat treated	58000	30000				Forged aircraft parts	Heat treatable
8416	Aluminum Union 35S	M-644	10-13 Si, bal. Al							Light alloy paneling	Not heat treatable
8417	Aluminum Union 51S	M-644	.5-1.5 Si, .5-1.5 Mg, bal. Al	Heat treated	40000	31000	8			Light alloy architectural, structure	Heat treatable
8418	Aluminum Union A51S	M-644	.6 Mg, 1.0 Si, .25 Cr, bal. Al		40000		15			Light alloy forgings	
8419	Aluminum Union 57S	M-644	1.5-3.0 Mg, .1-.35 Cr, bal. Al	Heat treated	32000	28000	5			Light alloy paneling, aircraft	Heat treatable
8420	Aluminum Union 123	M-644	5 Si, bal. Al	Cast	16000		4		40	Light alloy castings, aircraft	
8421	Aluminum Union 125	M-644	4.5-5.5 Si, 1.0-1.5 Cu, .4-.6 Mg, bal. Al	Heat treated	30000	22000				Cylinder heads, valve bodies	Pressure proof castings
8422	Aluminum Union 126	M-644	1.4 Cu, .5 Mg, .75 Mn, .75 Ni, 5.0 Si, bal. Al	Heat treated	26000 32000		3-1			Aircooled cylinder heads	Heat treatable
8423	Aluminum Union 135	M-644	.3 Mg, 7.0 Si, bal. Al	Heat treated	26000 32000		6-12			Light alloy castings	Corrosion resistant
8424	Aluminum Union 160	M-644	12 Si, bal. Al							Light alloy castings	
8425	Aluminum Union 162	M-664	12-15 Si, 1.5-2.5 Ni, .75-1.25 Mg, .5-1.0 Cu, bal. Al							Pistons	Low thermal expansion
8426	Aluminum Union 218	M-664	4.0 Cu, 1.5 Mg, 2.0 Ni, bal. Al							Pistons, cylinder heads	"Y" alloy
8427	Aluminum Union 225	M-664	4 Cu, bal. Al	Heat treated	36000		4			Aircraft light alloy castings	
8428	Aluminum Union 350	M-664	8.5-11.5 Mg, bal. Al	Cast Heat treated	36000 44000	22000 28000	14 12			Light alloy castings	Highest strength, ductility and impact
8429	Allegheny-Ludlum 88	M-1	6.5-14.0 Ni, 5.0-12.0 Mn, bal. Fe							Electrical apparatus	Non-magnetic
8430	Hy-Ten-St Bronze, Gr. 4	M-129	60-68 Cu, 20-24 Zn, 3-7 Al, 2.5-5.0 Mn, 2-4 Fe	Rolled	85000	40000	25	25	150	Impellers, gears, valves	Wear and corrosion resistant
8431	Alumaweld All Metal Solder	M-678								Soldering Al and Mg alloys	M.P.-550°F., no flux required for Mg
8432	Alumaweld Special	M-678								Soldering Al and Mg alloys	M.P.-550°F.
8433	Aluvac	M-679									
8434	Alzac Metal										
8435	Alzin	French	20 Zn, bal. Al		18000 28000		2- 3		62 65		
8436	AM-537	Ger.	Mg alloy								
8437	Amaloy		.60-.70 C, .70-.90 Mn, .2-.3 Mo, bal. Fe							Tools, dies	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8438	Ambrac 850	M-8	75 Cu, 20 Ni, 5 Zn	Soft	50000	18000	35			Condenser tubes	
				Hard	70000	60000	20				
8439	Ambraloy 927	M-8	76 Cu, 22 Zn, 2 Al, .05 As	Soft	52000	20000	65			Condenser tubes, ferrules	
				Hard	85000	60000	10				
8440	AMCOH Hollow Die	M-365	C, alloy, bal. Fe							Hollow dies	
8441	AMCOH Oil Hardening	M-365	.9 C, .5 Cr, .5 W, 1.0-1.25 Mn, bal. Fe							Tools	
8442	Amercut 1020	M-12	.15-.25C, bal. Fe		65000	50000	20	45	155		S.A.E.-1020
					85000	70000	30	55	185		
8443	Amercut X1020	M-12	.15-.25C, bal. Fe	Cold Drawn	70000	50000	15	50	160		S.A.E.-X1020
					90000	70000	25	55	190		
8444	American Marine	M-565	Pb-Sn-Sb		8750	8000	1.0	.7	30	Babbitts, bearings	Babbitt metal
8445	Amola	M-680	.20-.70 C, .70-.90 Mn, .15-.25 Mo, bal. Fe							Gears, axles, shafts	
8446	Ampco	M-681	Cu-Sn, Zn, Pb								
8447	Ampco Gr. 18-13	M-13	10.6-11.2 Al, 3.4-4.0 Fe, bal. Cu		85000	38000	15	18	149	Gears, worm wheels	High impact resistance (Obsolete)
					90000	42000	20	22	159		
8448	Ampco Gr. 18-22	M-13	10.6-11.2 Al, 3.4-4.0 Fe, bal. Cu		90000	45000	3	3	202	Bearings	Heat treatable, wear resistant
					100000	55000	7	7	223		
8449	Ampco Gr. 18-23	M-13	10.6-11.2 Al, 3.4-4.0 Fe, bal. Cu.		90000	43000	8		179 207	Aircraft, propellers, motors	Castings
8450	Ampco Gr. 18-33	M-13	84.6 Cu, 11.3 Al, 3.7 Fe, .4 special agents		90000	45000	8		180	Aircraft parts	(Obsolete)
					100000	55000	12		200		
8451	Ampco Metal 20-13	M-13	11.8-12.4 Al, 3.8-4.5 Fe, bal. Cu		96000	40000	8		192	Bearings, bushings	Corrosion and wear resistant
					102000	50000	12		207		
8452	Ampco Trode	M-13	Al, bal. Cu							Welding rods	Coated (obsolete)
8453	Ampcoloy 30	M-13	9.1 Al, 9.1 Pb, bal. Cu		45000	18000	32	25	50	Bearings	Formerly "Atlas 10"
					50000	20000	35	30	60		
8454	Ampcoloy 32	M-13	80 Cu, 10 Sn, 10 Pb		28000	14000	8	8	50	Spindle bearings	Formerly "Atlas P"
					35000	18000	12	12	65		
8455	Ampcoloy 34	M-13	71.5 Cu, 23 Pb, 5.5 Sn		25000	14000	14	12	50	Bearings, bushings	Formerly "Atlas 20"
					30000	16000	18	14	60		
8456	Ampcoloy 40	M-13	10 Al, 90 Cu		65000	24000	25	25	110	Bushings	Formerly "Atlas 90"
					70000	28000	30	30	120		
8457	Ampcoloy 42	M-13	89 Cu, 10 Al, 1 Fe		60000	22000	25	25	110		
					75000	28000	32	30	135		
8458	Ampcoloy 43	M-13	89 Cu, 10 Al, 1 Fe		62000	35000	8	9	126		
					72000	40000	15	16	156		
8459	Ampcoloy 44	M-13	86 Cu, 12 Al, other elements		60000	45000	3		200	Castings	Not heat treatable
					70000	50000	5		229		
8460	Ampcoloy 46	M-13	10.5-11.5 Al, 4-5 Fe, 4-5 Ni, bal. Cu.		90000	43000	3		200	Castings	
					96000	55000	10		235		
8461	Ampcoloy 50	M-13	84 Cu, 10 Sn, 3.5 Ni, 2.5 Pb		40000	22000	7		80	Worm gears	Formerly "Atlas 84"
8462	Ampcoloy 54	M-13	1.5 Ni, 11 Sn, 87.5 Cu		50000	30000	15		93		
8463	Ampcoloy 62	M-13	55-60 Cu, 38-42 Zn, 3.5 max. Mn, 1.5 Al, .4-2.0 Fe, 1.5 max. Sn		65000	28000	20	20	110	Castings	
					75000	38000	30	30	130		
8464	Ampcoloy 64	M-13	58-60 Cu, 30-40 Zn, other elements		90000	50000	20	20	170	Castings	
8465	Ampcoloy 66	M-13	58-66 Cu, 20-30 Zn, other elements		110000	60000	10	8	217	Castings	
					120000	70000	15	14	235		
8466	Ampcoloy 72	M-13	88 Cu, 10 Sn, 2 Zn								
8467	Ampcoloy 80	M-13	2.0-2.75 Be, 0-1.25 Ni, bal. Cu	Heat treated	90000	85000	0	0	350	Castings	
					125000	100000	4	4	420		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8468	Ampcoloy 91	M-13	97 Cu, 2.6 Co, 0.4 Be		90000	45000	10		200	Welding electrode	Same as Ampco
					115000	55000	20		240		Trodaloy 1
8469	Ampcoloy 97	M-13	99.5 Cu, 4 Cr, 1 Be		40000	35000	10		140	Welding electrode	Same as Ampco
					50000	40000	15		150		Trodaloy 7
8470	Ampcoloy 98	M-13	98.9 Cu, 1 Cr, .1 Si		40000	18000	20		75	Resistance welding electrode	Formerly Atlas 98-21
					50000	25000	25		85		(obsolete)
8471	Ampcoloy A-3	M-13	89 Cu, 10 Al, 1 Fe		70000	25000	30	30	115	Gears	
					75000	32000	40	40	126		
8472	Ampcoloy A-323	M-13	89 Cu, 10 Al, 1 Fe	Heat treated	80000	40000	22	24	143		Heat treatable
					90000	50000	30	32	156		Formerly "Atlas 89A323
8473	Ampcoloy E-1	M-13	89 Cu, 10 Al, 1 Fe		70000	40000	12	14	131	Castings	Formerly "Atlas
					80000	45000	20	20	143		89E1"
8474	Ampcoloy E-2	M-13	89 Cu, 10 Al, 1 Fe		75000	43000	10	14	160		Formerly "Atlas
					85000	48000	15	20	180		89E2" (obsolete)
8475	Ampcoloy E-3	M-13	89 Cu, 10 Al, 1 Fe		75000	45000	7	9	202		Formerly "Atlas
					80000	50000	12	14	229		89E3" (obsolete)
8476	Ampcoloy E-117	M-13	89 Cu, 10 Al, 1 Fe		90000	70000	2	3	229		Formerly "Atlas
					100000	80000	6	7	255		89E117"
8477	Ampcoloy E-123	M-13	10-11 Al, 1.25 Fe, bal. Cu		80000	42000	12	13	163	Castings	
					95000	50000	15	17	179		
8478	Ampcoloy E-133	M-13	89 Cu, 10 Al, 1 Fe	Heat treated	80000	45000	12	13	163		Formerly "Atlas
					100000	55000	15	17	179		89E123 (obsolete)
8479	Ampco Trodaloy	M-13	Cu alloy							Welding electrode	(Obsolete)
8480	Ampco-Trode 12	M-13	Al, bal. Cu		50000				100	Bronze welding rod for cast iron	
					60000				115		
8481	Ampco-Trode 16	M-13	Al, bal. Cu		60000		10		147	Bronze welding rod	
					70000		20				
8482	Ampco-Trode 18	M-13	Al, bal. Cu		70000		8		160	Bronze welding rod	Building up worn parts
					80000		14		180		
8483	Ampco-Trode 20	M-13	Al, bal. Cu		75000				200	Bronze welding rod	Building up worn parts
					85000				230		
8484	Ampco-Trode 21	M-13	Al, bal. Cu		60000		1.5		275	Bronze welding rods	Building up worn parts
					70000		3.0		310		
8485	Ampco-Trode 22	M-13	Al, bal. Cu		65000				294	Bronze welding rod	Building up worn parts
					75000				342		
8486	Amsco Dieweld	M-9	C, Cr, Mo, bal. Fe						500	Welding rod for forging dies, punches	Coated, air hardening
									600		
8487	Amsco Nickel Manganese Steel	M-9	.7-.9C, 13-15 Mn, .9-1.2 Si, 3.5-4.5 Ni, bal. Fe							Welding rod for austenitic Mn steels	Building up worn parts
8488	Anaconda Electro Sheet Copper	M-8	Cu							Weather proofing	
8489	Anaconda 271 Alloy	M-8	62 Cu, 35 Zn, 3 Pb	Hard	62000	50000	20		77RB	Machined parts	Free cutting
				Soft	47000	32000	60		16RB		
8490	Anaconda No. 624	M-8	60 Cu, 37.75 Zn, 1 Sn, 1 Pb, .1 Al, .15 Si.		55000	35000	8			Pressure die castings	
8491	Ananconda No. 719	M-8	18 Ni, 17 Zn, 65 Cu	Hard	90000		3				
				Soft	58000		40				
8492	Anaconda No. 997	M-8	Cu, alloy							Welding rod	Low fuming
8493	Anaconda 1026	M-8	81.5 Cu, 14.1 Zn, 4.25 Si, .15 Mn		85000	50000	8			Pressure die castings	
8494	Anaconda Special Phosphor Bronze	M-8	88 Cu, 4 Sn, 4 Zn, 4 Pb								Corrosion, heat and abrasion resistant
8495	Anaconda Super Nickel	M-8	70 Cu, 30 Ni							Condenser tubes	For severe service

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8496	Anfriloy	M-681	Cu, Sn, Zn, Pb								
8497	Anode	M-578	Non-ferrous alloy							Welding electrode	General purpose welding
8498	Anticorodal Special	M-689	Al alloy								Same as peraluman
8499	Anticorodal Wrought	M-689	1.0 Si, .65 Mg, .7 Mn, bal. Al	Heat treated	41000	30000	18		75		
				Soft	18000	10000	27		38		
8500	Antimonial Admiralty	M-33	71 Cu, 1 Sn, .04 Sb, 27.96 Zn	Annealed	54000	23000	60			Condensers, tubes	Admiralty brass
8501	AO2o Chisel and Punch	M-365	.50 C, 1.5 Cr, 2.25 W, .25 V, bal. Fe							Tool, chisels, punches	
8502	AP33	French	4 Cu, .25 Ti, bal. Al	Heat treated	45000		6			Light metal parts	
					52000		10				
8503	AP33M	French	4-6 Cu, .5 Mg, .4 Ti, bal. Al		47000					Light metal parts	
8504	Apex	M-688	High C, bal. Fe							Tools, drills	Drill rod
8505	Apollo Chromsteel	M-687	Ni-Cr plated steel								Heat resistant to 800°F.
8506	APW Silver Solder	M-686								Silver solders	
8507	Ara	M-39	C, alloy, bal. Fe							Tools	
8508	Arcast	M-685								Welding electrode	For cast iron
8509	Arcoloy	M-684	95 Cu, Si, P		55000					Range boilers, storage tanks	
8510	Arc-Wel	M-683	Non-ferrous							Welding rod	
8511	Ardoloy		C, alloy, bal. Fe							Cutters, tools	High speed steel
8512	Argus	M-548	Babbitt metal							Bearings	
8513	Aristoloy 302	M-682	17.5-19.0 Cr, 8-9 Ni, .08-.20 C, 2 max. Mn, 1 max. Si, bal. Fe							Stainless parts	Type 302 resists scaling to 1450°F.
8514	Aristoloy 303	M-682	17.5-19.0 Cr, 8-10 Ni, .20 max. C, S or Se or Zr, bal. Fe							Stainless parts	Type 303 Free machining
8515	Aristoloy 304	M-682	17.5-19.0 Cr, 8-9 Ni, .08 max. C, 2 max. Mn, 1 max. Si, bal. Fe							Stainless parts	Type 304 Heat and corrosion resistant
8516	Aristoloy 305	M-682	18-20 Cr, 9-10 Ni, .08-.20C, 2 max. Mn, 2 max. Si, bal. Fe							Stainless parts	Type 305 corrosion resistant
8517	Aristoloy 306	M-682	18-20 Cr, 9-11 Ni, .08 max. C, 2 max. Mn, bal. Fe							Stainless parts for welding	Type 306 Heat and corrosion resistant
8518	Aristoloy 307	M-682	20-22 Cr, 10-12 Ni, .08-.20 C, 1.5 max. Mn, bal. Fe							Stainless parts	Type 307 corrosion resistant
8519	Aristoloy 308	M-682	20-22 Cr, 10-12 Ni, .08 max. C, 1.5 Mn, bal. Fe							Stainless parts	Type 308 Heat and corrosion resistant
8520	Aristoloy 309	M-682	22-26 Cr, 12-14 Ni, .20 max. C, 2.0 max. Mn, bal. Fe							Stainless parts	Resists scaling to 1800°F.
8521	Aristoloy 316	M-682	16-18 Cr, 14 max. Ni, .10 max. C, 2.0 max. Mn, 2-3 Mo, bal. Fe							Stainless parts	Heat and corrosion resistant
8522	Aristoloy 317	M-682	18-20 Cr, 14 max. Ni, .10 max. C, 2.0 max. Mn, 3-4 Mo, bal. Fe							Stainless parts	Heat and corrosion resistant
8523	Aristoloy 347	M-682	17-20 Cr, 8-12 Ni, Cb, .10 max. C, 2 max. Mn, 1 max. Si, bal. Fe							Stainless parts	Heat and corrosion resistant
8524	Aristoloy 410	M-682	10-13.5 Cr, .15 max. C, 1 max. Mn, 1 max. Si, bal. Fe							Corrosion resistant parts	Resists scaling to 1250°F.
8525	Aristoloy 414	M-682	10-13.5 Cr, 2.0 max. Ni, .15 max. C, bal. Fe							Corrosion resistant parts	Resists scaling to 1250°F.

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8526	Aristoloy 416	M-682	12-14 Cr, .15 max. C, .60 max. Mo, .07 S, .07 Se, bal. Fe							Corrosion resistant parts	Free machining
8527	Aristoloy 430	M-682	14-18 Cr, .12 max. C, 1 max. Mn, 1 max. Si, bal. Fe							Corrosion resistant parts	
8528	Aristoloy 4/6 CRMO	M-682	4-6 Cr, .15 max. C, .4-.6 Mo, bal. Fe							Oil tubes, stills, oil refineries	Heat and creep resistant
8529	Aristoloy 7-9 Cr Mo	M-682	7-9 Cr, .15 max. C, Mo, bal. Fe							Oil tubes, stills, oil refineries	Creep and heat resistant
8530	Ark	M-261	.81 C, 3.6 Cr, 7.9 Mo, 1.5 W, 1 V, bal. Fe							Tools, cutters	High speed steel
8531	ArMa Steel	M-690	2.6-2.7 C, 1.2-1.3 Si, .15 S, bal. Fe		108000	95000	1.5		285	Castings, gears, rocker arms, camshafts	
8532	Armco 13	M-10	.12 max. C, 10 Cr, bal. Fe							Cutlery	Corrosion resistant
8533	Armco 17-7	M-10	.10-.20 C, 16-17.5 Cr, 7.0-8.5 Ni, bal. Fe		90000	45000	55		143 170	Stainless parts	Stainless
8534	Armco 18-10 Cb	M-10	.10 max. C, 1.5 max. Mn, 17-20 Cr, 8-12 Ni, (10 x C) Cb, bal. Fe		85000	40000	45 55		140 180	Stainless parts	Stainless Austenitic
8535	Armco 18-12 Mo	M-10	.10 max. C, 16-18 Cr, 14 max. Ni, 2-3 Mo, bal. Fe	Annealed	85000	40000	45 55		135 180	Stainless parts	Stainless Austenitic
8536	Armco 18-20 SMo	M-10	.10 max. C, 1.5 max. Mn, 16-18 Cr, 14 max. Ni, 2-3 Mo, bal. Fe		85000	40000	60		135 180	Stainless parts	Stainless Austenitic
8537	Armco 19-12 Mo	M-10	.10 max. C, 18-20 Cr, 14 max. Ni, 3-4 Mo, bal. Fe	Annealed	85000	40000	40 50		150 200		Austenitic stainless
8538	Armco 27	M-10	.25 max. C, 1.0 Si, 23-30 Cr, bal. Fe		80000	50000	23		175	Heat resistant parts	Resists heat to 2100°F.
8539	Armco High Tensile	M-10	.12 max. C, .35 Cu, .50 Ni, .05 Mo, bal. Fe		65000	50000	28	60		Trucks, railroad cars, automobiles	
8540	Armelec	M-691	Si, bal. Fe								
8541	Armoarc	M-692	C, alloy, bal. Fe							Welding electrodes for armor plate	
8542	Armstrong Metal	M-73									
8543	Armstrong Metal	M-693	.10 C, 4-6 Mn, 17.5 Cr, 8 Ni, 2.9 Cu, bal. Fe		70000		52	71	126		
8544	U.S.S. AR Steel	M-604	.35-.50 C, 1.5-2.0 Mn, .20 Cu, bal. Fe	Heat treated Rolled	150000 125000				250	Fan blades, coke screens, liner plates, tile dies	Wear resistant
8545	Arzite Metal	M-14	C, bal. Fe							Castings	Corrosion resistant malleable iron
8546	AS No. 46 Green Label	M-694	C, alloy, bal. Fe							Master gauges, spindels, forming and trimming dies	
8547	A.S. Tri-Mo	M-694	1.5 C, 12 Cr, .20 V, .8 Mo, bal. Fe							Threading dies, cutting tools, punches, dies	
8548	A.S. White Label	M-694	High C, bal. Fe							Blanking and forming dies, plug gauges	
8549	A.S.V.	M-57	C, bal. Fe							Tools, cutters	
8550	Atlan	M-353	.90 C, .50 Cr, 1.15 Mn, .5 W, bal. Fe							Tools, cutters, drawing dies	
8551	Atlan Non-Shrink Die	M-353	C, alloy, bal. Fe							Tools, dies	Non-deforming
8552	Atlantaloy No. 10	M-695	58 Cu, 41 Zn, 1 Sn		65400	36600	15		124	Castings	Plaster mold
8553	Atlantaloy No. 12	M-695	56.7 Cu, 40 Zn, 1.2 Al, .75 Fe, .9 Mn		81000		22		111	Castings	Plaster mold
8554	Atlantaloy No. 20	M-695	82.5 Cu, 11.2 Al, 5 Fe, 1.2 Mn		102500	51500	12		179	Castings	Plaster mold
8555	Atlantaloy No. 21	M-695	89 Cu, 10 Al, 1 Fe		79300	34900	22		156	Castings	Plaster mold
8556	Atlantaloy No. 22	M-695	91 Cu, 7 Al, 2 Si		61400		44.5		95	Castings	Plaster mold
8557	Atlantaloy No. 23	M-695	79 Cu, 11 Al, 5 Fe, 5 Ni		77600	55500	5.5		190	Castings	Plaster mold
8558	Atlantaloy No. 24	M-695	86.75 Cu, 8.5 Al, 3.5 Fe, 1.25 Mn		66200		28			Castings	Plaster mold

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8559	Atlantaloy No. 31	M-695	65 Cu, 23 Zn, 5 Al, 2.5 Fe, 5 Mn		109250	71500	10		206	Castings	Plaster mold
8560	Atlantaloy No. 42	M-695	91 Cu, 3.25 Al, 1.25 Fe, 4.5 Si		65800	42800	10		121	Castings	Plaster mold
8561	Atlantaloy No. 60	M-695	1.3 Cu, 93.2 Al, .5 Mg, 5.0 Si		17500	15000	5.5			Castings	Plaster mold
8562	Atlantic	M-353	.5 C, 18 W, 4 Cr, 1 V, .15 Mo, bal. Fe							Tools, cutters	High speed steel
8363	Atlas A	M-76	.30 C, 3.5 Cr, 9 W, .45 V, bal. Fe							Hot work tools, piercers, punches, dies	Hot work steel
8564	Atlas Alpha	M-435	.75-1.1 C, bal. Fe							Punches, dies, blacksmith tools	Water hardening
8565	Atlas B	M-76	.40 C, 3.5 Cu, 11 W, .45 V, bal. Fe							Hot work tools, dies, punches	Hot work steel
8566	Atlas CM	M-435	.40 C, 1.2 Mn, .15 Mo, bal. Fe	Normalized	100000	65000	24	53	217	Machinery parts	
8567	Circle L-D	M-74	.40 C, .4 Si, .75 Mn, bal. Fe	Cast	126000	88000	15	34	250	Steel castings	
8568	Circle L-C	M-74	.40C, .4 Si, .75 Mn, bal. Fe	Cast	108000	80000	18	40	200	Steel castings	
8569	Hydronalium Hy 5	M-78	95 Al, 5 Mg	Extruded	33000	13000	16		60	Seaplane pistons, propellers	Resists sea water
					36000	14000	22		70		
8570	Atlas XX-95	M-435	.95 C, bal. Fe							Cold beading dies	Water hardening
8571	Atlas XXX	M-435	1.35 C, 3.75 W, bal. Fe							Tools	maximum wear resistance
8572	Atlas No. 50A	M-76	C, bal. Fe							Hot work tools	Hot work tool steel
8573	Atlas No. 50B	M-76	C, bal. Fe							Hot work tools	Hot work tool steel
8574	Atlas No. 57	M-696	82 Cu, 11 Sn, 3.5 Zn, 0.5 Pb, 3.0 Ni-Sn hardener								
8575	Atlas No. 83A	M-696	85 Cu, 2 Sn, 5 Zn, 8 Pb								
8576	Atlas 89E-123	M-13	88.7 Cu, 10 Al, 1.0 Fe, .30 special elements		80000	42000	12	13	160	Gears, worms, nuts, heavy bearings	
					95000	55000	15	17	180		
8577	Atloy	M-353	C, bal. Fe							Tools	
8578	Auburn Cast	M-697	C, bal. Fe							Tools	
8579	Auburn Extra	M-697	C, bal. Fe							Tools	
8580	Auburn Hot Die	M-697	C, alloy, bal Fe							Tools	
8581	Auburn Perfectio	M-697	C, alloy, bal. Fe							Tools	
8582	Auburn Special	M-697	C, bal. Fe							Tools	
8583	Auburn Standard	M-697	C, bal. Fe							Tools	
8584	Auburn Tool Maker	M-697	C, alloy, bal. Fe							Tools, dies	Non-deforming
8585	Aufriloy	M-681	Cu, Pb, Sn, alloy							Bearings, bushings	
8586	Auromet	M-603	Al, Si, bal. Cu								
8587	Hydronalium Hy-9	M-78	9 Mg, bal. Al	Rolled	60000	40000	10			Seaplane pontoons and propellers	Resists sea water corrosion
				Extruded	54000	25000	20	45	82		
8588	Auromet No. 11	M-603	89 Cu, 10 Al, 1 Fe	Cast	80000	30000	30	30	120	Gear blanks, machine and structural parts	Die casting, corrosion and wear resistant
				Heat treated	80000	45000	3	10	235		
8589	Auromet No. 55	M-603	Al, Fe, bal. Cu		110000	80000	2.5		245	Gears	Corrosion and wear resistant
8590	Auromet No. 145	M-603	81 Cu, 4½ Zn, 5 Si		70000	30000	15	20	128	Gears, water pump impellers	Corrosion and wear resistant, die castings
					88000	55900	19		170		
8591	Auromet No. X-10	M-603	Al, Fe, bal. Cu		115000	105000	1.5		269	Gears	Corrosion and wear resistant
8592	Auromet No. X-14	M-603	Al, Fe, bal. Cu		104000	46000	8.8		187	Gears	
8593	Riverside No. 401	M-98	10 Ni, 23.5 Zn, 1.5 Pb, bal. Cu							Screw machine parts	Free cutting
8594	Autocrat	M-565	Alloy, bal. Cu							Bearings	
8595	Automotive Die	M-140									
8596	Autothermic		Steel coated with Al								
8597	Avial	M-698	0.5 Si, 2.5 Cu, 0.6 Mg, 1.0 Ni, 0.7 Cr, bal. Al	Heat treated	57000		26			Light alloy parts	
8598	Avional 411	M-689	1.0 Si, 4.8 Cu, 0.5 Mg, 0.8 Mn, bal. Al	Heat treated	64000	54000	8		115	Light alloy parts	
					74000	63000	12		130		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8599	Avional M	M–689	0.7 Si, 4.2 Cu, 0.65 Mg, 0.7 Mn, bal. Al	Heat treated	57000	40000	16		105	Light alloy parts	
					65000	44000	20		120		
8600	Avionalplat	M–689	Al alloy							Light alloy parts	Avional coated with Al
8601	Avional SK	M–249	3.5-5 Cu, 0.5-0.8 Mn, 0.5-0.8 Mg, bal. Al	Sheets	65000	48000	18			Light alloy parts	
					72000	56000	14				
8602	Avonmouth	M–699									
8603	AVS Metal	M–700									
8604	A.W. 160	M–701	1.0 Si, 0.7 Mn, .65 Mg, bal. Al							Light alloy parts	Same as Anticorodal
8605	Axaloy	M–702	C, bal. Fe							Truck axles	
8606	Axlo	M–499	C, alloy, bal. Fe	Heat treated	124000	104000	13	39	302	Crankshaft, gears, die blocks	Shock resistant
					234000	218000	21	57	477		
8607	Axloy 20	M–703	3.6 C, 2.5 Si, .60 Mn, bal. Fe		20000				163	For glass molds	Soft cast iron
8608	Axloy 30 CN	M–703	C, Ni, bal. Fe							Hydraulic cylinders, valves	Cast iron
8609	Axloy 30 CNM	M–703	3.3 C, .25-1.0 Ni, .25-1.0 Cr, .25-1.0 Mo, bal. Fe		35000				207	Liners, cams, cylinder blocks, gears	Cast iron
8610	Axloy 30 CRN	M–703	C, Cu, Cr, Ni, bal. Fe		30000					Oil field valves, pump liners	Cast iron, corrosion resistant
8611	Axloy 35 CN	M–703	C, Ni, Cr, bal. Fe		35000					Brake drums, gears, pump liners	Abrasion and wear resistant
8612	Axloy CNM	M–703	C, Ni, Cr, Mo, bal. Fe		35000					Dies, pistons, liners, cams	Wear resistant
8613	Axloy 50 CN	M–703	C, Ni, Cr, bal. Fe		50000					Hydraulic cylinders, valves, steam chests	Cast iron
8614	Axloy 50 CNM	M–703	C, Ni, Mo, bal. Fe		50000					Cylinder heads, pressure gates	Cast iron
8615	AZ	M–699									
8616	BA 35	M–28	.3 Cu, 0.5 Mg, 0.6 Sb, 0.2 Sn, bal. Al		460000		5		100	Light alloy parts	Free cutting
					52000		10				
8617	Bachite	M–704	C, Ni, Cr, bal. Fe								
8618	Bakedie No. 2	M–140								Colored stainless steel parts	Stainless
8619	Baker No. 175L	M–18	60 Ag, 20 Cu, 20 Zn	Annealed	78600		18			Coined parts, bearings, Silver solder	M.P.-680 °C.
8620	Bal-Cut 1115	M–516	.15 C, .15-.25 Pb, bal. Fe							Machinery parts	Free machining
8621	Balfors Ultra-Captal+1	Eng.	C, alloy, bal. Fe							Cutters, tools	High speed steel
8622	Baril										
8623	Barium 13 Cr	M–705	.12 C, 12-15 Cr, bal. Fe	Annealed	65000	40000	30	60		Stainless parts	Corrosion resistant
					75000	45000					
8624	Barium 17 Cr	M–705	.10 C, 16-23 Cr, bal. Fe	Annealed	70000	40000	28	55		Stainless trim	Corrosion resistant
					80000	45000					
8625	Barium 18-8	M–705	.05-.20 C, 16-23 Cr, 7-11 Ni, bal. Fe	Annealed	80000	35000	50	55		Stainless utensils	Heat and Corrosion resistant
					95000	45000	60	65			
8626	Hydronalium Hy-10	M–78	10 Mg, .5 Mn, .2-1.5 Si, bal. Al	Forged	54000	32000	15		93	Seaplane pontoons and propellers	Resists sea water corrosion
8627	BBB Welding Electrode	M–706									
8628	Belectric No. 0	M–707	3 C, 2 Si, bal. Fe	Cast	26000				170	Machinery castings, pumps	Cast iron
					33000				190		
8629	Belectric No. 1	M–707	3.25 C, 2.0 Si, bal. Fe	Cast	35000				200	Gears, pinions, brake drums, brake shoes, pumps	Cast iron
					42000				220		
8630	Belectric No. 2	M–707	2.9 C, 2.0 Si, bal. Fe	Cast	42000				220	Gears, pinions, brake drums, pumps	Cast iron
					50000				240		
8631	Belectric No. 3	M–707	3 C, 2 Si, alloys, bal. Fe	Cast	50000				230	Gears, pinions, brake shoes, pumps	Cast iron
					65000				300		
8632	Belectromal	M–707	2.15-2.35 C, 1.0 Si, 1.0 Cu, .5 Ni, bal. Fe	Cast	70000	45000	15		145	Castings	Malleable iron Ferritic
					60000				170		
8633	Bell Bronze	M–657	80 Cu, 20 Sn							Bells	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8634	Belmalloy	M-707	2.15-2.35 C, 1.0 Si, 1.0 Mn, bal. Fe	Cast	70000	45000	5		179	Tractor parts, axle parts	Pearlitic malleable cast iron
8635	Beraloy No. 25	M-61	97.75 Cu, 2.0 Be, .25 Co	Annealed	80000 66000	50000	10		207	Springs, electric contacts, diaphram valves, bearings	
8636	Bergal	M-708	94.1 Al, 4.0 Cu, 0.8 Mg, 0.7 Mn, 0.4 Si	Heat treated	175000					Light alloy parts	
8637	Bermax	M-709	5-7 Sn, 9-11 Sb, 0.5 max. Cu, bal. Pb		11000		4.5		20	Bearings	Non-magnetic
8638	Berrydur Contracid		Be, bal. Cu						600	Springs	
8639	Berrydur-Cu		1 Be, bal. Cu						260	Springs	Non-magnetic
8640	Berrydur-Cu		2.5 Be, bal. Cu						360	Springs	Non-magnetic
8641	Berylco No. 10	M-646	Be, bal. Cu	Annealed	100000	95000	10 13			Springs	
8642	Berylco No. 25	M-646	Be, bal. Cu	Heat treated	195000	138000	2			Springs	
8643	Berylco No. 70	M-646	Be, bal. Cu	Annealed	70000	65000	10 15			Springs	
8644	Berylco No. 185	M-646	1.5-2.0 Be, 0.5 max. Ni, or Co. 0.25 max. Fe, bal. Cu	Annealed Heat treated	68000 195000		49 3			Springs	
8645	Besplate	M-710	Ni							Anodes	
8646	Hy-Ten-Si No. 3	M-129	65 Cu, 35 Sn	Sand cast	90000	45000	20	20	185	Gears, worm wheels, bearings	
8647	Bethadur 301	M-24	.12-.20 C, 15-17 Cr, 5-7 Ni, bal. Fe							Stainless parts	Stainless
8648	Bethadur 301X	M-24	.10-.20 C, 16-18 Cr, 7-8.5 Ni, bal. Fe							Stainless parts	Stainless
8649	Bethadur 302B	M-24	.08-.20 C, 2-3 Si, 17-19 Cr, 7-9.5 Ni, bal. Fe							Stainless parts	Stainless
8650	Bethadur 309	M-24	.20 max. C, 22-26 Cr, 11-13 Ni, bal. Fe							Stainless and heat resistant parts	Heat and stainless and corrosion resistant
8651	Bethadur 316	M-24	.10 max. C, 16-19 Cr, 14 max. Ni, 2-4 Mo, bal. Fe							Stainless and heat resistant parts	Corrosion and heat resistant
8652	Bethadur 320	M-24	.20 max. C, 17-19 Cr, 7-9.5 Ni, Ti=4×C, bal. Fe							Stainless parts	Stainless
8653	Bethadur 321	M-24	.20 max. C, 18-20 Cr, 8-10 Ni, Ti=4×C, bal. Fe							Stainless parts	Stainless
8654	Bethadur 345	M-24	.15 max. C, 17-19 Cr, 8-12 Ni, Cb=6-10×3, bal. Fe.							Stainless parts	Stainless
8655	Bethadur 346	M-24	.15 max. C, 18-20 Cr, 8-12 Ni, Cb=6-10×C, bal. Fe							Stainless and heat resistant parts	Stainless and heat resistant
8656	Bethadur 347	M-24	.15 max. C, 17-19 Cr, 8-12 Ni, Cb=10×C, bal. Fe							Stainless and heat resistant parts	Stainless and heat resistant
8657	Bethadur 348	M-24	.15 max. C, 18-20 Cr, 8-12 Ni, Cb=10×C, bal. Fe							Heat and corrosion resistant parts	Stainless
8658	Bethlehem HM	M-24	.78C, 8.75Mo, 3.7 Cr, 1.1 V, 1.6 W, bal. Fe							Tools, cutters, reamers, broaches	High speed steel
8659	Bethlehm Mokut	M-24	C, Mo, W, Cr, bal. Fe							Tools, cutters	High speed steel
8660	Bethlehem Moly	M-24	C, Cr, Mo, bal. Fe							Bearings, injector parts	
8661	Bethlehem No. 7	M-24	40 Ni, bal. Fe							Electrical equipment	Low coef. expansion
8662	Bethlehem 66 High Speed	M-24	.81 C, 4 Cr, 4.6 Mo, 5.6 W, 1.6 V, bal. Fe							Tools, cutters, taps, reamers	High speed steel
8663	Bethlehem No. 235	M-24	.35-.50 C, 1.4-2.0 Mn, bal. Fe						235	Shovels, crushers, scraper blades, hoppers	Wear resistant
8664	Bethlehem No. 300	M-24	C, Mn, Si, bal. Fe						300	Shovels, hoppers, crushers, scraper blades	Abrasion resistant
8665	Bethlehem Silico-Manganese Spring Steel	M-24	C, Si, Mn, bal. Fe	Heat treated	210000 235000	180000 195000	12 9	30 35	415	Springs	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8666	Bethlehem Standard Bearing	M–24	1.0 C, 1.35 Cr, bal. Fe							Bearings, rollers, master gauges	Bearing steel
8667	Bicop Oxygen Free Copper		Cu							Electrical motors, generators	
8668	Birmal	M–137	2-6 Mg, .25-.75 Mn, bal. Al	Cast	22000	15000	3		58	Light alloy parts	
8669	Birmalite	M–137	9-11 Cu, .1-.5 Mg, 1.0 Fe, bal. Al	Cast Heat treated	19000 40000	17000	.5 .5		80 150	Pistons	Heat treatable
8670	Birmasil	M–137	11-14 Si, bal. Fe							Light alloy castings	Die cast alloy
8671	B. and L. Special O.H.S.S.	M–516	.15 C, .84 Mn, .13S, bal. Fe							Machinery parts	Free machining (Discontinued)
8672	Black Beauty	M–691	C, bal. Fe							Welding rod	
8673	Black Devil	M–712	C, bal. Fe							Hard facing electrode	Abrasion resistant
8674	Blackor	M–578	87 W, 9 C							Welding rod	Flux coated
8675	Blue Devil 85	M–712	C, Mo, bal. Fe		85000	75000	24	52		Welding rod	Flux coated
8676	Blue Devil 100	M–712	C, Mo, bal. Fe		103000	100000	19	47		Welding rod	Flux coated
8677	Blue Devil Yeloy	M–712	C, bal. Fe		80000	75000	25	53		Welding rod	Flux coated
8678	Blue Diamond	M–542	C, alloy, bal. Fe							Road machinery cutting edges	
8679	Blue Label Extra	M–373	C, bal. Fe							Tools, cutters	
8680	Blue Riband Victory No. 7	M–713	C, Co, W, Cr, bal. Fe							Cutters, tools	High speed steel
8681	B.O.H.	M–345	C, alloy, bal. Fe							Tools, dies	Cast to shape oil hardening
8682	Bohnalite X-10	M–138		Cast Heat treated	22000 36000	12000 17000	1–3 1–4		53–65	Castings Bearings	Permanent mold or die cast
8683	Boloney	M–714								Tools, cutters	High speed steel
8684	Braemow	M–140	.8 C, 5 Mo, 5 W, 4 Cr, 1 V, bal. Fe							Die	
8685	Brake Die	M–140	C, alloy, bal. Fe							Welding electrode	For high tensile steel
8686	Raco HD 64	M–986	C, bal. Fe							Welding rod	Bronze
8687	Bridgeport No. 1232	M–141	Si, bal. Cu							Gears, worm wheel bearings	
8688	Hy-Ten-Si No. 1	M–129	65 Cu, 35 Sn	Sand cast	110000	65000	12	12	225	Piston rings	Heat resistant
8689	Brilybdenum	M–715	Mo, bal. Fe							Cylinder liners	Austenitic
8690	Brimol	British	C, alloy, bal. Fe							Stainless steel parts	Stainless
8691	Bristahl	M–716	C, Ni, Cr, bal. Fe								
8692	Bristol	Europ.	.30 C, .90 Cr, .65 Ni, 1.0 Mo, .6 Al, bal. Fe	Heat treated	150000 200000	135000 175000	18 16	55 50	300 400	Nitrided parts, gears, cams	Nitriding steel
8693	Britor		W, C							Welding	Welding to steel
9694	BRM High Speed	M–289	C, alloy, bal. Fe							Form and lathe tools, reamers, planers	
8695	Bronzark	M–118								Welding electrode	For cast iron or copper
8696	Bronzend	M–677	Mn, bal. Cu							Bronze welding rod	
8697	Bronzend E	M–677	3 Si, .1 Mn, bal. Cu							Bronze welding electrode	Everdur type
8698	Bronzend H	M–677	Cu alloy							Bronze welding electrode	
8699	Bronzochrom No. 185	M–717	Cu alloy						180 235	Superfacing on steel and cast iron	M.P.—1000-1200 °F.
8700	Bronzochrom No. 186	M–717	Cu alloy						240 290	Brazing rod on iron and copper	M.P.—1000-1200 °F.
8701	Bronzochrom No. 187	M–717	Cu alloy						300	Brazing rod on copper	M.P.—1000-1200 °F.
8702	Bronzstox	M–214	Cu alloy							Bearings, bushings	
8703	B.R.S.	M–499	C, Cr, bal. Fe							Ball races	
8704	Bryiron	M–718	2.96 T.C., .73 Mn, 1.2 Si, 1.5 Ni, bal. Fe		51000				221	Liners, pistons	Tr. S.-4160 Def.-0.207"
8705	B.S. (Best Select) Copper	British	Cu								Fire refined

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8706	Youngstown Piladuc	M-531								Normalized tin plate	
8707	Bunting	M-720	Cu alloy							Bearings	
8708	Bunting No. 27	M-720	78.5-81.5 Cu, 9-11 Sn, 9-11 Pb	Cast	35000	17000	20		60	Bearings for machinery and automobiles	C.S.-21000
8709	Bunting No. 51	M-720	86.5 Cu, 10 Sn, 1.5 Pb, 2 Zn, .1 P, .2 Fe, .2 Sb	Cast	40000	18000	20		65	Bearings	C.S.-22000
8710	Bunting No. 72	M-720	83 Cu, 7 Sn, 7 Pb, 3 Zn, .07 P, .2 Fe, .2 Sb	Cast	34000	16000	20		58	Bearings	C.S.-20000
8711	Bunting No. 96	M-720	87.5 Cu, 10 Sn, 2.5 Pb, 1 Zn, .1 P, .2 Fe, .2 Sb	Cast	40000	18000	20		63	Bearings	C.S.-22000
8712	Bunting No. 98	M-720	88 Cu, 10 Sn, 2 Zn, .06 Fe, .20 Sb, .1 P	Cast	40000	18000	20		67	Bearings for aircraft	C.S.-23000
8713	Bunting No. 116	M-720	6 Cu, 86 Sn, .35 Pb, .18 Fe, 7 Sb, .1 Ni, .08 P	Cast						Bearings for internal combustion engine	
8714	Bunting No. 122	M-720	72 Cu, 3 Sn, 25 Pb, .2 Fe, .2 Sb, .25 Ni, .03 P	Cast	15000	7000	5		35	Bearings	C.S.-10000
8715	Bunting No. 124	M-720	85 Cu, 5 Sn, 9 Pb, 1 Zn, .2 Fe, .2 Sb, .1 P	Cast	28000	14000	15		50	Bearings	C.S.-17000 low friction
8716	Bunting No. 125	M-720	75 Cu, 4.5 Sn, 20.5 Pb, 1 Zn, .2 Fe, .2 Sb, .05 P	Cast	22000	11000	12		40	Bearings for electric motors	C.S.-14000
8717	Bunting No. 135	M-720	77 Cu, 8 Sn, 15 Pb, 1 Zn, .2 Fe, .2 Sb, .05 P	Cast	30000	14000	15		52	Bearings	C.S.-18000
8718	Bunting No. 143	M-720	85 Cu, 14 Sn, 1 Pb, .25Zn, .20 Fe, .20 Sb, .1 P	Cast	40000	15000	10		85	Bearings	C.S.-24000
8719	Bunting No. 147	M-720	88 Cu, 8 Sn, 1 Pb, 3 Zn, .2 Fe, .2 Sb, .1 P	Cast	45000	17000	15		65	Bearings	C.S.-22000
8720	Bunting No. 156	M-720	89 Cu, 11 Sn, .2 P	Cast	40000	18000	20		67	Gears	C.S.-23000
8721	Bunting No. 158	M-720	70 Cu, 5 Sn, 25 Pb, .2 Fe, .2 Sb, .25 Ni, .03 P	Cast	20000	10000	8		38	Bearings	C.S.-13000
8722	Bunting No. 161	M-720	63 Cu, 2 Sn, 35 Pb, .2 Fe, .2 Sb, .25 Ni, .03 P	Cast	12000	5000	5		28	Bearings	C.S.-8000
8723	Bunting No. 162	M-720	70 Cu, 9 Sn, 21 Pb, .2 Fe, .2 Sb, .25 Ni, .03 P	Cast	30000	15000	15		55	Bearings	C.S.-20000
8724	Bunting No. 164	M-720	86.5 Cu, 11 Sn, 1.2 Pb, .3 Fe, .2 Sb, 1.0 Ni, .25 P	Cast	40000	18000	12		75	Bearings	C.S.-23000
8725	Bunting No. 170	M-720	.25 Cu, 10 Sn, 75 Pb, .08 Fe, 15 Sb, .20 Ni, .08 P	Cast						Bearings	Babbitt
8726	Bunting No 178	M-720	68 Cu, 4 Sn, 28 Pb, .2 Fe, .2 Sb, .25 Ni, .03 P	Cast	18000	8000	5		36	Bearings	
8727	Burden Best	M-721	C, Si, bal. Fe							Plates, pipe	Wrought iron
8728	Burden Wrot	M-721	C, Si, bal. Fe							Plates, pipe	Wrought iron
8729	Burndy No. 101	M-722	Cu	Cast	20000	9000	50		35	Castings	
8730	Burndy No. 111	M-722	37 Zn, 1.5 Fe, 1.5 Al, .25 Mn, bal. Cu	Cast	70000 80000	30000 34000	25 40		100 105	Castings	
8731	Burndy No. 113	M-722	92.9 Cu, 1.7 Sn, 2.2 Pb, 3.2 Zn	Cast	22600	9200	18			Castings	
8732	Burndy No. 202	M-722	85 Cu, 5 Sn, 5 Pb, 5 Zn	Cast	26000 37000	8000 13000	15 20		45 59	Castings	
8733	Burndy No. 206	M-722	80 Cu, 10 Sn, 10 Pb, trace P	Cast	22000 23000	9000 12700	6 9		46 65	Castings	
8734	Burndy No. 302	M-722	89 Cu, 1 Fe, 10 Al	Cast	60000 80000	9000 13000	15 27		93 100	Castings	
8735	Burndy No. 308	M-722	88 Cu, 10 Sn, 2 Zn	Cast	30000 45000	10000 16000	15 30		57 74	Castings	Gun Metal

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8736	Burndy No. 309	M-722	86 Cu, 9.5 Sn, 2.5 Pb, 2 Zn	Cast	30000	17000	15		52	Castings	Modified gun metal
					40000	19000	25		72		
8737	Burndy No. 314	M-722	96 Cu, 1 Mn, 3 Si	Cast	50000	30000	24		103	Castings	"Everdur"
8738	Burndy No. 316	M-722	88 Cu, 4 Fe, 8 Al	Cast	75000		15		100	Castings	Al Bronze
							20				
8739	Burndy No. 329	M-722	91 Cu, 7 Al, 2 Si	Cast	70000		25			Castings	Duronze III
8740	B. and W. 5150	M-447	1.0 C, .4 Mn, 1.4 Cr, bal. Fe						450		Abrasion resistant
									750		
8741	B-XX	M-424									
8742	Byrwill "B"	M-723	91-93 Zn, 2-3 Pb, 6-7 Cu		28700				67		
8743	C-1	M-451	C, Ni, Mn, bal. Fe							Cast steel parts	Pearlitic
8744	C-55	M-64	.50 C, .75 Cr, 1.25 Ni, bal. Fe							Dies	Oil hardening
8745	C-501	M-724	Mg, Mn, bal. Al							Light alloy parts	Similar to "Peralman"
8746	C-502	M-724	Si, bal. Al							Light alloy parts	Similar to "Silumin"
8747	C-503	M-724	4 Cu, .4 Ti, bal. Al		40000	26000	4		80	Light alloy parts	
					43000	27000	5		90		
8748	Calliflex	M-725	W alloy							Thermostats	
8749	Callinite	M-725	W alloy							Facing alloy	High conductivity
8750	Calmar 18-8 Cb	M-277	17-20 Cr, 7-10 Ni, .9-1.25 Cb, C, bal. Fe	Annealed	80000	40000	40			Castings	Abrasion and corrosion resistant
					85000	45000	45				
8751	Calmet	M-726	Ni-Cr								Heat resistant to 1920 °F.
8752	Calmolloy	M-725	W alloy							Grid wire	
8753	Calo-Ferro (45)	M-275	.45 C, 13 W, 3 Cr, .25 V, bal. Fe							Tool, dies	Hot work tool steel
8754	Caloxo 25-12	M-277	24-27 Cr, 11-14 Ni, .25 max. C, bal. Fe	Annealed	75000	40000	30			Stainless castings	Stainless
					85000	45000	35				
8755	Calsun Bronze 951	M-8	95.5 Cu, 2 Sn, 2.5 Al	Soft	52000			40		Electrical conductors	Corrosion resistant
				Hard	135000			1			
8756	Calumet Box and Pin	M-38	C, alloy, bal. Fe							Mining box and pins	
8757	Cambriloy No. 1	M-727	C, bal. Fe							Mesh belts	
8758	Riverside Beryllium Copper	M-98	2.0-2.5 Be, bal. Cu	Annealed	70400		53			Springs, clips, bearings	Corrosion resistant
				Hard	140000		9				
8759	CanzlerBrass	M-728	Cu alloy							Welding wire	Brass
8760	Canzler No. 1	M-728	Cu alloy							Welding wire	Bronze
8761	Canzler No. 4	M-728	Cu							Welding wire	Copper
8762	Carbium	M-729	Cu, bal. Al							Light alloy parts	Heat treatable
8763	Carboloy Grade 78	M-31	W-Ta-Ti carbides							Cutters, tools, dies	Cemented alloy
8764	Carboloy Grade 999	M-31	WC alloy							Cutters, tools, dies	Cemented alloy 92.5 Ra
8765	Carboloy Grade 1078A	M-31	WC-Ti C							Cutters, tools, dies	Cemented 90.5 Ra
8766	Carbon Cold Header	M-73	.9 C, bal. Fe							Cold heading dies	
8767	Carbon-Molybdenum Steel	M-176	.18-.28 C, .4-.6 Mo, .5-.9 Mn, bal. Fe		65000				145	Machinery parts	
					87000						
8768	Carilloy	M-604	C, alloy, bal. Fe								Formerly "Carnegie-Illinois"
8769	Cariron	M-718	2.96 T.C., .75 Mn, 1.2 Si, 1.55 Ni, bal. Fe		50600				221	Liners, pistons	Tr. S.—4160, Def.—0.207
8770	Caro Bronze	M-730	91.2 Cu, 8.5 Sn, 0.3 P	Annealed	63000		60		50RB	Bearings and wearing parts	Wrought
				Hard	99000		12		100-RB		
8771	Caroph Carbon	M-85	C, bal. Fe							Tools	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8772	Carpenter Chrome Bearing Steel	M-32	1.05 C, 1.4 Cr, bal. Fe							Ball and roller bearing races	
8773	Carpenter Invar 36	M-32	.12 max. C, .35 Mn, 36 Ni + Co, bal. Fe							Precision instruments, radio parts, bimetal	Low coef. expansion
8774	Carpenter Samson No. 5	M-32	.50 C, .60 Cr, 1.25 Ni, .6 Mn, bal. Fe							Machinery parts, gears	Tough
8775	Carpenter No. 30	M-32	30 Ni, bal. Fe							Electrical parts	Non-magnetic
8776	Carpenter No. 484	M-32	.95 C, 5 Cr, .7 Mn, .2 V, 1.0 Mo, bal. Fe							Tools, plastic mold cavities	Air hardening
8777	Carpenter No. 883	M-32	.40 C, 5.0 Cr, .4 V, 1.35 Mo, 1.1 Si, bal. Fe							Hot work dies, punches, mandrils	Red hardness, tough
8778	Carpenter Permanent Magnet Type A	M-32	.90 C, 2.0 Cr, bal. Fe							Magnetic units	Permanent magnets
8779	Carpenter Permanent Magnet Type B	M-32	1.0 C, 3.75 Cr, bal. Fe							Magnetic units	Permanent magnets
8780	Carpenter Permanent Magnet Type C	M-32	.9 C, 6.0 Cr, bal. Fe							Magnetic units	Permanent magnet
8781	Carpenter Permanent Magnet Type D	M-32	1.05 C, 4.1 Cr, .35 Mo, bal. Fe							Magnetic units	Permanent magnet
8782	Carpenter Permanent Magnet Type E	M-32	.60 C, .20 Cr, 5.5 W, bal. Fe							Magnetic units	Permanent magnet
8783	Carpenter Permanent Magnet Type F	M-32	.80 C, 2.75 Cr, 8.75 W, .2 Mo, 17.5 Co, bal. Fe							Magnetic units	Permanent magnets
8784	Carpenter Permanent Magnetic Type G	M-32	.90 C, 5.75 Cr, 3.75 W, 36 Co, bal. Fe							Magnetic units	Permanent magnet
8785	Carpenter Stainless No. 1 JR	M-32	.12 max. C, 12-14 Cr, 3.5-4.5 Al, bal. Fe							Electrical resistance elements	Stainless resistance alloy
8786	Carpenter Stainless No. 2 FM	M-32	.3 C, 12-14 Cr, .3 S, bal. Fe							Surgical instruments, valve parts	Free machining
8787	Carpenter Stainless No. 4A	M-32	.06 C, 17-19 Cr, 7-9.5 Ni, bal. Fe							Stainless parts	Scale resistance to 1600 °F.
8788	Carpenter Stainless No. 4B	M-32	.08-.20 C, 18-20 Cr, 8-10 Ni, bal. Fe							Stainless parts	Stainless
8789	Carpenter Stainless No. 4C	M-32	.11 max. C, 18-20 Cr, 8-10 Ni, bal. Fe							Stainless parts	Stainless
8790	Carpenter Stainless No. 4 Cb	M-32	.07 C, 19 Cr, 9 Ni, .90 Cb, bal. Fe							Stainless parts	Stabilized
8791	Carpenter Stainless No. 4 Ti	M-32	.07 C, 19 Cr, 9 Ni, .40 Ti, bal. Fe							Stainless parts	Stabilized
8792	Carpenter Stainless No. 6-20	M-32	.12 max. C, 18-23 Cr, bal. Fe							Stainless parts	Stainless
8793	Carpenter Stainless No. 7-Mo	M-32	.10 max. C, 25-30 Cr, 3-5 Ni, 1.0-1.5 Mo, bal. Fe							Stainless parts	Stainless, age hardening
8794	Carpenter Stainless No. 321	M-32	.10 max. C, 17-20 Cr, 7-10 Ni, Ti = 6×C, bal. Fe							Stainless parts	Stainless
8795	Carpenter Stainless No. 347	M-32	.10 max. C, 17-20 Cr, 8-12 Ni, Cb = 10×C, bal. Fe							Stainless parts	Stainless
8796	Carpenter Stainless No. D-1	M-32	.10 C, 14-16 Cr, bal. Fe	Annealed	70000	50000	30			Pyrometer protection tubes, strip heaters	Resist heat to 1200 °F.
8797	Cast Composite	M-365	1.0-1.05 C, bal. Fe							Tools	
8798	Casting Weld	M-118								Hard welding electrode	Non-machinable
8799	Castolin	M-717								Welding and brazing alloy	Low temperature
8800	Castolin No. 14	M-717			48000					Welding rod for cast iron	Low temperature
8801	Castolin No. 15	M-717								Welding rod	Low temperature M.P.-354 °F.
8802	Castolin No. 16	M-717								Welding rod for steel	Low temperature

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8803	Castolin No. 17	M-717								Welding rod for cast steel	Low temperature
8804	Castolin No. 18	M-717			57000					Welding rod for brass	Low temperature
8805	Castolin No. 19	M-717								Welding rod for aluminum	Low temperature M.P.-400°F.
8806	Castolin No. 20	M-717									
8807	Castolin No. 21	M-717								Welding rod for nickel	Low temperature
8808	Castolin No. 24	M-717								Welding rod for aluminum	Low temperature
8809	Castolin No. 140	M-717								Welding rod	
8810	Castolin No. 145	M-717								Welding rod for Ni and cast iron	Wear resistant
8811	Castolin No. 180	M-717								Welding rod for steel and cast iron	M.P.-1490°F.
8812	*Castolin No. 181*	M-717								Welding alloy for brass	Low temperature
8813	Castolin No. 185	M-717	Cr, bal. Cu						235	*Welding rod for brass*	*Low temperature*
8814	Castolin No. 186	M-717	Cr, bal. Fe						290	Building up worn parts	
8815	Castolin No. 189	M-717								Building up worn parts	
8816	Castolin No. 190	M-717								Welding rod for bronze	Low temperature
8817	Castolin No. 195	M-717								Welding rod for aluminum	Low temperature
8818	Castolin No. 200	M-717								Welding rod for die casting	Low temperature
8819	Castolin No. 210	M-717								Welding rod for nickel alloys	Low temperature
8820	Castolin No. 211	M-717								Welding rod for cast aluminum	Low temperature
8821	Castolin No. 212	M-717								Welding rod for cast aluminum	Low temperature
8822	*Castolin No. 213*	M-717								Welding rod for cast aluminum	Low temperature
8823	Castolin No. 1600	M-717								Welding rod for cast aluminum	Low temperature
8824	Castolin No. 1601	M-717								Welding rod for WC	Low temperature
8825	Castolin No. 1800	M-717								Welding rod for stainless steel	Low temperature
8826	Castolin No. 1900	M-717								Welding rod for copper alloys	Low temperature
8827	Cataloy	M-481	Pb-Cu-Sn							Welding rod for magnesium alloys	Low temperature
8828	Cataloy No. 1	M-481	20 Pb, 72 Cu, 4 Sn, 4 other elements		26750		18	25	50	Catalyst	For non-ferrous metals
8829	Cataloy No. 2	M-481	25 Pb, 68 Cu, 3 Sn, 4 others		21350		13	25	50		
8830	Cataloy No. 3	M-481	30 Pb, 63 Cu, 3 Sn, 4 others		19550		11.7	19.5	39		
8831	Cataloy No. 4	M-481	25 Pb, 70 Cu, 1 Sn, 4 others		13700		10	9.7	34		
8832	Cataloy No. 5	M-481	40 Pb, 52 Cu, 8 others		9910		5.5	9.8	27		
8833	Cataloy No. 6	M-481	40 Pb, 51 Cu, 1 Sn, 8 others		10500		5.5	19.5	30		
8834	Cataloy No. 7	M-481	50 Pb, 42 Cu, 8 others		6400		10	8.6	13		
8835	Cataloy No. 8S	M-481	13 Pb, 80 Cu, 5 Sn, 2 others		30700		18.8	24.9	50		
8836	Cataloy No. 9N	M-481	11 Pb, 80 Cu, 5 Sn, 4 others		30100		14.1	8.2	53		
8837	CCR	M-699									
8838	Cecolloy	M-474	.30 C, .90 Mn, 1.3 Si, .6 Ni, .5 Mo, bal. Fe		56000				255	Steam cylinder liners, valves	Cast iron
8839	Celto	M-731								Welding electrode	Shielded arc
8840	Cenco	M-215	Cu							Bearings	
8841	Centralloy	M-649	C, alloy, bal. Fe							Bus and railway bodies	
8842	Central A	M-732	12 Si, 2.5 Cu, 1.25 Mg, 1.25 Mn, 2.5 Ni, .25 Ti, bal. Al	Cast	24000		1		110	Light alloy parts	
				Heat treated	33000		1		140		
8843	Central V	M-732	12 Si, 1.25 Mg, 2.5 Mn, .25 Ti, bal. Al	Cast	23000		1		100	Light alloy parts	
				Heat treated	31000		1		130		
8844	Ceralumin	M-452	1.25 Si, 2.5 Cu, .8 Mg, 1.2 Fe, 1.5 Ni, .15 Ce, bal. Al	Heat treated	51000	45000	1		130	Light alloy parts	
					60000	54000			140		
8845	*Ceralumin B*	M-452	1.5 Cu, 1.5 Ni, .2 Mg, .7 Fe, 1.5 Si, 0.1 Ce, bal. Al							*Pistons, cylinders, gear boxes*	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8846	Ceralumin D	M-452	2-3 Cu, 1-2 Ni, .5-1.0 Mg, 1.0-1.4 Si, 1.0-1.4 Fe, bal. Al	Heat treated	28000 40000		5			Light alloy castings	
8847	Ceralumin F	M-452	2.3 Cu, 1.2 Ni, .9 Si, .9 Mg, 1.0 Fe, .17 Ce, bal. Al							Light alloy castings	
8848	Cerro Alloys	M-733								Fusible alloys	
8849	Cetal	M-299	6.5 Si, 3 Cu, 10 Zn, bal. Al		26000 31000		0.5 3.0		65 90		
8850	C.I.G. No. 400	M-734	Cu alloy							Bronze welding rod	Fluxed
8851	C.I.G. No. 401	M-734	Mn. alloy, bal. Cu							Bronze welding rod	Fluxed
8852	C.F.S. No. 1	M-73	C, bal. Fe							Tools, cutters	
8853	Champaloy	M-38	0.6 C, 2.0 Ni, 1.0 Cr, 0.25 Mo, bal. Fe	Heat treated	208000	180000			450	Tools	
8854	Champion	M-712	C, bal. Fe							Welding rod	Ferrous
8855	Champion Grey Devil No. 2	M-712	C, bal. Fe							Welding rod	Flux coated
8856	Channeler	M-377	1.0 C, .5 Mn, bal. Fe							Stone cutting tools, augers, paving drills	Water hardening
8857	Chase Tellurium Copper Type A	M-33	.5 Te, bal. Cu	Forged Drawn	33000 50000	8000 30000	3 15			General	High conductivity
8858	Chase Tellurium Copper Type B	M-33	.5 Te, 1 Ni, 0.2 P, bal. Cu	Forged Heat treated	60000 75000	40000 50000	28 15			Machinery parts	Heat treatable
8859	4-6 Chrome	M-735	4-6 Cr, Ti = 4 to 6×C, .10 C, bal. Fe		66000	39000	45		143	Oil stills and refinery tubes	
8860	Chace No. 6150 Thermoflex	M-582								Circuit breaker elements	
8861	Chrome-Copper-Nickel Steel	M-176	.65-.85 Cr, .75 Ni, .12 C, .45-.65 Cu, bal. Fe		65000	35000	30	50	135	Machinery parts	Low temperature resistance
8862	Chrome Hot Work	M-365	.9 C, 3.75 Cr, bal. Fe							Tools, dies	Hot work
8863	Chrome Magnet	M-373	C, Cr, bal. Fe							Magnets	
8864	Chrome Manganese Steel	M-176	.4 C, .5 Cr, .9 Mn, bal. Fe		100000	55000	25		200	Machinery parts	
8865	Chromend 15/85	M-677	15 Cr, 85 Ni							Weld metal	Heat resisting
8866	Chromend H.C.	M-677	.10 C, 25 Cr, 12 Ni, bal. Fe							Weld metal	Stainless
8867	Chromend H.C N.	M-677	.10 C, 25 Cr, 20 Ni, bal. Fe							Welding rod	Heat and corrosion resistant
8868	Chromend H.N.	M-677	.10 C, 17 Cr, 25 Ni, bal. Fe							Welding rod	Heat and corrosion resistant
8869	Chromend K	M-677	.07 C, 19 Cr, 9 Ni, bal. Fe							Welding rod	Stainless
8870	Chromend K.S.	M-677	.10 C, 2.25 Si, 18 Cr, 8 Ni, bal. Fe							Welding rod	Stainless
8871	Chromend 2M	M-677	.10 C, 2 Cr, .5 Mo, bal. Fe							Welding rod	For low Cr steels
8872	Chromend 5M	M-677	.10 C, 4-6 Cr, .5 Mo, bal. Fe							Welding rod	
8873	Chromend 8/18	M-677	C, 8 Cr, 18 Ni, bal. Fe							Welding rod	Corrosion resistant
8874	Chromend 12	M-677	.10 C, 12 Cr, bal. Fe							Welding rod	Corrosion resistant
8875	Chromend 13/60	M-677	C, 13 Cr, 60 Ni, bal. Fe							Welding rod	Heat resistant
8876	Chromend 15/35	M-677	C, 15 Cr, 35 Ni, bal. Fe							Welding rod	Heat resistant
8877	Chromend 16	M-677	.10 C, 16 Cr, bal. Fe							Welding rod	Corrosion resistant
8878	Chromend 18	M-677	.10 C, 18 Cr, bal. Fe							Welding rod	Corrosion resistant
8879	Chromend 18/8 Mo	M-677	.07 C, 18 Cr, 12 Ni, 3 Mo, bal. Fe							Welding rod	Corrosion resistant
8880	Chromend 19/9 Cb	M-677	.07 C, 19 Cr, 9 Ni, .8-1.0 Cb, bal. Fe							Welding rod	Corrosion resistant
8881	Chromend 25/12 Cb	M-677	.10 C, 25 Cr, 12 Ni, .90-1.1 Cb, bal. Fe							Welding rod	Corrosion and heat resistant
8882	Chromend 28	M-677	C, 28 Cr, bal. Fe							Welding rod	Heat resistant
8883	Chromend 28/3 Mo	M-677	C, 28 Cr, 3 Ni, 1 Mo, bal. Fe							Welding rod	Heat resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8884	Chromend 29/9	M-677	C, 29 Cr, 9 Ni, bal. Fe							Welding rod	Heat resistant
8885	Mir-O-Col	M-988								Hard surfacing welding electrode	
8886	Chromend Special	M-677	C, alloy, bal. Fe							Welding electrode	
8887	Chrome Roll	M-85	C, alloy, bal. Fe							Tools, cutters	
8888	Chrome Vanadium D	M-140	C, Cr, V, bal. Fe							Tools	
8889	Chrome Vanadium Die Casting	M-275 M-140	C, Cr, V, bal. Fe							Tools and dies	
8890	Chrome Vanadium G	M-140	C, Cr, V, bal. Fe							Tools	
8891	Chrome Vanadium H	M-140	C, Cr, V, bal. Fe							Tools	
8892	Chrome Vanadium K	M-140	C, Cr, V, bal. Fe							Tools	
8893	Chromeweld 4-6	M-578	C, 4-6 Cr, Mo, bal. Fe							Welding electrode	For 4-6 Cr steel
8894	Chrommalloy										
8895	Chro-Mow	M-38	.35 C, 5.0 Cr, 1.5 Mo, 4 Mn, 1.25 W, 1.0 Si, bal. Fe							Punches, dies	Hot work steel
8896	Chrom-Super Service	M-739		Cast						Babbitt	Antifriction
8897	C.H.W.	M-73	.5 C, 2.75 Cr, .5 V, 15.0 W, bal. Fe							*Dies, punches, shear blades,* trimmers	Hot work steel
8898	Cindal	M-737	.8 Zn, .3 Mg, .3 Cr, bal. Al		27000 58000		5 20			Light alloy parts	Heat treatable
8899	Circle L22Ag	M-74	.07 C, 18 Cr, 8 Ni, .25-.30 Ag, bal. Fe							Stainless parts	Stainless against sea water
8900	Circle L22AgXM	M-74	.07 C, 18 Cr, 8 Ni, 3 Mo, .25 Ag, bal. Fe							Stainless parts	Resists sea water corrosion
8901	Class E	M-210	C, bal. Fe								
8902	Class H	M-210	C, bal. Fe								
8903	Cleremont Drill Rod	M-38	1.05 C, bal. Fe							Tools, pivots	Drill rod
8904	Cletaloy CT-A	M-738	Cu-W							Spot welding electrode	
8905	Cletaloy CT-65	M-738	Cu-W							Spot welding electrode	For stainless steel sheets
8906	Cletaloy CT-86	M-738	Cu-W							Spot welding electrode	For non-ferrous metals
8907	Cletaloy L-N-14	M-738	Ag-W							Spot welding electrode	
8908	Clevite	M-739	Cu-Pb							Bearings	
8909	Clevite No. 8	M-739	7-9 Pb, 3.5-4.5 Sn, 4 Zn, bal. Cu							Wrist pin and transmission bearings	With steel backing
8910	Clevite No. 10	M-739	9-11 Pb, 9-11 Sn, .5 max. Zn, bal. Cu							Wrist pin and transmission bearings	With steel backing
8911	Clevite No. 25	M-739	21.0-25.0 Pb, 3-4 Sn, 3 Zn, bal. Cu							Steering knuckle bushings	With steel backing
8912	Clevite No. 35	M-739	30-40 Pb, 60-70 Cu							Main and connecting rod bearings	With steel backing
8913	Climax	M-44	24 Ni, 73 Fe, 2.6 Mn		76000					Electrical parts	Heat and corrosion resistant
8914	C.M.P.	M-740	C, alloy, bal. Fe							Parts	Precision cold rolled strip steel
8915	Clomo	M-111a	.95 C, 1.1 Cr, .33 Mo, bal. Fe							Tools, cutters	
8916	Cloverleaf	M-741								Bearings, bushings	
8917	C.L.W.	M-73	.30 C, 3.25 Cr, .5 V, 9.25 W, bal. Fe							Extrusion and trimming dies, punches, shears	Hot work steel
8918	Clyde Alloy	M-742									
8919	C.M.S.	M-743	.10-.20 C, 1.2-1.5 Mn, .075-.15 S, bal. Fe		80000	75000	22	49	192	Machinery parts	Free machining

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8920	Coast Metal	M-167	Fe, Cr, Ni, Mo, C							Hard facing parts	Hard facing alloy
8921	Cobalt	M-344	C, alloy, bal. Fe							Tools, cutters	High speed steel
8922	Cobalt Chrome	M-73	1.35 C, 12.5 Cr, .3 Ni, 3.0 Co, .65 Mo, bal. Fe							Broaches, burnishing tools, valves, punches	High abrasion resistance
8923	Cobaltcrom KXK Stainless	M-40	1.0 C, 18 Cr, 1.1 Co, .2 V, 1.1 Mo, bal. Fe							Dies, press tools, pump valves	Corrosion and abrasion resistant
8924	Cobaltcrom PRK-HT	M-40	C, Co, Cr, bal. Fe							Welding rod	Coated
8925	Cobalt Magnet	M-373	C, alloy, bal. Fe							Magnet	
8926	Colalloy	M-744	Mn, Mg, Si, bal. Al		12000 61000				20 110	Chemical and food handling equipment	
8927	Colmonoy Overlay	M-642	Ni-B							Hard facing	Paste form
8928	Colmonoy No. 1	M-642	C, bal. Fe						600	Welding rod	Boride flux
8929	Colmonoy No. 2	M-642	B, C, bal. Fe							Castings, welding rod	Discontinued. Cast iron containing borides
8930	Colmonoy No. 3	M-642	C, W, Cr, B, bal. Fe						650	Casting, welding rod	Contains borides (Discontinued)
8931	Colmonoy No. 4	M-642	Ni, Cr, B						400	Welding rod	Nickel base alloy with borides
8932	Colmony No. 5	M-642	Ni, Cr, B						500	Pump sleeves, plungers, wear rings	Nickel base alloy with borides
8933	Colmonoy No. 6	M-642	Ni, Cr, B						600	Castings, welding rod	Overlay metal
8934	Colmonoy No. 7	M-642	C, B, bal. Fe						650	Welding rod	Wear and corrosion resistant (Discontinued)
8935	Colmonoy No. 10	M-642	B, Ni, bal. Fe							Welding rod	Corrosion and wear resistant (Discontinued)
8936	Colmonoy No. 20	M-642	Non-ferrous						200	Welding rod	Corrosion resistant
8937	Colonial No. 3	M-34	C, W, bal. Fe							Dies, tools	Hot work steel
8938	Colonial No. 301	M-744			72000	57500	32		109		Non-magnetic
8939	Colt Hot	M-55	C, Cr, Ni, Mo, bal. Fe								
8940	Columbia Extra Vanadium	M-35	1.0 C, .2 V, bal. Fe							Tools, cutters, dies	Tough
8941	Columbia Special Wire Drawing	M-35	2.3 C, 10.5 W, 1.85 Cr, bal. Fe							Wire drawing dies	Used unhardened
8942	Columbia Standard Vanadium	M-35	C, .2 V, bal. Fe							Tools	
8943	Co Major	M-69	C, W, Cr, V, Co, bal. Fe							Tools, cutters	High speed steel
8944	Brae-Cast	M-140	2.0 C, 1.5 Mo, 20 W, 35 Cr, 45 Co	Cast					65Rc	Cutters, tools	Cast
8945	Co-Mo	M-140	.7 C, 9 Mo, 1.5 W, 4 Cr, 1 V, 5 Co, bal. Fe							Tools, cutters	High speed steel
8946	Composition No. 1	M-508	Cu alloy								
8947	Conloy	M-746	Al alloy							Bicycles	Tubes
8948	Conqueror	M-688	.9 C, .4 Mn, .3 Si, bal. Fe							Stone drills and tools, punches chisels	Tough and wear resistance
8949	Conqueror Hollow Drill	M-688	.75 C, .3 Mn, .2 Si, bal. Fe							Hollow stone drills, pneumatic tools	Abrasion and shock resistant
8950	Constahl	M-716	C, Cr, Ni, bal. Fe							Stainless parts	Stainless
8951	Contracid	M-296	.6 Be, 60 Ni, 15 Cr, 7 Mo, bal. Fe							Springs	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8952	Cooper No. 14	M-36	.12-.35 C, 11-14 Cr, bal. Fe	Cast	75000	50000	20		180	Corrosion resistant castings	
8953	Cooper 17SCB	M-36	.08 C, 18-20 Cr, 8-10 Ni, Cb = 10×C, bal. Fe	Cast	80000	40000	47		150	Stainless steel castings	Stainless, resists acids
8954	Cooper No. 19A	M-36	.2-.5 C, 26-30 Cr, 2-3 Ni, bal. Fe	Cast	75000	35000	7		190	Furnace parts, stainless castings	Heat and corrosion resistant
8955	Cooper 21A	M-36	.07-.10 C, 15-20 Cr, 20-25 Ni, 3 Mo, 1.5 Si, bal. Fe	Cast	70000	35000	10		150	For hot H_2SO_4	Stainless
8956	Cooper 21C	M-36	.07-.10 C, 15—20 Cr, 20-25 Ni, 3 Mo, 1.5 Si, bal. Fe	Cast						Acid resistant castings	Stainless
8957	Cooper 22PM	M-36	.2-.5 C, 29 Cr, 9 Ni, 3 Mo, bal. Fe	Cast	90000	60000	30		180	Pumps, valve fittings	Resists sulphite liquors
8958	Cooper 22M	M-36	.2-.5 C, 24-28 Cr, 10-12 Ni, 3 Mo, bal. Fe	Cast						Valves, pumps fittings	Resists sulphite liquors
8959	Circle L-19	M-74	.15 C, 2.75 Ni, bal. Fe	Cast	70000 80000	40000 54000	30 27	50	150 165	Pumps, fittings	For low temperature use
8960	Coppco Ace	M-682	C, alloy, bal. Fe							Tools, cutters, dies	Oil hardening
8961	Coppco Cro-Tung	M-682	.5 C, 1.4 Cr, 2.5 W, bal. Fe	Oil hardened						Punches, chisels, tools	Tough
8962	Coppco Extra	M-682	.95 C, .25 Mn, bal. Fe							Cold heading dies, pneumatic piston tools	Tough
8963	Coppco Hot Work No. 1	M-682	.35 C, .9 Si, 5 Cr, 1.5 Mo, 1.1 W, bal. Fe	Air hardened						Hot work tools and dies, punches	Hot work steel
8964	Coppco Shock	M-682	.55 C, .80 Mn, 1.5 Si, .2 Cr, .35 Mo, bal. Fe							Chisels, penumatic tools	Tough, resists shock
8965	Coppco Special	M-682	.98 C, bal. Fe							Burnishing tools, dies, reamers, cutters	
8966	Coppco Standard	M-682	C, alloy, bal. Fe							Broaches, gauges, milling cutters, reamers	Non-deforming
8967	Coppco Universal	M-682	1.0 C, .25 Mn, .25 Si, bal. Fe							Pneumatic tools, punches, dies	Water hardening
8968	Coppco .75	M-682	.75 C, bal. Fe							Shock tools, shear blades	Water hardening
8969	Coppco 1.10	M-682	C, bal. Fe							Cutters, dies, knives, drills	Water hardening
8970	Coppco 1.20	M-682	1.2 C, .3 Mn, .5 Si, .2 Cr, bal. Fe							Knives, drills, reamers, taps, dies	Wear resistant
8971	Coppco 200	M-682	.9 C, 1.15 Mn, .5 Cr, .5 W, bal. Fe							Tools, dies	Non- deforming oil hardening
8972	Copper Arc	M-685	C, bal. Fe							Welding electrode	For cast iron
8973	Copper-Silicon Steel	M-747	C, Cu, Si, bal. Fe	Cast	107000	92000	1.7	2.2	269	Cast crankshafts	
8974	Corinth	M-1	.90 C, .30 Mn, bal. Fe							Tools, cutters	Water hardening
8975	Coroga	M-76	C, bal. Fe							Tools, cutters	
8976	Cralclad	Japan	Al alloy							Light alloy parts	Clad duralumin
8977	Cranp Alloy No. 99	M-309	Si, bal. Cu		45000	20000	15		120	Gears, cross-head bearings	Similar to "PMG"
8978	Cramp Superstrength 49A	M-309	Mn, Fe, Al, bal. Cu	Cast Forged	120000 125000	90000 90000	10 12	10 12	240 240	Bushings, worms, bearings, valve bodies	Mn bronze
8979	Cramp Superstrength 50	M-309	Mn, Fe, Al, bal. Cu	Cast Forged	90000 93000	45000 50000	25 20	20 20	185 185	Bushings, worms, bearings, valve bodies	Mn bronze
8980	Cramp Superstrength 50A	M-309	Mn, Fe, Al, bal. Cu	Cast Forged	100000 105000	50000 60000	20 18	18 18	200 193	Bushings, worms, bearings, valve bodies	Mn bronze
8981	Crane 5 Cr-Mo	M-748	.30 C, 4-6 Cr, .55 Mo, bal. Fe		110000	80000	18		245	Valves, fittings, piping	
8982	Crane 18-8 Mo	M-748	.10 C, 18-20 Cr, 9-10 Ni, 2-4 Mo, bal. Fe		85000	48000	53		150	Valves, fittings	Heat and abrasion resistance
8983	Crasco No. 7	M-337	1.05 C, .65 Cr, .4 Mn, .15 V, bal. Fe							Tools, dies	
8984	Crasfloy	M-451								Rolls	Hard alloy

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
8985	Crestaloy	M-749	C, Cr, V, bal. Fe							Tools, wrenches	
8986	Creston	M-750	C, alloy, bal. Fe								
8987	Creston No. 5	M-750	.55 C, .25 Mn, 1.25 Cr, 1.8-2.1 W, .15 Mo, .8 Ni, bal. Fe								
8988	Creston No. 6	M-750	C, Mn, Cr, W, Mo, Ni, bal. Fe								
8989	Creston No. 7	M-750	C, Mn, Cr, W, Mo, Ni, bal. Fe								
8990	Crobalt	M-751	C, W, Co, Cr, bal. Fe	Cast						Cutters	Cast alloy
8991	Crodi	M-435	.35 C, .5 Mn, 1.0 Si, 5 Cr, .15 V, .6 Mo, bal. Fe							Punches, dies, shear blades	Hot work steel
8992	Croloy 1¼	M-17	.15 C, 1.0-1.5 Cr, .45-.65 Mo, .5-1.0 Si, .3-.6 Mn, bal. Fe							Tubing	For high temperature use
8993	Croloy 2	M-17	.15 C, .3-.6 Mn, 1.75-2.25 Cr, .4-.6 Mo, bal. Fe							Tubing for oil refinery	For high temperature use
8994	Croloy 2¼	M-17	.15 C, .3-.6 Mn, 2.0-2.5 Cr, .9-1.1 Mo, bal. Fe							Tubing for oil refinery	For high temperature use
8995	Croloy 3M	M-17	.15 C, .3-.6 Mn, 2.75-3.25 Cr, .8-1.0 Mo, bal. Fe							Tubing	For high temperature use
8996	Croloy 5	M-17	.15 C, 4-6 Cr, .45-.65 Mo, bal. Fe							Tubing for oil refinery	For high temperature use
8997	Croloy 5M	M-17	.15-.20 C, 4-6 Cr, .45-.65 Mo, bal. Fe		60000	25000	30		163	High temperature tubes	Resists oxidation to 1200°F.
8998	Croloy 5 Si	M-17	.15 C, .5 Mn, 4-6 Cr, 1-2 Si, .45-.65 Mo, bal. Fe							Tubing	For high temperature use
8999	Croloy 5 Ti	M-17	.15 C, .5 Mn, 4-6 Cr, .5 Si, .45-.65 Mo, Ti, bal. Fe							Tubing	For high temperature use
9000	Croloy 7	M-17	.15 C, 7 Cr, 1.0 Si, .45-.65 Mo, bal. Fe							Tubing for oil refinery	For high temperature use
9001	Croloy 12	M-17	C, 12-14 Cr, bal. Fe	Annealed Heat treated	70000 180000				150 350	Tubing	Heat and corrosion resistant
9002	Croloy 16-13-8	M-17	.13 C, 1.5 Mn, .6 Si, 15.5-17.0 Cr, 2.5-3.25, Mo, 12.5-14.5 Ni, bal. Fe							Tubing	For high temperature use
9003	Croloy 18	M-447	.12 C, 15-18 Cr, .5 max. Ni, bal. Fe	Annealed	70000 85000	40000 60000	27 38		140 180	Tubing	Corrosion resistant
9004	Croloy 18 8	M-447 M-17	.07C, 18 Cr, 9.5 Ni, bal. Fe	Annealed	75000	30000	50		150	Tubing	Stainless
9005	Croloy 18-8 tabilized	M-17	.07 C, .6 Mn, .75 Si, 17-19 Cr, 10-12 Ni, Ti or Cb, bal. Fe	Annealed	75000		35		200	Tubing	For high temperature use
9006	Croloy 18-8S	M-17	.07 C, .6 Mn, .75 Si, 17-19 Cr, 8-10.5 Ni, bal. Fe							Tubing	For high temperature use
9007	Croloy 25-20	M-17	.15 C, 1.5 Mn, .75 Si, 24-26 Cr, 19-21 Ni, bal. Fe	Annealed	75000		35		200	Tubing	For high temperature use
9008	Croloy 27	M-447 M-17	.20 C, 27 Cr, 1 Ni, .12-.25 N, bal. Fe	Annealed	75000 90000	45000 60000	15 30		160 195	Tubing	Acid and alkali resistant
9009	Cromoco	M-57	1.6 C, 12 Cr, 1 Co, 1 Mo, bal. Fe							Dies, coining and blanking dies	Air hardening
9010	Cro-Mo-Loy	M-435	1.0 C, 1.0 Mn, 5.5 Cr, .25 V, 1.0 Mo, bal. Fe							Tools, dies	Air hardening
9011	Cro-Mol C-10	M-207	C, Cr, Mo, V, bal. Fe	Cast						Dies, rams, sow blocks	Castings
9012	Cronitung	M-260	C, alloy, bal. Fe								
9013	Crown	M-657	88 Cu, 10 Sn, 2 Zn; 87 Cu, 9 Sn, 4 Zn; 87 Cu, 8 Sn, 5 Zn	Cast	32000	16000	21			Bearings, pumps, engine castings	
9014	Crownmax										
9015	Crucible Nitrard No. 1	M-76	1.1 C, 12 Cr, Mo, V, bal. Fe							Dies	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9016	Crucible Weld AP	M-118	C, bal. Fe							Welding electrode	For low carbon steel
9017	Crucible Weld DH	M-118	C, bal. Fe							Welding electrode	Coated. For medium carbon steel
9018	Crucible Weld FP	M-118	C, bal. Fe							Welding electrode	Coated. For medium carbon steel
9019	Crusher Bearing Bronze	M-508	Cu alloy							Bearings	
9020	C.T.V. Hot Work	M-261	.40 C, 3.5 Cr, 2.4 W, .5 V, bal. Fe							Bolt and extrusion dies	Hot work steel. Oil hardening
9021	Cuferco	M-118	96 Cu, 2 Fe, 2 Co							Spot welding tips	Hardenable Electric Conductivity = 70% Cu
9022	Cuivrelect	French								Welding rod	
9023	Cupal	M-204	Cu plated Al								
9024	Cupralium	Ger.	7-8 Cu, bal. Al							Light alloy parts	
9025	Cupralium 12	Ger.	11.5-12.5 Cu, bal. Al							Light alloy casting	
9026	Cupralumin 8		8 Cu, .5 Fe, 1.5 Si, bal. Al	Cast						Light alloy parts	Similar to Alcoa 12
9027	Cupralumin 12		12 Cu, bal. Al		21000	20000	.5		80	Light alloy parts	
					26000	24000	1.5		90		
9028	Cuprodie	M-55	.5 C, .8 Cr, 1 Ni, 1.7 Cu, .3 Mo, bal. Fe						477	Die blocks	Resists heat checks
9029	Cuzinal	M-141	77 Cu, 2.1 Al, .03 As, bal. Zn	Annealed	50000		65			Condenser and heat exchangers	
				Drawn	85000		10				
9030	C.V.S.	M-499	C, Cr, V, bal. Fe	Annealed	110000	90000	20	50	277	Locomotive crank pins	Shock resistant
				Heat treated	130000	120000	17	50	302		
9031	C.V.S.S.	M-499	C, Cr, V, bal. Fe	Heat treated	210000	190000	8	20	430	Springs	Shock resistant
					190000	170000	12	30	437		
9032	C. W. Chisel	M-114	C, alloy, bal. Fe							Tools, chisels	
9033	C.Y.	M-752		Cast	60000		.5		250		Abrasion resistant
					70000						
9034	C.Y.C.	M-753									
9035	Cyclo	M-114	C, alloy, bal. Fe							Tools	
9036	Volco No. 10	M-998	85 Cu, 15 Zn	Hard	69000		7			Jewelry, hardware	37% Cond.
				Soft	40000		45				
9037	Volco No. 30	M-998	90 Cu, 10 Zn	Hard	62000		6			Screen wire, jewelry, screw stock	43% Cond.
				Soft	57000		4				
9038	Volco No. 95	M-998	95 Cu, 5 Zn	Hard	55000		5			Jewelry, coins, stampings	56% Cond.
				Soft	35000		38				
9039	Cyclops No. 9	M-114	C, alloy, bal. Fe							Tools	
9040	Morex	M-985	C, W, Cr, 4-6 Mo, bal. Fe							Tools, cutters	High speed steel
9041	Volco No. 5	M-998	63 Cu, 32 Zn, 5 Ni	Hard	80000		7			Plumbing fixtures, jewelry	12% Cond.
				Soft	50000		50				
9042	Cyclops R.B.C.	M-114	C, alloy, bal. Fe							Tools	
9043	Cyclops Special Carbon	M-114	C, bal. Fe							Tools	
9044	D-1 Disston	M-357	.8 C, bal. Fe							Tools	General purpose
9045	D-2	M-739	88 Sn, 3.0-3.5 Cu, 7.25-7.75 Sb, .1-.14 Te							Engine bearings	Steel backed babbitt
9046	D2-SA Tool	M-357	C, bal. Fe							Tools	General purpose
9047	D6-CO	M-357	.8 C, 4 Cr, 6 Co, 1.75 V, 18 W, bal. Fe							Tools, cutters	High speed steel
9048	D9-VA	M-357	1.15 C, .6 Mn, .2 V, .6 Si, bal. Fe							Taps, twist drills, reamers, tools	
9049	D29	M-57	C, alloy, bal. Fe								
9050	Dacar	M-69	C, bal. Fe								
9051	Damascus	M-539	Cu alloy							Bearings	
9052	Damascus	M-754									
9053	Damascus	M-73	.55 C, .25 Cr, .90 Mn, .20 V, 1.95 Si, bal. Fe							Chisels, stamps, cold cutters, punches, shears	Oil hardening
9054	Dannemora	M-434	C, W, Cr, V, bal. Fe							Coining dies	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9055	Dannemora DD59	M-608									
9056	Darwin 19	M-40	C, Co, W, Cr, bal. Fe							Tools, cutters, reamers,	High speed steel
9057	Darwin 93	M-40	.30 C, 3.5 Cr, .30 V, 10 W, .4 Si, bal. Fe							Dies	Hot work steel
9058	Darwin 3581	M-40	C, alloy, bal. Fe							Chisel	Tough and shock resistant
9059	Darwin ACD	M-40	C, bal. Fe							Dies	Water hardening
9060	Darwin Brand L-35	M-40	C, alloy, bal. Fe							Heading dies	
9061	Darwin C.L. No. 1	M-40	C, alloy, bal. Fe							Arc welding electrode, hard surfacing	Coated. Tough and abrasion resistant
9062	Darwin EE	M-40	1.35 C, .15 Cr, 4.0 W, .35 V, bal. Fe							Cutters, shears, tools	Water hardening
9063	Darwin PRK-33 Uncoated	M-40	C, alloy, bal. Fe							Welding electrode	Air hardening
9064	D & D Special O.H.	M-755									
9065	DBL	M-1	.8 C, 4 Cr, 5 W, 4 Mo, 1.5 V, bal. Fe							Cutters, tools	High speed steel
9066	Defender	M-178	Pb alloy		16100	7680			19.5	Bearings	Resists shock
9067	Defirust N	M-100	.12 C, 10-13.5 Cr, 2.0 max. Ni, bal. Fe							Corrosion resistant parts	Corrosion resistant
9068	Defirust No. 410	M-100	.12 max. C, 10-13.5 Cr, bal. Fe							Turbine blades	Corrosion resistant
9069	Defirust No. 416	M-100	.12 max. C, .5 Si, 12-14 Cr, bal. Fe							Corrosion resistant parts	Free machining
9070	Delloy No. 4	M-756	Co-Cr-W							Cutting tools	
9071	Delloy No. 6	M-756	Co-Cr-W							Cutting tools	
9072	Delloy No. 7	M-756	Co-Cr-W							Cutting tools	
9073	Delloy No. 9	M-756	Co-Cr-W							Cutting tools	
9074	Delloyd	M-756								Hard facing welding electrode	
9075	Deltal										
9076	Deltumin										
9077	Denavis	M-755	C, bal. Fe							Tools	
9078	Denavis	M-755	C, W, Cr, bal. Fe							Tools, cutters, reamers	High speed steel
9079	Denscast	M-44								Castings	Thin wall (Discontinued)
9080	Denso Iron	M-95	C, alloy, bal. Fe							Rolls	
9081	Depal	M-757	2 Cu, 2 Mn, 2 Ni, bal. Al		20000 26000	10000 14000	1.5 3.5		55 65		
9082	Deutsche Legierung	Ger.									
9083	D-H Lolm	M-44	Cu-Ni							Electrical resistance	
9084	D-H Nickel A	M-44	Ni							Electrical resistance	
9085	D-H Nickel D	M-44	Ni							Electrical resistance	
9086	D-H Nickel E	M-44	Ni							Electrical resistance	
9087	D-H Nickel Z	M-44	Ni							Electrical resistance	
9088	D-H No. 11 Alloy	M-44	Cu-Ni							Thermocouples, Electrical resistance	
9089	D-H 30 Ohm Alloy	M-44	Cu-Ni							Electrical resistance	
9090	D-H 90 Ohm Alloy	M-44	Cu-Ni							Electrical resistance	
9091	D-H-S Bronze No. 1	M-758	62-66 Cu, 4.5-7.0 Al, 2.0-3.5 Fe, 3.0-4.0 Mn, bal. Zn		120000	95000	12	12	240	Gears, bearings, valve stems	Resists acid, wear and shock
9092	D-H-S Bronze No. 2	M-758	62-66 Cu, 4.5-7.0 Al, 2.0-3.5 Fe, 3.0-4.0 Mn, bal. Zn		115000 120000	90000 95000	12 16	12 19	235 275	Worm gears, rolling mill housing nuts	Resists acid, wear and shock
9093	D-H-S Bronze No. 3	M-758	62-66 Cu, 4.5-7.0 Al, 2.0-3.5 Fe, 3.0-4.0 Mn, bal. Zn		105000	60000	17	17	200	Gears, bearings	Resists acid, wear and shock
9094	D-H-S Bronze No. 4	M-758	62-66 Cu, 4.5-7.0 Al, 2.0-3.5 Fe, 3.0-4.0 Mn, bal. Zn		90000	45000	25	25	185	Gears, bearings	Resists acid, wear and shock

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9095	Diamond A	M-85	2.2 C, .4 V, 11.5 W, bal. Fe							Dies	Air hardening
9096	Diamond Alloy	M-759	Co-Cr-W-Mo							Cutters, tools	
9097	Diamond G Bronze	M-741	Cu alloy							Bearings, bushings	
9098	Dica B	M-69	.33 C, 4.8 Cr, .4 Mn, 1.15 Mo, .95 Si, bal. Fe							Al die casting dies	Hot work steel
9099	Dical	M-760								Light alloy castings	
9100	Chace No. 6125	M-582								Thermostatic Metal	
9101	Die Casting	M-140	.45 C, 2.5 Cr, .60 Mn, .25 V, .3 Si, bal. Fe							Die casting dies	Hot work steel
9102	Die Steel No. 13200	M-373	C, alloy, bal. Fe							Dies	
9103	Didby's Cupritic Alloy		18 Cu, 18 Cr, 72 Fe								
9104	Die-Mol	M-357	.8 C, 4.0 Cr, 1.0 V, 1.5 W, 9 Mo, bal. Fe							Hacksaw blades, cutters, tools, reamers	High speed steel
9105	Dip Metal		70 Cu, .5 Sn, .5 Pb, .5 Ni, bal. Zn		35000		50				
9106	Gyrocast	M-977	C, alloy, bal. Fe							Straightening rolls, bar mill guides	Centrifugally cast castings
9107	Dirilyte Metal	M-761	Al, bal. Cu							Table wear	Color of gold Al bronze
9108	Disston 6-N-6	M-357	.8 C, 4 Cr, 1 V, 6 W, 6 Mo, bal. Fe							Cutting tools	High speed steel
9109	Disston 66	M-357	C, 6 W, 6 Mo, 4 Cr, 1 V, 2 Cu, bal. Fe							Cutting tools	High speed steel
9110	Circle L-205B	M-74	.30 C, .4 Si, .8 Mn, .6 Ni, .6 Cr, .2 Mo., bal. Fe	Cast	110000	90000	20	50	225	Steel castings	
9111	Circle L-205 A	M-74	.3 C, .4 Si, .8 Mn, .6 Ni, .6 Cr, bal. Fe	Cast	95000	62000	23	45	180	Steel castings	
9112	Disston No. 819	M-357	1.25 C, .3 Mn, .4 Cr, bal. Fe							Lawn mower blades	Tough
9113	Disston No. 825	M-357	.9 C, .4 Mn, 2.25 Cr, bal. Fe							Lawn mower blades	Tough
9114	Disston No. 827	M-357	C, alloy, bal. Fe							Lawn mower blades	Tough
9115	Disston No. 841	M-357	.4 C, .3 Mn, .7 Cr, .2 Mo, bal. Fe							Lawn mower blades	
9116	Disston No. 842	M-357	1.0 C, .3 Mn, 1.0 Cr, bal. Fe							Lawn mower blades	
9117	Disston No. 5170	M-357	.7 C, .3 Mn, bal. Fe							Lawn mower blades	
9118	Disston No. 5190	M-357	.9 C, .3 Mn, bal. Fe							Lawn mower blades	
9119	Disston No. 5390	M-357	.9 C, .7 Mn, bal. Fe							Lawn mower blades	
9120	Disston No. 51110	M-357	1.1 C, .3 Mn, bal. Fe							Lawn mower blades	
9121	Dixie Brand	M-365	C, bal. Fe							Tools	
9122	Dixoilbronz	M-590	Cu alloy	Cast						Bearings, bushings, gears, liners	
9123	D & M-7-0	M-40	C, alloy, bal. Fe							Arc welding electrode	Coated. Self hardening
9124	D & M-7-G	M-40	C, alloy, bal. Fe							Arc welding electrode	Coated. Hard surfacing, air hardening
9125	D & M-92	M-40	C, alloy, bal. Fe							Welding rod	Shock resistant
9126	D & M-305	M-40	C, bal. Fe							Arc welding rod	Coated
9127	D & M-LT	M-40	C, alloy, bal. Fe							Arc welding rod	Coated
9128	D & M-U2	M-40	C, alloy, bal. Fe							Welding rod	Self hardening
9129	Dodge Alloy D-1	M-762									
9130	Doquat	Russ.	Fe-W							Cutting tools	Hard sintered alloy
9131	Doler Alumin No. 99	M-158	99 Al	Die cast	10000	5000	25		23	Die Castings	
9132	Doler Alumin No. 133	M-158	13 Cu, 3 Si, bal. Al	Die cast	42000	24000	.5		105	Die castings	
9133	Doler Alumin No. 308	M-158	8 Si, bal. Al	Die cast	38000	20000	5		80	Die castings	
9134	Doler Brass No. 1	M-158	65 Cu, 34 Zn, 1 Si	Die cast	65000	35000	25		120	Die castings	
9135	Doler Brass No. 4	M-158	81.5 Cu, 14.5 Zn, 4.0 Si	Die cast	85000	50000	8		170	Die castings	Corrosion resistant
9136	Doler Brass No. 5	M-158	83 Cu, 10 Zn, 5 Si, 1 Mn, 1 Al	Die cast	105000	60000	5		190	Die castings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9137	Doler-Mag	M-158	9 Al, .1 Mn, .5 Zn, bal. Mg	Die cast	33000	21000	3		60	Die castings	
9138	Doler-Mag No. 2	M-158	2 Al, .2 Mn, .2 Si, bal. Mg	Die cast						Die castings	
9139	Doler-Mag No. 6	M-158	6 Al, .2 Mn, .2 Si, bal. Mg	Die cast						Die castings	
9140	Doler-Mag No. 10	M-158	10 Al, .2 Mn, .5 Si, bal. Mg	Die cast						Die castings	
9141	Doler No. 112	M-158	6-8 Cu, 2 max. Fe, 2.5-3.5 Si, 1.5 Zn, bal. Al	Die cast	30000		1.5		85	Die castings	
9142	Doler-Zink No. 2	M-158	2.7 Cu, 4.1 Al, bal. Zn	Die cast	47900		5.1		83	Die castings	C.S.—93100 S.S.—45800
9143	Doler-Zink No. 3	M-158	4.1 Al, .04 Mg, bal. Zn	Die cast	40300		4.7		74	Die castings	C.S.—60500 S.S.—30900
9144	Doler-Zink No. 5	M-158	1.0 Cu, 4.1 Al, .03 Mg, bal. Zn	Die cast	44500		3		76	Die castings	C.S.—87300 S.S.—38400
9145	Domestic	M-389	C, bal. Fe								
9146	Domite	M-763	C, Ni, bal. Fe							Stamping dies	Cast iron
9147	Donal	M-764	98.5 Al, 1.5 Mn								
9148	Dorium "D"									Condenser tubes	
9149	Double Chrome Vanadium	M-76	C, Cr, V, bal. Fe							Tools	
9150	Double Extra	M-85	C, .65 Cr, bal. Fe							Tools, dies, mandrels	
9151	Double Seven	M-365	1.3 C, 13.3 Cr, 3-4.5 Co, .25 Mo, 1 Ni, bal. Fe							Tools	
9152	Double Six	M-1	C, alloy, bal. Fe							Tools	
9153	Double Six Alloy	M-365	2.25 C, 14 Cr, bal. Fe							Blanking and drawing dies, gages	Non-shrinking
9154	Double Special	M-362	C, .25 Cr, .30 Mn, 3.5 W, .45 Si, bal. Fe							Burnishing tools	Water hardening
9155	Dowmetal "C"	M-43	Mg alloy	Cast						Light alloy parts	
9156	Dowmetal EX	M-43	6.5 Al, .2 Mn, .2 Si, bal. Mg	Die cast	27000	17000	4		50	Die castings	
9157	Dowmetal FS	M-43	Mg alloy								
9158	Dowmetal L	M-43	2.5 Al, .3 Mn, 3.5 Cd, bal. Mg		34000	19000	6		51	Light alloy forgings	
9159	Dowmetal O	M-43	8.5 Al, .2 Mn, .5 Zn, bal. Mg		42000	24000	5		78	Light alloy parts	Forgings or extrusions
9160	Dowmetal P	M-43	10 Al, .1 Mn, 1.0 Zn, bal. Mg	Heat treated	30000	19000	1.0		77	Light alloy castings	
9161	Dowmetal R	M-43	Mg alloy							Light alloy parts	
9162	Dowmetal X	M-43	3 Al, .2 Mn, 3 Zn, .5 max. Si, bal. Mg		38000	20000	9		59	Light alloy parts	Forgings and extrusions
9163	Dragon	M-1	.33 C, .55 Mn, .65 Cr, .35 Mo, bal. Fe							Bucket teeth, keys, studs, bolts	Water hardening
9164	Drawalloy 240	M-765	C, Cr, Ni, bal. Fe						240 260	Hard surfacing welding rod	Austenitic Non-Magnetic
9165	Dreadnaught	M-362	C, 4 Cr, 1.15 V, 18 W, bal. Fe							Tools, cutters, hacksaw blades	High speed steel
9166	Drill	M-377	.85 C, .50 Mn, .25 Si, bal. Fe							Drills, chisels, shear blades, axes, hammers	Water hardening
9167	Ductiloy	M-766	.10-.18 C, .8-.9 Si, .15-.25 Zr, .5-.65 Cr, .6-.75 Mn, .15-.25 Ni, Cu-Mo-Bal. Fe	Rolled	83500	59500	37	69		Machinery parts	See "N-A-X High Tensile"
9168	Dukane	M-755									
9169	Dundie	M-767	C, alloy, bal. Fe							Tools	
9170	Duralinox	French	4.5 Mg, 95.5 Al							Light alloy parts	Formerly "Alumag"
9171	Duralinox	M-767	7 Mg, bal. Al				18 22			Floors, partitions	
9172	Duralinox P	M-767	12 Mg, .5 Mn, bal. Al							Light alloy parts	Corrosion resistant
9173	Duralinox 5	M-767	5 Mg, .5 Mn, bal. Al							Light alloy parts	Corrosion resistant
9174	Duralit	French	3 Cu, .5 Ni, .5 Mg, 1.5 Fe, .7 Si, .1 Ti, bal. Fe							Forged connecting rods	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9175	Duraloy NSMO	M–45	23-25 Cr, 11-13 Ni, .15 max. C, 2-3 Mo, bal. Fe	Cast	75000	35000	25		195	Stainless steel castings	Heat and corrosion resistant
9176	Duraloy 18-8S	M–45	17-19 Cr, 7-9 Ni, .07 max. C, 1.0 Mn, bal. Fe	Cast	65000	35000	35		180	Stainless steel castings	Heat and corrosion resistant
9177	Duraloy 18-8 SMO	M–45	17-19 Cr, 7-9 Ni, .07 max. C, 2-4 Mo, 1.0 Mn, bal. Fe	Cast	65000	35000	35		180	Stainless steel castings	Heat and corrosion resistant
9178	Duraloy 25-20 Mo	M–45	24-26 Cr, 19-21 Ni, .20 C, 2-3 Mo, bal. Fe	Cast	65000	45000	20		185	Stainless steel castings	Heat and corrosion resistant
9179	Duralumin E	M–338	3.0-4.5 Cu, 1.0 max. Fe, 1.0 max. Si, 1.2 max. Mn, 1.0 max. Mg, bal. Al	Heat treated	71000	47000	12		130	Light alloy parts	Extrusions and forgings
9180	Duralumin 681A	M–245 M–338 M–457	4.5 Cu, .5 Mg, .6 Mn, bal. Al							Light alloy parts	
9181	Duralumin 681B	M–768 M–457 M–254	4.5 Cu, .5 Mg, .6 Mn, bal. Al							Light alloy parts	
9182	Duralumin 681H	M–254 M–768 M–338	2.5 Cu, .5 Mg, bal. Al	Heat treated	51000		25			Light alloy parts	
9183	Duralumin 681K	M–768 M–457 M–254 M–767	0.2 Mg, bal. Al	Heat treated	31000		20			Light alloy parts	
9184	Duralumin 681ZB	M–768 M–254 M–338	.6 Si, 4.5 Cu, .5 Mg, .8 Mn, bal. Al	Heat treated	62000 88000		14 3		128 175	Light alloy parts	
9185	Duralumin DM31	M–768 M–254 M–338	.6 Si, 4.0 Cu, 1.0 Mg, 1.2 Mn, bal. Al	Heat treated	71000 74000	57000 60000	10 12		125 140	Light alloy parts	
9186	Duralumin E	Eng.	3.0-4.5 Cu, 1.0 max. Si, 1.0 max. Mg, 1.2 max. Mn, bal. Al		60000	52000	8			Light alloy parts	
9187	Duralumin Super	Ger.	5.5 Cu, .3 Fe, 1.0 Mg, .6 Mn, .6 Si, bal. Al		71000 78000		10 20		130 140	Light alloy parts	
9188	Duralumin Z	Ger.	4.3-5.0 Cu, .3 Fe, .9 Mg, .6 Mn, .6 Si, bal. Al		68000 71000		12 14		130 135	Light alloy parts	
9189	Duranal	Ger.	5-10 Mg, .6 Mn, .2 Si, bal. Al							Light alloy parts	
9190	Duranalium 3.5	M–457	2-6 Mg, .25-.75 Mn, bal. Al	Cast	20000 22000	11000 15000	3 5		54 58	Rivets, bolts, screws	Corrosion resistant
9191	Duranalium 7	M–457	7 Mg, .45 Mn, bal. Al	Rolled	52000	32000	12		115	Seaplane pontoons, propellers	Resists sea water corrosion
9192	Duraweld No. 1	M–769								Hard facing welding rod	
9193	Duraweld No. 3	M–769								Hard facing welding rod	
9194	Duraweld No. 2	M–769								Hard facing welding rod	
9195	Duraweld No. 4	M–769								Hard facing welding rod	
9196	Durcilium	M–770	94.3 Al, 4.0 Cu, .5 Mg, .5 Mn, .7 Si							Light alloy parts	
9197	Durco D-6	M–46	C, 8 Cr, 19 Ni, bal. Fe							Petroleum industry	Corrosion resistant. Austenitic
9198	Durco D-7	M–46	C, 28 Cr, 4 Ni, 1 Mo, bal. Fe							Wear and corrosion resistant parts	High resistance to oxidation
9199	Durco D-10	M–46	Ni-Cr-Mo, W, Mn, Si, C, Fe							Heat and corrosion resistant parts	Non-magnetic

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9200	Durimet	M–46	22 Ni, 19 Cr, 3 Mo, 1 Si, 1 Cu, .07 C	Heat treated	65000	30000	35		130	Heat and corrosion resistant parts	Heat and corrosion resistant
					75000	40000	65		150		
9201	Durimet T.	M–46	22 Ni, 19 Cr, 1 Si, 1 Cu, 3 Mo, .07 C		100000	35000	40			Fume ducts	Heat and corrosion resistant
					110000	40000	45				
9202	Durinval	M–771	36 Ni, Cr, Ti, Al, bal. Fe							Magnetic parts, clock springs	
9203	Durinval	M–772	42 Ni, 2 Al, 2 Ti, bal. Fe							Chronometer springs	Age hardening
9204	Durite	M–35	C, W, bal. Fe							Tools, dies	Hot work steel
9205	Durodie	M–261	.4 C, 3.5 Cr, 2.5 W, .5 V, bal. Fe							Bolt dies, hot extrusion dies	Hot work steel
9206	Duronze IV	M–141	5 Al, bal. Cu	Annealed	65000		45			Condenser tubes	Sea water corrosion resistant
9207	Duronze V	M–141	2 Si, bal. Cu	Drawn	100000		10			Cold headed parts, bolts	Malleable
				Annealed	45000		50				
9208	Duroplat	Ger.	Al coated Duralumin							Bimetal parts	
9209	Dursilium	France	4-5 Cu, bal. Fe							Light alloy parts	
9210	Dutch Boy	M–88	Pb-Sn-Sb-Cu							Bearings	Babbitt
9211	Dutrax	M–358	C, bal. Fe							Machinery parts	
9212	DyCast No. 1	M–73	.40 C, 5.45 Cr, .30 Mn, . 50 V, .80 Mo, 1.0 Si, bal. Fe							Die casting dies	Resists heat checking
9213	Dymal AH	M–750	1.65-2.1 C, .25 Mn, 11-13 Cr, .35 V, .90 Mo, bal. Fe								
9214	Dymal OH	M–750	.90 C, 1.6 Mn, .5 Cr, .5 W, .2-.3 V, bal. Fe								
9215	Dymonhard No. 90	M–773							700	Hard facing electrode	Heat and corrosion resistant
9216	Dymonhard No. 91	M–773							600	Hard facing electrode	Heat and abrasion resistant
9217	Dymonhard No. 92	M–773							550	Hard facing electrode	Tough and shock resistant
9218	Dymonhard No. 93	M–773								Hard facing electrode	Corrosion and acid resistant
9219	Dymonhard No. 94	M–773							*600*	*Hard facing electrode*	*Abrasion resistant*
9220	Dymonhard No. 95	M–773							500	Hard facing electrode	Abrasion resistant
9221	Dymonhard No. 96	M–773							385	Hard facing electrode	Wear resistant
									444		
9222	Dynamic Steel C-3A	M–451	.4 C, Mn, Mo, bal. Fe	Cast						Gears, racks, sprockets	
9223	Dynamic Steel C-4	M–451	C, Ni, V, bal. Fe							*Rolling mill pinions*	
9224	Dynamic Steel C-5	M–451	C, Mn, Ni, Mo, bal. Fe							Rams, saw blocks	
9225	Dynamic Steel C-7	M–451	C, Cr, Ni, Mo, bal. Fe							Steel castings	
9226	Dynamic Steel C-9	M–451	C, Mn, V, bal. Fe							Steel castings	Air hardening
9227	Dynamic Steel C-10	M–451	C, Cr, Mo, bal. Fe							Die blocks, crane wheels	Wear resistant
9228	Dyn-El	M–537	.12 C, .6 Mn, .4 Cu, bal. Fe		72000	58000	28	60		Railroads, trucks, buses	
9229	Dynelec	M–691	Si, bal. Fe							Armatures, electric motors and generators	
9230	E No. 25	M–69	1.0 C, .35 Mn, .25 V, bal. Fe							Tools, concrete breakers	Water hardening
9231	Eagle Music Wire	M–774	C, bal. Fe							Wire, springs	
9232	Earlumin	Spain	4-5 Cu, bal. Al							Light alloy parts	
9233	Eastern G-35	M–775	C, bal. Fe		35000		0		215	Pressure fittings, cams, castings	Gray cast iron
9234	Eastern G-40	M–775	C, alloy, bal. Fe		40000		0		240	Die blocks, stoker parts, castings	Heat resistant cast iron
9235	Eastern H-55	M–775	C, bal. Fe		55000		0		270	Lapping plates, rolls, pressure fittings, castings	Gray cast iron
9236	Eastern H-60	M–775	C, bal. Fe		60000		0		270	Manhole covers, cylinders, rolls, brake drums	Gray cast iron

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9237	Eastern H-65	M-775	C, bal. Fe		65000		0		300	Die blocks, stoker parts, castings	Heat resistant cast iron
9238	Eastern Hy-Tenso	M-775	C, alloy, bal. Fe		75000	50000	5		200	Cams, shafts, clutches, crankshafts	Cast iron
9239	Eastern N	M-775	C, Ni, Cr, bal. Fe		50000		.5		195	Carburizing and annealing boxes, castings	Heat resistant cast iron
9240	Eastern N-1	M-775	C, Ni, Cr, bal. Fe		75000	60000	2		260	Rabble arms, pump parts, furnace parts	Heat resistance cast iron
9241	Eastern N-2	M-775	C, Ni, 28 Cr, bal. Fe		50000	40000	1		225	Annealing boxes, lead pots, pump and valve bodies	Heat resistant cast iron
9242	Eastern N-3	M-775	C, Ni, 23 Cr, bal. Fe		65000	50000	1		260	Glass industry, stainless castings	Stainless cast iron
9243	Eastern N-4	M-775	C, Ni, Cr, bal. Fe		60000	45000	2		250	Carburizing boxes, glass molds	Heat resistant cast iron
9244	Eastern N-5	M-775	C, Ni, Cr, bal. Fe		65000	45000	4		235	Furnace parts, grids, rollers, hearth plates	Heat resistant cast iron
9245	Eastern N-6	M-775	C, Ni, Cr, bal. Fe		75000	40000	20		160	Ship propellers, pump and valve bodies	Stainless cast iron
9246	Eastern "Z" Metal	M-775	C, bal. Fe		75000	50000	12		180	Air drill parts, sprockets, gears, unions	Malleable cast iron
9247	E-B Alloy	M-76	.65 C, 3.75 Cr, .55 V, .70 Mo, bal. Fe							Header dies, gripper dies, shear blades	Hot work steel
9248	E.C. 124										
9249	Eclipse 75		C, alloy, bal. Fe							Cold hobbing tools	
9250	Economy Bronze	M-8	Cu alloy								
9251	Economy Hardface	M-9	C, Cr, Mo, Mn, bal. Fe						450 550	Hard facing electrode	Air hardening
9252	Edal	Ger.	5 Mg, bal. Al		40000 64000	21000 43000	5 31	1		Light alloy parts	
9253	E.H.W. No. 1	M-73	.25 C, 14 W, 4 Cr, bal. Fe							Hot work tools and dies	Hot work steel
9254	E.H.W. No. 2	M-73	C, 10-15 W, bal. Fe							Hot work tools and dies	Hot work steel
9255	E.H.W. No. 3	M-73	C, 6.5-9.5 W, bal. Fe							Hot work tools and dies	Hot work steel
9256	E.I.S. 14	M-64	.75 C, .15 V, bal. Fe							Shears	Water hardening
9257	E.I.S. 15	M-64	.90 C, .15 V, bal. Fe							Shears	Water hardening
9258	E.I.S. 41	M-64	1.0 C, 4 Cr, .15 V, .25 Mo, bal. Fe							Hot work dies	Oil or air hardening
9259	E.I.S. 43	M-64	1.5 C, 12 Cr, bal. Fe							Shear blades	Air hardening
9260	E.I.S. 57	M-64	.6 C, 1.0 Cr, 2.0 Ni, .12 V, .80 Mo, bal. Fe							Hot work dies	
9261	E.I.S. 73	M-64	.30 C, 3.5 Cr, .35 V, 10 W, bal. Fe bal. Fe							Hot work dies	Oil or air hardening
9262	E.I.S. 76	M-64	1.0 C, .6 Cr, 1.2 Mn, .10 V, .5 W, bal. Fe							Dies	Non-deforming oil hardening
9263	E.I.S. 79	M-64	.4 C, 5 Cr, .5 V, 4.25 W, .4 Mo, bal. Fe							Hot work dies	Oil hardening
9264	E.I.S. 97	M-64	.5 C, .4 Cr, 1.0 Mn, .4 Mo, 2.0 Si, bal. Fe							Hot work dies	Oil hardening
9265	E.I.S. 717	M-64	C, alloy, bal. Fe								
9266	Elastuf Chro-Moly (modified)	M-307	C, Cr, Mo, bal. Fe								
9267	Elastuf Type A	M-307	.45-.55 C, Cr, V, bal. Fe	Heat treated	125000 160000	105000 135000	15 22	42 64	255 340	Gears, shafts	Preheat treated

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9268	Elastuf C.H.	M-307	.2 C, 1.25 Mn, bal. Fe		70000					Gears, pinions, shafts	Free machining
9269	Elastuf 44	M-307	.5 C, Cr, Ni, Mo, bal. Fe	Heat treated	193000	185000	13	45	420	Gears, shafts	Preheat treated
					212000	200000	12	42	460		
9270	Elcon										
9271	Electrite No. 19	M-73	.84 C, 4.2 Cr, .25 Mn, 2.1 V, 18.5 W, .6 Mo, bal. Fe							Tools, cutters, blanking and boring tools	Abrasion resistant High speed steel
9272	Chase Alloy No. 58	M-33	98.68 Cu, 1.1 Ni, .22 P		88000	80000	3		96 Rb	Springs, elec. conductors	
					110000	100000					
9273	Electrite Double Six	M-73	.85 C, 5.5 W, 4 Cr, 1.5 V, 4.5 Mo, bal. Fe							Countersink and counterbore tools	High speed steel
9274	Electrite HV-6	M-73	1.15 C, 3 V, 5.5 Mo, 5.9 W, 4.1 Cr, bal. Fe							Tools, cutters, dies	Wear and abrasion resistant
9275	Electrite Lacomo	M-73	.8 C, 4 Cr, 5 Co, 1.25 V, 2 W, 8.5 Mo, bal. Fe							Hobs, saw teeth, lathe centers	High speed steel
9276	Electrite Super Como	M-73	.8 C, 3.75 Cr, 7.5 Co, 1.1 V, 1.75 W, 8.5 Mo, bal. Fe							Lathe tools, milling cutters	High speed steel
9277	Vascoloy-Ramet Gr. 2A68	M-329	Ta, C						91–Ra	Cutters for cast irons	Sintered
9278	Electrite T.N.W.	M-73	.85 C, 4 Cr, 1.8 V, 8 Mo, bal. Fe							Form and gear cutters	High speed steel
9279	Electrite UB	M-73	.8 C, 4.25 Cr, 4.25 Co, 2.15 V, 14 W, bal. Fe							Reamers and reamer blades	High speed steel
9280	Electroloy	M-778								Welding equipment	
9281	Electroloy No. 11	M-777								To eliminate gases and oxides in Cu castings	
9282	Electroloy No. 14	M-777	Cu-Ni							Deoxidizer and fluidizer for valve castings	
9283	Electroloy No. 15	M-777								Degasifier for NI alloy castings	
9284	Electroloy No. 26	M-777								Al bronze degasifier	
9285	Electroloy No. 55	M-777	Ni alloy							Deoxidizer for bronze castings	Degasifier
9286	Electroloy No. 154	M-777									
9287	Electroloy Grade A	M-778			48000		25		135	Spot welding tips, electrical contactors	Electrical conductivity 80-85%
9288	Electroloy Grade B	M-778			175000		5		365	Facing and inserts on projection welding electrodes	Electrical conductivity 40-45%
9289	Electroloy Grade BX	M-778			95000		4		210	Flash and butt welding dies	Electrical conductivity 50%
							8		228		
9290	Electroloy Grade C	M-778			60000		20		150	Spot welding tips	Electrical conductivity 55-65%
9291	Electroloy D	M-777								Deoxidizer for Cu castings	
9292	Electroloy Grade XX	M-778			70000		20		150	Spot welding tips	Electrical conductivity 90%
9293	Electroloy Match Plate Aluminum	M-777	Al alloy							Match plates	
9294	Electroloy Pattern Aluminum	M-777	Al alloy							Patterns	Low shrinkage, high fluidity
9295	Electron A5	M-137	5 Al, bal. Mg							Light alloy parts	
9296	Elektron A7	M-137	7 Al, bal. Mg							Light alloy parts	
9297	Elektron A8	M-137	7-8.5 Al, .2-1.5 Zn, .2-.5 Mn, bal. Mg							Die and sand castings	Light alloy parts
9298	Elektron A8HT	M-106	8 Al, 1 Zn, .5 Mn, bal. Mg	Heat treated	26000		6		50	Light alloy parts	Sand and permanent mold castings
		M-78			32000		10				
9299	Elektron A9V	M-137	8.5 Al, .5 Zn, .3 Mn, bal. Mg							Light alloy parts	Heat treatable

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9300	Elektron A11V	M-137	11 Al, bal. Mg							Light alloy parts	
9301	Raco HD-82	M-986	C, alloy, bal. Fe							Welding electrode for wear resistant surfaces	
9302	Elektron AZ-91	M-137	8.5-10.5 Al, 0.1-1.0 Zn, .2-.5 Mn, bal. Mg	Cast	20000	16000	2	1	60	Light alloy parts	Gravity or pressure die castings
		M-106		Chill	28000	16000	5		70		
9303	Electron AZ 551	M-137	5.5 Al, 1 Zn, bal. Mg							Light alloy parts	
9304	Electrunite Enduro	M-395	C, alloy, bal. Fe								
9305	Electrunite Steel Tubes	M-395	C, alloy, bal. Fe								Electric welded
9306	Elephant Brand No. 28 Metal	M-450	9 Sn, .3 Zn, .01-.35 P, bal. Cu		70000	55000	15				
					100000	80000	20				
9307	Elephant Brand No. 28D	M-450	P, Sn, bal. Cu		85000	60000	20				
9308	Elephant Brand No. 113	M-450	90 Cu, 10 Al		42500	19000	9				
9309	Elephant Brand No. 13 D	M-450	4-6 Sn, 4-6 Pb, .1 P, bal. Cu		55000	30000	12				
9310	Elesco No. 600	M-779									
9311	Elesco No. 600 H.T.	M-779									
9312	Elkaloy D	M-265	Cu alloy	Cast	70000				200		20% Elec. Cond.
9313	Elkaloy DX	M-265	Cu alloy	Cast	120000				240		8-12% Elec. Cond. (Discontinued)
9314	Elkonium No. 25	M-265	93 Ag, 3 Th								(Discontinued)
9315	Elkonium No. 57	M-265									
9316	Elmet C	M-780							120	Welding electrode	82% conductivity for welding iron (spot)
9317	Elmet Cu	M-780							350	Welding electrode	36% conductivity spot welding of copper
9318	Elmet H-1	M-780							120	Welding electrode	Butt welding 59% conductivity
9319	Elmet H-2	M-780							180	Butt welding electrode	45% conductivity
9320	Elmet H-3	M-780								Butt welding electrode	36% conductivity
9321	Elmet U	M-780							180	Spot welding electrode	68% conductivity
9322	Eloxa —	Ger.	Al alloy							Light alloy parts	Anodically oxidized
9323	Elverite C	M-447	1.0-1.8 Cr, 3-3.5 C, .25-1.0 Si, 3.75-4.25 Ni, bal. Fe						650 700	Coal and cement pulverizers	Abrasion resistant
9324	Embeebush Metal	M-179									
9325	Empire No. 1	M-162	.2-.3 C, .6-.8 Mn, .35-.50 Si, bal. Fe							Castings	
9326	Empire No. 2	M-162	.4-.5 C, .6-.8 Mn, .35-.50 Si, bal. Fe							Castings	
9327	Empire No. 3	M-162	.3-.35 C, .6-.8 Mn, .5-.6 V, bal. Fe							Nitriding castings	
9328	Empire No. 4	M-162	.25-.35 C, .7-.9 Mn, .35-.50 Si, .45-.55 Mo, bal. Fe							Castings	
9329	Empire No. 6	M-162	.30-.35 C, .6-.8 Mn, .35-.50 Si, 1.0-1.5 Cr, bal. Fe							Castings	
9330	Empire No. 7	M-162	.8-.9 C, .6-.8 Mn, 1.0-1.5 Cr, bal. Fe							Castings	
9331	Empire No. 8	M-162	.30-.35 C, .6-.8 Mn, .35-.50 Si, 1.0-1.25 Cr, .25 Mo, bal. Fe							Castings	
9332	Empire No. 9	M-162	.45-.55 C, .6-.8 Mn, 1.25-1.50 Cr, .3-.4 Mo, bal. Fe							Castings	
9333	Empire No. 10	M-162	.25-.40 C, .6-.8 Mn, 1.75-2.25 Ni, .65-.95 Cr, .25-.35 Mo, bal. Fe							Castings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9334	Empire No. 11	M-162	.25-.35 C, .6-.8 Mn, 2.25-2.75 Ni, 1.0-1.25 Cr, .30 Mo, bal. Fe							Castings	
9335	Empire No. 13	M-162	.25-.35 C, .6-.8 Mn, 2.25-2.5 Si, 2.25-2.50 Ni, 7-9 Cr, bal. Fe							Castings	
9336	Empire No. 14	M-162	.15-.25 C, .4-.7 Mn, 12-14 Cr, bal. Fe							Corrosion resistant castings	Corrosion resistant
9337	Empire No. 15	M-162	.15-.30 C, .4-.7 Mn, 3 Ni, 16-20 Cr, bal. Fe							Corrosion resistant castings	Corrosion resistant
9338	Empire No. 16	M-162	.20 C, .4-.7 Mn, 7-9 Ni, 17-21 Cr, bal. Fe							Stainless Castings	Stainless
9339	Empire No. 16A	M-162	.10 C, .4-.7 Mn, 7-9 Ni, 17-21 Cr, bal. Fe							Stainless castings	Stainless
9340	Empire No. 16B	M-162	.10 C, .4-.7 Mn, 7-9 Ni, 17-21 Cr, 2-4 Mo, bal. Fe							Stainless castings	Stainless
9341	Empire No. 17	M-162	.15-.30 C, 3 Ni, 26-30 Cr, bal. Fe							Corrosion and heat resisting castings	Corrosion and heat resistant
9342	Empire No. 17A	M-162	1.0 C, 3 Ni, 26-30 Cr, bal. Fe							Corrosion and heat resisting castings	Corrosion and heat resistant
9343	Empire No. 19	M-162	.2-.3 C, 7-9 Ni, 26-30 Cr, bal. Fe							Corrosion and heat resisting castings	Corrosion and heat resistant
9344	Empire No. 20	M-162	.15-.20 C, 10-13 Ni, 23-28 Cr, bal. Fe							Corrosion and heat resisting castings	Corrosion and heat resistant
9345	Empire No. 21	M-162	.20-.25 C, 19-21 Ni, 23-27 Cr, bal. Fe							Corrosion and heat resisting castings	Corrosion and heat resistant
9346	Empire No. 22	M-162	.15-.25 C, 24-27 Ni, 18-22 Cr, bal. Fe							Corrosion and heat resisting castings	Corrosion and heat resistant
9347	Empire No. 23	M-162	.15-.25 C, .4-.7 Mn, 34-37 Ni, 13-17 Cr, bal. Fe							Corrosion and heat resisting castings	Corrosion and heat resistant
9348	Endurance AA	M-65	87 Cu, 12 Sn, 1P							Aero and motor bronze castings	Wear resistant, low coef. friction
9349	Endurance BB	M-657	89 Cu, 10.5 Sn, .5 P							Bushings	Resists abrasive wear
9350	Endurance CC	M-657	87.65 Cu, 10 Sn, .35 P							Pumps, collars, bearings	Corrosion resistant
9351	Endurance DD	M-657	80 Cu, 10 Sn, 9.75 Pb, .25 P							Railway bearings, connecting rod bearings	
9352	Endurance EE	M-65	84 Cu, 9.5 Sn, 6.3 Pb, 0.2 P							Railway bearings, connecting rod bearings	
9353	Enduria	M-24	C, bal. Fe							Springs	
9354	Enduro 18-8 F.S.	M-97	C, 18 Cr, 8 Ni, bal. Fe							Spinners, stainless parts	Stainless
9355	Enduro 18-8 S Cb	M-97	.15 C, 17-19 Cr, 7-9.5 Ni, Cb = 6-10×C, bal. Fe	Annealed	80000	35000	60	60	135	Stainless parts	Non-magnetic
					90000	45000	55	55	185		
9356	Endweldur	M-653	C, bal. Fe	Normalized	55000					Chains	
9357	Endweldur 85	M-653	C, bal. Fe	Normalized	85000					Chains	
9358	Endweldur 125	M-653	C, 3.5 Ni, bal. Fe	Heat treated	125000					Chains	
9359	Epco-Oil Hard	M-781	1.0 C, .5 Cr, 1.0 Mn, .5 W, bal. Fe							Dies, gauges, master tools	
9360	Epco-Water Hard	M-781	1.05 C, .25 Mn, bal. Fe							Blanking, forming, and trimming dies	
9361	Erges 4										
9362	Ergonit									Tools	
9363	Evalloy										
9364	Evans Peerless	M-259	C, bal. Fe							Tools	
9365	Evershyne	M-233	C, Ni, Cr, bal. Fe							Stainless parts	Stainless
9366	E.V.H.I.	M-752	C, Ni, Cr, bal. Fe		70000		5			Corrosion resistant parts	Resists S and oxidation
9367	Exi-Die	M-35	.90 C, 1.15 Mn, .5 Cr, .5 W, .1 V, bal. Fe							Taps, reamers, broaches, dies, form tools	Non-deforming

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9368	Extra No. 5	M-360	C, bal. Fe							Tools	
9369	Extra Carbon	M-39	C, bal. Fe								
9370	Extra Carbon	M-73	1.0 C, .25 Mn, .25 Si, bal. Fe							Engraving tools, shear blades, taps	Water hardening
9371	Extra Carbon Vanadium	M-76	C, bal. Fe							Tools	
9372	Extra Draco	M-39	C, bal. Fe							Tools	
9373	Extra G	M-782	C, bal. Fe							Tools	
9374	Midvale Extra	M-85	.6-1.2 C, bal. Fe							Tools	Water hardening
9375	Extra L	M-115	.6-1.25 C, bal. Fe							Tools	Varying tempers
9376	Extra Special Alloy	M-73	C, W, bal. Fe							Tools	
9377	Extra Superduralumin	Japan	Al-Cu-Zn-Mn-Mg							Light alloy parts	
9378	Extra Tough No. 4	M-69	C, alloy, bal. Fe								
9379	Extra Vanadium	M-35	C, .25 Mn, .2 V, .2 Si, bal. Fe							Punches, shock tools	Water hardening
9380	Copperweld Wire	M-711	Cu							Cable	
9381	D.T.D. 49b	British	.35-.45 C, 1.0-1.75 Si, .5-1.0 Mn, 12.5-14.5 Cr, 12.5-14.5 Ni, 2-3 W, bal. Fe							Aircraft valves	Austenitic
9382	Z-Metal	M-904	High C, bal. Fe							Castings	Spheroidized cast iron
9383	Extra	M-783	1.15 C, .3 Mn, .5 V, .35 Si, bal. Fe								
9384	Extra	M-32	C, bal. Fe							Machinery parts	
9385	Everdur D (1000)	M-8	94.8 Cu, 4 Si, 1.1 Mn	Cast	50000	20000	25			Castings, pipe fittings, valves	M.P.—1000°C.
9386	Eureka	M-35	C, bal. Fe							Machinery parts	
9387	Extra Tool	M-784	C, bal. Fe							Tools	
9388	Elektron AZG	M-137	6 Al, 2.25-3.5 Zn, .2-.5 Mn, bal. Mg	Cast	22000	14000	5		55	Light alloy parts	
				Chill	30000	15000	10		60		
9389	*Elektron AZ31*	M-137	2.5-3.25 Al, .75-1.25 Zn, .2-.5 Mn, bal. Mg	Cast	21000	11000	7		45	Brake shoes	Sand or gravity die cast
				Chill	30000	11000	15		45		
9390	Faceweld No. 1	M-578								Hard facing electrode	Cast abrasion resistant
9391	Faceweld No. 12	M-578								Hard facing	Cast abrasion resistant
9392	Fagersta AD 95	M-785	.70 C, .25 Cr, .15 V, 1.0 W, bal. Fe							Coining die	
9393	Fagersta Alloy Shoe Die	M-608	.50 C, .60 Cr, .60 Mn, .40 Mo, bal. Fe							Tools, dies	
9394	Fagersta Alloy "30" Drill	M-608	1.0 C, 1.1 Cr, .30 Mn, .35 Mo, bal. Fe							Tools, drills	
9395	Fagersta Brilliant H.H.	M-608	.70 C, 3.5 Cr, 14 W, bal. Fe							Tools, cutters	High speed steel
9396	Fagersta Brilliant WKE Extra	M-608	.70 C, 4.5 Cr, 9 Co, 1.5 V, 19 W, bal. Fe							Tools, cutters	High speed steel
9397	Fagersta Brilliant WW	M-608	.70 C, 4.5 Cr, 1.5 V, 18 W, bal. Fe							Tools, cutters	High speed steel
9398	Fagersta Broach	M-608	1.15 C, .40 Cr, 1.25 Mn, bal. Fe							Tools, broaches	
9399	Fagersta Die Casting	M-608	.50 C, 3 Cr, .35 Mn, .25 V, bal. Fe							Die casting dies, tools	
9400	Fagersta Engraver Plates	M-608	.35 C, .30 Mn, .10 Si, bal. Fe							Engraver plates	
9401	Fagersta Hollow Drill	M-608	.8 C, .3 Mn, bal. Fe							Hollow drills	
9402	Fagersta Non-Deforming	M-608	.95 C, .45 Cr, 1.05 Mn, .45 W, bal. Fe							Tools, dies	Non-deforming

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9403	Fagersta Overcoat Axe	M-608	1.0 C, .25 Mn, bal. Fe							Axes, tools	
9404	Fagersta Pavement Breaker	M-608	.65 C, .30 Mn, bal. Fe							Pavement breaking tools	
9405	Fagersta Polhem Wire Drawing	M-608	1.8 C, 2.0 Cr, 2.0 Mn, 13 W, bal. Fe							Wire drawing dies	
9406	Fagersta Regular	M-608	1.0 C, .35 Mn, bal. Fe							Tools	
9407	Fagersta Rolled Auger	M-608	.85 C, .30 Mn, bal. Fe							Augers	
9408	Fagersta Special	M-608	1.0 C, .35 Mn, bal. Fe							Tools	
9409	Fahrite C-7	M-95	.20 max. C, 24-27 Cr, 10-13 Ni, 1.25 max. Mn, bal. Fe		84000	40000	25		160	Heat and corrosion resisting parts	Heat and corrosion resistant
9410	Fahrite C7M	M-95	.20 max. C, 24-27 Cr, 10-13 Ni, 2.5-3.5 Mo, bal. Fe		85000	42000	27		179	Heat and corrosion resistant parts	Resists most acids and alkalis
9411	Fahrite C8	M-95	.15 max. C, 7-9 Ni, 17-21 Cr, bal. Fe	Heat treated	85000	40000	57		140	Valves, fittings, castings	Stainless
9412	Fahrite C8A	M-95	.07 C, 18-21 Cr, 8-10 Ni, 1.0 Mn, bal. Fe	Heat treated	80000 90000	36000 45000	50 50		160 170	Stainless parts, castings Stainless parts	Stainless Stainless
9413	Fahrite C8AM	M-95	.07 C, 18-21 Cr, 8-10 Ni, 2.5-3.5 Mo, 1.0 Mn, bal. Fe								
9414	Fahrite C12	M-95	.16 max. C, 12-14 Cr, 1.0 max. Ni, 1.0 max. Mn, bal. Fe	Heat treated	100000	45000	20		179 400	Corrosion resistant parts	Corrosion resistant
9415	Fahrite C-73	M-95	.2-.3 C, 28-30 Cr, 8-10 Ni, bal. Fe		80000	45000	10		200	Stainless steel castings	Resists most acids alkalis
9416	Fahrite N-17	M-95	.20 C, 16-20 Cr, 2 Ni, bal. Fe		80000		30		175	Stainless castings, valves pumps	Corrosion resistant
9417	Fahrite N-61	M-95	.4-.7 C, 59-62 Ni, 10-15 Cr, bal. Fe	Cast	70000	35000	5		185	Carburizing furnace parts	Resists oxidation to 2000 °F.
9418	Falcon 4	M-435	.45 C, 2.25 W, 1.25 Cr, .25 V, bal. Fe							Chisels, pneumatic tools	
9419	Falcon 6	M-435	.55 C, 2.25 W, 1.25 Cr, .25 V, bal. Fe							Punches, shear blades	
9420	Falls No. 11	M-92								Electrical equipment	High electrical conductivity
9421	Falls No. 14	M-92								Pressure tight castings	
9422	Falls No. 15	M-92								Nickel deoxidizer	
9423	Falls No. 21	M-92								Mn bronze hardener	
9424	Falls No. 26	M-92								Al Bronze deoxidizer	
9425	Falls No. 55	M-92								Deoxidizer and degasifier	
9426	Famex										
9427	Farrells Hard Edge	M-220		Heat treated					650 750	Crane wheels, rollers, sheaves, sprockets, gears	Abrasion resistant
9428	F and G1										
9429	F and G3										
9430	F and G4										
9431	F and G5										
9432	F and G8										
9433	Fanite	M-53								Brazing metal	
9434	Fast Finishing	M-365	1.25-1.35 C, 3.5-5.0 W, bal. Fe							Tools	
9435	FCC 5X1	M-439	.30 C, 5 Cr, 1.2 Si, 1.6 Mo, .5 V, bal. Fe							Tools, dies, mandrels	Oil hardening
9436	FCC No. 55	M-439	1.45-1.60 C, 11.5-13 Cr, .85-1.0 Mo, .5 V, 2.0 Co., .4 Ni, bal. Fe							Tools, dies	Cast to shape, air hardening
9437	FCC Nitricastiron	M-439								Liners	
9438	Federal-Mogul B-100	M-709	3-5 Cu, 7-8 Sb, 86-89 Sn	70 °F. 212 °F. 300 °F.	10500 6500 4200		11 18 22		24 13 8	Bearings, steel and bronze back bearings	Babbitt

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9439	Federal-Mogul B-101	M-709	3.5-5.5 Cu, 4-5 Sb, 88.5-91.5 Sn	70 °F.	9500		9		20	Lining for steel and bronze back bearings	Babbitt
				212 °F.	6000		17		11		
				300 °F.	4100		22		6		
9440	Federal-Mogul B-103	M-709	5.0-6.5 Cu, 6.5-7.5 Sb, 85-87.5 Sn	70 °F.	10500		7		25	Lining for steel and bronze back bearings	Babbitt
				212 °F.	6500		10		14		
				300 °F.	4000		15		8		
9441	Federal-Mogul B-104	M-709	6.5-8.5 Cu, 7-8.5 Sb, 82-85.5 Sn	70 °F.	10750		4.6		29	Lining for steel and bronze back bearings	Babbitt
				212 °F.	6800		10		16		
				300 °F.	4400		16		9.6		
9442	Federal-Mogul B-109	M-709	1.5-2.5 Cu, 8.5-9.5 Sb, 88-90 Sn	70 °F.	11650		15		26	Lining for steel and bronze back bearings	Babbitt
				212 °F.	6600		20		13		
				300 °F.	3650		24		8		
9443	Federal-Mogul B-10025	M-709	3-5 Cu, .25 max. Pb, 7.3-8.0 Sb, bal. Sn		12075		15.5		26	Bearings, connecting rods cast on mandrils	Die castings
9444	Federal-Mogul B-10125	M-709	3.5-5 Cu, .25 max. Pb, 4-5 Sb, bal. Sn		11000		11		23	Bearings	Babbitt
9445	Federal-Mogul B-10325	M-709	5-6.5 Cu, .25 max. Pb, 6-7.5 Sb, bal. Sn		12600		4.6		30	Lined bearings	Babbitt
9446	Federal-Mogul B-10425	M-709	6.5-8 Cu, .25 max. Pb, 7.25-8 Sb, bal. Sn		10760		2		32	Main and connecting rod engine bearing	Heavy duty
9447	Federal-Mogul B-10925	M-709	1.75-2.75 Cu, .25 min. Pb, 8.5-9.5 Sb, bal. Sn		11650		17		26	Bearings	Babbitt
9448	Federal-Mogul B-11125	M-709	1.75-2.75 Cu, .25 max. Pb, 7.5-8.5 Sb, bal. Sn		11600		17		26	Bearings	Babbitt
9449	Federal-Mogul CS 50	M-709	.75 Ag, .50 Cu, bal. Cd	70 °F.	18000		50		40	Bearings	
				212 °F.	11800		44		19		
				400 °F.	4350		68				
9450	Federal-Mogul Duro	M-709								*Slow moving pulley and axle* bearings	*Antifriction*
9451	Federal-Mogul F-1	M-709	88 Cu, 10 Sn, 2 Zn		48400		48	41	65	Bearings, gears, piston pin bushings	S.A.E.-62
9452	Federal-Mogul F-2	M-709	80 Cu, 10 Sn, 10 Zn		40000		29	27	64	Bushings, bearings	S.A.E.-64
9453	Federal-Mogul F-3	M-709	83-86 Cu, 4-6 Sn, 4-6 Pb, 4-6 Zn		30400		20	22	56	Bearings, Babbitt lined bearings	"Ounce Metal" "Steam Metal"
9454	Federal-Mogul F-5	M-709	85 Cu, 5 Sn, 9 Pb, 1 Zn		31000		16.5	20	52	Bearings, bushings, babbitt lined bearings	S.A.E.-66
9455	Federal-Mogul F-6	M-709	76-78 Cu, 7-9 Sn, 14-16 Pb, 1.5 others		27000		17	11	50	Bearings for locomotive rods	S.A.E.-67
9456	Federal-Mogul F-8	M-709	83 Cu, 7 Sn, 7 Pb, 3 Zn		34000		23	24	53	Bearings, bushings	
9457	Federal-Mogul F-11	M-709	87-89 Cu, 9-11 Sn, 1.5-2.5 Pb, 1 others		46000		40	31	69	Bearings, bushings	S.A.E.-63
9458	Federal-Mogul F-13	M-709	86-89 Cu, 9-10 Sn, 1-3 Pb, .75-1.5 Zn, 1 others		44000		37	31	64	Bearings	
9459	Federal-Mogul F-15	M-709	70 Cu, 10 Sn, 20 Pb		31300		16	14.6	59	Bearings	
9460	Federal-Mogul F-16	M-709	70 Cu, 5 Sn, 25 Pb		21000		15.7	15.7	42	Bearings, for bushings under water shafts	"Journal Bearing Metal"
9461	Federal-Mogul F-18	M-709	72-74 Cu, 6-8 Sn, 18-20 Pb, 1.5 others		25000		16	14	47	Bearings	
9462	Federal-Mogul F-19	M-709	85-89 Cu, 7.5-8.5 Sn, .75-1.5 Pb, 2.25-4.2 Zn		45000		42	31	58	Bearings	"Ford metal"
9463	Federal-Mogul F-20	M-709	88.5-89.5 Cu, 10.5-11.5 Sn, .25 max. P	Sand cast	52000		47		70	Bearings, gears, bushings	S.A.E.-65 "Gear Bronze"
				Chill	51000		17		100		
9464	Federal-Mogul F-22	M-709	5-12 Al, Fe, Ni, Mn, Zn, Sn, bal. Cu		70000		25		130	Marine propellers	Resists sea water corrosion

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9465	Federal-Mogul F-23	M-709	88-90 Cu, 9.5-10.5 Al, .75-1.25 Fe		65000		15		125	Gears, bushings, high strength castings	Good corrosion resistant
9466	Federal-Mogul F-26	M-709	2-4 Sn, 30-37 Pb, bal. Cu		19500		10.5	7.5	36	Bearings, bushings	
9467	Federal-Mogul F-27	M-709	11.5-13.5 Sn, 13.5-16.5 Pb, bal. Cu		30000		5		69	Heavily loaded bearings	
9468	Federal-Mogul F-28	M-709	4.5-5.5 Sn, 17-19 Pb, 1.75 others, bal. Cu		25000		12		50	Compressor seals for refrigerators	Resists Freon and SO_2
9469	Federal-Mogul F-32	M-709	10.8-11.1 Al, 4-4.5 Fe, 1.0 others, bal. Cu						185	Rollers, safety tools, forming and drawing dies	Wear resistant
9470	Federal-Mogul F-33	M-709	11.5-12 Al, 4-4.5 Fe, 1.0 others, bal. Cu						225	Rollers, safety tools, dies	Wear resistant
9471	Federal-Mogul F-34	M-709	13 Al, 4-4.5 Fe, 1.0 max. others, bal. Cu						290	Rollers, safety tools, drawing dies	Wear resistant
9472	Federal-Mogul L-100	M-709	5-7 Sn, 9-11 Sb, .5 max. Cu, bal. Pb		11000		4.5		20	Bearings	"Bermax"
9473	Federal-Mogul No. 407	M-709	Ni-Cu-Pb-Sb, Sn							Heavy duty bearings	Babbitt
9474	Federal-Mogul No. 408	M-709	Cu-Sb-Sn							Bearings for motor pumps, rock crushers	Babbitt
9475	Federal-Mogul Special "B"	M-709	Pb-Sb							Slow speed bearings	
9476	Feran	M-798	Fe-Al							Bimetals in canning industry	
9477	Ferchromit	M-651	22-30 Cr, .5-2.5 Si, .1-1.5 C, bal. Fe								Resists oxidation at high temperature
9478	Fermo Special	M-499	C, bal. Fe	Heat treated	72000	44000	27	60	156	Case hardened parts	
					80000	54000	32	65	183		
9479	Ferno	M-688	.70 C, 3.75 Cr, .55 V, .7 Mo, bal. Fe							Hot work dies, punches, shear blades	Good red hardeners
9480	Ferno Extra	M-688	.45 C, 3.75 Cr, .4 Mn, .7 V, 12 W, bal. Fe							Hot work dies, punches, shear blades	Tough and abrasion resistant
9481	Ferrocite	M-799	C, bal. Fe							Valves guides	Powder metals
9482	Ferrodur Iron	M-508	C, alloy, bal. Fe		50000		0		550	Pump liners, shaft sleeves	Centrifugal castings
9483	Ferro-Silicon Cast Iron No. 8	M-243	C, bal. Fe							Welding rod	Cast iron
9484	Ferrotite	M-192									
9485	Ferrowold	M-578	C, bal. Fe							Welding rod for cast iron	Coated
9486	Fibro	M-499	C, bal. Fe	Heat treated	66000	44000	27	60	153	Case hardened parts, gears, shafts	
					76000	54000	32	65	166		
9487	Fifty-Five	M-800	2.9-3.1 C, 1.2-1.5 Ni, .4-.6 Mo, 1.4-1.6 Si, bal. Fe	Cast	55000 62000					Hydraulic press and diesel engine parts	Cast iron
9488	Filnic F	M-44	Ni-Co-Ti-Fe							Resistance metal, filaments	
9489	Finishing Special	M-85	C, Cr, W, bal. Fe							Tools	
9490	Finkl Type R	M-55	C, Ni, Cr, Mo, bal. Fe		110000	86000	23	66		Locomotive side rods	Forgings
9491	Firedie	M-35	.35 C, .5 Cr, .45 Mn, .45 V, 1.0 Mo, 1.0 Si, bal. Fe							Hot work dies, die casting dies	Hot work die steel
9492	Firex Special	M-40	.40-.55 C, .4-1.0 Cr, 2.75-4.0 Ni, .4-.9 Mn, .15-.20 V, .4-.7 Mo, bal. Fe							Tools	Shock resistant
9493	Firth Best Tool	M-57	C, .10 Cr, .28 Mn, bal. Fe							Drills, tools, dies	Water hardening
9494	Firthite HA	M-57	WC, 6 Co						79Rc	Tool bits, cutters	For semi-finishing hard irons
9495	Firthite HB	M-57	WC, 8 Co						77Rc	Tool bits, cutters	For roughing cast iron
9496	Firthite HC	M-57	WC, 13 Co						74Rc	Tool bits, cutters	Heavy roughing cuts

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9497	Firthite HD	M-57	WC						79Rc	Finishing tools, cutters	For moderate roughing cuts
9498	Firthite HD-3	M-57	WC, 6 Co						79Rc	Tools, cutters	Rough and semi-finish cuts
9499	Firthite HE	M-57	WC, 3 Co						80Rc	Tools, cutters	For finishing hard irons
9500	Firthite HF	M-57	WC, 3 Co						81Rc	Tools, cutters	Finishing cuts
9501	Idealoy	M-681	Cu-Sn-Zn-Pb								
9502	Idiart									Compressor pistons	
9503	Idronal	Italian	7 Mg, bal. Al							Marine parts	Resists sea water corrosion
9504	Idronal	Italian	5 Mg, 1 Si, bal. Al							Marine parts	Resists sea water corrosion
9505	IK	French	4.5 Cu, bal. Al		64000		5		110	Light alloy parts	
9506	Illium R	M-29	58 Ni, 21-23 Cr, W, 0-4 Cu, 4-6 Mo, Mn, bal. Fe		105000 150000	55000 100000	45 12		240 365	Chemical equipment, kettles, spray nozzles	Resists strong acids
9507	Impacto	M-435	.15 C, .5 Mn, .25 Mo, 1.75 Ni, bal., Fe	Normalized	80000	45000	30	65	163	Case hardened parts	
9508	Imperial All-Metal Solder	M-786								Al solder	High strength
9509	Imperial Major	M-365	21-22 W, 4-5 Cr, 13 Co, 1.5 V, .5 Mo, bal. Fe							Tools, cutters	High speed steel
9510	Imperium	M-698									
9511	Inco "B" Monel	M-68	31.25 Cu, 1 Fe, 1.5 Mn, 65.5 Ni, .18 C	Forged	102000	70000	22	67	207	Forgings	
9512	Inco MM	M-68	33.7 Cu, 3.3 Fe, .5 Mn, 3.8 Si, 58.5 Ni, .26 C	Cast	61000	44000	.7	1.0	306	Castings to resist steam erosion	
9513	Indco	M-499	C, bal. Fe	Heat treated	56000	46000	30	50		Broaches, knitting machines automobile parts	Case hardening steel
9514	Indus N.C.C.H. No. 1	M-499	C, 1.5 Ni, .3-.5 Cr, bal. Fe	Heat treated	90000	60000	25	60	187	Cams, gears, rollers, crown wheels	Case hardening steel
9515	Indus N.C.H. No. 2	M-499	C, 3 Ni, bal. Fe	Heat treated	110000	70000	23	50	202	Cams, gears	Case hardening steel
9516	Indus N.C.H. No. 3	M-499	C, 3 Ni, .25-.50 Cr, bal. Fe	Heat treated	120000	90000				Cams, gears, crown wheels, bolts	Case hardening steel
9517	Indus N.C.H. No. 4	M-499	C, 5 Ni, bal. Fe	Heat treated	160000 130000	110000 100000	16 13	45 35	302 350	Gears, cams, crown wheels	Case hardening steel
9518	Indus N.C.C.H. No. 5	M-499	C, 3.0-3.5 Ni, .7-1.0 Cr, bal. Fe	Heat treated	140000 160000	100000 120000	17 12	30 40		Heavy gears	Case hardening steel
9519	Indus Nickel Molybdenum	M-499	C, Ni, Mo, bal. Fe	Heat treated	100000 110000	80000 90000	17 22	40 45	228 255	Gears, cams	Case hardening steel
9520	Indus "ONC"	M-499	C, 3.0-3.75 Ni, Cr, bal. Fe	Annealed Heat treated	90000 130000	56000 110000	25 17	50 50	196 302	Axles, connecting rods, crankshafts, screw couplings	High impact
9521	Indefatigable	French	.26 C, 4 Ni, .6 Cr, .9 Mo, bal. Fe	Heat treated Annealed	230000 120000	190000 100000	6 16			Rail and switch parts, street car tracks	
9522	Ingaclad Type 304	M-328	.08 C, 18-20 Cr, 8-10 Ni, bal. Fe							Stainless parts	Stainless clad steel
9523	Ingaclad Type 309	M-328	.20 C, 22-26 Cr, 12-14 Ni, 2 max. Mn, bal. Fe		60000 70000	40000 50000	30 50		150 200	Heat and corrosion resistant parts	Heat and corrosion resistant clad steel
9524	Ingaclad Type 316	M-328	.10 C, 16-18 Cr, 14 max. Ni, 2-3 Mo, bal. Fe							Heat and corrosion resistant parts	Stainless clad steel
9525	Ingaclad Type 317	M-328	.10 C, 18-20 Cr, 14 max. Ni, 3-4 Mo, bal. Fe							Heat and corrosion resistant parts	Stainless clad steel
9526	Ingaclad Type 347	M-328	.10 C, 17-20 Cr, 8-12 Ni, Cb = 10×C, bal. Fe							Corrosion resistant parts	Stainless clad steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9527	Ingersall	M-328	C, Cr, Ni, bal. Fe	Annealed	85000	165				Stainless steel parts	Stainless
9528	Ingersoll	M-328	C, alloy, bal. Fe							Tools	
9529	Ingersolls DBL	M-328	C, W, Mo, Cr, bal. Fe							Tools, cutters	High speed steel
9530	Inland Ledloy	M-67	C, .15-.35 Pb, bal. Fe							Machinery parts	Free cutting
9531	Innosein		5-6 Cu, bal. Al							Light alloy parts	
9532	Inoxalium	M-787									
9533	Inuso	French								Welding rod	
9534	I.R. Metal	M-788	2.5-3.25 C, .7-1.1 B, .5-1.5 Si, .5-1.25 Mn, 3.5-4.5 Ni, bal. Fe							Oil field accessories	Abrasion resistant cast iron
9535	Iron-Dilite	M-211	Fe							Machinery parts pump bearings	Porous, Powder metallurgy
9536	Iroquois Special	M-76	C, alloy, bal. Fe							Tools	
9537	Ironweld	M-607	C, bal. Fe							Welding rod for cast iron	
9538	Isabellin	M-789	Cu, Mn, Al							Electric resistance parts	
9539	Isorod	M-507	3 C, 1 Si, 2 Mn, 2 Cr, 5 Mo, 2 Ni, bal. Fe			78000			545	Wear plates	Corrosion and abrasion resistant
9540	Italsil	Italy									
9541	Jalcold	M-173									
9542	Jalweld	M-173									
9543	Janney Alloy No. 20	M-508	79 Cu, 2 Ni, 5 Sn, 14 Pb			28000			75 85	Bushings, bearings, sleeves and pump liners	Abrasion resistant
9544	Jano	M-344	C, 4 Cr, 2 V, 19 W, .6 Mo, bal. Fe							Tools, cutters	High speed steel
9545	J. & L. Correct Balance	M-173	C, bal. Fe							Forgings	
9546	JBR Alloy	M-790	C, 6 Co, W, Cr, V, bal. Fe							Tools, cutters	Tipped tools
9547	J. C. Dairy Metal	M-508	30-35 Ni, 55-60 Cu, bal. special alloy							Dairy equipment, ice cream freezer shell	Centrifugal casting
9548	Jefaloy A	M-170	2.85-3.5 T. C., .3-.7 Mn, Si, bal Fe							Castings, pump parts, sprockets	Wear resistant cast iron
9549	Jelenko No. 7	M-791	Au							Dental work	Cast
9550	Jessco A	M-69	C, W, Cr, V, bal. Fe							Tools, cutters	High speed steel
9551	Jessco B	M-69	C, Co, W, Cr, V, bal. Fe							Tools, cutters	High speed steel
9552	Raco HD30	M-986	C, bal. Fe							Welding electrode	Mild steel
9553	Jessop E-75CV	M-69	C, alloy, bal. Fe							Pneumatic chisel, trimming dies, stamps, shears Tools	
9554	Jessop E-83	M-69	C, bal. Fe							Cutting tools, dies, punches, stamps, shears	Tough, oil hardening
9555	Jessop No. 773	M-69	.68 C, .68 Mn, .3 Mo, bal. Fe								
9556	Jessop Non-Magnetic Steel	M-69	.25-.40 C, 10.5-12 Mn, 7-8 Ni, bal. Fe		80000 110000	35000 60000	25 50	30 60		Transformer covers, switch covers, electric equipment	Austenitic, Non-magnetic
9557	Jessop RT	M-69	C, bal. Fe							Tools	Water hardening
9558	Hewitt Mill	M-959							31.2	Bearings	Babbitt C.S.—19100
9559	J. Hot Working Die	M-69	C, alloy, bal. Fe							Hot work dies	Hot work steel
9560	Johnson Bronze No. LX	M-172	74.75 Pb, 15 Sb, 10 Sn, .25 Cu							Camshaft bearings	Babbitt
9561	Johnson Bronze No. 12	M-172	90 Sn, 7.5 Sb, 2.5 Cu							Bearings	High speed and high temp. service
9562	J.S.B.	M-172	Bronze on steel							Bushings, bearings, washers	Bronze on steel in finished bearing
9563	J.P.S. Steel	M-261	.90-1.0 C, 1.1-1.3 W, .45-.60 Cr, bal. Fe							Shock tools, threading, taps, reamers, broaches	Oil Hardening
9564	K-42-B	M-118	50 Ni, 25 Co, 7 Fe, 18 Cr, 2 Ti	70°F. 1110°F.	165000 127100		29 21	37 22		Dies, valves, steam fitting and turbine blades	Retains strength at high temperature

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9565	Kaloy		3.0-3.2 T.C., 2.0-2.2 Si, .35-.50 Mo, bal. Fe		45000 50000				205 250		Tr. S.-5800, Tr. Def.—.25
9566	Katadyn Silver	Ger.									
9567	K.D. 16	M-344	C, 4.5 Cr, 10 Co, 2.2 V, 16 W, 1.5 Mo, bal. Fe							Tools, cutters	High speed steel
9568	KK	M-435	1.1 C, 1.4 Cr, .4 Mo, bal. Fe							Bearings, machinery parts	Oil hardening
9569	Kelcaloy	M-792	C, bal. Fe alloy							Oil refinery equipment	
9570	Kennametal	M-793	W-Ti-C							Cutting tools	Cemented carbides
9571	Kennametal Grade KH	M-793	$WTiC_2$						91Ra	Cutting Tool	Jr.S.—224000
9572	Kennametal Grade K3H	M-793	$WTiC_2$						79.6 Rc	Cutting Tool	
9573	Kennametal Grade K4	M-793	WC+Co							Cutting tools	For cast iron, brass, stone, slate, etc.
9574	Kennametal Grade K4H	M-793	WC						80.6 Rc	Cutting tools	
9575	Kennametal Grade KM	M-793	$WTiC_2$						77.6 Rc	Cutting tools	Jr.S.—248000
9576	Kennametal Grade KS	M-793	$WTiC_2$						75.6 Rc	Cutting tools	Jr.S.—286000
9577	Kennametal Grade KWH	M-793	$WTiC_2$							Cutting tools, lathe centers	
9578	Kentucky	M-191	C, Cu, bal. Fe								
9579	Kerchsteel		.12-.18 As, C, bal. Fe								
9580	Ketos	M-362	.90 C, .50 Cr, 1.25 Mn, .50 W bal. Fe							Blanking, trimming, and forming dies	
9581	Keystone	M-539	Cu alloy							Bearings	
9582	Keystone Alloy Chisel	M-357	.5 C, 1.1 Cr, 2 W, .2 V, bal. Fe							Chisels, punches, shears	Tough
9583	Kirksite A	M-794 M-88	Al, Cu, Mg, bal. Zn	Cast Rolled	38000 62000		3		107	Stamping dies	
9584	Hewmet	M-959			7850				23.7	Bearings	Babbitt
9585	KL	M-114	.35 C, 7.5 Cr, .6 Mn, 7.5 W, 1.5 Si, bal. Fe							Hot work dies	Resists abrasion and heat checking
9586	K.M	M-114	.45 C, 7.5 Cr, .6 Mn, 7.5 W, 1.5 Si, bal. Fe							Hot work dies	Resists abrasion and heat checking
9587	K-9 Special Oil Hardening	M-365	.90 C, .5 W, .7 Cr, 1.0 Mn, .2 Si, bal. Fe							Tools, cutters	Oil hardening
9588	Kobitalium	Eng.	1-5 Cu, .2-2.0 Ni, .25-2.0 Mn, 1-2 Fe, .5-2.0 Si, .4-2.0 Mg, .08-.12 Ti, bal. Al							Light alloy castings	Also rolled or forged
9589	K.O.H.	M-174	C, alloy, bal. Fe							Tools	
9590	Koltschug	Russ.	4 Cu, .3 Ni, bal. Al							Light alloy parts	
9591	Koval	M-795	72 Ni, 17 Co, 2.2 Ti, 6.25 Fe							Internal combustion valves, molds and machine parts	High temperature resistant
9592	Kerrofestal	Ger.	1.0 Si, .3 Fe, .7 Mn, .65 Mg, bal. Al							Architecture, window frames, chemical industry	Light alloy
9593	Kovar	M-795	29 Ni, 17 Co, .2 Mn, bal. Fe							Electronic tubes, radio and X-ray tubes	Same coef. expansion as glass
9594	Kraffts Alloy	Swed.	8 Sn, 26 Pb, 66 Bi								M.P.—100 °C.
9595	Kramer Grade AX Manganese Bronze	M-346	Cu alloy	Cast	80000					Castings	
9596	Kromal	M-750	C, alloy, bal. Fe								
9597	Kromal No. 2	M-750	.9 C, 1.5 Mn, .4 Cr, .3 V, bal. Fe								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9598	Kromal No. 3	M-750	.5 C, .9 Mn, .9 Cr, .2 Mo, bal. Fe								
9599	Kromal No. 4	M-750	.48C 1.85 Cr, .4 Mo, 1.25 Ni, bal. Fe								
9600	National Graphitic Steel	M-89	C, bal. Fe		75000				200	Steel castings	Abrasion resistant
9601	Raco HD 5	M-986 M-68	C, bal. Fe							Welding electrode	For mild steel
9602	Krosit Chisel Steel	M-362	.5 C, .9 Mn, .35 Mo, 1.5 Si, bal. Fe							Cold chisels	Oil hardening, tough
9603	Krovan	M-362	.9 C, 1.0 Cr, .2 V, bal. Fe							Rolls	Water hardening
9604	Krupp Nitroplat	M-72	Composite sheet Krupp V2A on C steel							Corrosion resistant part	
9605	Krupp V-3M Extra	M-72	C, 12-18 Cr, bal. Fe	Annealed Heat treated					210 620	Ball and roller bearings, disks for meat grinders	Corrosion resistant
9606	Krupp V-16 Supra	M-72	Low C, Cr, Ni, bal. Fe		78000 101000		55 65		140 175	Stainless parts	Austenitic stainless
9607	KS	M-114	.35 C, 5.25 Cr, .25 Mn, .20 V, 5.25 W, .2 Mo, .9 Si, bal. Fe							Hot work dies	Hot work steel resists abrasion and heat checks
9608	Amsco F-8N	M-9									Austenitic Non-magnetic
9609	N.W.S.	M-487 M-352								Tools, dies	Non-shrinkable
9610	K.S. 1275 Kolbenleg										
9611	K.S. Magnet Steel	Japan	.7-1.0 C, 6-8 W, 1-2 Co, bal. Fe							Magnets, magnetos	
9612	K.S. Seewasser Juf										
9613	Maxel 7	M-38	.6-.7 C, .75-1.0 Mn, .7-.9 Mo, bal. Fe								
9614	Kulgrid "C"	M-996								Lead-in wires for vacuum tubes	Resists high temp.
9615	Kuprodur		Cu-Si-Ni								
9616	Kut Kor	M-797	C, W, Cr, V, bal. Fe							Tipped tools and cutters	High speed steel
9617	Kut Kost Grade Y	M-797	C, W-Co-1.5 B, bal. Fe						61Rc	Tools, cutters	For heavy cuts
9618	Kut Kost Grade X	M-797	C, W-Co, 1.5 B, bal. Fe						67Rc	Tools, cutters	Centrifugally cast
9619	Kut Kost Grade XV	M-797	C, W, Co, 1.5 B, bal. Fe						70Rc	Tools, cutters	Centrifugally cast
9620	Kut Kost Grade XX	M-797	W, Co, 1.5 B, bal. Fe						75Rc	Tools, cutters	Light cuts
9621	McGill No. 2	M-181	Si, bal. Cu		95000				160 180		Corrosion and abrasion resistant
9622	Lactovac	M-679									
9623	Lamite Grade 1	M-115	Co-Cr-Mo-W						56Rc	Hard facing electrode	Cast
9624	Lamite Grade 3	M-115	Co-Cr-Mo-W							Hard facing electrode	Cast, Corrosion resistant
9625	Lamite Grade 6	M-115	Co-Cr-Mo-W						44Rc	Hard facing electrode	Cast, Corrosion resistant
9626	Lanark	M-73	.55 C, .15 Cr, .90 Mn, .25 V, 1.3 Mo, 1.9 Si, bal. Fe							Chisels, punches, shear blades, stamps	
9627	LaSalle 1020-90	M-669	.18-.23 C, .7-1.0 Mn, bal. Fe		57000 80000	40000 72000	17 38	60 65	125 156	Machinery parts, piston pin shafts, pinions, gears	Modified X-1020
9628	Latrobe CC	M-73	C, alloy, bal. Fe							Tools	
9629	Latrobe O.K.V.	M-73	C, alloy, bal. Fe							Tools	
9630	Lavin No. 230	M-801	55 Cu, Mn, bal. Zn		65000		40		112		Mn Bronze
9631	Lavin No. 300	M-801	Zn, Mn, 55 Cu		70000		38		131		Mn Bronze
9632	Lavin No. 310	M-801	Zn, Mn, 55 Cu		60000		45		103		Mn Bronze

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9633	Lavin No. 320	M-801	Zn, Mn, 55 Cu		80000		30		156		Mn bronze
9634	Lavin No. 384	M-801	Zn, Mn, 60 Cu		90000		20		178		Mn bronze
9635	Lavin No. 420	M-801	Zn, Mn, 55 Cu		70000		35		137		Mn bronze
9636	Lavin No. 483	M-801	Zn, Mn, 60 Cu		80000		25		170		Mn bronze
9637	Lavin No. 598	M-801	Zn, Mn, 60 Cu		110000		15		228		Mn bronze
9638	Lavin No. 599	M-801	Zn, Mn, 60 Cu		115000		12		235		Mn bronze
9639	Lavin No. 685	M-801	Zn, Mn, 60 Cu		100000		15		207		Mn bronze
9640	LCT	M-38	.45 C, 3.0 Cr, .4 V, 15 W, bal. Fe							Hot swaging dies, extrusion dies, shear blades	Hot work steel
9641	LCT No. 2	M-38	.45 C, 3 Cr, .4 V, 11.5 W, bal. Fe							Brass forging dies, punches, forming rolls	Hot work steel (Peerless LCT 2)
9642	Leco	M-688	.33 C, .75 Cr, .30 Ni, .4 Mn, .75 Mo, .65 Si, .75 Cu, .15 Ti, bal. Fe							Chisels, dies, drills	Tough, fatigue resistant
9643	Leco Extra	M-688	.44 C, .75 Cr, .35 Ni, .4 Mn, .75 Mo, .65 Si, .75 Cu, .15 Ti, bal. Fe							Dies, rivet sets, chisels, punches, cutters	Fatigue and abrasion resistant
9644	Ledloy C-1045	M-67	.40-.50 C, .15-.35 Pb, bal. Fe		98000	65000	28	52		Machinery parts	
9645	Ledloy C-1120	M-67	.15-.25 C, .15-.35 Pb, bal. Fe		62300	44000	36	63		Machinery parts	
9646	Ledaloyl	M-172	Cu alloy							Self lubricating bearing	Sintered type, Oil impregnated
9647	Lehigh Conqueror	M-688	C, bal. Fe							Tools	
9648	Croma	M-688	.35 C, 1.0 Cr, .8 Mn, bal. Fe							Machinery parts	Formerly Lehigh Croma
9649	Lehigh Die-L Temper	M-24	.85 C, 11.5 Cr, 1.05 Ni, .3 V, bal. Fe							Dies, shear blades	Abrasion resistant
9650	Lehigh Die S Temper	M-24	2 C, 11.5 Cr, 1 Ni, .6 V, bal. Fe							Dies and shear blades, gauges	Abrasion resistant
9651	Lehigh H Temper	M-24	1.6 C, 11.5 Cr, .75 Mo, .3 V, bal. Fe							Tools and dies, gages, punches	Oil hardening
9652	Lehigh Special No. 3	M-688	High C, bal. Fe							Tools and dies	General use
9653	Lehigh Special No. 5	M-688	High C, bal. Fe							Tools and dies	Abrasion resistant
9654	Lehigh SS	M-688	.75 C, 4.5 Cr, 12 Co, 2 V, 20 W, bal. Fe							Lathe tools, drills, punches, dies	High speed steel
9655	Lehigh XXX High Speed	M-688	.7 C, 4 Cr, 1 V, 18 W, bal. Fe							Lathe & planer tools, punches, reamers	High speed steel
9656	Liberty	M-362	1.2 C, .3 Cr, 1.25 W, bal. Fe							Chaser and threading tools	Water hardening
9657	Lico	M-802									
9658	Powdiron 51-1	M-632	100 Fe							Bearings	Sintered
9659	Lion	M-389	C, bal. Fe								
9660	Lion Extra	M-69	1.0 C, .3 Mn, bal. Fe							Drawing, forming and trimming dies	
9661	Lisco	M-802									
9662	LLCT	M-38	.25 C, 4 Cr, 15 W, .4 V, bal. Fe							Piercing punches, extrusion dies	Hot work steel
9663	Lockport Special	M-373	C, 18 W, 4 Cr, 2 V, bal. Fe							Tools, cutters	High speed steel
9664	Lo-Cro Type 501	M-38	.10 min. C, 4-6 Cr, bal. Fe							Oil refineries	
9665	Lo-Cro Type 502	M-38	.1 max. C, 4-6 Cr, bal. Fe							Oil refineries	
9666	Loaded Iron	M-494	C, Cr, P, bal. Fe						320	Cylinder liners	Cast Iron
9667	Lo-Ex Alloy	M-137	13-15 Si, 1.5-2.5 Ni, 1.0 Mg, .7 Cu, bal. Al	Cast Heat treated	26000 38000	23000 33000	.5 .5		75 140	Pistons	Low thermal expansion
9668	Logan	M-802									
9669	Lotung	M-289	C, alloy, bal. Fe							Hot punching, Al die casting dies	Hot work steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9670	Lowmoor Iron	M–803	C, bal. Fe								
9671	Firthite ND20	M–57	20 Co, WC						70Rc	Punches, dies, cutting tools	Cemented, shock resistant, tough
9672	Firthite TA	M–57	WC							Tipping tools for ordinary cuts	Cemented
9673	Firthite T04	M–57	WC							Tipped tools for rough cuts	Cemented
9674	Firthite T89	M–57	WC, 13 Co						77Rc	Rough and semi-finish cuts, tipped tools	Cemented
9675	Firthite T89M	M–57	WC, 6 Co						80Rc	Tipped tools for finish cuts	Cemented
9676	Firthite T90	M–57	WC, 8 Co						80Rc	Tipped tools for finish cuts	Cemented
9677	Fisco Airdie	M–627	C, alloy, bal. Fe							Tools, cutters	High speed steel
9678	Fisco Airquench	M–627	.95 C, 2.04 Mn, 1.9 Cr, 1 Mo, bal. Fe							Dies, rolls, gauges	Air hardening
9679	Fisco Carbon	M–627	1.0 C, bal. Fe							Tools, dies, cutters	Water hardening
9680	Fisco Cobalt	M–627	.74 C, 4.5 Cr, 1.4 V, 18.8 W, .6 Mo, 5 Co, bal. Fe							Tools, cutters, dies	High speed steel
9681	Fisco Chromdie	M–627	1.6 C, 12 Cr, .75 Mo, .25 V, bal. Fe							Dies, gauges, mandrels, shear blades	Air hardening
9682	Fisco Duplex	M–627	.8 C, bal. Fe							Tools	
9683	Fisco Excell	M–627	.8 C, 18 W, 4 Cr, 2 V, .7 Mo, bal. Fe							Tools, cutters	High speed steel
9684	Fisco High Speed	M–627	.7 C, 18 W, 4 Cr, 1V, bal. Fe							Tools, cutters	High speed steel
9685	Fisco Hot Work	M–627	C, bal. Fe							Hot work tools and dies	Hot work steel
9686	Fisco Moly	M–627	C, W, Cr, V, Mo, bal. Fe							Tools, cutters	High speed steel
9687	Fisco Oilhard	M–627	.9 C, 1.1 Mn, .5 Cr, .25 V, .4 W, bal. Fe							Tools, cutters, dies, gauges	Non-deforming
9688	Fisco Pneumatic	M–627	C, bal. Fe							Tools	
9689	Fisco Precision	M–627	C, bal. Fe							Tools	
9690	Fisco Special	M–627	1.0 C, bal. Fe							Tools, dies, cutters	Water hardening
9691	Fisco Star Tung	M–627	C, W, bal. Fe							Tools, cutters	
9692	Fisco Vanadium	M–627	.9 C, .16 V, bal. Fe							Tools, dies, cutters	
9693	Fisco No. 1	M–627	C, Mo, bal. Fe							Arbors, gears, pinions	Carburizing steel
9694	Fisco No. 3	M–627	C, Mo, Cr, bal. Fe							Axles, bolts, gears, keys, pinions	
9695	Fisco Oilite	M–627	C, bal. Fe							Tools, dies	
9696	Fisco Seven	M–627	C, bal. Fe								
9697	Fisco Tiger	M–627	1.0 C, 18 W, 4 Cr, 2 V, bal. Fe							Tools, cutters	High speed steel
9698	Fisco 66	M–627	.8 C, 4 Cr, 5.5 W, 1.5 V, 5 Mo, bal. Fe							Tools, cutters	High speed steel
9699	Fisco Superior	M–627	.8 C, 12 Co, 20 W, 4 Cr, 1 V, .6 Mo, bal. Fe							Tools, cutters	High speed steel
9700	Five Point Deep Hard	M–804								Gears, axles, wrist pins, wheels, valves	
9701	Five Star	M–85	.85 C, 4 Cr, 10.5 Co, 18 W, .55 Mo, bal. Fe							Tools, cutters	High speed steel
9702	Flamaloy	M–157	C, alloy, bal. Fe							Castings	Castings, wear resistant
9703	Fleetweld No. 5	M–578	C, bal. Fe							Welding rod	
9704	Fleetweld No. 7	M–578	C, bal. Fe							Welding rod	
9705	Fleetweld No. 8	M–578	C, bal. Fe							Welding rod	Coated, shielded arc
9706	Fleetweld No. 9	M–578	C, bal. Fe							Arc welding electrode	Coated shielded arc
9707	Fleetweld No. 9HT	M–578	C, bal. Fe							Welding rod	Coated, shielded arc
9708	Fleetweld No. 10	M–578	C, bal. Fe							Welding rod	Flux coated
9709	Fleetweld No. 11	M–578	C, bal. Fe		70000	55000				Welding rod	Coated, shielded arc

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9710	Flexarc Grade 18	M–118	C, bal. Fe							Welding rod	Sulcoat
9711	Flinso	M–805								Solder for Al	
9712	Flintuff	M–95								Rolls	Hard alloy
9713	Follansbee Armature Electric No. 1	M–806	.4 C, .5 Si, bal. Fe	Annealed	45000	25000	25			Laminated pole pieces, motors, transformers	High permeability (Discontinued)
9714	Follansbee ExtraSpecial Power Transformer No. 7	M–806	Si, bal. Fe							Power and distribution transformers	(Discontinued)
9715	Follansbee Improved Electric No. 2	M–806	Si, bal. Fe							Motors, armatures	(Discontinued)
9716	Follansbee Radio A-1 No. 13	M–806	Si, bal. Fe							Radio transformers, chokes and loud-speaker transformers	(Discontinued)
9717	Follansbee Radio A-2 No. 12	M–806	Si, bal. Fe							Radio, choke, loud-speaker transformers	(Discontinued)
9718	Follansbee Radio A-3 No. 11	M–806	Si, bal. Fe							Radio, choke and loud-speaker transformers	(Discontinued)
9719	Follansbee Radio B No. 10	M–806	Si, bal. Fe							Choke, coils, transformers	(Discontinued)
9720	Follansbee Radio C No. 9	M–806	Si, bal. Fe							Choke and filters, audio transformers	
9721	Follansbee Radio D No. 8	M–806	Si, bal. Fe							Choke coils	
9722	Follansbee Regular Power Transformer No. 5	M–806	Si, bal. Fe							Transformers, generators, motors	
9723	Follansbee Special Dynamo No. 4	M–806	Si, bal. Fe							Induction motors, generators, motors	
9724	Follansbee Special Motor No. 3	M–806	Si, bal. Fe							Motors	
9725	Follansbee Special Power Transformer No. 6	M–806	Si, bal. Fe							Transformers	Low watt loss
9726	*Fonte R. A.*	*M–700*									
9727	Fortal	M–807	94.3 Al, 4.0 Cu, .5 Mg, .5 Mn, .7 Si								
9728	Fort Pitt Vanadium	M–275	C, V, bal. Fe							Tools	
9729	Four Star	M–85	C, bal. Fe							Tools	
9730	FPC Non-Tempering Chisel	M–365	.3-.4 C, .7-.9 Cr, .6-.8 Mn, .3-.6 Mo, bal. Fe							Tools	
9731	Frankite E-212	M–571	C, bal. Fe							Hydraulic bodies, compressor cylinders	
9732	Frankite E-604	M–571	C, 4.5 Ni, 1.5 Cr, bal. Fe							Mixer blades, ash chutes, scrapers	"Ni-Hard" abrasion resistant
9733	Frankite E-830N	M–571	C, 30 Cr, 3 Ni, bal. Fe							Furnace supports, kilns	Corrosion and heat resistant
9734	Frasse Grade A	M–360	1.1-1.2 C, .15-.25 Mn, bal. Fe							Augers, broaches, cutters, tools	Water hardening
9735	Frasse Grade B	M–360	1.0-1.1 C, .15-.25 Mn, bal. Fe							Cold chisels, drills, knives, reamers	
9736	Frasse Grade C	M–360	.90-1.1 C, .15-.25 Mn, bal. Fe							Chisels, drills, hammers, picks, punches	
9737	Frasse Grade H	M–360	1.0-1.1 C, 1.25-1.75 W, bal. Fe							Cutters, tools	
9738	Freemachineweld	M–118	C, bal. Fe							Welding electrode	Machinable

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9739	Frontier No. 38	M–58	67 Cu, 8 Sn, 24 Pb, 1 Zn	Cast	22500	14500	10		45	Castings, bearings	
					27500	19000	15		55		
9740	Frontier No. 39	M–58			45000	28000	6		100	Castings	30-50% Elec. Cond.
							10		120		(Obsolete)
9741	Frontier 40E	M–58	5.5 Zn, .55 Mg, .5 Cr, .2 Ti, bal Al	Cast	32000	22000	3			Sand castings, light alloy parts	
					38000	26000	10				
9742	Frontier No. 40	M–58	.15 Ti, .5 Cr, 7-8 Zn, .6 Mg, bal. Al	Cast	30000	28000	1		69	Light alloy castings	(Obsolete)
					38000	32000	5		73		
9743	Frontier No. 88	M–58	Al alloy								
9744	Fuller Alloy	M–808	6 Zn, 1.2 Mg, 2 Fe, bal. Al	Heat treated	43000		0		110	Light alloy castings	
					48000		2		115		
9745	Fultalloy	M–809	C, .5 Mo, bal. Fe							Castings	
9746	Fuse-Well No. 28	M–810	C, bal. Fe							Welding rod for cast iron	Flux coated, gas welding
9747	L.P.D.	M–73	.30 C, 5 Cr, 1.4 W, 1.75 Mo, .9 Si, bal. Fe							Hot forging dies	Hot work steel
9748	LSC	M–76	C, alloy, bal. Fe							Hot work tools and dies	Hot work steel
9749	L-35	M–40	.9 C, .4 Mn, .35 V, bal. Fe							Cold heading dies	Water hardening
9750	Lubrik	M–543	Sn, Pb, bal. Cu							Bearings, bushings	
9751	Lucas Nifal		25 Ni, 12 Al, 63 Fe							Permanent magnets	
9752	Ludlite	M–1	12 Cr Silcrome backing on steel								
9753	Ludlum DBL	M–1	.75-.80 C, .5-.8 Si, 3.7-4.2 Cr, 4.8-5.5 W, 1.5 V, 3.5-4 Mo, bal. Fe							Tools, cutters	
9574	Ludlum LMW	M–1								Tools	
9755	Ludlum ML	M–1	C, 18W, 4 Cr, 2 V, .75 Mo, bal. Fe							Tools, cutters	High speed steel
9756	Ludlum No. 545	M–1	C, alloy, bal. Fe							Tools	
9757	Ludlum S.S.V.	M–1	C, bal. Fe							Tools	
9758	Lukens 2% Nickel	M–176	.20 max. C, 2 Ni, bal. Fe						140		
9759	Lundie L	M–73	C, alloy, bal. Fe							Tools	
9760	Lumen Alloy No. 43	M–77	Ni-Sn, bal. Cu							Bearings, gears, nuts	Abrasion resistant
9761	Lumen Alloy No. 96	M–77	88 Cu, 8.5 Al, 3.5 Fe		73000	25000			121		Abrasion resistant
9762	Luminare 2-S	M–811								Al welding rod	
9763	Luster	M–812									
9764	G-Alloy	M–814	Pb alloy		10000				22	Bearings	
9765	G-97	M–689	12 Cu, .25 Mg, 1.4 Mn, .8 Fe, bal. Al	Heat treated	24000	21000	.5		120	Pistons	
					31000	26000	1.0		150		
9766	Galvalloy	M–813	Al alloys							Al bonding alloy	
9767	Galvamatt	M–814	C, bal. Fe							Stoves, metal signs	Galvanized sheets
9768	G. Babbitt	M–815	12.5 Sb, 3 As, .75 Sn, bal. Pb	70 °F.	9800		1.5		22	Babbitts, bearings	M.P. 486-549 °F.
		M–314		392 °F.	1900		70				Heavy duty
9769	GBZ10 Bronze	Ger.	90 Cu, 10 Sn	Cast	45500	20000	45		62		
9770	GBZ 14 Bronze	Ger.	86 Cu-14 Sn	Cast	32000	27000	7		79		
9771	GBZ 20	Ger.	80 Cu, 20 Sn.	Cast	27000		0		120		
9772	G.D.H. Blue Label	M–816	1.55-1.7 C, 11.5-12.5 Cr, .15-.25 V, .7-.9 Mo, bal. Fe	Heat treated					64Rc	Tools, gauges, punches, dies	
9773	G.D.H. Bronze Label	M–816	.90-.95 C, 1.0-1.1 Mn, .4-.5 Cr, .4-.5 W, bal. Fe	Heat treated					64Rc	Tools, gauges, broaches, taps	Oil hardening
9774	G.D.H. Red Label	M–816	.65-.75 C, 3-4 Cr, 1-1.5 V, 18-20 W, bal. Fe							Tools, cutters	High speed steel
9775	G.D.H. Silver Label	M–816	1.0 C, bal. Fe	Heat treated					66Rc	Tools, punches, shears, dies	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9776	G.E. 33	M-60	84.5 Cu, 15 Zn, .5 Sn							Slip rings	(Discontinued)
9777	Genesee 304	M-500	.45 C, 17 Cr, 35 Ni, .65 Mn, bal. Fe							Heat corrosion resistant parts	Heat and corrosion resistant
9778	Genessee 305	M-500	.35 C, 17 Cr, 65 Ni, .60 Mn, bal. Fe							Heat and corrosion resistant parts	Heat and corrosion resistant
9779	Genuine Silverine	M-586								Bearings	Babbitt
9780	Gibsiloy	M-650	Ag-Ni							Electric contacts	Sintered powders
9781	Gibsaloy Grade A	M-650	50-95 Ag, 5-50 Ni							Electric contacts	Sintered powders
9782	Gibsaloy Grade C	M-650	93-99 Ag, 1-7 graphite							Electric contacts	Mechanically processed
9783	Magnetoflex		41 Cu, 24 Ni, 35 Co							Permanent Magnet	
9784	Gibsaloy Grade M	M-650	30-90 Ag, 10-70 Mo							Electrical contacts	
9785	Gibsaloy Grade NC	M-650	Ag, Ni, graphite							Electrical contacts	
9786	Gibsaloy Grade ND	M-650	5-25 Ni, 1-10 Cd, bal. Ag							Electrical contacts	
9787	Gibsaloy Grade NM	M-650	1-35 Ni, 1-30 Mo, bal. Ag							Electrical contacts	For high current densities
9788	Gibsaloy Grade NW	M-650	1-35 Ni, 1-30 W, bal. Ag							Electrical contacts	For high current densities
9789	Gibsaloy Grade NW-54	M-650								Electrical contacts	
9790	Gibsaloy Grade NW-55	M-650								Electrical contacts	
9791	Gibsaloy Grade W	M-650	30-90 Ag, 10-70 W							Electrical contacts	
9792	Giesche ZL 2	Ger.	4 Al, 1-1.5 Cu, bal. Zn							Die or sand castings	
9793	Giesche ZL 3	Ger.	4 Al, .5 Cu, bal. Zn							Pressed or drawn parts	
9794	Gilmore Nickel Alloy	M-817								For setting diamond tools, holders	
9795	Glacier Precision Finish Lead Bronze	M-818	Sn, Pb, bal. Cu								
9796	Glixey No. 1	M-819								Transmission bearings, pump bearings	Antifriction metal
9797	Glixey No. 2	M-819								Bearings	Antifriction metal
9798	Glixey No. 2A	M-819								Bearings	Antifriction metal
9799	Glixey No. 3	M-819								Bearings	Antifriction metal
9800	Collet Steel	M-24	.95 C, .7 Mn, bal. Fe							Collets	
9801	Turbo Glyco	M-240	Pb alloy							Turbine bearings	Babbitt
9802	Marine Glyco	M-240	Pb alloy							Marine bearings	Babbitt
9803	Standard Glyco	M-240	Pb alloy							Bearings	Babbitt
9804	Heavy Pressure Mill Glyco	M-240	Pb alloy							Bearings	Babbitt
9805	Transmission Glyco	M-240	Pb alloy							Bearings	Babbitt
9806	GMS 58	Ger.	Zn, bal. Cu							Castings	
9807	GMS 63	Ger.	Zn, bal. Cu							Castings	
9808	GMS 67	Ger.	Zn, bal. Cu							Castings	
9809	Gold Tip	M-669	.08-.13 C, .6-.9 Mn, .24-.33 S, bal. Fe	Cold drawn	80000	75000	15	48	180	Screw machine parts	SAE-X-1112
9810	Gordon	M-73	.60 C, .60 Cr, .3 Mn, .35 Mo, bal. Fe							Arbors, tools, cold cutters, cold bending dies	Tough
9811	Gordon Die Steel	M-73	.57 C, .70 Si, .6 Cr, .35 Mo, bal. Fe							Pneumatic tools, swedging dies, cams, chisels	Tough
9812	Gorham Imperial	M-820	C, Co, W, bal. Fe							Tool bits, cutters	For heavy cuts
9813	Gorham Imperial 9	M-820	C, 8-9 Mo, 8-9 Co, bal. Fe							Tools, cutters	
9814	Gorham Molybdenum	M-820	C, W, Mo, Cr, V, bal. Fe							Tools, cutters	High speed steel
9815	Gormet	M-820	C, Cr, Co, Mo, W, bal. Fe							Cutters for iron, brass and bakelite	Cast mixture

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9816	Grac	M-821	10 Sn, Sb, As, Cd, Ni, bal. Pb								
9817	Grade A	M-822	1.0 C, bal. Fe							Tools	
9818	Grade "A" Phosphor Bronze 351 Alloy	M-8	95 Cu, 5 Sn+P		55000 70000						
9819	Grade S	M-788	C, Ni, bal. Fe							Sucker rods in oil wells	Resists H_2S in water
9820	Granada Tool Steel	M-38	1.0 C, bal. Fe							Mining sledges, tools, dies	
9821	Granator	M-633									
9822	Granature	M-633									
9823	Granalec	M-633									
9824	Granformer	M-633									
9825	Granimo	M-633									
9826	Gransisil	M-633									
9827	Graph-Al	M-823 M-327	1.5 C, .16 Al, .4 Mn, bal. Fe							Mandrels, rolls, drawing dies, cold heading dies	Water hardening graphitic steel
9828	Graphalloy Grade A	M-247	55 graphite, bal. Pb. babbitt							Bearings of light service	Babbitt soft grade
9829	Graphalloy Grade N	M-247	55 graphite, bal. Pb babbitt							Bearings of medium service	Babbitt medium grade
9830	Graphalloy Grade O	M-247	55 graphite, bal. Pb babbitt							Bearings	Babbitt hard grade
9831	Graphalloy Grade S	M-247	55 graphite, bal. Pb babbitt							Bearings	Medium hardness
9832	Graphex	M-824									
9833	Graph M.N.S.	M-823 M-376	1.5 C, 1.25 Mn, 1.0 Si, 1.75 Ni, .5 Mo, .5 Cr, bal. Fe							Blanking dies, punches, forming rolls	
9834	Graph-Mo	M-376	1.5 C, .25 Mo, .8 Si, .4 Mn, bal. Fe							Plug and ring gauge dies, taps, spindles, rolls	Wear and abrasion resistant graphitic steel
9835	Graph-Sil	M-376	1.5 C, .75-.95 Si, .35-.40 C.C., bal. Fe	Annealed Heat treated	100000 220000				400	Cold header dies, bushings, engine sleeves	Graphitic steel abrasion resistant
9836	Graph-Tung	M-376	1.5 C, 4 Mn, .65 Si, .5 Mo, 2.8 W, bal. Fe							Blanking and drawing dies, coining dies, shear blades	Abrasion resistant graphitic steel
9837	Gray Devil	M-712	C, bal. Fe							Welding rod for steel	
9838	Gray Label Stayput	M-343	C, alloy, bal. Fe							Molding and threading dies, chasers, taps, reamers	Oil hardening, non-deforming
9839	Green Label Drill Rod	M-32	1.2 C, .2 Mn, bal. Fe							Tools	Tough and wear resistant
9840	Gridnic A	M-44								Radio sets and tube parts	
9841	Gridnic B	M-44								Radio parts and tube parts	
9842	Gridnic C	M-44								Radio sets and tube parts	
9843	Gridnic D	M-44								Radio sets and tube parts	
9844	Gridnic E	M-44								Radio sets and tube parts	
9845	Gridnic F	M-44	Ni-Co-Ti-Fe							Radio sets and tube parts	
9846	Gripmore Tool	M-334	.95 C, 3.5 Cr, 1.0 W, bal. Fe							Hot work tools	Hot work steel
9847	GT2A Metal	France								Chemical equipment	Corrosion resistant
9848	GT4A Metal	France								Chemical equipment	Corrosion resistant
9849	G.W. 32	Ger.	7.6 Zn, 1.7 Mg, bal. Al	Heat treated	43000 50000		4 6		130 140	Light alloy parts	
9850	Hackett K-Copper	M-825	Cu alloy		70000		20	50	150	Welding tips and holders	75-80% cond. of Cu
9851	Halcomb	M-259	C, alloy, bal. Fe								
9852	Halcomb Cold Hubbing Steel	M-260	.04 C, bal. Fe						100	Cold hubbing dies	
9853	Halcomb CSM No. 2	M-260	.30 C, .8 Cr, .3 Mo, bal. Fe						200	Dies for zinc base die castings	
9854	Halcomb First Quality	M-38	1.25 C, bal. Fe							Tools	Drill rod

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9855	Halcomb Nu-Die	M-260	.38 C, 1.0 Si, 5 Cr, .4 V, 1.4 Mo, bal. Fe	Heat treated	200000	180000	13.5	47	420	Die casting dies	Resists heat checking
9856	Hallside	M-826	C, bal. Fe		90000					Valve stems, valves	Self lubricating
9857	Hancodur	M-827									
9858	Hardy Nickel Iron	M-435	.05 C, .20 Mn, 2 Ni, bal. Fe	Annealed	50000	35000	35	75	112	Locomotive stay bolts	
9859	Handy Silver Solder Easy	M-63								Solder	M.P.—1325°F.
9860	Handy Silver Solder Hard	M-63								Solder	M.P.—1450°F.
9861	Handy Silver Solder Hard No. 1	M-63								Silver solder	M.P.—1425°F.
9862	Handy Silver Solder Medium	M-63								Silver solder	M.P.—1390°F.
9863	Harchrome	M-828	C, alloy, bal. Fe							Arc welding electrode	For 4-6 Cr steel
9864	Hard Devil	M-712	.85-1.0 C, bal. Fe						250 400	Hard facing welding electrode	
9865	Hardentough No. 1	M-118	.85 C, bal. Fe						300 425	Welding electrode	Hard facing wear resistant
9866	Hardentough No. 2	M-118	C, Mn, Ni, bal. Fe						347	Welding electrode	Hard facing wear resistant
9867	Hardentough No. 4	M-118	C, alloy, bal. Fe						500 600	Hard facing welding electrode	Wear resistant
9868	Hardentough No. 5	M-118	C, alloy, bal. Fe						600 675	Hard facing welding electrode	Wear resistant
9869	Hardentough No. 6	M-118	C, alloy, bal. Fe						700 800	Hard facing welding electrode	Wear resistant
9870	Hard Facing Rod No. 217	M-9	C, Cr, Mn, W, Mo, bal. Fe						600 700	Hard facing welding rod	Abrasion resistant
9871	Hard Facing Welding Rod 459	M-9	C, Cr, Mn, Mo, bal. Fe						500 600	Hard facing welding rod	Wear and heat resistant
9872	Hardnair	M-353	1.3 C, 5 Cr, .3 V, 1.2 Mo, 1.0 Si, bal. Fe							Drawing dies, blanking and forming dies	
9873	Hardrock 33	M-829	7 Co, 18 W, 4 Cr, 1 V, C, bal. Fe							Tool bits	High speed steel
9874	Hardwell 50	M-578	C, alloy, bal. Fe							Hard facing welding rod	Shielded arc, shock resistant
9875	Hardwell 100	M-578	C, alloy, bal. Fe							Hard facing welding rod	Shock resistant
9876	Harmomang A	M-828	C, Mn, Mo, bal. Fe							Welding rod for high Mn steel	Wear and abrasion resistant
9877	Harmomang B	M-828	C, Mn, Mo, bal. Fe							Welding rod for high Mn steel	Wear and abrasion resistant
9878	Harnimoly	M-828	C, Mo, bal. Fe		90000	70000	20			Welding rod for high carbon steels	Shielded arc
9879	Harstain	M-828	C, Cb, Cr, Ni, bal. Fe							Welding electrode for stainless steel	
9880	Harvill No. 1	M-830	0-1.5 Al, 0-.4 Pb, 0-1.5 Sn, 38-42 Zn, 3.5-4.5 Mn, 55-60 Cu		65000	30000	10		100 130		
9881	Harvill No. 2	M-830	7-9 Al, 2.5-4.5 Ni, 85-87 Cu		75000		25		110	Die castings	Al Bronze
9882	Harvill No. 3	M-830	18 Ni, 55-64 Cu, bal. Zn		55000	35000	10		115	Die castings	White Ni brass
9883	Harvill No. 4	M-830	57-59 Cu, .5-1.5 Sn, 40-42 Zn		55000	40000	15		130	Die castings	Yellow Brass
9884	Hastelloy B	M-167	33 max. Mo, 7 max. Fe, bal. Ni	Cast Rolled	82000 140000	57000 65000	9 45	13 45	230 235	Agitators, heating and cooling coils, pump parts, valves	Resists HCl, H_2SO_4 and H_3PO_4
9885	Hathol A										
9886	Hathol B										

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9887	Hawk Cold Header Die	M-362	.95 C, bal. Fe							Heading dies	Tough, water hardening
9888	Hawk Impacto	M-362	.90-1.1 C, bal. Fe							Silverware blanking and striking dies	Water hardening
9889	Hawk 777	M-362	.70 C, .09 Cr, .84 Mn, .72 Mo, bal. Fe							Tools	Oil hardening
9890	Hawk 977	M-362	.90 C, .09 Cr, .72 Mo, bal. Fe							Rivet punches	Oil hardening, tough
9891	Hawk Prefak	M-362	.90 C, .5 Cr, 1.25 Mn, .5 W, bal. Fe							Tools, cutters, dies	Non-deforming
9892	Haynes Stellite 93	M-167	15-19 Cr, 13-17 Mo, 4-7 Co, .5-3.0 V, bal. Fe	Cast Heat treated	43000 35000				62Rc	Hard surfacing welding rod	Stellite 93
9893	HB 5		10.5 Al, 4 Fe, 4 Mn, 1 Zn, .5 Cr, bal. Cu							Gears	Corrosion resistant Al bronze
9894	Atlan H.C.C. Die	M-353	1.5 C, 12 Cr, 1 V, .8 Mo, bal. Fe							Tools, blanking dies	Non-deforming
9895	H.C. Fire Refined Copper	British	Cu							Electrical purposes	Highest electrical conductivity
9896	H.C. Pick Steel	M-38	C, alloy, bal. Fe							Mining picks	
9897	H.C. Poker Bar Steel	M-38								Mining poker bars	
9898	Heavy Alloy	M-831	76-90 W, 1-16 Ni, 3-20 Cu		80000	74000	1		290	For balancing crankshafts of aero motors	Powder metals
9899	Hecla Bronze	M-832								Bearings	
9900	Hecla Special	M-275	C, alloy, bal. Fe							Tools	
9901	Heddal										
9902	Heddronal 3.5										
9903	Heddronal 5										
9904	Heddronal 7										
9905	Helco H-40	M-833	C, Ni, bal. Fe						228	Hydraulic press cylinders	Cast iron
9906	Helco N-140	M-833	C, Ni, bal. Fe							Heavy castings	Cast iron
9907	Helco HD-50	M-833	C, Ni, bal. Fe		50000					Castings	Cast iron
9908	Helco HD-60	M-833	C, Ni, bal. Fe		60000					Castings	Cast iron
9909	Helios D	M-140									
9910	Helios G	M-140									
9911	Helios H	M-140									
9912	Helios K	M-140									
9913	Red Cut Cobalt B	M-115 M-34	.78 C, 18 W, 4 Cr, 6.75 Co, 1.85 V, .75 Mo, bal. Fe							Cutting and forming tools, reamers, taps	High speed steel
9914	Hennequin Metal										
9915	Heppenstall 2V90	M-64	C, alloy, bal. Fe							Trimmers	
9916	Heppenstall 3N24	M-64	C, Ni, bal. Fe,							Forgings	
9917	Heppenstall 3N25	M-64	.2-.3 C, .7-1.0 Mn, 2.5-3.0 Ni, bal. Fe	Normalize Heat treated	88000 102000	64000 77000	25 28	52 58	160 255	General forgings	
9918	Heppenstall 3R40	M-64	C, Cr, Mo, bal. Fe							Hammer rams, saw blocks	
9919	Heppenstall 5H50	M-64	C, Cr, Mo, V, bal. Fe							Forgings	
9920	Heppenstall C45	M-64	.40-.55 C, 1-1.5 Ni, .5-.8 Cr, .25-.35 Mo, bal. Fe	Normalize Heat treated	106000 125000	71000 105000	20 22	48 56	230 295	Forgings	
9921	Heppenstall C-55	M-64	.5-.6 C, 1.0-1.5 Ni, .5-.8 Cr, .25-.35 Mo, bal. Fe	Normalize Heat treated	108000 130000	73000 110000	19 21	48 54	275 305	Forgings	
9922	Hercalloy	M-835	C, Ni, Mo, bal. Fe	Heat treated	125000 150000					Chains, fittings, joining links	
9923	Hercules	M-114	1.0 C, .5 Cr, .2 V, bal. Fe							Dies and machinery parts	Fatigue resistant
9924	Herculite	M-85	.54 C, 2.6 Ni, .45 Mo, bal. Fe							Tools	
9925	Herculoy 418	M-238	3.0-3.25 Si, .5 Sn, bal. Cu	Hot Roll Cold Roll	67000 120000		60 5				

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9926	Herculoy 419	M–238	2.0-2.5 Si, .25 Sn, bal. Cu	Hot Roll	50000		60				
				Cold Roll	100000		10				
9927	Herculoy 420	M–238	3.0-3.25 Si, 1.0 Mn, bal. Cu								
9928	Herculoy 421	M–238	1.5-2.0 Si, .25 Mn, bal. Cu								
9929	HIA	M–76	C-Si-Cr-W-Ni, bal. Fe							Tools	
9930	Hidalgo No. 48 Alloy	M–344	.55 C, .20 Cr, .75 Mn, .20 V, 2.0 Si, bal. Fe							Chisels, shear blades, punches	
9931	Hidalgo RL	M–344	1.25 C, .4-.5 Cr, 5.5 W, bal. Fe							Cutting tools	For finishing cuts on hard material
9932	Hiduminium RR 53 B	M–137	2-3 Cu, 1-2 Ni, .6-1.0 Mg, 1.2-1.5 Fe, .7-1.5 Si, bal. Al	Cast	21000	14000	3		78	Levers, brackets, textile	Light alloy
				Heat treated	42000	37000	2		138	and food machinery	
9933	Hiduminium RR 53 C	M–426	.8-2.0 Cu, .5-1.5 Ni, .3-.8 Mg, .8-1.4 Fe, 2-3 Si, .3 Ti, bal. Al	Cast	30000	20000	3		75	Sand and die castings	Light alloy
				Heat treated	44000	40000	2		115		
9934	Hiduminium RR 75	M–426	97.6 Al, 2 Cu, .4 Mg							Wire, rivets	
9935	Hiduminium RR 77	M–426	1.5-3.0 Cu, 4-6 Zn, 2-4 Mg, .6 Fe, .6 Si, 1.0 max. Ni, .3 Ti, bal. Al	Annealed	32000	19000	20		65	Extruded and drawn tubing, rolled sheet	Light alloy
				Heat treated	85000	74000	16		180		
9936	Hiduminium RR 82	M–426	Al alloy							Fuel pipes	
9937	Hiduminium S12	M–426	12 Si, 1.0 Cu, 1.0 Ni, 1.2 Mg, bal. Al							Aircraft pistons	Forging alloy
9938	High Carbon Alloy	M–389	C, alloy, bal. Fe							Piston rods	
9939	High Dynamic	M–376	C, Ni, Cr, Mo, bal. Fe								
9940	High Graphitic Iron	M–508	3.5 T.C., .4 C.C., 3 Si, .5 Mo, bal. Fe		38000				220	Steam cylinder liners, packing rings	Centrifugal castings
9941	Super Nerva	M–807									
9942	High Production	M–365	1.55 C, 11.5 Cr, .75 Mo, bal. Fe							Blanking and forming dies, mandrels, coining dies	Non-deforming
9943	Balco	M–61	2.5 Fe, bal. Ni							Voltage resistors	Magnetic
9944	Revere Magnesium J-1	M–238	Al, Zn, bal. Mg							Light alloy parts	Sheets
9945	High Speed Babbitt	M–665								Bearings	Babbitt
9946	High Tensile Alloy	M–836	C, bal. Fe								
9947	Hightensile Bronze No. 1	M–508	60-70 Cu, 21-25 Zn, 3-7 Al, 3-7 Mn, 2-5 Fe	Cast	120000	55000	15		220	Pump liners, sleeves, bushings, gears, pinions	Pressure tight castings
9948	Hightensile Bronze No. 2	M–508	60-70 Cu, 21-25 Zn, 3-7 Al, 3-7 Mn, 2-5 Fe	Cast	100000	50000	20		200	Pump liners, sleeves, bushings	Pressure tight castings
9949	Hightensile Bronze No. 3	M–508	60-70 Cu, 21-25 Zn, 3-7 Al, 3-7 Mn, 2-5 Fe	Cast	90000	45000	25		180	Pump liners, sleeves, bushings	Centrifugal castings
9950	High Test	M–68	2.75-3.15 T.C., 1.0-1.25 Ni, .6-1.0 Mn, .9-1.1 Si, bal. Fe							Brake drums, valve bodies	Cast iron
9951	O-Alloy										
9952	Hollup Gr. No. 55	M–844	C, bal. Fe							Welding rod	For pipe and pressure weld
9953	O.H. 38	M–841	Al alloy		30000	17500	2.5		65	Light alloy parts	
9954	Ohioloy	M–95	C, alloy, bal. Fe							Rolls	
9955	Revere Magnesium M	M–238	Mn, bal. Mg							Radio sets and tube parts	Resistance metal
9956	Olds Bearing Bronze		60-65 Cu, 17-19 Pb, 9-11 Zn, 4.5-6.0 Ni, 4.5-6.5 Sn		22000	16000	3			Formed parts	
9957	Olympic Bronze Type D	M–33	95.5 Cu, .5 P, 3 Si, 1 Zn		55000				70	Screw machine parts	
					150000				200		
9958	Olympic Bronze Type G	M–33	77 Cu, 1 Si, 22 Zn							Hardware, springs, hinges, sheathing	
9959	Owan	M–842	Pb-Cu							Bearings	Self-lubricating

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
9960	Owan Metal	M-714								Bearings	
9961	Ommet "A" Alloy	M-837	Mo-Ni-Fe						280		Sintered alloy. Heat resistant.
9962	Ommet Iron	M-837	.001C, .01 Si, .01 P, .01 Mn, 99.98 Fe							Vacuum tubes	Sintered iron
9963	Ommet-Sivar 48	M-837	Fe-Co-Ni							Glass to metal seals, vacuum tubes	Sintered alloy
9964	Ommet-Sivar 60	M-837	Fe-Co-Ni							Glass to metal seals, vacuum tubes	Sintered alloy
9965	Ommet-Sivar 90	M-837	Fe-Co-Ni							Glass to metal seals	Sintered alloy
9966	Oralloy	M-838	Au alloy							Dentures	
9967	Orange Label	M-365	1.0-1.05 C, bal. Fe							Tools	
9968	Orange Label Special Alloy Tool Steel	M-343	C, alloy, bal. Fe							Chisels, punches, heading tools, rivet sets	Fatigue resistant
9969	Oscillumin	Germ.	.8 Cu, .4-.6 Fe, 12.6-13.2 Si, bal. Al		28000		4		65	Light alloy castings	
9970	Osmagal	M-462	98.2 Al, 1.8 Mn								
9971	Ossilumin	M-299									
9972	Otiscoloy	M-840	.08-.12 C, .90-1.25 Mn, .35 Cu, .10 Ni, .05 Cr, bal. Fe		70000	50000	25	55		Deep drawn parts	
9973	Otisel K2	M-331									
9974	Otisel K3	M-331									
9975	Otisel K7	M-331									
9976	Otisel K8	M-331									
9977	Otisel K9	M-331									
9978	Otisel O-2	M-331	C, alloy, bal. Fe							Castings	
9979	Otisel O-3	M-331	C, alloy, bal. Fe							Castings	
9980	Otisel O-4	M-331	.15-.35 C, .25-2.0 Mo, 4-8 Cr, bal. Fe		100000 110000	65000 80000	18		190 230	Castings in petroleum refineries	Stainless
9981	Otisel O-5	M-331	C, alloy, bal. Fe							Castings	
9982	Otisel O-6	M-331	C, alloy, bal. Fe							Castings	
9983	Otisel O-7	M-331	C, alloy, bal. Fe							Castings	
9984	Otisel O-8	M-331	C, alloy, bal. Fe							Castings	
9985	Otisel O-9	M-331	C, alloy, bal. Fe							Castings	
9986	Otisel O-10	M-331	C, alloy, bal. Fe							Castings	
9987	Otisel O D	M-331	C, alloy, bal. Fe							Castings	
9988	Otisel O-H	M-331	C, alloy, bal. Fe							Castings	
9989	Otisel O-M	M-331	C, alloy, bal. Fe							Castings	
9990	Otisel O-S	M-331	C, alloy, bal. Fe							Castings	
9991	*Oxweld No. 1*	*M-843*	*C, alloy, bal. Fe*							*Welding rod for alloy steel*	
9992	Oxweld No. 2	M-843	C, bal. Fe							Welding rod for high carbon steel	
9993	Oxweld No. 7	M-843	C, bal. Fe							Welding rod	
9994	Oxweld No. 9	M-843	C, bal. Fe							Cast iron welding rod	
9995	Oxweld No. 19 Cupro	M-843	Cu alloy							Bronze welding rod	
9996	Oxweld No. 21 H.S.	M-843	Cu alloy							Bronze welding rod	
9997	Oxweld No. 23	M-843	Al alloy							Al welding rod	
9998	Oxweld No. 25 M	M-843	Cu alloy							Bronze welding rod	
9999	Oxweld No. 26	M-843	Si-Cu alloy							Bronze welding rod	
10000	Oxweld No. 28	M-843	C, 18 Cr, 8 Ni, Cb, bal. Fe							Stainless steel welding rod	
10001	Oxweld No. 31T	M-843	Cu alloy							Bronze welding rod	
10002	Oxweld No. 32CMS	M-843	C, bal. Fe							Welding rod	
10003	Oxweld No. 38	M-843	Cu alloy							Cu welding rod	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10004	Otisel O-12	M-331	.12-.35 C, 11-14 Cr, bal. Fe		75000	39000	10		140	Acid resistant castings	
					130000	90000	25		150		
10005	Otisel O-16	M-331	.12 C, 14-18 Cr, bal. Fe		70000	39000	20		140	Acid resistant castings	
					80000	43000	15		175		
10006	Otisel O-18	M-331	.08-.20 C, 18-20 Cr, 8-10 Ni, bal. Fe		78000	39000	60		135	Acid resistant castings	Stainless
					85000	42000	65		160		
10007	Otisel O-24	M-331	.20 max. C, 22-25 Cr, 10-13 Ni, bal. Fe		80000	40000	45		140	Heat resistant castings	Heat resistant
					85000	43000	30		150		
10008	Otisel O-30	M-331	.25 max. C, 25-30 Cr, 1.0 max. Mn, bal. Fe		45000	35000	2		170	Heat resistant castings	Resists heat to 2150° F.
					70000	60000	3		190		
10009	Hills-McCanna No. 20P	M-168	Cu-Si-Fe		40000	19000	35	30	70	Bronze castings	
10010	Hills-McCanna No. 22	M-168	65 Cu, 2 Pb, 30 Zn, 1 special element		30000		25	20	40	Plumbing fixtures	SAE-41
					35000		35	30	50		
10011	Hills-McCanna No. 30A	M-168	Cu-Zn-Al-Mn-Fe		57000	32000	24	27	96	Bronze castings	Mn Bronze
					62000	35000	35	30	99		
10012	Hills-McCanna No. 30B	M-168	Cu-Zn-Al-Mn-Fe		71000	30000	25	25	130	Bronze castings	SAE-43
					80000	35000	30	30	135		
10013	Hills-McCanna No. 30C	M-168	Cu-Zn-Al-Mn-Fe		115000	99000	9	8.4	220	Mn bronze castings	
					119000	102000	9.5	8.6	235		
10014	Hills-McCanna No. 39	M-168	Cu-Si-Fe, special hardener		57000	26000	27	27	100		Same as "Everdur D"
10015	Hills-McCanna No. 43	M-168	Cu-Al-Fe, special hardener		84000	33000	22	25	134	Bearings, bushings	Al bronze
10016	Hills-McCanna No. 48	M-168	Cu-Al-Fe, special hardener		72000	55000	3	3	229	Construction parts	Al bronze
10017	Hills-McCanna No. 49	M-168	Cu-Al-Fe, special hardener		55000	55000	0	0	300	Dies for forming tools	
10018	Hills-McCanna No. 102	M-168	88 Cu, 10 Sn, 2 Zn		48000	24000	42	35	85		SAE-62
10019	Hills-McCannaNo.102P	M-168	Cu-Si-Fe, special hardener		52000	26000	17	19	119		
10020	Hills-McCanna No. 105	M-168	85.75 Cu, 10 Sn, 2.5 Pb, 1.75 Ni		44500	33500	12	15	96	Gears	
10021	Hills-McCanna No. 110	M-168	80 Cu, 10 Sn, 10 Pb		45000	25000	32	24	64		SAE-64
10022	Hills-McCanna No. 111	M-168	88 Cu, 10 Sn, 2 Pb		49000	24000	49	36	81		SAE-63
10023	Hi-Nickel Alloy	M-373	C, alloy, bal. Fe								
10024	Hipersil	M-118	Si, bal. Fe							Transformer cores	High permeability
10025	H-M-Blue Chip	M-57	C, W, Cr, V, bal. Fe							Tools, cutters	High speed steel
10026	H-Monel	M-68	65 Ni, 29.5 Cu, 1.5 Fe, .9 Mn, 3 Si, .1 C	Cast	90000	45000	20		170		Corrosion resistant
					115000	75000	10		210		
10027	Carpenter H-9 Extra	M-32	.90 C, .35 Mn, .35 Si, bal. Fe							Header dies, punches, coining and striking dies	Water hardening
10028	Hob-A-Die	M-289	C, alloy, bal. Fe							Zinc die casting dies	Resists fire check
10029	Hobalite	M-289	C, alloy, bal. Fe							Plastic mold dies	
10030	Hobalite	M-783	.05 C, .15 Mn, bal. Fe							Mold dies	Water hardening
10031	Hockleisteungstahl	Germ.	10 Cr, 2 W, .5 V, 1.5 C, 1.2 Si, .4 Mn, bal. Fe							Shear blades, dies	
10032	Hofors-1	M-224	1.0C, 1.1 Mn, .6 Si, 1.0 Cr, bal. Fe							Large ball and roller bearing rings	Oil hardening, non-deforming
10033	Hofors-3	M-224	1.0 C, 1.5 Cr, bal. Fe							Ball bearings, master gauges, taps	
10034	Hofors-7	M-224	1.1 C, .6 Cr, bal. Fe							Taps, twist drills, dies, punches, reamers	
10035	Hofors-9	M-224	1.1 C, .5 Cr, bal. Fe							Bearings, rollers, reamers, taps	
10036	Hofors-13	M-224	1.05 C, 1.0 Cr, bal. Fe							Ball bearing rings, rollers, punches, taps	
10037	Hofors-22	M-224	1.0 C, 1.1 Cr, .35 Mo, bal. Fe							Cutting tools, chisels, drills, rollers, taps	Wear resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10038	Hofors-46	M-224	.90 C, 1.15 Mn, .5 Cr, .5 W, .1 V, bal. Fe							Blanking dies, broaches, form tools, punches, taps	
10039	Hofors-100	M-224	1.0 C, bal. Fe							Twist drills, punches, shear blades	
10040	Hofors-711	M-224	.50 C, .70 Si, 1.15 Cr, 2.5 W, .15 V, bal. Fe							Broaches, milling cutters, blanking and heading dies	
10041	Hollow Drill	M-783	1.0-1.1 Cr, .35 Mn, C, .30 Si, bal. Fe							Rock drills	Water hardening
10042	Hollow Blue Band	M-844	.10 max. C, 25 Cr, 12 Ni, bal. Fe							Welding electrode for stainless steels	Stainless Coated
10043	Hollup Grade CI-3	M-844								Welding electrode for cast iron	Coated
10044	Hollup Grade CI-8	M-844								Welding electrode for cast iron	Coated
10045	Hollup Grade CI-9	M-844	C, Ni, Cu, bal. Fe							Welding electrode for cast iron	Coated
10046	Hollup Grade CI-10	M-844							435	Welding electrode for hard surfacing cast iron	Coated
10047	Hollup Grade 1	M-844	.06 max. C, bal. Fe		45000		13			Welding electrode for low carbon steel	Coated
10048	Hollup Grade 3	M-844	.10-.15 C, bal. Fe		60000		12			Welding electrode for boiler flues and fire boxes	Coated
10049	Hollup Grade 3R	M-844	.10-.15 C, bal. Fe		60000		12			Welding electrode for boiler tubes	Special coating
10050	Hollup Grade 5	M-844	.18-.25 C, bal. Fe		70000					Welding electrode for building up bearing surfaces	Coated Wear resistant
10051	Chace No. 3700	M-582								Thermostatic bimetal	
10052	Hollup Grade 6	M-844	C, Ni, bal. Fe							Welding electrode	Coated Shock resistant
10053	Hollup Grade 7	M-844	.85-1.1 C, bal. Fe							Welding electrode for high carbon steel parts	Coated
10054	Hollup Grade 9	M-844	.75-.95 C, 12-14 Mn, 3-4 Ni, bal. Fe						190 500	Welding electrode for high manganese steels	Coated
10055	Hollup Grade 10	M-844	.06 max. C, bal. Fe		45000		13			Welding electrode	Coated
10056	Hollup Grade 10X	M-844	.06 max. C, bal. Fe							Welding electrode	Coated, ductile
10057	Hollup Grade 11	M-844	.06 max. C, bal. Fe							Welding rod for wrought iron and steel	Cu coated
10058	Hollup Grade 15	M-844	.08-.10 C, bal. Fe		45000		13			Welding electrode	Coated
10059	Hollup Grade 20	M-844	Cu alloy		40000					Coated bronze welding rod for copper alloys	
10060	Hollup Grade 20B	M-844	Cu alloy		40000					Coated bronze welding rod	For light gauge sheets
10061	Hollup Grade No. 22	M-844	C, bal. Fe							Welding electrode	
10062	Hollup Grade No. 30	M-844	.10-.15 C, bal. Fe		60000		12			Welding electrode for flues, boilers and fire boxes	Coated
10063	Hollup Grade No. 30A	M-844	.10-.15 C, bal. Fe							Coated welding electrode	For automatic welding at high speeds
10064	Hollup Grade No. 170E	M-844	C, Cr, V, bal. Fe							Coated welding electrode	Shock resistant
10065	Hollup Grade No. 250	M-844	C, 25 Cr, 12 Ni, bal. Fe							Welding electrode	For stainless clad steel
10066	Hollup No. 1217	M-844	Al alloy							Coated Al welding rod	
10067	Hollup No. 2320	M-844	.10 C, 3.5 Ni, bal. Fe		90000		27			Coated welding electrode for Ni steels	Shock resistant
10068	Hollup No. 2512	M-844	C, 5 Ni, bal. Fe		100000		25			Coated welding electrode for Ni steels	
10069	Hollup No. 6723	M-844	Cu-Ni		50000					Monel metal welding rod	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10070	Hollup H.S.V.	M-844	C, Cr, V, Ni, bal. Fe							Coated welding electrode	
10071	Hollup I.H.S.	M-844	C, alloy, bal. Fe							Coated welding electrode	
10072	Hollup MCM	M-844	C, Cr, Mo, bal. Fe		85000		27			Coated welding electrode	For aircraft tubing
10073	Hollup N.C.	M-844	C, bal. Fe							Coated welding electrode	
10074	Hollup Phos-Copper	M-844	P, bal. Cu							P-Cu brazing rod for copper alloys	
10075	Hollup R.D.S.	M-844	C, bal. Fe							Coated welding electrode	
10076	Hollup Red Band	M-844	C, 18 Cr, 8 Ni, bal. Fe		90000		30			Stainless steel welding electrode	Stainless
10077	Hollup Yellow Band	M-844	.10 C, 4-6 Cr, .5 Mo, bal. Fe		75000		35			Welding electrode for 5 Cr steel	
10078	Howe Brown Extra	M-38	C, alloy, bal. Fe							Tools	
10079	Howe Brown Special	M-38	C, alloy, bal. Fe							Tools	
10080	Hoyt	M-88								Bearings	Babbitt
10081	H.P.S.	M-96	C, W, Cr, V, bal. Fe							Hot work tools and dies	Hot work steel
10082	H & R No. 1	M-363	.55-.75 C, 3.8-4.3 Cr, .90-1.25 V, 17.75-18.85 W, bal. Fe							Lathes and planer tools, cutters	High speed steel
10083	H & R No. 2	M-363	.80-.85 C, 4.0-4.5 Cr, 2.0-2.25 V, 18-19 W, .6-.8 Mo, bal. Fe							Lathe tools, drills, taps, reamers	High speed steel
10084	H & R Cobalt High Speed Steel	M-363	.75-.80 C, 4 Cr, 18W, 5 Co, 1 V, bal. Fe							Cutting tools	High speed steel
10085	H & R Gray Label	M-363	.90-1.05 C, bal. Fe							Punches, dies, stamp, headers	
10086	H & R Hot Work	M-363	.30-.35 C, 3-3.5 Cr, .3-.5 V, 10-11.5 W, bal. Fe							Extrusion and swedging dies, shear blades	Hot work steel
10087	H & R-K Chrome	M-363	2.25-2.4 C, .25-.4 Mn, 12.75-13.25 Cr, .15-.25 V, bal. Fe							Plug gauges, punches, forming dies	
10088	H & RK2 High Carbon High Chrome	M-363	1.5 C, 11.5 Cr, .75 Mo, .25V, bal. Fe							Blanking and forming dies, lamination dies	
10089	H & R MY-A	M-363	.40 C, 1.5 Cr, 1.5 Si, .25 V, bal. Fe							Rivet sets, hand chisels, punches, shears	
10090	H & R No. 80	M-363	1.0 C, .5 Cr, .7 Mn, .25 V, 1.25 Mo, bal. Fe							Lamination dies, gages, reamers	
10091	H & R Oil Hardening	M-363	.90-1.0 C, .90-1.0 Mn, .5-.6 Cr, .2 V, bal. Fe							Cold forming tools and dies, punches, broaches, gauges	
10092	H & R Vanadium	M-363	1.05-1.15 C, .18 V, bal. Fe							Striking and heading dies, swedging tools	Water hardening
10093	H.R.S.	M-499	C, Si, Mn, bal. Fe	Heat treated	170000 190000	150000 170000	10 12	20 25	387 444	Automobile springs	Good resiliency
10094	H.T.M. Steel	M-240	.35-.45 C, 2.0 Ni, .9 Cr, .4 Mo, bal. Fe	Heat treated	158000 237000	142000 207000	11 18	44 58	321 461	Gears, spindles, shafts, rolls	
10095	H.T.S.	M-499	C, alloy, bal. Fe	Normalized Heat treated	74000 110000	60000 74000	27 25	45 50	217 255		
10096	H.T.S. 33	M-845	Al alloy		30000 38000		3 10		63 69	Light alloy castings	Not heat treatable
10097	Selflube Iron	M-989	90 Fe, 10 Cu		40000					Bearings	Sintered
10098	H.V. Blue Chip	M-57	.82C, 4 Cr, 2 V, 18W, bal. Fe							Finishing tools and cutters	High speed steel
10099	H.W.D.	M-57	.4 C, 5 Cr, .15 V, 1.15 W, 1.5 Mo, .8 Si, bal. Fe							Hot punches and dies	Hot work steel. Tough.

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10100	Hyb-Lum Grade A	M-305	Ni, Cu, Mn, Si, Al								Corrosion resistant
10101	Hyb-Lum Grade B	M-305	Ni-Cu-Mn-Si-Al								
10102	Hybnickel A-1	M-194	31-39 Ni, 16-23 Cr, .51-.65 C, bal. Fe								
10103	Hyco	M-688	2C, 12.5 Cr, 1.0 V, .75 Mo, bal. Fe							Dies, punches, rivet sets, rolls	Wear and abrasion resistant
10104	Hyco	M-365	C, 18 W, 4 Cr, 1-2 V, 3-5.5 Co, bal. Fe							Tools, cutters	High speed steel
10105	Hydronalium D.B.A.	M-78	Al alloy							Light alloy parts	
10106	Hydronalium 51	M-78	.2-1.5 Si, 5-12 Mg, .2-.5 Mn, bal. Al		23000 27000	13000 18000	2 5		60 70	Light alloy parts	
10107	Hydronalium 71	M-78	7 Al, 1 Si, bal. Mg							Light alloy parts	
10108	Hypar	M-39	C, alloy, bal. Fe							Tools	
10109	Hypersilid	M-846	C, 14-16 Si, bal. Fe							Castings	Cast iron Acid resistant
10110	Hy-Speed	M-256	88 Cu, 10 Sn, 2 Pb							Bushings, bearings	
10111	Hy-Ten Alloy Chisel Steel	M-119	.75 C, .5 Cr, .35 Mn, bal. Fe							Battering tools, chipping chisels, cold chisels	Water hardening
10112	Hyten B-43	M-119	.40-.45 C, .65-.85 Cr, 1.5-2.0 Ni, .3 Mo, bal. Fe		326000 132000	294000 117000	10 61	32 69	627 285	Heavy duty gears, shafts, pinions, bolts	
10113	Hytensil Aluminum No. 375	M-847	98 Al	Heat treated	48000		3		100	Light alloy parts	Corrosion resistant
10114	Hytensilite	M-847	98 Al	Cast Heat treated	32000 45000	28000 41000	15 5		40 100	Light alloy parts	
10115	Macalloy No. 2	M-115	.65 C, 1.25 Ni, .75 Cr, .2 Mo, bal. Fe		190000 305000	170000 290000	5 12	18 40	420 600	Shear blades, gears, arbors, ball races, axes	
10116	Maccomax	M-80	C, Cr, V, W, bal. Fe							Tools, cutters	High speed steel
10117	Macco Radio	M-80	.8C, 4 Cr, 6 W, 5.5 Mo, 1.8 V, bal. Fe							Tools, cutters	High speed steel
10118	Machinable Cast Iron	M-712	C, bal. Fe							Cast iron welding rod	Flux coated
10119	Magalloy FX-4	M-645	2 Al, .2 Mn, 2.0 Cd, 4 Cu, bal. Mg		21000	13000	3		45	Pistons, permanent mold castings	High thermal conductivity
10120	Magalloy RX-3	M-645	1.2-2.0 Mn, bal. Mg	Extruded	39000 45000	25000 29000	4 9		39 46	Extruded parts	Wrought alloy
10121	Magalloy RX-9	M-645	6-7 Al, .75 Zn, .15-.20 Mn, bal. Mg	Wrought	45000 48000	30000 34000	11 13		55 60	Light alloy parts	
10122	Magalloy X-5	M-645	7.5-8.5 Al, .15-.2 Mn, bal. Mg	Cast Heat treated	28000 36000	13000 13000	7 8		50 50	Light alloy castings	
10123	Magalloy X-6	M-645	1.2-2.0 Mn, bal. Mg	Sand Die	14000 26000	4500 10000	5 7		35 37	Gasoline tank fittings, high pressure die castings	
10124	Magalloy X-7	M-645	5.5-6.5 Al, 2.5-3.0 Zn, .15-.20 Mn, bal. Mg	Cast Heat treated	28000 37000	12000 19000	7 5		50 71	Aircraft castings	
10125	Magalloy X-8	M-645	4.5-6.5 Al, .15-.20 Mn, .2-.5 Si, bal. Mg	Cast	29000	11000	8		50	Light alloy sand castings	
10126	Magalloy X-10	M-645	9.5-10.5 Al, 0.1 Mn, bal. Mg	Cast Heat treated	22000 36000	12000 17000	3 4		55 65	Leak proof castings	
10127	Magalloy X-11	M-645	11.5-12.5 Al, 0.1 Mn, bal. Mg	Cast Heat treated	20000 32000	16000 22000	1 .5		70 90	Sand and permanent mold castings	
10128	Magalloy Z-104	M-645	3.5-4.5 Mg, bal. Al		22000 25000	12000	6 9		46 54	Sand castings	
10129	Magalloy Z-107	M-645	6.5-7.5 Mg, bal. Al		25000 27000	15000	4 6		55 65	Sand castings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10130	Magalloy Z-110	M-645	9-11 Mg, bal. Al	Heat treated	42000	22000	12		68	Sand castings	Heat treatable
					45000	25000	14		80		
10131	Magdal	M-871	1 Mg, 1.25 Mn, bal. Fe	Soft	21000		16				
				Hard rolled	34000		8				
10132	Mag Metal	M-870							55		Pt substitute
10133	Magnewin	M-869	Mg alloy								
10134	Magnolia Cadmium Nickel	M-436								Bearings, liners	High loads
10135	Magnolia and Sotropic Bronze	M-178	Sn, Pb, bal. Cu		31250	26000	8.5		70	Die cast bronze bearings	
10136	Magnuminium 133	M-556	.2 Al, .2 Zn, 2.5 Mn, .4 Si, .2 Cu, bal. Mg		30000	16000	10		50	Light alloy parts	
90137	*Magnuminium 299*	M-556	*2.0-6.0 Al, 3-10 Sn*, .25-4.0 Ag, bal. Mg		18000		4			Light castings	D.T.D. 350
10138	Malachite										
10139	Mal-Arc	M-265								Hard facing welding rod	Abrasion resistant
10140	Malax	M-750									
10141	Malax AA	M-750	C, 4.25 Cr, 19 W, 2 V, bal. Fe							Tools, cutters	High speed steel
10142	Malax AAA	M-750	C, 4.25 Cr, 19 W, 2 V, 5-8 Co, .8 Mo, bal. Fe							Tools, cutters	High speed steel
10143	Malcrome	M-750									
10144	Malga	M-750									
10145	Malgaloy	M-750									
10146	Mallix	M-89								Grate bars, elevator buckets	Heat and abrasion resistant
10147	Mallory Elkon Bronze	M-265	Cu alloy	Cast	55000	37500	10				40% elec. cond. Discontinued
10148	Mallory 22	M-265	Cu-Cd-Zr	Wrought	75000	35000	15			Resistance welding electrode	Discontinued
10149	Mallory 53	M-265	Cu alloy	Wrought	100000				200	Flash welding dies, bushings,	45% cond.
				Cast	70000				200	fusion welding rod	
10150	Mallory 53B	M-265	Cu alloy	Cast	60000					Flash welding dies, bearings	
					70000						
10151	Mallory 73	M-265	Cu alloy	Wrought	180000				375	Projection welding, electrodes	20% elec. cond.
				Cast	110000				375	bearings, springs	
10152	Mallory 84	M-265	Cu alloy		90000				180	Welding electrode	60% elec. cond. Discontinued
10153	Mallory 100	M-265	Cu alloy	Wrought	110000				230	Welding electrodes, gears,	50% elec. cond.
				Cast	95000				230	springs	
10154	Mallory 333	M-265	Cu, Cr, Li	Cast	53000		20			Welding electrode, springs,	85% elec. cond.
				Wrought	75000		15			collector rings	Discontinued
10155	Mallory 1000	M-265	Cu-W		75000						Sintered Sp. Gr. 17
10156	Mallory K-Metal	M-265	W							Contacts for ignition system	
10157	Mallory MK-Metal	M-265								Magneto contacts	
10158	Mandur										
10159	Manelec	M-691	Si, bal. Fe							*Electrical equipment*, motors	
10160	Manganend 13	M-677								Welding electrode	
10161	Macalloy No. 1	M-115	.35 C, 1.25 Ni, .75 Cr, .20 Mo, bal. Fe	Heat treated	95000	65000	12	55	187	Gears, shafts, pinions,	
					170000	140000	30	72	311	springs, studs	
10162	Manganese Carbon Alloy	M-669	C, Mn, bal. Fe	Heat treated	125000	105000	16	50	260	Drive shafts, bolts, studs,	SAE-T-1340
									320	spindles, pins	
10163	Manganese Molybdenum Steel	M-176	.25 max. C, 1.65 max. Mn, .75 max. Mo, bal. Fe		95000	60000	25		200	Shafts gears	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10164	Manganese Screw Stock	M-669	C, Mn, bal. Fe		65000	44000	16	55	156	Case hardened parts, gears, shafts	SAE-X-1314
					80000	75000	35	60	130		
10165	Mangano Special	M-73	.90 C, .50 Cr, 1.20 Mn, .50 W, bal. Fe							Reamers, dies, threading taps, trimming dies	Non-deforming
10166	Manganweld A	M-578	C, Cr, Ni, bal. Fe							Welding electrode, hard facing electrode	Shielded arc Austenitic
10167	Mangenweld B	M-578	C, alloy, bal. Fe							Welding electrode for manganese steel	Austenitic, hard facing
10168	Manmo 6 Temper	M-115	.60 C, .80 Mn, 1.0 Cr, .45 Mo, bal. Fe							White metal die casting dies, punches, cams, shear blades	Tough
10169	Manmo 7 Temper	M-115	.73 C, .8 Mn, 1.0 Cr, .45 Mo, bal. Fe							Brake dies, plastic molds, collets, chisels	Tough
10170	Mansfalium										
10171	Maple Leaf	M-435	.80 C, bal. Fe							Tools	
10172	Marsh	M-753									
10173	Marwin	M-848	C, bal. Fe							Machinery parts	Free machining
10174	Marwin Supastuff	M-848	C, bal. Fe							Machinery parts, bolts	
10175	Massalloy	M-467	C, Cr, Ni, Mo, bal. Fe	Heat treated	135000	110000	17	30	286	Steel castings	
10176	Massillon	M-467	C, Mn, bal. Fe	Normalize	100000	60000	20	35	207	Stokerworms	Cast steel
10177	Maximold	M-289	C, alloy, bal. Fe							Al and Zn die casting dies	Air hardening. Resists fire checks.
10178	Mayari R	M-24	.08-.20 C, .5-1.0 Mn, .5-.7 Cu, .25-.75 Ni, .2-1.0 Cr, .08-.12 P, bal. Fe		70000	50000	22		150	Transportation equipment, structures	
10179	Mazlo AM 260	M-313	9 Al, 1 Zn, .10 Mn, bal. Mg	Cast	23000	14000	1		65	Sand or permanent mold	Heat treatable
				Heat treated	38000	20000	3		78	castings	
10180	Mazlo AM 263	M-313	9 Al, .6 Zn, .10 Mn, bal. Mg	Cast	34000	22000	3		60	Pressure die castings	
10181	Mazlo AM-C52S	M-313	3 Al, 1 Zn, bal. Mg	Extruded						Light alloy parts	Sheets & extrusions
10182	Mazlo AM-C57S	M-313	6 Al, 1 Zn, .15 Mn, bal. Mg	Annealed	42000	26000	10			Light alloy parts	Extruded & pressed
		M-4		Rolled	50000	35000	6				
				Extruded	44000	32000	14		55		
10183	M-Chrome	M-73	1.0 C, 1.4 Cr, bal. Fe							Tools, dies	
10184	McGill Brass Pressure Casting Alloy	M-181	57-62 Cu, 38-41 Zn, .5 Sn, 1-5 Pb		60000	30000	20			Pressure die castings, structural parts	
10185	McK. No. 15	M-849	.10-.15 C, .40-.55 Mn, bal. Fe							Welding electrode	Shielded arc coating
10186	M K. No. 16	M-849	.10-.15 C, .4-.55 Mn, bal. Fe							Welding electrode for flat positions	Shielded arc coating
10187	McK. No. 17	M-849	.10-.15 C, .4-.55 Mn, bal. Fe							Welding electrode	Shielded arc coating
10188	McK. No. 18	M-849	.10-.15 C, .40-.55 Mn, bal. Fe							Welding electrode for flat position fillet	Shielded arc coating
10189	McKenna K4	M-793							92RA	Tools, cutters	For cutting cast iron, glass, porcelain
10190	Meehanite A	M-82	C, alloy, bal. Fe	Cast	50000				196	Castings	Superseded by Meehanite GA
		M-850		Heat treated	75000				600		
10191	Meehanite B	M-82	C, bal. Fe, alloy	Cast	45000				196	Castings	Cast iron superseded
		M-850		Heat treated	60000				500		by Meehanite GB.
10192	Meehanite C	M-82	C, alloy, bal. Fe		40000				196	Cast iron castings	Superseded by
		M-850							450		Meehanite GC
10193	Meehanite CB	M-82	C, alloy, bal. Fe		45000				187	Acid pans, kettles, pumps, valves, fittings	Acid resistant castings
		M-850									
10194	Meehanite CB3	M-82	C, alloy, bal. Fe		45000				187	Pumps, valves, fittings	Acid resistant castings
		M-850									

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10195	Meehanite CC	M–82 M–850	C, alloy, bal. Fe							Cast iron castings	
10196	Meehanite D	M–82 M–850	C, alloy, bal. Fe		35000				175 400	Cast iron castings	Superseded by Meehanite GD
10197	Meehanite E	M–82 M–850	C, alloy, bal. Fe		30000				140 450	Cast iron castings	Superseded by Meehanite GE
10198	Meehanite GA	M–82 M–850	C, alloy, bal. Fe		50000				223	Cast iron castings	
10199	Meehanite GAH	M–82 M–850	C, alloy, bal. Fe		70000				250 600	Cast iron castings	
10200	Meehanite GB	M–82 M–850	C, alloy, bal. Fe		42000 46000				212	Cast iron castings	
10201	Meehanite GC	M–82 M–850	C, alloy, bal. Fe		38000 42000				207	High pressure cast iron castings	
10202	Meehanite GD	M–82 M–850	C, alloy, bal. Fe		33000 38000				193	Pressure castings	Cast iron
10203	Meehanite GE	M–82 M–850	C, alloy, bal. Fe		30000				174	Cast iron castings	General purpose
10204	Meehanite GM	M–82 M–850	C, alloy, bal. Fe		50000 60000				241		
10205	Meehanite HA	M–82 M–850	C, alloy, bal. Fe		50000				196 240	Diesel castings, valves, dies, manifolds	Heat resistant to 1200° F.
10206	Meehanite HB	M–82 M–850	C, alloy, bal. Fe		38000				350 500	Stoker plates, furnace rolls, skid castings	Heat resistant to 1600° F.
10207	Meehanite HC	M–82 M–850	C, alloy, bal. Fe		38000				229	Cast iron castings	Heat resistant
10208	Meehanite HD	M–82 M–850	C, alloy, bal. Fe		33000				202	Heat resisting cast iron castings	Heat realstant
10209	Meehanite HE	M–82 M–850	C, alloy, bal. Fe		30000				170 220	Slag pots, furnace castings	Heat resistant
10210	Meehanite HR	M–82 M–850	C, alloy, bal. Fe		40000				300 400	Furnace and burner parts, stokers, grates	Resists heat to 1550° F.
10211	Meehanite KC	M–82 M–850	C, alloy, bal. Fe							Pumps, valves, fittings, evaporators	Alkali resistant
10212	Meehanite SC	M–82 M–850	C, alloy, bal. Fe		27000				200 300	Annealing boxes, carburizing boxes, baffle plates	Heat resistant to 1650° F.
10213	Meehanite WA	M–82 M–850	C, alloy, bal. Fe		50000				196 321	Gears, brake drums, cams, dies, pinions	Wear resistant
10214	Meehanite WAH	M–82 M–850	C, alloy, bal. Fe		70000				200 600	Cast iron castings	Wear resistant
10215	Meehanite WB	M–82 M–850	C, alloy, bal. Fe		38000				350 550	Mill liners, crushers, pump impellers	Wear resistant
10216	Meehanite WBC	M–82 M–850	C, alloy, bal. Fe	Chilled	45000				550	Cement mill gears, rolls, rollers, cams	Hard exterior
10217	Meral	Swiss	3.2 Cu, .8 Mg, .3 Mn, 1 Ni, bal. Al		56000	36000	18		110	Light alloy parts	
10218	Me Ritingots	M–851	Cu alloy							Castings	
10219	Mercury	M–39	C, bal. Fe							Tools	
10220	Mesta Special	M–852	C, alloy, bal. Fe							Rolls	Cast steel
10221	Metaljoiner	M–744								Solder	M.P.-650° F.
10222	Metamold	M–289	C, alloy, bal. Fe							Zn and Al die casting dies	Oil hardening
10223	Metco Aluminum	M–853	Al							Metal spraying	Wire
10224	Metco Copper	M–854	Cu							Metal spraying	Wire

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10225	Metco Electrolytic Zinc	M-854	Zn							Metal spraying	Wire
10226	Metco Lead A	M-854	Pb							Metal spraying	Wire
10227	Metcoloy No. 1	M-854	C, Cr, Ni, bal. Fe							Metal spraying	Stainless steel wire
10228	Metcoloy No. 2	M-854	C, Cr, Ni, bal. Fe							Metal spraying	Stainless steel wire
10229	Metco Monel Metal	M-854	Cu-Ni							Metal spraying	Monel metal wire
10230	Metco Nickel	M-854	Ni							Metal spraying	Nickel wire
10231	Mezzo Steel	M-612	C, W, Mo, Cr, V, bal. Fe							Tools, cutters	High speed steel
10232	M-H Composite	M-229	C, alloy, bal. Fe							Heavy duty rollers	In sheet mills
10233	M-H Special Alloy Steel	M-229	C, alloy, bal. Fe							Rolls for slabbing mill	
10234	Miarmi Iron	M-854	C, bal. Fe							High strength castings	Cast iron
10235	Tubeloy	M-314	.02 Ca, .02 Mg, .02 Sn, bal. Pb		40000		15		8	Water service pipe	Extruded
10236	Midflex	M-237								Thermo metal	Bi-metal
10237	Milco 9	M-365	.73 C, .28 Mn, 4 Cr, 1.75 V, 18.25 W, 8.5 Co, bal. Fe							Tools, cutters, reamers	High speed steel
10238	Midvaloy 0500	M-85	.30 C, 5 Cr, .3-.5 Mo, bal. Fe							Oil refinery equipment	Heat resistant
10239	Midvaloy 13	M-85	.12 C, 12-14 Cr, .5 max. Ni, bal. Fe		80000 200000	35000 170000	7 30		140 400	Corrosion resistant parts	Corrosion resistant
10240	Midvaloy 1808 M	M-85	.07 C, 18 Cr, 8 Ni, 2.0-3.5 Mo, bal. Fe							Corrosion resistant parts	Stainless
10241	Midvaloy 2512-7	M-85	.07 C, 23-26 Cr, 11-13 Ni, bal. Fe		70000 115000	40000 60000	9 45		140 230	Heat and corrosion resisting parts	Heat and corrosion resistant
10242	Midvaloy 2512-16	M-85	.16 C, 25 Cr, 12 Ni, bal. Fe							Automatic furnaces, skid rails, walking beams	Heat resistant to 1850° F.
10243	Midvaloy 1808	M-85	.07-.20 C, 18 Cr, 8 Ni, bal. Fe							Stainless parts	Stainless
10244	Midvaloy "HR-1"	M-85	20 Cr, 7 Ni, 4 W, .35 C, bal. Fe							Recuperators, chain grate stokers, gas turbine rotors	High temp. work
10245	Midvaloy 2802	M-85	C, 28 Cr, 3 max. Ni, bal. Fe							Ore roaster parts in mining industry	
10246	Millaloy	M-855	C, 4 Ni, 1.5 Cr, bal. Fe	Heat treated	312000	272000	11	35	532	Shear blades	
10247	Mill Brass Mix	M-741	Cu alloy							Bearings, bushings	
10248	Millenite	M-857	C, alloy, bal. Fe							High duty castings	
10249	Milne Hollow Die Steel	M-365	C, bal. Fe							Hollow dies	Water hardening
10250	Milvan	M-365	C, 19 W, 4.25 Cr, 2.25 V, bal. Fe							Tools, cutters	High speed steel
10251	Minerva Chisel	M-365	.5 C, 1.75 Cr, 1.9-2.0 W, .2 V, bal. Fe							Tools	
10252	Minimax No. 178	M-658								Dental amalgams	
10253	Misco Grade A	M-84	.5-.7 C, 35-37 Ni, 15-17 Cr, bal. Fe							Furnace parts, retorts, carburizing boxes	Resists heat to 1950° F.
10254	Misco HN-1	M-84	.5-.8 C, 16-20 Cr, 66-70 Ni, bal. Fe	Cast	60000	36000	3		217	Stainless steel castings	Acid resistant
10255	Misco Metal	M-84	35 Ni-15 Cr							Furnace parts, annealing boxes, retorts	Heat and corrosion resistant
10256	Misco 18-8 MO	M-84	C, 18 Cr, 8 Ni, 3 Mo, bal. Fe							Stainless parts	Stainless
10257	Miscrome No. 4	M-84	C, 13 Cr, bal. Fe							Corrosion resisting parts	Corrosion resistant
10258	Mishima Steel		10 Al, 25 Ni, bal. Fe							Permanent magnets	High coercive force
10259	Dowmetal FS-1	M-43	Mg alloy								
10260	Mixend	M-677								Weld metal for cast iron	
10261	M-K-9	M-859	Al alloy		60000		30			Light alloy parts	
10262	MK9-AS	M-859	Al alloy	Cast Wrought	35000 47500					Light alloy parts	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10263	M-M-1	M-365	.65-.85 C, 7.5-9.5 Mo, 1.25-2.25 W, 3.5-4.5 Cr, .9-1.5 V, bal. Fe							Tools, cutters	High speed steel
10264	Mocasco	M-601	C, alloy, bal. Fe							Castings	Cast iron
10265	Mocasco 30	M-601	3.25-3.35 T.C., 2-2.2 Si, 1.0-1.35 Ni, .25-.30 Cr, bal. Fe	Cast	30000				200	Air compressor cylinders, motor blocks and heads	Wear and heat resistant
10266	Mocasco 50	M-601	C, 1.5 Ni, .6 Mo, bal. Fe	Cast	50000				241	Castings, pistons, gears, valves	Cast iron
10267	Mocasco 60	M-601	C, 1.5 Ni, Cr, .90 Mo, bal. Fe	Cast	60000				228 260	Gears, brake drums, pump and hydraulic castings	Cast iron
10268	Mo Chip	M-57	C, Mo, Co, W, Cr, bal. Fe							Tools, cutters	
10269	Mo Chip Superior	M-57	C, Mo, Co, W, Cr, bal. Fe							Tools, cutters	
10270	Mohican	M-435	.8 C, 1.5 W, 4 Cr, 1 V, 8.5 Mo, bal. Fe							Tools, cutters	High speed steel
10271	Durex Iron	M-839	C, W, Mo, Cr, V, bal. Fe		15000 35000		1 7		90	Bearings	Sintered
10272	Selflube Iron	M-989	95 Fe, 5 Cu							Bearings	Sintered
10273	Molel Alloy	M-432	C, alloy, bal. Fe							Tools	
10274	Molite	M-35	.8 C, 4 Cr, 5 W, 5 Mo, 1.5 V, bal. Fe							Tools, cutters	High speed steel
10275	Moltrop	M-860	C, bal. Fe								
10276	Molybdenum Chisel	M-365	C, bal. Fe							Chisels, tools	
10277	Molybdenum Self-Hardening	M-39	C, alloy, bal. Fe							Tools	
10278	Molybdie Type C	M-55	.4 C, .6 Mn, .85 Cr, 1.5 Ni, .3 Mo, bal. Fe	Heat treated	130000	100000	18	50	285	Machine parts, piston rods, rams	Shock resistant
10279	Molybdie Type R	M-55	.31 C, .75 Cr, 1.5 Ni, .3 Mo, bal. Fe	Heat treated	130000	100000	18	50	285	Machine parts, shafting, gears	Shock resistant
10280	Moly-Iron	M-278	C, 1 Mo, 1 Cr, bal. Fe	Cast	55000				240	Heat and abrasion resistant castings	Heat and abrasion resistant
10281	Molyite	M-35	C, 9 Mo, 4 Cr, 2 V, bal. Fe							Tools, cutters	High speed steel
10282	Moly-Nickel	M-861	C, bal. Fe							Welding rod	
10283	TCM	M-275	.35 C, 5 Cr, 1-1.5 Mo, 1.0 Si, 1.25 W, bal. Fe							Die casting dies	Hot work steel
10284	Monarch Metal	M-863	Cu alloy, Pb							Bearings	Leaded
10285	Monark-1	M-435	.5 C, .4 Mn, 1.2 Si, .5 Mo, bal. Fe							Chisels, pneumatic tools	Water hardening
10286	Monark-2	M-435	.6 C, .75 Mn, 2 Si, .3 Cr, .2 Mo, bal. Fe							Chisels, pneumatic tools	Water hardening
10287	WE-X	M-206	Si, bal. Fe								
10288	Moraine,	M-839	Cu alloy							Bearings	Sintered
10289	Mo-Technickill	M-229								Heavy duty rollers	
10290	Motelec	M-691	Si, bal. Fe								
10291	Mo-Tiger	M-24	C, Mo, W, Cr, V, bal. Fe							Tools, cutters	High speed steel
10292	Mo-Van	M-260	.85 C, 4 Cr, 1.75 V, 7.5 Mo, bal. Fe							Tools, cutters	High speed steel
10293	M S M Alloy	M-365	.5 C, .7 Mn, 1.8-2.0 Si, .25 Mo, bal. Fe							Tools	
10294	M S M	M-210	C, alloy, bal. Fe							Tools	
10295	Mu-Hole Punch	M-85	C, alloy, bal. Fe							Tools	
10296	Murex Alternex	M-529	C, bal. Fe							Welding electrode	
10297	Murex Cresta	M-529	C, bal. Fe							Welding electrode	For mild steel
10298	Murex Fillex	M-529	C, bal. Fe							Welding electrode	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10299	Murex Genex	M-529	C, bal. Fe							Welding electrode	
10300	Murex Molex	M-529	C, bal. Fe							Welding electrode	For C-Mo steel
10301	Murex Rolex	M-529	C, bal. Fe							Hard surfacing electrode	For carbon steels
10302	Murex Stainless	M-529	C, 18 Cr, 8 Ni, bal. Fe							Stainless steel welding electrode	
10303	Murex Surfacing	M-529	C, alloy, bal. Fe							Welding rod	For high speed surfacing
10304	Murex Type F	M-529	C, bal. Fe							Welding electrode	For mild steel
10305	Murex Vertex	M-529	C, bal. Fe							Welding electrode	For mild steel
10306	Murex No. 5 Chrome	M-529	C, 4-6 Cr, bal. Fe							Welding electrode	For 4-6 Cr steel
10307	Murex No. 14 Chrome	M-529	C, 14 Cr, bal. Fe							Welding electrode	For 12-14 Cr steel
10308	NA-2 S	M-643	99.0 Al		10000		27		20	Bars and sections, hollow	Wrought
					11000		38		25	ware, tanks, panelling	
10309	NA-3 S	M-643	Mn, bal. Al		13000		25		25	Panels, tanks, architecture,	Extruded
					14000		38		30	trim	
10310	NA-4 S	M-643	Mn, Mg, bal. Al		21000		18		37	Architectural panels, roofing,	Wrought
					22000		27		42	floors	
10311	NA-10 S	M-643	Al alloy		12000		25		25	Light alloy parts	Extruded
					13000		33		28		
10312	NA-11 S	M-643	Al alloy		24000		23		45	Light alloy parts, screws	Free machining
					26000		27		55		
10313	NA-13 S	M-643	Al alloy	Heat treated	36000		25		70	Light alloy parts	Heat treatable
					38000		29		75		
10314	NA-15 S	M-643	Al alloy	Heat treated	44000		30		90	Architectural and marine	Heat treatable
					46000		31		93	parts	
10315	NA-17 S	M-643	Cu-Mg-Mn, bal. Al	Heat treated	50000		15		95	Structural and aircraft parts	Wrought
					54000		18		104		Heat treatable
10316	NA-22 S	M-643	Cu-Mg-Mn-Si, bal. Al	Heat treated	56000		8		120	Aircraft parts	Wrought
					62000		13		128		Heat treatable
10317	NA-24 S	M-643	Cu -Mn, bal. Al	Heat treated	56000		10		100	Aircraft parts	Wrought
					58000		17		110		Heat treatable
10318	NA-25 S	M-643	Al alloy							Aircraft parts	Wrought
											Heat treatable
10319	NA-26 S	M-643	3-4 Cu, 1.0 max. Si, 1.2 max. Mn, 1.0 max. Mg, bal. Al		60000		8			Aircraft parts	
10320	NA-33 S	M-643	Al alloy		17000		25		33	Architectural	
10321	NA-37 S	M-643	9-14 Si, bal. Al		20000		30		38	Marine parts, panelling	Extruded
10322	NA-38 S	M-643	Al alloy							Light alloy parts	
10323	NA-50 S	M-643	Al alloy		22000		20		40	Light alloy parts	
					20000		25		45		
10324	NA-51 S	M-643	Si-Mg-bal. Al	Heat treated	40000		8			Structural, architectural and marine parts	
10325	NA-55 S	M-643	Al alloy	Heat treated	33000		26		76	Architectural and marine parts	
10326	NA-57 S	M-643	Mg, bal. Al	Extruded	24000		30		48	Architectural and marine parts	
10327	NA-80 S	M-643	Al alloy		38000		24		77	Light alloy parts	Free machining
10328	NA-111	M-643	Si, bal. Al	Cast						Light alloy castings	
10329	NA-115	M-643	Si, bal. Al	Cast						Light alloy castings	
10330	NA-123	M-643	Si, bal. Al	Cast						Light alloy castings	
10331	NA-124	M-643	Si, bal. Al							Light alloy castings	
10332	NA-125	M-643	1.0-1.5 Cu, .5 Mg, 5 Si, .25 max. Ti, bal. Al		30000					Light alloy castings	Age hardening
					34000						
10333	NA-126	M-643	Si, bal. Al							Light alloy castings	
10334	NA-127	M-643	Si, bal. Al							Light alloy castings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10335	NA-135	M-643	Si, bal. Al							Light alloy castings	
10336	NA-140	M-643	Si, bal. Al							Light alloy castings	
10337	NA-150	M-643	10 Si, bal. Al							Light alloy castings	
10338	NA-155	M-643	Si, bal. Al							Light alloy castings	
10339	NA-156	M-643	Si, bal. Al							Light alloy castings	
10340	NA-160	M-643	Si, bal. Al							Light alloy castings	
10341	NA-162	M-643	Si, bal. Al							Light alloy castings	
10342	NA-165	M-643	Si, bal. Al							Light alloy castings	
10343	NA-172	M-643	Si, bal. Al							Light alloy castings	
10344	NA-211	M-643	Cu, bal. Al							Light alloy castings	
10345	NA-218	M-643	Cu, bal. Al							Castings	Light alloy
10346	NA-222	M-643	4.0-4.6 Cu, .9 max. Si, .7 max. Fe, .25 max. Ti, bal. Al		36000					Light alloy castings	Age hardening
10347	NA-224	M-643	Cu, bal. Al							Castings	Light alloy
10348	NA-225	M-643	Cu, bal. Al							Castings	Light alloy
10349	NA-226	M-643	.9 max. Si, .7 max. Fe, .25 max. Ti, 4.0-4.6 Cu, bal. Al		42000 52000		1 4			Castings	Age hardening
10350	NA-232	M-643	Cu, bal. Al							Castings	Light alloy
10351	NA-234	M-643	Cu, bal. Al							Castings	Light alloy
10352	NA-235	M-643	Cu, bal. Al							Castings	Light alloy
10353	NA-236	M-643	Cu, bal. Al							Castings	Light alloy
10354	NA-238	M-643	Cu, bal. Al							Castings	Light alloy
10355	NA-240	M-643	Cu, bal. Al							Castings	Light alloy
10356	NA-242	M-643	Cu, bal. Al							Castings	Light alloy
10357	NA-244	M-643	Cu, bal. Al							Castings	Light alloy
10358	NA-250	M-643	Cu, bal. Al							Castings	Light alloy
10359	NA-260	M-643	12 Cu, bal. Al							Castings	Light alloy
10360	NA-305	M-643	Mg, bal. Al							Castings	Light alloy
10361	NA-307	M-643	Mg, bal. Al							Castings	Light alloy
10362	NA-320	M-643	Mg, bal. Al							Castings	Light alloy
10363	NA-322	M-643	Mg, bal. Al							Castings	Light alloy
10364	NA-330	M-643	Mg, bal. Al							Castings	Light alloy
10365	NA-350	M-643	9.5-10.5 Mg, bal. Al		36000 32000					Castings	Heat treatable
10366	NA-450	M-643	Zn, bal. Al							Castings	Light alloy
10367	NA-465	M-643	Zn, Cu, bal. Al							Castings	Light alloy
10368	NA-510	M-643	Mn, bal. Al							Castings	Light alloy
10369	Nada C	M-548	Si, bal. Cu	Cast	45000 55000		60 70			Bronze castings	
10370	Naloy	M-864	C, alloy, bal. Fe							Broaches, form tools	
10371	National No. 2	M-539	Cu, Sn, Pb, Ni		33000	21000	7	7	75	Bearings, engine and machinery castings	C.Y.P.-14000
10372	National No. 3	M-539	Cu, Sn, Pb		32000	21000	10	10	74	Bushings, bearings	C.Y.P.-14000
10373	National No. 4	M-539	Cu, Sn, Zn		42000	23000	21	22	88	Gears, pinions, worm wheels, nuts	C.Y.P.-16000
10374	National No. 5	M-539	Sn, bal. Cu		37000	21000	10			Gears	Acid resistant
10375	National No. 6	M-539	Sn, Pb, bal. Cu		27500	17000	16	15	47	Bearings with poor lubrication	C.Y.P.-9700
10376	National No. 7	M-539	Sn, Pb, Ni, bal. Cu		40000	27000	12	15	90	Bearings	For heavy loads
10377	National No. 9A	M-539	Al, Fe, bal. Cu		63000	28000	10	11	143		C.Y.P.-15000
10378	National No. 9B	M-539	Al, Fe, bal. Cu		64000	28000	11	12	144	Acid resisting parts, crates, pickling racks	C.Y.P.-24000
10379	National No. 9C	M-579	Al, Fe, bal. Cu		84000	33000	25	24	137	Bushings, bearings	C.Y.P.-24000

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10380	National No. 9D	M-579	Al, Fe, bal. Cu		88000	43000	13	13	149	Bushings, bearings	C.Y.P.-30000
10381	National No. 9E	M-539	Al, Fe, bal. Cu		90000	43000	12	12	170	Gears, pinions, worms, worm wheels	C.Y.P.-35000
10382	National No. 9F	M-539	Al, Fe, bal. Cu		97000	58000	3.5	3.5	241	Slides, gibs	C.Y.P.-40000
10383	National No. 9G	M-539	Al, Fe, bal. Cu		55500	55500	0	0	300	Forming or drawing dies	C.Y.P.-61000
10384	National No. 9H	M-539	Al, Fe, bal. Cu		120000	101000	3	5.5	235		Heat treatable
10385	National No. 10A	M-539	Zn, Fe, Al, Mn, bal. Cu		70000	35000	32	20	125		
10386	National No. 10B	M-539	Zn, Al, Mn, Fe, bal. Cu		115000	77000	13	16	210		C.Y.P.-64000
10387	National No. 11	M-539	Sn, Pb, bal. Cu		33000	16000	12	58			
10388	National No. 12	M-539	Sn, Pb, bal. Cu		40000	21000	19	18	81		C.Y.P.-16600
10389	National No. 13	M-539	Sn, Pb, Zn, bal. Cu		30000	19000	13	18	69		For steam and water pressure
10390	N-A-X High Tensile	M-766	.13 C, .7 Mn, .8 Si, .6 Cr, .11 Zr, bal. Fe	Rolled	76000	52000	40	74	155	Structural	Formerly "Ductiloy"
10391	NC-4	French	24 Ni, 3 Cr, bal. Fe							Thermostatic bimetal	
10392	N.C.O.H.	M-499	C, alloy, bal. Fe	Annealed	94000	52000	28	50	196	Gears, axles, crankshafts	
				Heat treated	230000	210000	8	25	477		
10393	NCR-238	M-260	.4 C, 1.4 Si, 8.25 Cr, 2.25 Ni,							Stainless parts, pump and furnace parts	Stainless
		M-38	1.25 Cu, bal. Fe								
10394	Neatro	M-115	1.27 C, 5.5 W, 4.5 Cr, 4 V, 4.5 Mo, bal. Fe							Cutting tools	High speed steel
10395	Necomicle	Japan	C, Ni, Cr, Mo, bal. Fe							Turbine blades, chemical apparatus	Stainless
10396	Neloy Molybdenum	M-232	C, alloy, bal. Fe	Annealed	85000		20	30	170	Steel castings	
					95000		25	40	197		
10397	Neloy Molybdenum No. 2A	M-232	C, alloy, bal. Fe		100000		15	35	190	Steel castings	
					115000		20	45	220		
10398	Neloy Molybdenum No. 3A	M-232	C, alloy, bal. Fe		125000		12	30	250	Steel castings	
					140000		15	40	280		
10399	Neloy Molybdenum No. 5A	M-232	C, alloy, bal. Fe		140000		10	20	302	Steel castings	
					160000		13	30	331		
10400	Neloy Molybdenum No. 6A	M-232	C, alloy, bal. Fe		160000		7.5	15	341	Steel castings	
					180000		10	25	375		
10401	Neloy No. 1	M-232	C, alloy, bal. Fe	Cast	85000		23	50	163	Steel castings	
					95000		30	60	170		
10402	Neloy No. 2	M-232	C, alloy, bal. Fe		90000		23	55	174	Steel castings	
					93000		28	65	198		
10403	Neloy No. 3	M-232	C, alloy, bal. Fe		100000		20	50	202	Steel castings	
					110000		26	60	240		
10404	Neloy No. 4	M-232	C, alloy, bal. Fe		115000		15	40	240	Steel castings	
					130000		20	45	268		
10405	Neloy No. 5	M-232	C, alloy, bal. Fe		125000		12	35	268	Steel castings	
					135000		20	45	288		
10406	Neloy No. 6	M-232	C, alloy, bal. Fe		135000		9	30	286	Steel castings	
					150000		18	40	302		
10407	Nemicle	Japan	C, Ni, Cr, Mo, bal. Fe							Turbine blades, chemical apparatus	Stainless
10408	Nemicle C	Japan	C, Ni, Cr, Mo, bal. Fe							Turbine blades, chemical apparatus	Stainless
10409	Nemicle F	Japan	C, Ni, Cr, Mo, bal. Fe							Turbine blades, chemical apparatus	Stainless
10410	Neochrax	M-651	22-30 Cr, .5-2.5 Si, 1.0-1.5 C, bal. Fe								Corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10411	Nesaloy	M-865	Li alloy							To disperse Pb in Cu	
10412	Neutralloy	M-866	75 Ni, 15 Cr, 10 Fe, Si, Ti, Mn							Castings	Corrosion and acid resistant
10413	Neutralloy	M-23	73 Ni, 14 Cr, 2 Si, 10 Fe							Castings	Corrosion and heat resistant. (Discontinued)
10414	New Kathode	M-578	C, bal. Fe							Welding electrode	Shielded arc for mild steel
10415	Newport Armature	M-191	Si, bal. Fe							Electric generators	
10416	Newport Electrical "A"	M-191	Si, bal. Fe							Electric generators	
10417	Newport Electrical "B"	M-191	Si, bal. Fe								
10418	Newport Electrical "C"	M-191	Si, bal. Fe								
10419	Newport Transformer	M-191	Si, bal. Fe							Transformers	
10420	Newport Transformer Special	M-191	Si, bal. Fe							Transformers	
10421	Newport Transformer Extra Special	M-191	Si, bal. Fe							Transformers	
10422	Ney's No. 125	M-349								Dental amalgam	
10423	Niagra	M-92									
10424	Ni Chillite	M-229	Ni, Cr, Mo, C, bal. Fe							Rolls	Chilled iron
10425	Ni Chillite No. 2	M-229	C, alloy, bal. Fe							Rod mill rolls	Heavy duty
10426	Nichrome Type A	M-44	62 Ni, 15 Cr, bal. Fe							Rheostats, potentiometers, heating elements	Heat resistant
10427	Nichrome Type B	M-44	Cr-Ni							Addition agent to cast iron	For alloying
10428	Nichrothermsteel		Ni, bal. Fe								Low coefficient expansion
10429	Nickelchromeight	M-118	C, Cr, Ni, bal. Fe							Welding electrode	For 18/8 stainless steel
10430	Nickelchromweld	M-578	Ni, Cr, bal. Fe							Welding electrode	Shielded arc
10431	Nickelchromtwelve	M-118	C, Ni, Cr, bal. Fe							Welding electrode	For 25/12 stainless steel
10432	Nickelend	M-677	.5 Fe, bal. Ni							Ni weld metal	
10433	Nickelmang	M-118	C, alloy, bal. Fe							Welding electrode for Mn steel	Bare and coated
10434	Nicral AD	M-93									
10435	Nicral AD-8412										
10436	Nicroman	M-357	.7 C, .4 Mn, 1.65 Ni, 1.0 Cr, .35 Cu, bal. Fe							Dies, hobs, taps, shear blades	
10437	Nicuite	M-214	10 Sn, 3.5 Ni, 2.5 Zn, bal. Cu		55000	48000	6 8		100 120	Bearings	Heavy loads and slow speeds
10438	Nikro M	M-115	.7 C, 1.4 Ni, .85 Cr, .25 Mo, bal. Fe	Heat treated	290000					Collets, races, arbors, gears	
10439	Nikrome M	M-24	.35-.45 C, .9-1.2 Cr, 2.0-2.5	Heat treated	125000	99000	20	60	265		
10440	Nilstain 302	M-240 M-61	Ni, .5 Mo, bal. Fe 18-20 Cr, 8-10 Ni, .20 C, 2 Mn, bal. Fe		85000 350000	35000 300000	5 60	0 75	140 425	Stainless parts, springs	Corrosion resistant
10441	Nipermag	M-867								Loud speakers, motors, generators	Permanent magnet
10442	Nippon Evershining Steel	M-716	C, Cr, Ni, bal. Fe							Stainless parts	Stainless
10443	Nirex	M-44	Ni-Cr-Fe							Heat resisting parts	Stainless, heat resistant.
10444	Nironite	M-229	C, alloy, bal. Fe							Rolls for strip mills	Heavy duty

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10445	Nironite C	M-229	C, alloy, bal. Fe							Rolls for bar and billet mills	Heavy duty
10446	Nironite D	M-229	C, alloy, bal. Fe							Rolls for strip mills	Heavy duty
10447	Ni Tensyle	M-494	2.8 C, 1.5-2.0 Ni, 1.25-1.75 Si, bal. Fe	Cast	56000				200	Flywheels	Cast iron
				Heat treated	66000				280		
10448	Nitralloy EZ	M-38	.3-.4 C, 1.25 Cr, 1.1 Al, .2 Mo, .15-.25 Se or S, bal. Fe	Heat treated	155000	135000	18	55	300	Nitrided parts	Nitriding steel
		M-76			200000	175000	16	50	400		
10449	Nitralloy EZ 505	M-76	C, Cr, Mo, .85-1.2 Al, .2-.4 Si, bal. Fe							Nitrided parts	Nitriding steel
10450	Nitralloy G Gr. 69	M-76	.38-.45 C, .4-.7 Mn, 1.4-1.8 Cr, .3-.45 Mo, .95-1.35 Al, bal. Fe							Nitrided parts	Nitriding steel
10451	Nitralloy H70	M-76	C, alloy, bal. Fe							Nitrided parts	Nitriding steel
10452	Nitralloy 135 Modified	M-76	.40 C, .5 Mn, 1.0 Al, 1.75 Cr, .4 Mo, bal. Fe	Heat treated	158700	141000	17	56	320	Cylinder barrels, nitrided parts	Nitriding steel
		M-38									
10453	Nitralloy N	M-1	.20-.27 C, .4-.7 Mn, 1.0-1.3 Cr, .2-.3 Mo, 3.25-3.75 Ni, 1.1-1.4 Al, bal. Fe							Nitrided parts	Nitriding steel
		M-38									
10454	Nittany	M-122	Zn, bal. Cu							Screws, nuts, bolts	Free cutting
10455	Nivarox	M-296	28 Ni, W, Mo, Be, bal. Fe								Elinvar type
10456	N.M.C.	English	12 Ni, 5 Mn, 3.5 Cr, .5 C, .5 Si, bal. Fe							Valve inserts	
10457	No-Kor-O-H	M-435	.21-.35 C, 12-15 Cr, bal. Fe								
10458	No-Kor-O-18-8F	M-435	.10 C, .4 Mn, .4 Si, 18 Cr, 9 Ni, .25 Se, bal. Fe						143	Stainless parts	Corrosion resistant
10459	No-Kor-O-18-H-60	M-435	.65 C, .5 Mn, .4 Si, 17 Cr, bal. Fe						207	Corrosion resisting parts	Corrosion resistant
10460	No. 2 Bronze	M-508	88 Cu, 10 Sn, 2 Pb						90	High pressure bearings, pump liners	Acid mine water resistant
10461	No. 8 Bronze	M-508	82.5 Cu, 7.5 Sn, 7.5 Pb, 2.5 Zn						75	Crusher bearings	Heavy duty
									85		Centrifugally cast
10462	No. 35 Monel	M-69	31.25 Cu, 65.5 Ni, 1 Fe	Cold rolled	78000	45000	40			Table tops	
					85000	65000	20				
10463	No. 38 Mil	M-344	C, alloy, bal. Fe							Pneumatic tools	
10464	No. 122 Alloy	M-137	9.25-10.75 Cu, .15-.35 Mg, .5-1.5 Fe, bal. Al	Cast	17000	16000	.5		80	Pistons	Permanent molds
				Heat treated	40000		.5		160		
10465	Stag Mo	M-210	C, W, Cr, V, bal. Fe							Tools, cutters	High speed steel
10466	No. 444 Alloy	M-739	80-96 Cu, 3.5-5.0 Sn, 3.5-4.5 Pb, 4 Zn							Bearings, bushings	SAE 791
10467	No. 712 Alloy	M-18	29 Os, 40-50 Ir, bal. Pt							Contact points	
10468	No. 1015-65	M-669			55000		18	60	156	Case hardened parts	Modified X-1015
					65000		38	65	120		
10469	No. 1040 Alloy	Germ.	15 Cu, 1 Mn, 3 Mo, 71 Ni, 10 Fe							Electrical equipment	Magnetic alloy
10470	Agile Silver Black	M-661	.6 C, 12 Cr, 8 Mo, 8 W, 1.5 B, bal. Fe							For welding high speed steel cutters	High speed steel
10471	N.O.H.	M-499	C, 3 Ni, bal. Fe	Annealed	90000	60000	20	50			
				Heat treated	110000	90000	27	55			
10472	Non-Shrink Die	M-353	C, alloy, bal. Fe							Dies	Non-deforming (Discontinued)
10473	Non-Stretch Steel	M-669	C, alloy, bal. Fe			125000				Dies	Non-deforming
10474	Non-Warp Steel	M-669	C, alloy, bal. Fe			100000				Dies	Non-deforming
10475	Nordic	M-291	C, Si, bal. Fe							Pipes	Wrought iron
10476	Normanna	M-333									

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10477	Notem										
10478	Novalite	Italy									
10479	Novite	M–868	1.5 Ni, .5 Cr, C, bal. Fe		38000					Impellers, cylinder heads, water pumps	Cast iron
10480	No-Wear	M–725	WC							Hard facing welding electrode	Gas welding
10481	Nuloy	M–288	C, alloy, bal. Fe							Steel castings	
10482	Non-Pa-Reil	M–333									
10483	Chace No. 6650	M–582								Thermostatic bimetal	
10484	No. 812	M–357	1.8 C, 12.25 Cr, bal. Fe							Blanking and coining dies, taps, reamers	Non-deforming
10485	Harcus	M–783	C, alloy, bal. Fe							Punching and blanking dies	Non-deforming
10486	L 5	M–137	12.5-14.5 Zn, 2.5-3.0 Cu, .8 max. Fe, .7 max. Si, .2 max. Ti, bal. Al	Cast	20000	11000	4		65	Crankcases, gear boxes, fans, brackets	Sand or permanent mold casting
10487	L 8	M–137	11-13 Cu, .8 max. Fe, .7 max. Si, .2 max. Ti, bal. Al	Cast	22000	16000	1.5		80	Carburetors, automobile pistons	High pressure castings
10488	L 11	M–137	6-8 Cu, 1.0 max. Sn, .8 max. Fe, .2 max. Ti, bal. Al	Cast	22000	16000	4		60	Gear boxes, cylinder heads	Sand or permanent mold castings
10489	Hiduminium RR 53	M–137	1.5-2.5 Cu, .5-2.0 Ni, 1.4-1.8 Mg, 1.2-1.5 Fe, .02-.12 Ti, 2 max. Si, bal. Al	Heat treated	50000	44000	2		140	Pistons, cylinder heads	Die casting
10490	Haynes Stellite No. 2400	M–167	2.3 C, .7 Mn, .5 Si, 31.3 Cr, 17.5 W, 40 Co, .2 B, .3 Mo, 2.4 V, 4.2 Fe							Cutting tools	
10491	P2 Alloy	M–137	3.0-4.5 Cu, 4-5 Si, 2-4 Fe, 1.75-2.5 Ni, bal. Al	Cast	25000	23000	2		101	Carburetors, brake shoes, cameras, electric meters	Pressure die casting
10492	P & A Enameling	M–691									
10493	P & H Smootharc	M–828	C, bal. Fe							Welding rod	
10494	Page-Allegheny 15-35	M–872	.25 max. C, 15 Cr, 35 Ni, bal. Fe							Welding electrodes for stainless steel	Coated
10495	Page-Allegheny 17-7	M–872	.10-.20 C, 16-18 Cr, 7-8.5 Ni, bal. Fe							Stainless steel welding electrode	Type 301X
10496	Page-Allegheny 18-8	M–872	18 Cr, 8 Ni, .07 C, Cb, bal. Fe							Welding electrode	Stainless steel
10497	Page-Allegheny 19-9	M–872	19 Cr, 9 Ni, .07 C, bal. Fe							Welding electrode	Stainless steel
10498	Page-Allegheny 22 Spec.	M–872	.11 max. C, 19-22 Cr, 9-12 Ni, bal. Fe							Welding electrode	Stainless steel
10499	Page-Allegheny 25-12	M–872	.25 max. C, 25 Cr, 12 Ni, bal. Fe							Welding electrode	Stainless steel
10500	Page-Allegheny 25-20	M–872	.25 max. C, 25 Cr, 20 Ni, bal. Fe							Welding electrode	Stainless steel
10501	Page-Allegheny 33 N.H.	M–872	.08 max. C, 11.5-13.5 Cr, .10-.20 Al, bal. Fe							Welding electrode	Stainless
10502	Page-Allegheny 33 T.Q.	M–872	.12 max. C, 11.5-13 Cr, bal. Fe							Welding electrode	Stainless
10503	Page-Allegheny 46	M–872	.10 min. C, 4-6 Cr, bal. Fe							Welding electrode	For 4-6 Cr steel
10504	Page-Allegheny 66 W	M–872	.12 max. C, 16-18 Cr, 2.5-3.5 W, bal. Fe							Welding electrode	Corrosion resistant
10505	Page-Allegheny 67	M–872	.35 max. C, 18-23 Cr, bal. Fe							Welding electrode	Corrosion resistant
10506	Page-Allegheny 4-6 Chromium	M–872	.10 max. C, 4 Cr, Mo, bal. Fe							Welding electrode	Corrosion resistant
10507	Page-Allegheny 12% Cr	M–872	12 Cr, .12 max. C, bal. Fe							Welding electrode	Corrosion resistant
10508	Page-Allegheny 16% Cr	M–872	.12 max. C, 16 min. Cr, bal. Fe							Welding electrode	Corrosion resistant
10509	Page-Allegheny 18% Cr	M–872	.35 max. C, 18 min. Cr, bal. Fe							Welding electrode	Corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10510	Page-Allegheny 23% Cr	M-872	.35 max. C, 23 Cr, bal. Fe							Welding electrode	Corrosion resistant
10511	Page-Allegheny Alloy 22	M-872	.08-.20 C, 19-22 Cr, 9-12 Ni, bal. Fe							Digesters, pipes, tanks, agitators, strainers	Corrosion resistant
10512	Page-Allegheny 33 Grade A	M-872	.12 min. C, 12-15 Cr, bal. Fe							Combustion and steam engine parts, fans	Heat resistant to 1500° F.
10513	Page-Allegheny 33 Grade C1	M-872	.12 max. C, 12-14 Cr, bal. Fe							Fans, blowers, condensers, engine parts	Heat resistant to 1500° F.
10514	Page-Allegheny 34	M-872	.12 max. C, 14-16 Cr, bal. Fe							Fans, blowers	Corrosion resistant
10515	Page-Allegheny 44	M-872	.20 max. C, 22-26 Cr, 11-13 Ni, bal. Fe							Furnace parts, boiler baffles, pumps	Heat resistant to 2100° F.
10516	Page-Allegheny 55	M-872	.35 max. C, 23-30 Cr, bal. Fe							Furnace parts, boiler baffles	Heat resistant to 2100° F.
10517	Page-Allegheny 66 Grade B	M-872	.12 min. C, 15-18 Cr, bal. Fe							Fans, blowers, condensers, evaporators	Heat resistant to 1600° F.
10518	Page-Allegheny 66 Grade C2	M-872	.12 max. C, 16-18 Cr, bal. Fe							Corrosion resisting parts	Corrosion resistant
10519	Page-Allegheny AMO	M-872	.10 max. C, 16-19 Cr, 14 max. Ni, 2-4 Mo, bal. Fe							Welding electrode	Stainless
10520	Page-Allegheny A-Ti	M-872	.10 max. C, 17-20 Cr, 7-10 Ni, Ti = 6×C, bal. Fe							Welding electrode	Stainless
10521	Page-Allegheny "B" Sp	M-872	.11 max. C, 18-20 Cr, 8-10 Ni, bal. Fe							Welding electrode	Stainless
10522	Page-Allegheny Metal A	M-872	.11 max. C, 17-19 Cr, 7-9 Ni, bal. Fe							Welding electrode	Stainless
10523	Page-Allegheny Metal B	M-872	.08-.20 C, 18-20 Cr, 8-10 Ni, bal. Fe							Welding electrode	Stainless
10524	Page-Allegheny Metal C	M-872	.08-.20 C, 17-19 Cr, 7-9 Ni, bal. Fe							Stainless parts	Type 302
10525	Page-Allegheny Metal Cb	M-872	.10 max. C, 17-20 Cr, 8-12 Ni, Cb = 10×C, bal. Fe							Welding electrode	Stainless
10526	Page-Allegheny Metal E M	M-872	.20 max. C, 17-19 Cr, 7-9.5 Ni, S or Se or Mo, bal. Fe							Welding electrode	Stainless
10527	Page-Allegheny Ohmaloy	M-872	.12 max. C, 12-14 Cr, 4-4.5 Al, bal. Fe							Welding electrode	Stainless
10528	Page-Armco	M-872	C, bal. Fe							Welding electrode	
10529	Page-Auto	M-872	C, bal. Fe							Welding electrode	
10530	Page B	M-872	C, bal. Fe							Welding electrode	
10531	Page CE	M-872	C, bal. Fe							Welding electrode	
10532	Page E	M-872	C, bal. Fe							Welding electrode	
10533	Page Hard Facing	M-872	C, alloy, bal. Fe							Hard facing electrode	
10534	Page HC	M-872	C, alloy, bal. Fe							Welding electrode	
10535	Page Hi-Tensile C	M-872	C, bal. Fe							Welding electrode	Shielded arc
10536	Page Hi-Tensile F	M-872	C, bal. Fe							Welding electrode	Shielded arc
10537	Page Hi-Tensile G	M-872	C, bal. Fe							Welding electrode	Shielded arc
10538	Page Hi-Tensile Shielded Arc	M-872	C, bal. Fe							Welding electrode	Shielded arc
10539	Page HT	M-872	C, bal. Fe							Welding electrode	
10540	Page MC	M-872	C, bal. Fe							Welding electrode	
10541	Palladent		40 Pd, bal. Ag								
10542	Panther Extra	M-76	.80 C, 14 W, 4 Cr, 2 V, .68 Mo, 5 Co, bal. Fe							Tools, cutters	High speed steel
10543	Panther XX	M-1	C, alloy, bal. Fe							Tools, cutters	
10544	Par 2C	M-153	C, alloy, bal. Fe							Heat and corrosion resisting castings	Heat, wear and corrosion resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10545	Par 9A	M–153	C, alloy, bal. Fe							Heat and corrosion resisting castings	Heat, wear and corrosion resistant
10546	Par 10A	M–153	C, alloy, bal. Fe							Heat and corrosion resisting castings	Heat, wear and corrosion resistant
10547	Par 11A	M–153	C, alloy, bal. Fe							Heat and corrosion resisting castings	Heat, wear and corrosion resistant
10548	Paralloy	M–873	Ni, Cr, Mo, C, bal. Fe							Castings	Cast iron
10549	Paraloy No. 2	M–873	C, 2-4 Ni, .75-1.0 Cr, bal. Fe		40000 50000				250 300	Cast dies for sheet metal stamping and drawing	Cast iron
10550	Parasteel	M–367	C, alloy, bal. Fe								
10551	Parkaloy	M–874	C, Cr, Ni, bal. Fe							Screws, bolts	Cold forging alloy
10552	Park Special	M–38	C, alloy, bal. Fe							Tools	
10553	Paulite	M–875	C, Ni, Cr, bal. Fe							Crushers	Cast iron abrasion resistant
10554	PDCP	M–319	Cu							Electric generators and motors	Electrolytic pure copper
10555	PE 8	Russ.	92 WC, 8 Co							Cutting tools	Cemented
10556	Peckrite	M–876	2.8-3.0 T. C., 1.6-1.8 Si, .75 Mn, 1.2-1.5 Ni, bal. Fe	Cast Heat treated	50000 70000				 450	Bushings, gears, piston rings, cams	Cast iron
10557	Pencoyd	M–877									
10558	Pennaloy Heat Resistant	M–466	.13-.20 C, 5-7 Cr, bal. Fe								
10559	Pennaloy Heat Resistant	M–466	.21-.25 C, 7-11 Cr, bal. Fe								
10560	Peraluman 5		Al-Mg								
10561	Perduro	M–170	1.6-1.8 T.C., .4-.6 C.C., .5-.7 Mn, .9-1.1 Si, .9-1.1 Cu, bal. Fe	Heat treated	80000 90000	60000 70000	8 6		179 207	Cast chains, sprockets	Malleable iron Resists heat to 1100° F.
10562	Perfection Antifriction	M–88								Bearings	Babbitt
10563	Perfection Steel										
10564	Permal	M–878								Die castings	
10565	Permite	M–240	Sn, bal. Cu								
10566	Permite No. 1010	M–6	4 Cu, 1 Si, bal. Al							Machine parts	
10567	Permium No. 205	M–879	Os, Ru, Rh, Co, Ni							Jewelry, instrument jewels	Sintered
10568	Permo	M–880	Os, Rh, Ru							Instrument bearings, fountain pen tips	Corrosion and wear resistant
10569	Permold	M–881	Al alloy							Washing machine and typewriter parts	Permanent mold
10570	Permometal	M–880								Instrument pivots	Wear and corrosion resistant
10571	Phoenix A	M–369	C, alloy, bal. Fe							Steel castings	
10572	Phoenix A Special	M–369	C, alloy, bal. Fe							Steel castings	
10573	Phoenix K	M–369	C, alloy, bal. Fe							Castings	Cast iron
10574	Phoenix Molybdenum Chill	M–369	C, alloy, bal. Fe							Castings	Cast iron
10575	Phoenix Nickel Chill	M–369	C, alloy, bal. Fe							Castings	Cast iron
10576	Phoenix Piroco	M–369	C, alloy, bal. Fe							Steel castings	
10577	Phono-Hi-Strength	M–141	97 Cu, 2 Sn, 1 Si								
10578	Phosphor Bronze No. 130	M–450	90 Cu, 5 Sn, 5 Sb, P		55000	45000	20			Bearings	
10579	Pinshac	M–882									
10580	Pioneer Metal	M–326	65 Ni, Cr-Mo, bal. Fe	Cast	74000	36500	42		150	Castings, fittings, pumps, valve parts	Acid resistant

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10581	Piston	M-140									
10582	Pittsburgh	M-883	C, bal. Fe							Welding rod	
10583	Pitho	M-618	C, alloy, bal. Fe							Reamers, taps, broaches, gauges	Non-shrinking
10584	Planeweld No. 1	M-578	C, bal. Fe							Welding electrode for Cr-Mo steel	Shielded arc
10585	Planeweld No. 2	M-578	C, bal. Fe							Welding rod for Cr-Mo steel	Shielded arc
10586	PM-20	M-884	.05 C, .9 Mn, 3 Ni, .7 Cu, .18 Mo, bal. Fe		85000 95000	57000 68000	18			Automotive and railway bodies	
10587	PMG No. 3	M-319	98.2 Cu, 1.2 Si, .6 Fe							Screws, rivets, bolts, nails	
10588	PMG No. 10	M-319	95.6 Cu, 3.2 Si, 1.2 Fe							Tanks, vats, pump rods, pistons	
10589	PMG No. 95	M-319	96.6 Cu, .4 Pb, 2.5 Si, .5 Fe							Screw machine products	
10590	PMG No. 96	M-319	97 Cu, 2.5 Si, .5 Fe							Bolts, nuts, tubing	Cold heading
10591	Pobedit	Russ.	90 WC, 10 Co							Cutting tools	Cemented
10592	Pobedit-Alpha	Russ.	TiC, Co							Cutting tools	Cemented
10593	Polaris	M-357	.6 C, .7 Ni, .15 Cr, .15 Mo, bal. Fe							Lawn mower blades, dies	Tough, wear resistant
10594	Poldi Radeco D	M-96	C, alloy, bal. Fe							Tools	Abrasion resistant
10595	Pollvit	Germ.	97.4 Al, .6 Cu, 1.8 Mn, .2 Ag								
10596	Pomet 111	M-885	5-10 Sn, bal. Cu							Mechanical and electrical parts	Powder metals
10597	Pomet 300	M-885	Fe							Magnetic cores, pole shoes	Powdered metallurgy
10598	Pomet 389	M-885	.10 C, bal. Fe							General parts	Powdered metals
10599	Pomet 560	M-885	Al alloy								Powdered metals
10600	Pomoloy C-2	M-886	C, bal. Fe		40000				215		Gray cast iron
10601	Pomoloy C-3	M-886									
10602	Pompton Extra	M-76	C, alloy, bal. Fe							Tools	
10603	Porex	M-839	5-11 Sn, bal. Cu							Filters, porous membranes, diffusers	Powder metals
10604	WE III	M-206	Si, bal. Fe								Formerly Portsmouth III
10605	WE IV	M-206	Si, bal. Fe								Formerly Portsmouth IV
10606	WE V	M-206	Si, bal. Fe								Formerly Portsmouth V
10607	WE VI	M-206	Si, bal. Fe								Formerly Portsmouth VI
10608	WE VII	M-206	Si, bal. Fe								Formerly Portsmouth VII
10609	WE VIII	M-206	Si, bal. Fe								Formerly Portsmouth VIII
10610	WE IX	M-206	Si, bal. Fe								Formerly Portsmouth IX
10611	Powder Braze	M-799									Powder metals
10612	Powder Nickel Genuine Babbitt	M-178			17500	6500			27	Bearings	For high pressures and temperatures
10613	Power	M-178	Cu, Sb, bal. Sn		17500	6500			27	Bearings	Heavy loads
10614	Precision	M-740									
10615	Precision A-12	M-887	11-13 Si, .6 max. Cu, 2 max. Fe, .5 max. Ni, bal. Al	Cast	33000		1.5		80	Light alloy die castings	Corrosion resistant
10616	Precision A-50	M-887	4.5-6.0 Si, .6 max. Cu, 2 max. Fe, bal. Al	Cast	29000		4		70	Die castings	High impact strength
10617	Precision A-54	M-887	4.5-5.5 Si, 3.4-4.5 Cu, 2 max. Fe, bal. Al	Cast	32000		2		75	Die castings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10618	Precision ZN-5	M-887	3.5-4.3 Al, .75-1.25 Cu, bal. Zn	Cast	42000		4		75	Die castings	
10619	Precision ZN-6	M-887	3.5-4.3 Al, .10 max. Cu, bal. Zn	Cast	36000		5		65	Die castings	
10620	Precision ZN-7	M-887	3.5-4.3 Al, 2.5-3.5 Cu, bal. Zn	Cast	45000		5		80	Die castings	
10621	Premag	M-526	.8 Ag, bal. Cu							Welding rod	Copper welds
10622	Premier	M-248								Resistance metal	
10623	Premier "C"	M-248	24 Fe, 60 Ni, 16 Cr							Rheostat and resistance units	Used up to 1700° F.
10624	Press E-Z	M-69	C, alloy, bal. Fe							Plastic molds, die casting dies	
10625	Pressurdie No. 2	M-140	.35 C, 1.5 Mo, 1.25 W, 5 Cr, .15 V, bal. Fe							Hot work dies	Hot work steel
10626	Pressure Tite Iron	M-508	2.85 T.C., .65 C.C., 1.25 Ni, .8 Mn, .4 Cr, 1.6 Si, bal. Fe	Cast	55000				285	Liners, engine sleeves, oil pumps	Centrifugal cast
10627	PRK-SH	M-40								Self hardening welding electrode	For hardened tool and die steels
10628	Prometal	M-700									
10629	Prometal Chrome Inoxydable R. F.	M-700									
10630	Prometal Inoxydable R. F.-3	M-700									
10631	Pyramid	M-178	Pb alloy		17800	8870			24	Bearings	Pouring temperature 875°—1000° F.
10632	Pyrasteel	M-146	25-28 Ni, 16-18 Cr, 2.5 Si, bal. Fe								Resistant to 1800° F.
10633	Pyrasteel Special	M-146	14 Ni, 25-28 Cr, 2.5 Si, bal. Fe								Resistant to 2000° F.
10634	Pyrodie	M-64	C, alloy, bal. Fe							Dies	
10635	Pyrodur	Germ.									
10636	Plastalloy	M-357	.08 C, .43 Mn, 1.3 Ni, .56 Cr, bal. Fe							Dies, plastic molds	
10637	Promal	M-89	1.8 T.C., .4 C.C., 1.0 Si, bal. Fe							Sprockets, gears	Malleable cast iron
10638	PRK-33	M-439	1.45-1.6 C, 11.5-12.5 Cr, .9-1.0 Mo, 3.0-3.5 Co, .4-.5 Ni, bal. Fe							Tools, dies	Cast to shape
10639	Maxtack	M-365	2.25 C, 10 W, 2 Cr, 2.5 Mn, 1.0 Si, bal. Fe							Tools, cutters	
10640	Hy-Ten-Si Bronze Grade 1	M-129	60-68 Cu, 20-24 Zn, 3-7 Al, 2.5-5.0 Mn, 2-4 Fe		108000	65000	14	14	220	Pump and fan impellers, gears, valves	Wear and corrosion resistant
10641	Hydrone	M-522	31 Na, bal. Pb							Deoxidizer	For non-ferrous metals
10642	Hyman Alloy		.8 Si, 3 Cu, .5 Mg, .5 Ni, bal. Al	Heat treated	36000 43000		6 9				
10643	Hot Stamping Alloy Die	M-389	C, alloy, bal. Fe							Hot stamping die	
10644	Metaline	M-990	Cu alloy							Oil-less bronze bearings	
10645	Monaca	M-755									
10646	Nico	M-685	C, bal. Fe							Cast iron welding electrode	
10647	Nicaloi	M-1	47 Ni, bal. Fe							Armature punchings, electrical machinery and motors	
10648	Phoenix	M-88								Bearings	Babbitt
10649	Scotts Acme		C, bal. Fe								
10650	S.C.S.S.	M-499	C, Si, bal. Fe	Heat treated	180000 190000		8 12	20 30	402 430	Springs	Tough

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10651	Seaco Blue Diamond	M-374	C, alloy, bal. Fe							Tools	
10652	Seaco No-Label	M-374	C, bal. Fe							Drills	
10653	Seaco Red Diamond	M-374	C, alloy, bal. Fe							Drills, tools	
10654	Seaco Yellow Diamond	M-374	C, alloy, bal. Fe							Dies	
10655	Sealmet	M-856	Fe-Ni-Cr							Glass to metal seals in radio tubes	
10656	Sea Steel	M-59	C, Cr, Ni, bal. Fe							Marine fittings, hardware, pulleys	Stainless
10657	Secobalt	M-969	.75 C, 5 Cr, 11 Co, 1.5 V, 18 W, .8 Mo, bal. Fe							Cutters, tools	High speed steel
10658	Secodie	M-969	1.35 C, .6 Cr, .35 V, 1.5 Mo, 1.2 Si, bal. Fe							Dies	Non-deforming
10659	Secoloy	M-969	2.5 C, 33 Cr, 44 Co, 17 W, 2 Fe							Tool bits, cutters	Cast
10660	Secovan	M-969	.7 C, 4.5 Cr, 2.25 V, 18 W, .65 Mo, bal. Fe							Tools, cutters	High speed steel
10661	Seco XXX	M-969	C, alloy, bal. Fe							Chisels, hammers	
10662	Sefco No. 2	M-970	C, Ni, bal. Fe		66000					Gears, machinery parts	Cast iron
10663	Select B	M-73	1.0 C, 5.25 Cr, .25 V, 1.1 Mo, bal. Fe							Blanking and forming dies, punches, plastic dies	Wear resistant
10664	Seminole Hard	M-76	.48 C, 1.3 Cr, 2 W, .25 V, bal. Fe							Tools	Shock resistant
10665	Seminole Medium	M-76	.43 C, 1.3 Cr, 2 W, .25 Mo, bal. Fe							Hot work tools and dies	Hot work stee
10666	Semperal	M-971	4 Cu, 1 Zn, .3 Mg, .6 Mn, .7 Fe, bal. Al	Soft Rolled	36000 71000		22 2		60 170	Light alloy parts	
10667	Sendust	Japan	9.6 Si, 5.4 Al, 85 Co	Cast						Cores of electromagnetic apparatus	Brittle
10668	Seneca	M-972	C, bal. Fe							Wire	
10669	Seycast	M-103	Ni							Anodes	Controlled grain
10670	Seymourco	M-103	Ni, bal. Cu								Nickel silver
10671	Seymour Nickel Silver Grade A	M-103	Ni alloy		100000						Corrosion resistant
10672	Seymour Phosphor Bronze Grade A	M-103	Sn, P, bal. Cu		105000				160		
10673	Seymour Phosphor Bronze Grade C	M-103	Sn, P, bal. Cu		112000				175		
10674	SH 50	M-54	.5 C, .75 Cr, .15 V, bal. Fe							Die blocks	
10675	Shaperite	M-669	.4 C, Mn, bal. Fe	Cold drawn	100000	90000	13	45	217	Machinery parts	Modified X-1340
10676	Sharon Stainless 17-7	M-600	C, Cr, Ni, bal. Fe							Stainless parts	Stainless
10677	Sheepbridge Stokes Mark III	M-494	C, Ni, Cr, Mn, bal. Fe							Centrifugal castings	
10678	Sheetweld	M-118	C, bal. Fe							Welding electrode	For light sheet meta
10679	Sheffalloy	M-973								Collapsible tubes	
10680	Shenango-Penn No. 1	M-974	85 Cu, 5 Sn, 5 Pb, 5 Zn		28500	19500	15		60	Bushings, bearings	"Ounce metal"
10681	Shenango-Penn No. 2	M-974	80 Cu, 10 Sn, 10 Pb		29000	21500	8		65	Bearings, crank pins, thrust washers	
10682	Shenango-Penn No. 3	M-974	88 Cu, 10 Sn, 2 Pb		32000	19000	16		68	Bearings, pump liners	
10683	Shenango-Penn No. 4	M-974	88 Cu, 10 Sn, 2 Zn		38000	22000	22		70	Air valves, steam fittings, gears	
10684	Shenango-Penn No. 5	M-974	88 Cu, 6.5 Sn, 1.5 Pb, 4 Zn		43000	21000	38		65	Pump liners, valves	
10685	Shenango-Penn No. 9	M-974	82.5 Cu, 7.5 Sn, 7.5 Pb, 2.5 Zn		29500	20000	10		62	Bearings, bushings	Heavy duty
10686	Shenango-Penn No. 11	M-974	75 Cu, 10 Sn, 15 Pb		25000	21000	5		50	Bearings, bushings, pump liners	
10687	Shenango-Penn No. 13	M-974	94.5 Cu, 1 Mn, 4.5 Si		50000	30000	24		130	Centrifugal castings	"Everdur"

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10688	Shenango-Penn No. 15	M-974	55-60 Cu, 38-42 Zn, 1.5 Sn, 2 Fe, 3.5 Mn, 1.5 Al		72000	33000	25		170	Pump liners, propeller hubs, gears	
10689	Shenango-Penn No. 17	M-974	87 Cu, 6 Sn, 3 Pb, 4 Zn		32000	21000	18		67	Shaft sleeves, roll covers	
10690	Shenango-Penn No. 18	M-974	90 Cu, 10 Sn		35000	21500	12		85	Liners, drums, rolls	
10691	Shenango-Penn No. 19	M-974	88 Cu, 8 Sn, 4 Zn		42000	25000	31		70	Pipe fittings, gears, bolts, nuts, valves	
10692	Shenango-Penn No. 21	M-974	81 Cu, 18.5 Sn, .5 max. P		40000		.5		135	Bearings	
10693	Shenango-Penn No. 22	M-974	82.5 Cu, 17 Sn, .5-1.0 P		37000		1		100	Bearings	
10694	Shenango-Penn No. 23	M-974	83 Cu, 13.5 Sn, 3.5 Zn		32000	23000	12		75	Sleeves, slides	
10695	Shenango-Penn No. 24	M-974	62.5 Cu, 36.3 Zn, 1.0 Sn, .2 Al		30000	18000	15		90	Hardware, plumbing, pump liners	
10696	Shenango-Penn No. 25	M-974	23 Cu, 60 Ni, 3.5 Fe, .5 Al 3.5 Mn, 2.0 C+Si	Cast	65000	32000	25		130	Valve fittings, propeller hubs	Monel metal castings
10697	Shenango-Penn No. 26	M-974	60-70 Cu, 30-40 Ni, 1-2 Mn, 1-2 Fe, 1-2 Si		70000	38000	15		160	Castings	Corrosion resistant
10698	Shenango-Penn No. 27	M-974	97.5 Ni, 2 Si+C, .5 Fe	Cast	60000 70000	20000 30000	25 35		75 95	Rolls, cylinders, pump liners, kettles	
10699	Shenango-Penn No. 28	M-974	1.25-2.0 Si, 1.0-1.5 Mn, .04-.12 S, 2.75-3.10 T.C., 12-15 Ni, 5-7 Cu, 1.5-4.0 Cr, bal. Fe	Cast	20000 25000				120 180	Castings	"Ni-Resist" iron
10700	Shenango-Penn No. 29	M-974	1.4-2.0 Si, .9-1.2 Mn, 3.2-3.6 T.C., 1.0 Ni, bal. Fe	Cast	28000				190	Bushings, liners, machinery castings	Cast iron
10701	Shenango-Penn No. 30	M-974	1.5-1.8 Si, .9 Mn, 2.7-3.0 T.C., 1-2 Ni, .25-.75 Mo, bal. Fe	Cast	30000 45000				225 300	Pump liners, cylinder liners, heavy duty castings	Cast iron
10702	Shenango-Penn No. 31	M-974	1.4-1.7 Si, .8 Mn, 2.6-3.1 T.C., .5-1.0 Ni, .35-.75 Cr, bal. Fe	Cast	40000				255 300	Heavy duty castings, conveyor rolls	Cast iron. Heat and abrasion resistant
10703	Shield-Arc 85	M-578	C, bal. Fe				20 24		190 250	Welding rod	
10704	Shield-Arc 100	M-578	C, bal. Fe		95000 105000		14 20			Welding rod	
10705	Shock Proof	M-888	C, bal. Fe		53000					Castings	Malleable iron
10706	Sicromo 1	M-376	.15 max. C, 1.0-1.4 Si, .75-1.25 Cr, .45-.65 Mo, bal. Fe	Annealed	60000	25000	30	50	163	High temperature tubing	Resists heat to 1150° F.
10707	Sicromo 2	M-376	.15 max. C, .5 Mo, 1.0-1.5 Si, 1.75-2.25 Cr, bal. Fe		60000	25000	30		163		Resists heat to 1200° F.
10708	Sicromo 3	M-376	.15 max. C, .5 Mo, 1.0-1.5 Si, 2.75-3.25 Cr, bal. Fe	Annealed	60000	25000	30	50	160	High temperature tubing	Resists heat to 1200° F.
10709	Sicromo 5	M-376	.15 max. C, .5 Mo, 1.0-2.0 Si, 4-6 Cr, bal. Fe		60000	25000	30		163		Resists heat to 1300° F.
10710	Sifbrass Brazing Strip No. 6	M-243	Cu alloy							Brazing	
10711	Sifbronze No. 1	M-243	Cu alloy							Welding rod	Bronze
10712	Sifbronze No. 2	M-243	Cu alloy							Welding rod	Bronze
10713	Sifbronze No. 3	M-243	15 Ni, bal. Cu							Welding rod	Bronze corrosion resistant
10714	Sifbronze No. 4	M-243	Cu alloy							Welding rod	Bronze
10715	Sifbronze No. 5	M-243	Cu alloy							Welding rod	Bronze
10716	Sifcoloy	M-889	3.1 T.C., 1.14 Si, .62 Cu, .76 Mo, bal. Fe	Cast	58000				250	Nozzle castings, lock gate valves	Erosion resistant
10717	Sifonil No. 10	M-243								Welding rod	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10718	Sifsilcopper No. 7	M-243	Cu							Welding rod for copper	
10719	Sigal	Germ.	87 Al, 13 Si								
10720	Silal V	M-890	97.2 Al, 1.2 Mg, .8 Mn, .5 Si, .3 Ti							Light alloy parts	Rolling and extrusion
10721	Silcrome X	M-76								Truck, airplane and auto engine valves	
10722	Silcrome XB	M-76	.60-.86 C, 1.25-1.75 Si, 19-23 Cr, 1-2 Ni, bal. Fe							Valves and valve seats	For gas engines
10723	Silcrome XCR	M-76	.40-.50 C, 1.0 Si, 1.0 Mn, 23-24 Cr, 4.5-5 Ni, 2.5-3 Mo, bal. Fe							Valves ad valve seats	For gas engines
10724	Silcrome X9	M-76	Si-W							Exhaust valves	Heavy duty
10725	Silcromé X10	M-76	C, 18 Cr, 8 Ni, bal. Fe								*Austenitic*
10726	Silical	Swed.	Al alloy								Same as "Silumin"
10727	Silicalfa	M-658	Al alloy								Same as "Silumin"
10728	Silmal	French	1 Mg, 1.75 Si, bal. Al		38000 43000		25 30				
10729	Silmelec	French	97.8 Al, .6 Mg, .6 Mn, 1.0 Si							Electric conductor wires	
10730	Silmo	M-376	.15 max. C, 1.15-1.65 Si, .45-.65 Mo, bal. Fe	*Annealed*	65000	30000	30	50	163	High temperature tubing	Heat resistant to *1000° F.*
10731	Silvaz	M-48	Si-Al-V-Zr-Fe							Deoxidizing alloy	
10732	Silver Label	M-343	.90 C, .5 Cr, 1.1 Mn, .5 W, bal. Fe							Hobs, taps, reamers, dies	Non-deforming
10733	Silver Tip	M-669	.08-.13 C, .6-.9 Mn, .16-.23 S, bal. Fe	Cold drawn	83000	76000	15	50	195	Screw machine parts	Modified SAE 1112
10734	Simonds No. 47	M-373	.5 C, 1.4 Cr, .25 V, 2 W, .25 Mo, 8 Si, bal. Fe							Chisels	Shock resistant
10735	Simonds No. 12150	M-373	1.5 C, 1 Cr, .15 V, .8 Mo, bal. Fe							Punches, dies	Abrasion and corrosion resistant
10736	Hollup Grade No. 70	M-844	85-1.1 C, bal. Fe							Welding electrode	Coated
10737	Simonds Blue Label	M-373	1-1.25 C, bal. Fe							Edge holding tools	Water hardened
10738	Simonds Blue Streak	M-373	Al-Ni-Co							Magnets	Permanent
10739	Simonds Chromium Magnet Steel	M-373	3.5 Cr, bal. Fe							Magnets	Permanent
10740	Simonds Chromium Magnet Steel	M-373	6 Co, bal. Fe							Magnets	Permanent
10741	Simonds Chromium-Molybdenum Magnet Steel	M-373	4 Cr-Mo							Magnet	Permanent
10742	Simonds Green Streak	M-373	Al-Ni-Co							Permanent magnet	
10743	Simonds Molva	M-373	.8 C, 4.0 Cr, 1.75 V, 8.5 Mo, bal. Fe							Cutting tools, drills, reamers	High speed steel
10744	Simonds O.H.D.	M-373	1.2 C, .6 Cr, .25 V, 1.65 W, bal. Fe							Punches, dies	Oil hardened
10745	Simonds Red Streak	M-373	.75 C, 4 Cr, 1 V, 18 W, bal. Fe							Drills, reamers, cutting tools	High speed steel
10746	Simonds S.T.M.	M-373	.8 C, 3.75 Cr, 1.1 V, 1.6 W, 8.6 Mo, bal. Fe							Cutting tools, drills, reamers	High speed steel
10747	Simonds Super Cobalt	M-373	.8 C, 4 Cr, 8 Co, 1.0 V, 18 W, bal. Fe							Cutting tools, drills, reamers	High speed steel
10748	Simonds Teenax 46	M-373	.9 C, .5 Cr, 1.15 Mn, .15 V, .50 W, bal. Fe							Taps, punches, dies	
10749	Simonds Tunco	M-373	.7 C, 4 Cr, 5 Co, 1 V, 18 W, bal. Fe							Drills, reamers, cutting tools	High speed steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10750	Simonds Tungsten Magnet Steel	M-373	W-Fe							Permanent magnet	
10751	Simonds 17% Cobalt Magnet Steel	M-373	17 Co							Permanent magnet	
10752	Simonds 35% Cobalt Magnet Steel	M-373	35 Co							Permanent magnet	
10753	Simonds 40% Cobalt Magnet Steel	M-373	40 Co							Permanent magnet	
10754	Sinterloy A	M-799	.15 C, bal. Fe							Gears, cams, washers	Sintered alloy
10755	Sinterloy B	M-799	.40 C, bal. Fe							Gears, cams, washers	Sintered alloy
10756	Sinterloy C	M-799	.80 C, bal. Fe							Gears, cams	Sintered alloy
10757	Sisco Oil Hardening Chisel	M-375	C, alloy, bal. Fe							Chisels	
10758	Sivyer 5% Cr	M-288	4.5-6.5 Cr, .25 max. C, .45-.65 Mo, bal. Fe		100000 110000	75000 90000	18 22		229	Corrosion resisting steel castings	Abrasion resistant
10759	SIWI	M-40	C, alloy, bal. Fe							Dies	Hot die steel
10760	Six-Max	M-435	.8 C, 6 W, 4 Cr, 1.5 V, 6 Mo, bal. Fe							Cutting tools	High speed steel
10761	SKF No. 85	M-267	C, alloy, bal. Fe							Chisels	Water hardened
10762	S.L.B.	M-802									
10763	SM	M-32	.6 C, .8 Mn, 1.9 Si, bal. Fe							Punches, chisels	Shock resistant
10764	Smena No. 1	M-515	20.6 W, 31.4 Cr, 33.5 Ni, 4.2 C, 1.6 Mn+Si, 8.7 Fe							Cutting tools	
10765	Smootharc AP	M-828	C, bal. Fe							Welding rod	On mild steel
10766	Smootharc DH	M-828	C, bal. Fe							Welding rod	On mild steel
10767	Smootharc FR	M-828	C, bal. Fe							Welding rod	
10768	Smootharc Harcast	M-828	C, bal. Fe							Welding rod	For cast iron
10769	Smootharc Harcote	M-828	C, bal. Fe							Hard surfacing electrode	Air hardened
10770	Smootharc Harmang	M-828	C, bal. Fe							Welding electrode	For Mn steel
10771	Smootharc Harni	M-828	C, bal. Fe							Welding rod	For 3% Ni steel
10772	Smootharc "Har-Ten"	M-828	C, bal. Fe							Welding rod	For low carbon steel
10773	Smootharc LG	M-828	C, bal. Fe							Welding rod for light gauge steel	Shielded arc. Coated
10774	Smootharc Litecote	M-828	C, bal. Fe							Welding electrode	For general purpose
10775	Smootharc PF	M-828	C, bal. Fe							Welding rod	Heavily coated
10776	Smootharc WC	M-828	C, bal. Fe							Welding rod	Coated
10777	Smootharc 110	M-828	C, bal. Fe							Welding electrode	
10778	Smoothole Granite Drill	M-85	.87 C, .15 V, .10 Mo, bal. Fe							Hollow drill	
10779	S.M.Z.	M-48	Si-Mn-Zr							Graphitizing alloy for white cast iron	Ladle addition
10780	S.N.C.G.	M-499	C, alloy, bal. Fe	Heat treated	232000		14	39	512	Gears	Shock resistant
10781	Softweld	M-578	C, bal. Fe							Welding rod	On cast iron
10782	Solar Eclipse	M-891	C, alloy, bal. Fe							Cold hobbing dies	Oil hardened
10783	Solbiskys Alloy	Germ.	1.4 Zn, 0.5-1.0 Ni, 0-3 Cd, 0-3 Sn, bal. Al							Light alloy parts	
10784	Soldaloy No. 1	M-265	Cu alloy		65000		20		93 137	Soldering iron tips	85% Elec. cond.
10785	Soldaloy No. 8	M-265	Cu alloy		90000		10		165 210 137	Soldering iron tips	50-60% Elec. cond.
10786	Solder HC	M-892			20000					Solder for Al	
10787	Solid Drill	M-793	1.05 C, 0.35 Mn, bal. Fe							Granite drills	Water hardened
10788	Solid Drill	M-24	.8 C, bal. Fe							Drills, bits	
10789	Sona-Metall	M-893	.2-.7 Si, 3-4 Cu, .7 Sn, .5 Mg, 1.0 Fe, .2 Ni, bal. Al		36000 50000		4 7		60 90	Light alloy parts	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10790	Spang Chalfant 1	M-735	.15 C, 2 Cr, .5 Mn, .5 Mo, bal. Fe		66500	40500	40		131		
10791	Spang Chalfant 2	M-735	.1-.2 C, .5 Mn, bal. Fe		62400		36		126		
10792	Spang Chalfant 3	M-735	.1-.2 C, .45-.65 Mo, bal. Fe		64000	32500	37		126		
10793	Spanval 320										
10794	Sparkaloy	M-61	Si-Mn-Ni							Spark plugs	Wear resistant
10795	Sparta	M-114	1.05 C, 5 Cr, .9-1.25 Mo, .25 V, bal. Fe							Cutting tools, dies	Air hardened
10796	Spartan	M-435	C, 18 W, 4 Cr, 1 V, bal. Fe							Cutting tools	High speed steel
10797	Special	M-24	C, Cr, W, V, bal. Fe							Cutting tools	High speed steel
10798	Special	M-341	C, Cr, W, V, Mo, bal. Fe								
10799	Special Alloy	M-389	C, alloy, bal. Fe								
10880	Special Carbon	M-73	1.0 C, .25 Mn, .10 max. Cr, bal. Fe							Drills, tools	Water hardened
10801	Special Carbon	M-85	.6-1.2 C, bal. Fe							Tools	Water hardening
10802	Special Carbon SSC	M-40	.95 C, .35 Ni, V, bal. Fe							Tools	Water hardening
10803	Special Chrome Vanadium	M-365	.6 C, .9-1.0 Cr, .2 V, bal. Fe							Tools	
10804	Special D	M-344	C, W, bal. Fe							Tools	
10805	Special Draco	M-39	C, alloy, bal. Fe							Tools	
10806	Special G	M-782	C, alloy, bal. Fe							Tools	
10807	Special M	M-76	C, alloy, bal. Fe							Tools	
10808	Special No. 13	M-76	C, bal. Fe							Tools	
10809	Special Oil Hardening	M-389	C, alloy, bal. Fe							Tools	
10810	Special Oil Hardening	M-275	C, alloy, bal. Fe							Tools	
10811	Special Processed	M-69	1.0 C, bal. Fe							Cold heading dies and punches	Water hardening
10812	Special Punch	M-73	C, W, bal. Fe							Punches	
10813	Special Van	M-275	C, V, bal. Fe								
10814	Special Vanadium	M-365	.8-1.1 C, .10-.20 V, bal. Fe							Tools	
10815	Special Wire Drawing Die	M-35	2 C, 1.8 Mn, 1.85 Cr, 10.5 W, .5 Mo, bal. Fe							Drawing dies	For wire
10816	Special Worth E.	M-75	C, alloy, bal. Fe							Tools, dies	
10817	Speedcase X-1515	M-894	.15 C, Mn, bal. Fe							Screw machine parts	Free machining
10818	Speed Treat X-1535	M-894	.30-.40 C, bal. Fe							Screw machine parts	Free machining (Discontinued)
10819	Speed Treat X-1535	M-495	.30-.40 C, .25 S, bal. Fe							Screw machine parts	Free machining
10820	Speed Treat X-1545	M-894	.40-.50 C, bal. Fe							Screw machine parts	Free machining
10821	Speed Treat X-1545	M-495	.40-.50 C, .25 S, bal. Fe							Screw machine parts	Free machining
10822	Spinzwel	M-121	10 Ni, 64 Cu, 26 Zn								Ni silver
10823	Sprababbitt A	M-853								Metal spraying	Babbitt wire
10824	Sprabrass	M-853	Zn, bal. Cu							Metal spraying	Brass wire
10825	Sprabronze C	M-853	Sn, bal. Cu							Metal spraying	Bronze wire
10826	Sprabronze M	M-853	Sn, bal. Cu							Metal spraying	Bronze wire
10827	Sprabronze P	M-853	P, Sn, bal. Cu							Metal spraying	P-bronze
10828	Sprabronze T	M-853	Si, bal. Cu							Metal spraying	Tobin bronze
10829	Sprairon A	M-853	Fe							Metal spraying	Iron wire
10830	Sprasteel 10	M-853	C, bal. Fe							Metal spraying	Steel wire
10831	Sprasteel 25	M-853	C, bal. Fe							Metal spraying	Steel wire
10832	Sprasteel 40	M-853	C, bal. Fe							Metal spraying	Steel Wire
10833	Sprasteel 80	M-853	C, bal. Fe							Metal spraying	Steel wire
10834	Sprasteel 120	M-853	C, bal. Fe							Metal spraying	Steel wire
10835	SPS 245	M-435	.40 C, .75 Mn, .60 Cr, .15 Mo, 1.25 Ni, bal. Fe	Annealed	100000	68000	30	58	187	Shafts, gears	Izod-45
10836	ST-10 Solder	M-815	87.5 Pb, 10 Sn, 1.5 Ag, .5 Bi, .5 Sb		5335		11.5			Solder	Liquid at 554° F.

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10837	ST-15 Solder	M-815	82.75 Pb, 15 Sn, 1.25 Ag, .5 Bi, .5 Sb		6180		11.5			Solder	Liquid at 532° F.
10838	ST-20A Solder	M-815	76.75 Pb, 20 Sn, 1.25 Ag, 1.5 Bi, .5 Sb		6720		13			Solder	Liquid at 514° F.
10839	ST-20B Solder	M-815	73.25 Pb, 20 Sn, 1.25 Ag, 5 Bi, .5 Sb		6810		27			Solder	Liquid at 486° F.
10840	ST-20 C Solder	M-815	77.75 Pb, 20 Sn, 1.25 Ag, .5 Bi, .5 Sb		6840		14			Solder	Liquid at 518° F.
10841	ST-30 Solder	M-815	67.75 Pb, 30 Sn, 1.25 Ag, .5 Bi, .5 Sb		7625		15			Solder	Liquid at 478° F.
10842	ST-48	M-895									
10843	Stag Allenite	M-210	W C							Tipped cutting tool	Fast cutting on cast iron
10844	Stainlend 18/8 Mo	M-677	18 Cr, 18 Ni, .07 C, 3 Mo; bal. Fe							Welding rod	Corrosion resisting
10845	Stainlend HC	M-677	25 Cr, 12 Ni, .10 C, bal. Fe							Welding rod	Corrosion and heat resisting
10846	Stainlend K	M-677	19 Cr, 9 Ni, .07 C, bal. Fe							Welding rod	Corrosion resisting
10847	Stainless Steel Grade H.C.	M-362	C, Cr, Ni, bal. Fe								Stainless
10848	Stainweld A-5	M-578	C, Cr, Ni, .8 Cb, bal. Fe		90000 100000		30 45			Stainless steel welding rod	Stainless
10849	Stainweld A-7	M-578	C, 18 Cr, 8 Ni, bal. Fe		85000 95000		35 50			Stainless steel welding rod	Stainless, austenitic
10850	Stainweld B	M-578	25 Cr, 12 Ni, Cb, bal. Fe							Stainless steel welding rod	Coated, shielded arc
10851	Stainweld C	M-578	C, 18 Cr, 8 Ni, 3.5 Mo, bal. Fe							Stainless steel welding rod	Stainless
10852	Stainweld D	M-578	C, 25 Cr, 20 Ni, bal. Fe		80000 90000		35 45			Stainless steel welding rod	Stainless
10853	Stalinit No. 2	Russ.	Ti-Cr-Fe							Cutting tool	Hard sintered alloy
10854	Staminal	M-73	.55 C, .4 Cr, 2.7 Ni, .9 Mn, .15 V, .45 Mo, 1.0 Si, bal. Fe							Chisels, cold cutters, die blocks, punches	Oil or air hardening, tough
10855	Standard	M-114	C, bal. Fe							Tools	
10856	Standard Draco	M-39	C, alloy, bal. Fe							Tools	
10857	Standard G	M-782	C, bal. Fe							Chisels	
10858	Standard Vanadium	M-35	C, .2 V, bal. Fe							Punches, tools	Tough, shock resisting
10859	Stanelec	M-691									
10860	Stanfire	M-896	C, Ni, Cr, bal. Fe							Fire box grates	Heat resisting cast iron
10861	Star	M-657	78 Cu, 6 Sn, 10 Zn, 6 Pb							Castings	
10862	Star J Metal	M-167	35 Cr, max. 40 Co, min. 20 W, 9 max. bal.		65000				640	Tool bits, form tools, milling cutters	Wear resisting
10863	Star-Max	M-32	.78 C, 3.75 Cr, 1.15 V, 1.5 W, 6.5 Mo, bal. Fe							Cutting tools	High speed steel
10864	Star-Mo	M-57	C, Cr, Mo, W, V, bal. Fe							Cutting tools	High speed steel
10865	Stayblade Max	M-897	C, Cr, Ni, Ti, Al, bal. Fe							Turbine blades, boiler drums	Austenitic. Resists heat to 900° C.
10866	Staybolt	M-724	C, Si, bal. Fe							Staybolts	Wrought iron
10867	Stellite 98 M 2	M-167	35 min. Co, 35 max. Cr, 20 max. W, 18 max. bal.		63000				682	Cutting tools, valves, dies	Wear resisting
10868	Stellit TTS No. 1	Russ.	Co-W-Cr							Cutting tools	Hard sintered alloy
10869	Stellit TTS No. 2	Russ.	Co-W-Cr							Cutting tools	Hard sintered alloy
10870	Sterling TX	M-57	C, Cr, bal. Fe							Turbine blades	Stainless

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10871	Steropes	M-39	C, alloy, bal. Fe							Tools	
10872	Volco No. 68	M-998	70 Cu, 30 Zn	Hard	105000		1			Cartridges, clips	
				Soft	49000		48				
10873	Stoodex	M-202								Hard facing alloy	
10874	Stoodite 45	M-202							45 Rc	Hard facing alloy	Tough
10875	Stoodite 54	M-202								Hard facing alloy	For tool making
10876	Stoodite 63	M-202								Hard facing alloy	For tool making
10877	Stoodite K	M-202	Mo-W-Mn-Si, C-Fe						58 Rc	Hard facing alloy	
10878	Stoodite AC	M-202								Hard facing rod	
10879	Strenes	M-898	C, alloy, bal. Fe							Dies	
10880	Strenes AA	M-898	C, alloy, bal. Fe							Dredge pump casing, coke crushing rolls	Abrasion resisting cast iron
10881	Strenes B	M-898	C, Cr, Ni, Mo, bal. Fe							Dies, bushings	
10882	Strenes C	M-898	C, Cr, Ni, Mo, bal. Fe	Cast	50000					Dies, bushings, pump	Cast to shape
				Heat treated	75000				550	impellers	
10883	Strennes Metal	M-898									
10884	Stress-Proof	M-669	.4-.5 C, 1.35-1.65 Mn, .24-.33 S, bal. Fe	Cold drawn	125000	100000	10	35	268	Studs, bolts, shafts	Modified X-1340
10885	Stress-Proof No. 1	M-669	.35-.45 C, 1.35-1.65 Mn, .2-.3 S, bal. Fe			125000				Studs, bolts, shafts	Free machining
10886	Stress-Proof No. 2	M-669	.35-.45 C, 1.35-1.65 Mn, .2-.3 S, bal. Fe		115000	100000	16	50	268	Studs, bolts, shafts	Free machining
10887	Stress-Proof No. 3	M-669	.35-.45 C, 1.35-1.65 Mn, .2-.3 S, bal. Fe			80000				Studs, bolts, shafts	Free machining
10888	Stroh	M-899	C, bal. Fe							Steel castings, gears	Wear and shock resisting
10889	Studal	French	97.7 Al, 1.0 Mg, 1.3 Mn							Light alloy parts	
10890	Stylus Metal		5 Sn, 20 Cu, 12 Sb, 63 Pb								
10891	Stylus Metal		85 Pb, 5 Sn, 10 Sb								
10892	Styrian Blue Label	M-651	C, alloy, bal. Fe							Cutting tools	
10893	Sunshine Metal		C bal. Fe							Rubber tire molds	Semi-steel cast iron
10894	Supard Chrome	M-508	C, Cr, bal. Fe		196000				200	Pump liners, plunger sleeves,	Corrosion resisting
									500	bushings	to sulphuric acids
10895	Super	M-783	1.1 C, 3.75 Cr, .3 Mn, 3.25 V, 12.5 W, .8 Mo, bal. Fe							Lathe and planer tools	High speed steel
10896	Super Alloy	M-328	.55-.65 C, 1-1.5 Ni, .45-.75 Cr, bal. Fe	Heat treated	225000	220000	6	20	47 Rc	Plow and harrow discs	
10897	Super A Mechanite	M-32	C, Cu, bal. Fe		50000					Gears, piston rings, engines	
10898	Super Avional	M-689	.8 Si, 4.5 Cu, 1.0 Mg, 1.2 Mn, bal. Al	Heat treated	68000	48000	15		130	Light alloy parts	
10899	Superbasique	M-700									
10900	Volco No. 65	M-998	65 Cu, 35 Zn	Hard	73000		10			Rivets, screws, eyelets,	
				Soft	45000		60			reflectors	
10901	Superfine IX	M-900	C, alloy, bal. Fe		32000				190	Cast iron castings	Tr. S.-2500
10902	Superfine MM	M-900	C, alloy, bal. Fe		44000				180	Cast iron castings	Tr. S.-7000
10903	Superfine Mold	M-900	C, alloy, bal. Fe		26000				160	Glass mold castings	Cast iron
10904	Superfine MX	M-900	C, alloy, bal. Fe		62500				220	Cast iron castings	Tr. S.-8620
10905	Superfine XXX	M-900	C, alloy, bal. Fe		43000				200	Cast iron castings	Tr. S.-8380
10906	Super-Invar	M-118	31 Ni, 5 Co, bal. Fe							Instruments	Zero expansion
10907	Superior	M-901	C, Cr, Ni, bal. Fe							Stainless steel parts	Stainless
10908	Superior A Nickel Chrome	M-248	80 Ni, 20 Cr							Electrical resistances	Non-magnetic

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10909	Superior Ark High Speed	M-69	.70-.75 C, 18 W, 4 Cr, 1 V, bal. Fe							Boring tools, threading dies, gear cutters	High speed steel
10910	Superior Chrome	M-275	C, alloy, bal. Fe							Tools	
10911	Superior 3	M-140	1.5 C, 12 Cr, .87 V, 1.0 Mo, bal. Fe							Shear blades, blanking and forming dies	Cold worked steel
10912	Superloy No. 10	M-246	C, Cr, Ni, Mo, bal. Fe							Steel castings	High strength
10913	Superloy Manganese Steel	M-246	C, Mn, bal. Fe							Steel castings	Abrasion resisting
10914	Super Mo-Chip High Speed	M-57	C, 4 Cr, 8 Co, 1.5 V, 8 Mo, bal. Fe							Tools, cutters	High speed steel
10915	Super Motung	M-114	.8 C, 3.75 Cr, 5 Co, 1.25 V, 1.5 W, 8.5 Mo, bal. Fe							Cutting tools	High speed steel
10916	Superneutral	M-700								Instruments	Zero expansion
10917	Super Nilvar	M-44	31 Ni, 5 Co, bal. Fe								
10918	Super Oilite	M-211	75 Fe, 25 Cu		30000				45	Bearings, parts	Heavy duty,
					45000				90		Sintered alloy
10919	Super Silicon Cast Iron No. 9	M-243	C, Si, bal. Fe							Welding rods	Cast iron
10920	Super WH Meehanite	M-82	C, bal. Fe							Ball mill liners, muller tires	Wear resisting cast iron
10921	Super-X-12% Nickel Silver	M-279	12 Ni, 18 Zn, bal. Cu	Hard	78000		4			Coins, hardware, emblems	Good for severe cold
				Soft	50000		25			jewelry	work
10922	Super-X Phosphor Bronze Grade A	M-279	95 Cu, 5 Sn, P	Hard	87000		7			Springs, contacts, diaphrams	
				Soft	51000		60				
10923	Super-V	M-902	High C, alloy, bal. Fe	Annealed	60000	44000	18		143	Castings	Malleable iron
10924	Super Zorite	M-184	37-40 Ni, 17-21 Cr, bal. Fe							Beams, rails, trays, furnace parts	Heat resisting to 1800° F.
10925	Supra		20 Si, 5 Cu, 2 Mn, .7 Fe, bal. Al		21000		.5		100	Pistons	
									130		
10926	Sureweld A	M-844	C, bal. Fe		67000		30			Welding electrode	Coated
10927	Sureweld B	M-844	C, bal. Fe		70000		30			Welding electrode	Coated
10928	Sureweld C	M-844	C, bal. Fe		67000		25			Welding electrode	Coated
10929	Sureweld F	M-844	C, bal. Fe		67000	55000	27	35		Welding electrode	Coated
10930	Sureweld MLV	M-844	C, bal. Fe		80000		25			Welding electrode	Coated
					100000						
10931	Sureweld N	M-844	C, bal. Fe		75000		25			Welding electrode	Coated
10932	Sureweld No. 450	M-844	C, alloy, bal. Fe							Welding electrode	Coated, wear and shock resisting
10933	Sureweld No. 520	M-844	C, 12-14 Mn, bal. Fe						600	Mn steel welding electrode	Hard surfacing
10934	Sureweld No. 550	M-884	C, alloy, bal. Fe						600	Hard surfacing electrode	Abrasion and wear
									675		resisting
10935	Sureweld No. 650	M-884							700	Hard surfacing electrode	Severe abrasion
									800		resisting
10936	Sureweld TD	M-884							500	Hard surfacing electrode for	Wear and corrosion
									680	tools and dies	resisting
10937	Surfaceweld	M-578							54 Rc	Hard surfacing	Abrasion resisting Alloy powder
10938	Colmonoy Sweaton	M-612								Welding electrode	Corrosion and wear resisting
10939	Swiftweld	M-578	C, bal. Fe		45000		5			Welding electrode	For mild steel
					55000		10				
10940	Q-Alloy Chrome C-1	M-59	25-30 Cr, 3 max. Ni, bal. Fe								Resists mine water corrosion

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10941	Q-Alloy Chrome C-2	M-59	C, Cr, bal. Fe								Resists nitric acid corrosion
10942	Q-Alloy Chrome C-3	M-59	C, alloy, bal. Fe						500	Mill guides	Heat resisting to 2000° F.
10943	Q-Alloy CN2-MO	M-59	17-21 Cr, 7-9 Ni, 1-4 Mo, bal. Fe								
10944	Quarzal		Cu-Si-Mn-Cr-Na-Zn-Fe								Wear resisting
10945	SA-50	M-725	W alloy							Glass sealing-in wire	
10946	Sabeco No. 16	M-221	69-71 Cu, 15.5-16.5 Sn, 13.5-14.5 Pb		32250	22500	1	1.5	119	Friction rings, heavy duty bearings	
10947	S.A. Brilliant	M-333	C, Cr, V, W, bal. Fe							Drills, lathe and planer tools	High speed steel
10948	SA-CN	M-333	C, Cr, bal. Fe							Bolt heading dies, hot work punches	Hot work steel
10949	SAE 925		Zn alloy							Die castings	
10950	SAE 4120		.15-.25 C, Cr, Mo, bal. Fe							Gears, pinions, shafts	Case hardening steel
10951	SA Grey Label	M-333	C, bal. Fe							Drop forge dies	
10952	SA Hy-Pro	M-333	C, Cr, V, W, Co, bal. Fe							Cutting tools	High speed steel
10953	SA Hy-Pro Die Steel	M-333	C, Cr, bal. Fe							Dies	Non-deforming
10954	SA Lily Brand	M-333	C, alloy, bal. Fe							Brass working dies	
10955	Samson No. 158	M-32	.10 C, 3.5 Ni, 1.5 Cr, bal. Fe							Gears, shafts, clutch parts	Case hardening steel
10956	Samson No. 436	M-32	.15 C, 1.75 Ni, .25 Mo, bal. Fe							Gears, shafts	
10957	Samson No. 500	M-32	.10 C, 5 Ni, bal. Fe							Turbine blades, gears	
10958	Samson No. 2-547	M-32	.20 C, 3.5 Ni, bal. Fe							Gears, shafts	
10959	Samson No. 3-427	M-32	.30 C, 1.0 Cr, .20 Mo, bal. Fe							Aircraft and automotive parts	
10960	Samson No. 3-547	M-32	.30 C, 3.5 Ni, bal. Fe							Shafts	
10961	Samson No. 4-408	M-32	.40 C, 3 Ni, .75 Cr, bal. Fe							Clutches, shafts	
10962	Samson No. 5-317	M-32	.50 C, 1.75 Ni, 1.0 Cr, bal. Fe							Gears, clutches, shafts	
10963	Samson No. 5-720	M-32	.5 C, .9 Cr, .2 V, bal. Fe							Leaf and coil springs, gears, shafts	
10964	SA-N-65	M-333	C, Cr, V, bal. Fe							Rivet sets, punches	
10965	SA-N-88	M-333	C, alloy, bal. Fe							Hobs, punches	Tough
10966	Sanderson XX	M-903	C, alloy, bal. Fe							Burnishing tools	
10967	S & J Special	M-38	1.25 C, bal. Fe							Drill rod, tools, taps, reamers	
10968	Sandusky No. 2	M-295	.50-1.0 Cr, C, bal. Fe		25000				180	Cast iron rolls	Centrifugally cast
					40000				250		
10969	Sandusky No. 3	M-295	C, 1.25-1.5 Ni, .5-.75 Cr, bal. Fe		40000				220	Cast iron rolls	Centrifugally cast
					60000				300		
10970	Sandusky No. 4	M-295	C, 2.0-2.5 Ni, .5-.75 Cr, bal. Fe		50000				220	Cast iron rolls	Centrifugally cast
					60000				300		
10971	Sandusky No. 6	M-295	C, 2.25-2.5 Ni, bal. Fe		30000				180	Cast iron rolls	Centrifugally cast
					45000				250		
10972	Sandusky No. 8	M-295	C, 1.75-2.0 Ni, .75-1.0 Cr, bal. Fe		40000				250	Cast iron rolls	Centrifugally cast
					50000				300		
10973	Sandusky No. 9	M-295	C, 1.5-2.0 Ni, .5-.8 Mo, bal. Fe		40000				220	Cast iron rolls	Centrifugally cast
					60000				300		
10974	Sandusky No. 10	M-295	C, 12.5-15 Ni, 1.5-6.0 Cr, 5.5-7.0 Cu, bal. Fe		30000				150	Cast iron rolls	Centrifugally cast
					40000				280		
10975	Sandvik 20 WIV	M-101	1.14 C, .5 W, .2 V, bal. Fe							Tools, dies	Water hardening
10976	SA N-N	M-333	C, W, bal. Fe							Gripper dies, piercers	Hot work steel
10977	SA Non-Pa-Reil	M-333	C, alloy, bal. Fe							Tools	Non-deforming
10978	Saranac	M-38	C, alloy, bal. Fe							Tools	
10979	Sardo	M-344	C, alloy, bal. Fe							Tools, dies	Non-deforming, air hardening

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
10980	SA-White Label	M-333	C, bal. Fe							Taps, drills, forming and blanking dies	
10981	SA-Yellow Label	M-333	C, alloy, bal. Fe							Punches, dies, shear blades	
10982	Sterling	M-904									Corrosion and heat resisting
10983	Standard	M-362	C, bal. Fe							Tools, dies	Water hardening
10984	Standard	M-140	.60-1.4 C, .20-.35 Mn, bal. Fe							Tools	
10985	Stainless Steel Grade B	M-362	C, Cr, Ni, bal. Fe								Stainless
10986	Stainless Steel Grade A	M-362	C, Cr, Ni, bal. Fe								Stainless
10987	SSB		Cu, bal. Al							Light alloy parts	Super duralumin type
10988	Shock Resisting	M-389	C, alloy, bal. Fe								
10989	Self Hardening	M-345	2.15 C, 1.15 Cr, 1.65 Mn, 10.5 W, bal. Fe							Tack dies	Tough and fatigue resisting
10990	Silumin	M-315	Al alloy								
10991	Special	M-389	C, Cr, W, V, bal. Fe							Tools, cutters	High speed steel
10992	Radiametal	M-1	47 Ni, bal. Fe							Electrical equipment	
10993	Rail End	M-712	C, Cr, Mo, V, bal. Fe						320 336	Hard facing electrode	For battered rail ends
10994	Railway Axle Box	M-657	83 Cu, 7 Sn, 6 Zn, 4 Pb		30000	12000	18			Castings, bearings	
10995	Railwear	M-844							350 380	Hard surfacing electrode	Coated. For rail joints.
10996	Rajah	M-39	C, alloy, bal. Fe							Tools	
10997	R. B. Special	M-140									
10998	Readyweld	M-578	C, bal. Fe		60000 70000		16 22			Welding rod	
10999	Redalloy	M-33	85 Cu, 14 Zn, 1 Sn	Annealed	42000		48			Condenser tubes, heat exchanger tubes	
11000	Red Circle	M-905	C, bal. Fe	Heat treated						Cast iron rolls	Chilled
11001	Red Devil	M-712	C, bal. Fe		68000	56000	30	50		Welding rod	Flux coated
11002	Red Devil 75	M-712	C, .6 Mo, bal. Fe		74000	62000	32	65		Welding rod	Flux coated
11003	Red Devil 85	M-712	C, .9 Mo, bal. Fe		80000	72000	24	47		Welding rod	Flux coated
11004	Red Fox 10	M-430	C, alloy, bal. Fe		97000		23	55		Furnace parts, exhaust valves, fire bars	Heat resisting to 800° C.
11005	Red Fox 11	M-430	C, Cr, bal. Fe							Annealing boxes, resistor covers, pyrometer tubes	Heat resisting to 1000° C.
11006	Red Fox 12	M-430	C, Cr, bal. Fe	Heat treated	83000		25	50	183	Baffle plates, *skids, rails*	
11007	Red Fox 21	M-430	C, Cr, Si, bal. Fe		118000		27	59		Exhaust valves, fire bars, conveyor chains	Heat resisting to 850° C.
11008	Red Fox 31	M-430	C, Ni, Cr, bal. Fe		75000		65	70		Exhaust manifolds, furnace parts	Austenitic. Resists heat to 1150° C.
11009	Red Label	M-365	.95-1.0 C, bal. Fe							Tools	
11010	Red Label	M-373	C, bal. Fe							Tools	
11011	Hollup Grade No. 90	M-844	.75-.95 C, 12-14 Mn, 3-4 Ni, bal. Fe							Welding electrode	For high Mn steel
11012	Red Tiger	M-24	1.0 C, 18 W, 4 Cr, 2 V, .65 Mo, bal. Fe							Tools, cutters, taps, reamers	High speed steel
11013	Red-X-8	M-906	2 Cu, .5 Mg, .4 Mn, 8 Si, bal. Al	Cast Heat treated	33000 42000	20000 36000	3 1		65	Light alloy parts, permanent mold castings	Heat treatable
11014	Red-X-8-5	M-906	5 Cu, .25 Mg, 8 Si, .3 Mn, bal. Al							Light alloy parts, pistons	
11015	Red-X-10	M-906	9.5-10.5 Si, 2 Cu, .6 Mg, .6 Mn, bal. Al	Cast	36000	30000			85	Light alloy parts, pistons	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11016	Red-X-13	M-906	2 Cu, .5 Mg, .75 Mn, 12 Si, bal. Al	Heat treated	50000	41000	1.5			Permanent mold castings, crank cases, pistons	
				Chill cast	41000	27000	2.5		85		
11017	Reformend	M-677	C, bal. Fe							Welding electrode	For cast iron
11018	Regelmetall WM 80		80 Sn							Bearings	
11019	Regin 711	M-111a	.5 C, 1.15 Cr, 2.5 W, .2 V, bal. Fe							Shear blades, hot heading dies, chisels	
11020	Regular Carbon	M-85	.60-1.2 C, bal. Fe							Tools	Water hardening
11021	Regular Straight Carbon	M-261	C, bal. Fe								
11022	Reliance	M-907	C, bal. Fe							Steel castings	
11023	Relit	Russ.	W C							Cutting tools	Hard sintered alloy
11024	Relleum	M-266	59 Cu, 2 Pb, 31 Zn							Brass forgings	
11025	Rema	M-52	C, bal. Fe							Telephone switchboard equipment	
11026	Remalloy	M-22 M-205	17 Mo, 12 Co, 71 Fe							Permanent magnet	
11027	Remalloy	M-790	12 Co, C, Cr, W, V, bal. Fe							Tools, cutters	High speed steel
11028	Rennite	M-790	12 Co, C, Cr, W, V, bal. Fe							Tools, cutters	High speed steel
11029	Resistac No. 1	M-129	8-11 Al, 5 max. Fe, 5 max. Ni, bal. Cu	Cast or rolled	65000	28000	20	20	120	Castings, gears	Corrosion resisting
11030	Resistac No. 2	M-129	8-11 Al, 5 max. Fe, 5 max. Ni, bal. Cu	Cast or rolled	75000	32000	25	25	150	Castings, gears	Corrosion resisting
11031	Resistac No. 3	M-129	8-11 Al, 5 max. Fe, 5 max. Ni, bal. Cu	Cast	90000	42000	15	15	185	Castings, gears	Corrosion resisting
				Forged	95000	45000	17	17	195		
11032	Revalon	M-238	76 Cu, 22 Zn, 2 Al	Hard	83000	75000	15				
				Soft	62000	16000					
11033	Revere	M-238	Cu alloy								
11034	Vectalite	M-69	CoO+FeO							Permanent magnets	Sintered
11035	Rex 1059	M-38	1.2 C, 4 Cr, 4 V, 14 W, .75 Mo, bal. Fe							Cutting tools, planer and shaper tools	High speed steel
11036	Rex 1092	M-38	4 Cr, 1.5 V, 5.5 W, 3.75 Mo, bal. Fe							Boring tools, broaches, chasers	
11037	Rexalloy	M-38	33 Cr, 44 Co, 17 W							Cutting tools, gauges, wear strip	Cemented, cast
11038	Rex Bronze	M-652	80 Cu, 10 Sn, 10 Pb							Castings	
11039	Rex Cast Aluminum	M-844	Cu, bal. Al							Welding rod	For Al alloys
11040	Rex Cast Iron	M-844	3.0-3.5 C, 3.0-3.5 Si, bal. Fe							Welding rod	For cast iron
11041	Rexcobalt	French	C, alloy, bal. Fe							Tools	
11042	Rex Composition	M-652	78-86 Cu, 3-6 Sn, 2-6 Pb, 5-14 Zn							Castings	
11043	Rex VM	M-38	.86 C, 4 Cr, 2 V, 8 Mo, bal. Fe							Saws, twist drills, taps, reamers, hobs	High speed steel
11044	Rex VM Dreadnaught	M-38	.86 C, 4 Cr, 2 V, 8 Mo, bal. Fe							Taps, drills, planer and boring tools	High speed steel
11045	Reynolds Metal	M-909	Al							Foil	
11046	Rezistal 329	M-38	C, Cr, Ni, bal. Fe							Stainless steel parts	Stainless
11047	Rezistal Safweld	M-362									
11048	RG 5	Germ.	85 Cu, 5 Sn, 7 Zn, 3 Pb								
11049	Richloy Hi-Tensile Solder No. 3	M-910	Sn, Pb		7183		47			Soft solder	M.P.-416° F.
11050	Richloy Hi-Tensile Solder No. 4	M-910	30 Sn, 70 Pb		7883		42			Soft solder	M.P.-390° F.
11051	Richloy Hi-Tensile Solder No. 5	M-910	40 Sn, 60 Pb		9000		36			Soft solder	M.P.-370° F.

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11052	Richloy Hi-Tensile Solder No. 6	M-910	50 Sn, 50 Pb		9412		34			Soft solder	M.P.-356° F.
11053	Richloy Hi-Tensile Solder No. 7	M-910	65 Sn, 35 Pb		9577		32			Soft solder	M.P.-360° F.
11054	Rita Alloy No. 2	M-354	.2 C, 1.15 Mn, .5 Ni, .5 Cr, bal. Fe		85000				174 388		
11055	Rita Alloy No. 4	M-354	.4 C, .9 Mn, .5 Cr, .5 Ni, bal. Fe						223 461		
11056	Rita Alloy No. 5	M-354	.5 C, 1.2 Mn, .5 Ni, .6 Cr, bal. Fe						269 629	Gears, bolts, studs, axles	
11057	Rivaloy No. 24	M-98	Ni, bal. Cu							Jewelry novelties	
11058	Riverside No. 1	M-98	30 Ni, 14 Zn, bal. Cu	Rolled	60000 120000					Watch cases, stampings	Corrosion resisting
11059	Riverside No. 2	M-98	25 Ni, 13 Zn, bal. Cu	Rolled	58000 115000					Drawings, stampings	
11060	Riverside No. 3	M-98	18 Ni, 17 Zn, bal. Cu	Rolled	50000 104000					Watch cases, jewelry, emblems	Nickel silver
11061	Riverside No. 4	M-98	18 Ni, bal. Cu							Springs	
11062	Riverside No. 5	M-98	18 Ni, 15.9 Zn, 1.1 Pb, bal. Cu	Rolled	50000 90000					Screw machine products	
11063	Riverside No. 6	M-98	18 Ni, 10 Zn, bal. Cu	Rolled	50000 90000					Deep drawn or spun parts	
11064	Riverside No. 7	M-98	18 Ni, 27 Zn, bal. Cu	Rolled	70000 123000					Springs, bolts, studs	
11065	Riverside No. 8	M-98	8 Ni, 2 Pb, bal. Cu								
11066	Riverside No. 9	M-98	16 Ni, bal. Cu								
11067	Riverside No. 10	M-98	10 Ni, 25 Zn, bal. Cu	Rolled	50000 105000					Drawn and spun parts	
11068	Riverside No. 11	M-98	16 Ni, 16 Zn, bal. Cu	Annealed						Spun and drawn parts	
11069	Riverside No. 12	M-98	15 Ni, 23 Zn, bal. Cu	Rolled						Stampings, fishing reels	
11070	Riverside No. 13	M-98	15 Ni, 2 Pb, bal. Cu								
11071	Riverside No. 14	M-98	12 Ni, 26 Zn, bal. Cu							Bolts, shafts	Nickel silver
11072	Riverside No. 15	M-98	10 Ni, bal. Cu								
11073	Riverside No. 16	M-98	10 Ni, 2 Pb, bal. Cu								
11074	Riverside No. 17	M-98	5 Ni, bal. Cu								
11075	Riverside No. 18	M-98	5 Ni, 2 Pb, bal. Cu								
11076	Riverside No. 20	M-98	12 Ni, 2 Pb, 21 Zn, bal. Cu							Keys	
11077	Riverside No. 21	M-98	21 Ni, bal. Cu								
11078	Riverside No. 23	M-98	16 Ni, .5 Pb, 15.5 Zn, bal. Cu							Screw machine parts	Free machining
11079	Riverside No. 30 Grade A	M-98	3.8-4.8 Sn, .03-.35 P, .1 Fe, bal. Cu		40000 87000					Springs, gears, bolts	
11080	Riverside No. 31	M-98	.2 P, 4.3 Sn, 1-2 Pb, bal. Cu	Rolled	50000 100000					Gears, pinions, bolts	Free machining
11081	Riverside No. 33	M-98	Sn, P, bal. Cu							Bearings, bushings	
11082	Riverside No. 47 Grade C	M-98	7-9 Sn, .03-.25 P, .15 Ni, .2 Zn, bal. Cu	Soft Hard	53000 100000					Spring diaphragms	
11083	Riverside No. 80	M-98	88 Cu, 4 Sn, 4 Zn, 4 Pb							Screw machine parts	
11084	Riverside No. 101	M-98	87.5 Cu, 2.25 Sn, 10.25 Zn							Jewelry	
11085	Riverside No. 102	M-98	87 Cu, 12 Zn, 8 Sn							Valves, carburetors, novelties, buckles	
11086	Riverside No. 105	M-98	95 Cu, 4 Zn, 1 Sn	Rolled	38000 80000					Fuse clips, electrical contacts	38% elec. cond.
11087	Riverside No. 205	M-98	91.6 Cu, 8 Sn, .4 P							Welding rod	P-Bronze

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11088	Riverside No. 209	M-98	90 Cu, 10 Sn, .05 P							Welding rod, springs, bearings	For Cu and bronze
11089	Riverside No. 209 Grade D	M-98	9-11 Sn, .03-.25 P, bal. Cu	Soft Hard	58000 109000					Springs	
11090	Riverside No. 330	M-98	95.65 Cu, 4 Sn, .35 P							Welding rod	P-Bronze
11091	Riverside No. 402	M-98	12 Ni, bal. Cu								
11092	Riverside No. 403	M-98	15 Ni, bal. Cu								
11093	Riverside No. 404	M-98	30 Ni, 22 Zn, bal. Cu							Resistance wire	Wire
11094	Riverside No. 405	M-98	10 Ni, bal. Cu								
11095	Riverside 72-28	M-911	70 Cu, 2 Sn, 28 Pb							Bearings	
11096	Riverside 74-26	M-911	70 Cu, 4 Sn, 26 Pb							Bearings	
11097	Riverside 78-22	M-911	70 Cu, 8 Sn, 22 Pb							Bearings	
11098	Riverside 60-20	M-911	70 Cu, 10 Sn, 20 Pb							Bearings	
11099	Riverside 80-20 Hard	M-911	70 Cu, 10 Sn, 20 Pb + Ni							Bearings	
11100	R-Monel	M-68	63-70 Ni, 2.5 max. Fe 2.0 max. Mn, .03 max. C, bal. Cu	Cold drawn Hot rolled	80000 110000 75000 95000	50000 95000 35000 65000	35 15 45 30	65 50	145 210 130 165	Automatic screw machine parts	Free machining
11101	RNC 44	M-104	5 Al, 30 Cr, bal. Fe							Electrical heating resistances	
11102	Robins C.I. 25	M-460	3.4 T.C., .5 C.C., 2.5 Si, bal. Fe		28000				170 190	Gray iron castings	Tr.S.-2000 Tr. def.-.25"
11103	Robins C.I. 35G	M-460	3.3 T.C., .55 C.C., 2.3 Si, .3 Cr, bal. Fe		35000				190 230	Cast iron gears	Tr.S.-2200 Tr. def.-.30"
11104	Robins C.I. 35SG	M-460	3.3 T.C., .65 C.C., 2.3 Si, 1.1 Ni, bal. Fe		35000				210 240	Cast iron gears	Tr.S.-2300 Tr. def.-.30"
11105	Robins C.I. 50	M-460	3.1 T.C., .65 C.C., 2.4 Si, .75 Ni, .2 Cr, .5 Mo, bal. Fe		50000 70000				230 270	Cast iron castings, gears	Tr.S.-3000 Tr. def.-.40"
11106	Robins Copper-Free Ni-Resist	M-460	2.5-3.0 T.C., 2.0-2.5 Si, 19.5-20.5 Ni, 2-3 Cr, bal. Fe		25000				120 140		Tr.S.-2100 Tr. def.-.60"
11107	Robins High Chrome Ni-Resist	M-460	2.5-3.0 T.C., 2.0-2.5 Si, 13.5-14.5 Ni, 5.5-6.5 Cu, 4-6 Cr, bal. Fe		30000				160 200	Stoker gates, flue dampers	Tr.S.-2400 Tr. def.-.45"
11108	Robins Standard Ni-Resist	M-460	2.5-3.0 T.C., 2.0-2.5 Si, 13.5-14.5 Ni, 5.5-6.5 Cu, 2-2.5 Cr, .9-1.1 Mn, bal. Fe		25000				130 160	Castings	Non-magnetic Corrosion resistant
11109	Rocan	M-238	Cu							Conduits, sheeting	Electrolytic copper
11110	Rockaloy Grade A	M-829								Cutting tool	Carbide
11111	Rockaloy No. 110	M-829								Cutting tool	Carbide
11112	Rockaloy No. 111	M-829								Cutting tool	Carbides
11113	Rockaloy No. 112	M-829								Cutting tool	Carbides
11114	Roger Metal	M-700									
11115	Roncan	M-238	Cu							Roofing, building	Refined copper
11116	Ronensil	M-912	8-9 Cr, 12 Mn, bal. Fe							Tableware, household utensils	Non-magnetic
11117	Ronensil	M-501	C, 16 Mn, 7-9 Cr, 1 Mo, bal. Fe							Stainless steel parts	Stainless
11118	Ross-Meehan	M-82a	C, alloy, bal. Fe							Steel castings	
11119	Roxo	M-753									
11120	R-P	M-40	.65 C, .8 Mn, 1.95 Si, bal. Fe							Tools	Oil hardening
11121	Ruinella	M-92									
11122	Rustless 13HC	M-100	.40 max. C, 13-15 Cr, bal. Fe							Cutlery, ball bearings, valve trim	Corrosion resistant
11123	Rustless 13HC-35	M-100	.40 max. C, 12-14 Cr, .5 max. Ni, bal. Fe	Annealed Hardened	85000 250000	40000 190000	34 3	68 5	160 550	Cutlery, scissors, surgical instruments	Corrosion resistant
11124	Rustless 16-6	M-100	.12-.20 C, 15-17 Cr, 5-7 Ni, bal. Fe								Stainless

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11125	Rustless 17	M–100	.12 max. C, 14-18 Cr, .5 max. Ni, bal. Fe	Annealed	75000	40000	35	75	140	Trim, ornaments, screws	Stainless
				Worked	100000		10	60	250		Non-hardening
11126	Rustless 17 FM	M–100	.12max. C, .15 min. S, 14-18 Cr, .5 max. Ni, bal. Fe	Annealed	75000		34	62	140	Screws, bolts	Free cutting, stainless
				Worked	100000		8	58	250		
11127	Rustless 17HC60	M–100	.65 C, 14-18 Cr, .5 max. Ni, bal. Fe		100000		27	55	190	Cutlery, scissors, valve trim	Stainless, hardenable
					270000		2	3	575		
11128	Rustless 17HC90	M–100	1.0 C, 14-18 Cr, .5 max. Ni, bal. Fe		105000		21	42	200	Cutlery, scissors, valve trim	Stainless, hardenable
					285000		1.5	2	625		
11129	Rustless 17-7	M–100	.10-.20 C, 16-18 Cr, 6-8.5 Ni, 2.0 max. Mn, 1.0 max. Si, bal. Fe	Annealed	105000	45000	55	68	165	Stainless parts, springs, wire cloth	Stainless. Non-magnetic
				Worked	325000	300000					
11130	Rustless 20-10	M–100	.08 C, 20-22 Cr, 10-12 Ni, 2.0 max. Mn, 1.0 max. Si, bal. Fe	Annealed	95000		60	70	140	Welding wire, milk and food handling equipment	Austenitic. Stainless Type 307
				Worked	225000		5	5.5	400		
11131	Feralsi	M–745	Fe-Al-Si							Magnetic applications	
11132	Rustless 29-9	M–100	.25 max. C, 27-31 Cr, 8-10 Ni, bal. Fe								Stainless. Type 312
11133	Ryanite No. 2	M–464	C, 1.5 Ni, .5 Cr, bal. Fe							Crankcases, cylinder blocks, cylinder barrels	Cast iron
11134	Rycrome	M–240	C, Cr, Mo, bal. Fe	Cold drawn	105000		16	54	269	Crankshafts, pinions, bolts, studs	Formerly "Nikrome"
					135000		20	61	302		
11135	Plastic CSM No. 2	M–38	.30-.35 C, .7 Mn, .5 Si, .8 Cr, .25 Mo, bal. Fe							Dies to be carburized	Non-deforming
11136	T-1 Alloy	M–190	Al alloy		30000		7				
					34000		9				
11137	Talide	M–913	WC		300000					Wear plates, guides, dies, cutting tools	Heat resisting to 2000° F.
11138	T Alloy "A"	M–140	C, alloy, bal. Fe							Tools	
11139	Tail Shaft Bronze	M–508	87 Cu, 6 Sn, 3 Pb, 4 Zn							Bearings, pump liners	Centrifugal casting
11140	TAM	M–109	12-15 Ti, 18-22 Al, 2-4 Si, 4-5 Cr.							For refining steel	
11141	TAM Manganese Titanium Grade 1	M–109	39 Mn, 30 Ti, 8 Al, 3 Si, 20 Fe							Steel deoxidizer	
11142	TAM Manganese Titanium Grade 2	M–109	55 Mn, 30 Ti, 6 Al, 4 Si, 5 Fe							Steel deoxidizer	
11143	TAM Molybdenum Titanium	M–109	48 Mo, 16 Ti, 2 Al, 7 Si, 27 Fe							Ladle additions to cast iron	
11144	TAM Nickel Titanium	M–109	62 Ni, 25 Ti, 8 Al, 1 Si, 3.5 Fe							Ladle additions to steel	
11145	Tank Brand	M–914									
11146	Tantaloy	M–53	TaC							Cutting tools	For corrosion resistant steels
11147	Tantung	M–53	Co-Cr-W-Ta-C							Cutting tool, mixer blades, hot swaging dies	Carbides
11148	Tantung G	M–53	WC-TaC-Co-Cr-CbC							Cutting tools, wear and corrosion resisting parts	Carbides
11149	Tarpon	M–76	C, alloy, bal. Fe							Tools	
11150	Taylor Ni-Mo Steel	M–915	.2 C, Ni, Mo, bal. Fe							Hoist and drag chains	
11151	TCM	M–69	C, W, Mo, Cr, V, bal. Fe							Cutting tools	High speed steel
11152	Technalloy A	M–229	1.2-1.3 C, bal. Fe							Rolls	For steel mills
11153	Technalloy AX	M–229	C, bal. Fe							Heavy duty rolls	For blooming mills
11154	Technalloy B	M–229	1.8-2.0 C, bal. Fe							Rolls	For steel mills
11155	Technalloy C	M–229	C, bal. Fe							Heavy duty rolls	For structural mills

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11156	Technalloy D	M-229	2.2-2.3 C, bal. Fe							Rolls	For steel mills
11157	Technalloy E	M-229	2.4-2.6 C, bal. Fe							Rolls	For steel mills
11158	Technalloy Standard	M-229	1.0 C, bal. Fe							Rolls	For steel mills
11159	Teco	M-796	WC, VC, CrC, ThC, MoC, Co, Ni							Tools, wearing parts, cutters	A series of refractory alloys
11160	Teco Grade 23	M-916	WC							Cutting tools	90.8 Ra
11161	Teco Grade 68	M-916	WC							Cutting tools	91.3 Ra
11162	Teco Grade 607	M-916	WC							Cutting tools	91.8 Ra
11163	Teco Grade 610	M-916	WC							Cutting tools	92.0 Ra
11164	Teco Grade 625	M-916	WC							Cutting tools	91.0 Ra
11165	Teco Grade 946	M-916	WC							Cutting tools	90.2 Ra
11166	Teco Grade 946X	M-916	WC							Cutting tools	91.5 Ra
11167	Teco Grade 964	M-916	WC							Cutting tools	91.0 Ra
11168	Teco Grade K-65	M-916	WC							Cutting tools	91.5 Ra
11169	Teco Grade KT-13	M-916	WC							Cutting tools	89.0 Ra
11170	Teco Grade T-13	M-916	WC							Cutting tools	88.0 Ra
11171	Red-X-6	M-906	1-2 Cu, .2-.5 Mg, .4 Mn, 6 Si, bal. Al							Light alloy castings	
11172	Teenax NB	M-96	C, W, Cr, bal. Fe								
11173	Telastic Moly	M-862	C, Mn, .15-.20 Mo, bal. Fe	Normalized Heat treated	80000 110000	45000 85000	23 15	40 40	190 245	Cast gears	Heavy duty
11174	Temcross	M-328	C, alloy, bal. Fe								
11175	Temperite	M-927	Pb, Sn, Cd							Temperature indicating alloys	Low melting series of alloys
11176	Templato	M-719									White metal
11177	Tennal 50	M-190	6-8 Cu, 2.5 max. Zn, 1.5 max. Fe, 3.0 max. Si, bal. Al							Crankcases, oil pans, cylinder heads	
11178	Tennal I	M-190	Si, bal. Al							Light alloy parts	Corrosion resisting
11179	Tennal T Titanite	M-190	Ti, Mn, bal. Al								
11180	Trojan Shank	M-435	.35 C, .7 Mn, .5 Cr, .3 Mo, 3.2 Ni, bal. Fe							Mining bit shanks	
11181	Tennal T	M-190	Ti, Mn, bal. Al								
11182	Thermal B	M-75	.5 C, 3-4 Cr, 9 W, .6 V, bal. Fe							Tools, cutters	High speed steel
11183	Thermal DH	M-750	.58 C, 3-4 Cr, 10-14 W, .4 V, bal. Fe							Tools, cutters	High speed steel
11184	Thermalloy No. 72M	M-47	60-62 Ni, 12-15 Cr, 1-2.5 Mo, bal. Fe							Carburizing boxes, rolls, grids, furnace castings	
11185	Thermocrom	M-918	C, Mo, bal. Fe							Piston rings	Cast iron
11186	Thermo	M-260	C, alloy, bal. Fe								
11187	Thermoflex	M-919								Thermostatic and contact alloy	Bimetal
11188	Thermold A	M-114	.35 C, 5 Cr, .45 Mn, .45 V, 1.0 Mo, 1.0 Si, bal. Fe							Hot work dies	Hot work steel
11189	Thermold B	M-114	.35 C, 5 Cr, 1.5 W, 1.7 Mo, 1.0 Si, bal. Fe							Hot work dies	Hot work steel
11190	Comol		12 Co, 17 Mo, bal. Fe							Permanent magnets	
11191	Ticonium	M-920	35.7 Ni, 29 Co, 27.7 Cr, 6 Mo, 1-6 Be		110000	65000	6			For bone surgery	32 Rc
11192	Timken 2%C-¼% Mo	M-376	.15 max. C, 1.75-2.25 Cr, .45-.65 Mo, bal. Fe		60000	25000	30		163		Resists heat to 1150° F.
11193	Timken 2¼% Cr-1% Mo	M-376	.15 max. C, 2-2.5 Cr, .9-1.1 Mo, bal. Fe	Annealed	60000	25000	30	50	163	High temperature tubing	Resists heat to 1150° F.

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11194	Timken DM	M-376	.15 max. C, 1.0-1.5 Cr, .45-.65 Mo, bal. Fe	Annealed	60000	25000	30	50	163	High temperature tubing	
11195	Timken DM2	M-376	.15 max. C, .8-1.1 Cr, .45-.65 Mo, bal. Fe								
11196	Vascoloy Ramet Grade 2 A7	M-329	W-Ta-C							Cutters	Sintered carbides
11197	Vascoloy Ramet Grade 2 A5	M-329	W-Ta-C							Cutters	Sintered carbides
11198	Tioga	M-1	.67 C, .65 Cr, 1-4 Ni, .2 Mo, bal. Fe							Lathe centers, clutch parts, cams, arbors	Oil hardening, tough
11199	Tiona	M-114	1.0 C, .85 Cr, 2.0 Mn, .85 Mo, bal. Fe							Blanking dies	Air hardening
11200	Tinea	M-921								Bearings	Anti-friction meta
11201	Tool Steel	M-377	.95 C, .5 Mn, bal. Fe							Broaches, dies, lathe centers, wood working tools	Water hardening
11202	Toolweld 55	M-578	C, Cr, V, W, bal. Fe						60 Rc	Welding electrode for worn dies and tools	Shielded arc. High speed steel deposit
11203	Toolweld 60	M-578	C, Cr, V, W, bal. Fe						60–65 Rc	Welding electrode for worn dies and tools	Shielded arc. High speed steel deposit
11204	Tordal	Germ.	Al alloy				13		110	Light alloy parts	Free cutting
11205	Torpedo	M-688	.9 C, .5 Cr, 1.3 Mn, .5 W, bal. Fe				18		130	Dies, punches, rivet sets	Non-deforming, oil hardening
11206	Tough Devil	M-712	13 Mn, 3 Ni, C, bal. Fe		135000	45000	80	50	180 200	Welding rod for high Mn steels	Wear resisting, austenitic
11207	Toughite No. 5	M-922	C, Cr, V, bal. Fe							Tires and rollers in kilns, coolers and dryers	
11208	Tough M—Temper	M-24	.45 C, .95 Cr, .2 V, .2 Co, bal. Fe							Shear blades, dies, chisels, punches	Tough
11209	T.P.A.	M-513	.4-.5 C, .7 max. Mn, 13-15 Ni, 13-15 Cr, .5 Mo, 1.75-3.0 W, bal. Fe	at 70° F. at 1600° F.	120600 23000	84000	30 20	44 27	215	Valves, valve seats	Heat resisting, austenitic
11210	Trance Phosphor Bronze	M-450	90 Cu, 5 Sn, 5 Pb, trace P								
11211	Tranelec A	M-691	Si, bal. Fe								
11212	Tranelec B	M-691	Si, bal. Fe								
11213	Tranelec C	M-691	Si, bal. Fe								
11214	Transweld	M-578	C, bal. Fe		85000		20			Welding rod	For mild steel
11215	Trenite	M-535	C, alloy, bal. Fe							Castings	Heat, corrosion and wear resisting
11216	Triangle X-Extra	M-111	C, bal. Fe								
11217	Triangle X-Special	M-111	C, bal. Fe								
11218	Tri-Lok	M-923									
11219	Tri-Lok	M-924									
11220	Trimet	M-725	W							Wire for sealing into glass	
11221	Trimmax	M-64	C, bal. Fe							Trimmers	
11222	Trimmer Die	M-80	C, alloy, bal. Fe							Tools	
11223	Triple Life D-C	M-40	1.2 C, 4 Cr, bal. Fe							Dies, reamers	
11224	Tripli-Cast	M-838			69000 109600		5 1.5		132 205		M.P.-1710° F.
11225	Tritex	M-669	.25-.55 C, Mn, bal. Fe	Cold drawn	70000 120000		13 30	45 65	165 255	Splines, shafts, gears	
11226	Tritex Broachrite	M-669	.35-.45 C, Mn, bal. Fe	Cold drawn	100000	90000	13	45	217	Machinery parts, gears, shafts	
11227	Tritex Plus	M-669	.35-.45 C, Mn, bal. Fe							Motor shafts, gears	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11228	Triton A	M-140	C, alloy, bal. Fe							Tools	
11229	Trodaloy No. 7	M-60	99.5 Cu, .4 Cr, .1 Be	Heat treated	30000		10		80	Soldering tips, resistance welding electrodes	75% elec. cond.
				Casting	35000		15				
11230	Trualoy Aluminum	M-925	Al alloy		22000		2		60	Light alloy castings	
11231	Trualoy Aluminum Bronze	M-925	Al, bal. Cu		65000	25000	20		115	Sand castings	Corrosion resisting
11232	Trualoy Bearing Bronze	M-925	Sn, Pb, bal. Cu		25000	12000	8		60	Bearings	High compressive strength
									80		
11233	Trualoy Copper	M-925	Cu							Current conductors	High conductivity 90%
11234	Tru-Die	M-750	C, alloy, bal. Fe							Dies	Non-shrinking
11235	Truflex A	M-926								Thermostatic bimetal	Max. temp. 300° F.
11236	Truflex A-2	M-926								Thermostatic bimetal	Max. temp. 300° F.
11237	Truflex B	M-926								Thermostatic bimetal	Max. temp. 1200° F.
11238	Truflex B-2	M-926								Thermostatic bimetal	Max. temp. 1200° F.
11239	Truflex B-12½	M-926								Thermostatic bimetal	Max. temp. 1100° F.
11240	Truflex B-15	M-926								Thermostatic bimetal	Max. temp. 1100° F.
11241	Truflex B-20	M-926								Thermostatic bimetal	Max. temp. 1100° F.
11242	Truflex B-25	M-926								Thermostatic bimetal	Max. temp. 1100° F.
11243	Truflex B-30	M-926								Thermostatic bimetal	Max. temp. 1100° F.
11244	Truflex B-35	M-926								Thermostatic bimetal	Max. temp. 1100° F.
11245	Truflex B-40	M-926								Thermostatic bimetal	Max. temp. 1100° F.
11246	Truflex B-47	M-926								Thermostatic bimetal	Max. temp. 1100° F.
11247	Truflex D	M-926								Thermostatic bimetal	Max. temp. 1200° F.
11248	Truflex E	M-926								Thermostatic bimetal	Max. temp. 1200° F.
11249	Truflex E-2	M-926								Thermostatic bimetal	Max. temp. 1200° F.
11250	Truflex F	M-926								Thermostatic bimetal	Max. temp. 1200° F.
11251	Truflex G	M-926								Thermostatic bimetal	Max. temp. 1200° F.
11252	Truflex G-2	M-926								Thermostatic bimetal	Max. temp. 1200° F.
11253	Truflex H	M-926								Thermostatic bimetal	Max. temp. 1200° F.
11254	Truflex J	M-926								Thermostatic bimetal	Max. temp. 500° F.
11255	Truflex K	M-926								Thermostatic bimetal	Max. temp. 1200° F.
11256	Truflex L	M-926								Thermostatic bimetal	Max. temp. 800° F.
11257	Truflex M	M-926								Thermostatic bimetal	Max. temp. 1200° F.
11258	Truflex N	M-926								Thermostatic bimetal	Max. temp. 1000° F.
11259	Truflex O	M-926								Thermostatic bimetal	Max. temp. 400° F.
11260	Truflex Q	M-926								Thermostatic bimetal	Max. temp. 1000° F.
11261	Truflex R	M-926								Thermostatic bimetal	Max. temp. 700° F.
11262	Truflex T	M-926								Thermostatic bimetal	Max. temp. 800° F.
11263	T.S.B.	Russ.								Cutting tools	
11264	T.T.Q. High Speed	M-261	.75 C, 22 W, 5 Cr, 11 Co, 1.6 V, bal. Fe							Cutting tools for hard and abrasive material	High speed steel
11265	Tube Mandrel	M-365	1.15-1.35 G, .35 Cr, bal. Fe							Tools, mandrels	
11266	Tufcut	M-750	C, alloy, bal. Fe								
11267	Tuffaloy	M-790	C, bal. Fe							Tools	
11268	Tuftork	M-669	.35-.45 C, Ni, Mo, bal. Fe	Heat treated	112500	105000	16	50	320	Drive shafts, bolts, studs, spindles	
11269	Tufwear No. 2	M-927	C, Ni, Mn, bal. Fe							Sleeves, steel castings	For oil well drilling machines
11270	Tufwear No. 3	M-927	C, Ni, Cr, Mo, bal. Fe							Jaw clutches	For oil well drilling machines
11271	Tuncro	M-353	.50 C, 1.4 Cr, .25 V, 2 W, bal. Fe							Chisels, punches, pneumatic tools, hot work dies	Hot work steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11272	Tungsten Hack Saw	M-357	1.2 C, .10 V, 1.0 W, bal. Fe							Hack saws	
11273	Twin Six	M-1	C, alloy, bal. Fe							Tools	
11274	Two Star Special	M-85	.80 C, 4 Cr, 2 V, 18 W, .55 Mo, bal. Fe							Tools, cutters	High speed steel
11275	Tylerite	M-929	C, Ni, bal. Fe							Molding machine parts, match plates	Cast iron
11276	Typlex	M-289	C, alloy, bal. Fe							Gages, hot forging dies	Air hardening
11277	U-20	M-689	13 Cu, .25 Mg, 1.5 Mn, 1.0 Ni, bal. Al	Heat treated	40000 43000		.5		120 130	Pistons	
11278	U.C.A. 2-2	M-111a	.90 C, 1.6 Mn, 1.5 Cr, bal. Fe						64 Rc	Blanking and forming dies, pressing dies	Oil hardening, non-deforming
11279	U.H.B. Cold Header Die	M-111a	.91-.98 C, bal. Fe							Cold heading dies	Water hardening
11280	U.H.B. Forma	M-111a	.05 max. C, bal. Fe							Plastic molding dies	Case hardening
11281	U.H.B. Standard	M-111a	1.0 C, bal. Fe							Tools	Water hardening
11282	U.H.B. Valand 2	M-111a	.32 C, 2.5 Cr, 2.0 Co, .35 V, 9.5 W, bal. Fe							Hot work tools and dies	Hot work steel
11283	Ultimo 4	M-435	.45 C, .75 Mn, .75 Cr, .35 Mo, 2.0 Ni, bal. Fe	Normalized	110000	85000	25	60	228	Shafts, gears	Heavy duty
11284	Ultra Crystal Plus One	M-350	C, Cr, V, W, Co, bal. Fe							Tools, cutters	High speed steel
11285	Una	M-930								Welding rod	
11286	Una High Speed No. 44	M-930	.08 max. C, .2-.3 Mn, bal. Fe							Welding rod	Flux coated for high speed
11287	Una High Speed No. 45	M-930	.12-.18 C, .4-.6 Mn, bal. Fe							Welding rod	Flux coated for high speed
11288	Una High Tensile No. 65	M-930	.13-.18 C, .4-.6 Mn, bal. Fe							Welding rod	Flux coated
11289	Una No. 76	M-930	.13-.18 C, .4-.6 Mn, bal. Fe							Welding rod	Flux coated
11290	Una No. 156	M-930	.13-.18 C, bal. Fe							Welding rod	Flux coated
11291	Una No. 158	M-930	.08 C, .2-.3 Mn, bal. Fe							Welding rod	Flux coated
11292	Una No. 160	M-930	.13-.18 C, .4-.6 Mn, bal. Fe							Welding rod	Flux coated
11293	Una No. 200	M-930	.07-.12 C, .3-.5 Mn, bal. Fe							Welding rod	Flux coated
11294	Una No. 300	M-930	.13-.18 C, .4-.6 Mn, bal. Fe							Welding rod	Flux coated
11295	Una No. 325	M-930	.85-1.10 C, .3-.6 Mn, bal. Fe							Welding rod	Hard and abrasion resisting
11296	Una No. 350	M-930	.17 C, 4.75-5.25 Ni, bal. Fe							Welding rod	
11297	Una No. 425	M-930	.08 C, .2-.3 Mn, bal. Fe							Welding rod	Protected arc
11298	Una No. 470	M-930	Ni-Cu							Welding rod	For machinable welds on cast iron
11299	Una No. 560	M-930	Cu							Welding rod for copper to steel	Flux coated
11300	Una No. 601	M-930	Al							Welding rod	For Al
11301	Una No. 712	M-930	.15-.25 C, .3-.6 Mn, 3.25-3.75 Ni, bal. Fe							Welding rod	Flux coated
11302	Una No. 911	M-930	.07 C, .5 Mn, 18-20 Cr, 8-10 Ni, bal. Fe							Welding rod	For 18-8 Stainless steel
11303	Una No. 912	M-930	.20 C, 2.0 Mn, 22-26 Cr, 12-14 Ni, bal. Fe							Welding rod	For stainless steel
11304	Una No. 914	M-930	.10 C, 12-14 Cr, .25 Ni, bal. Fe							Welding rod	For corrosion resistant steel
11305	Una No. 916	M-930	.10 C, 16-18 Cr, .25 Ni, bal. Fe							Welding rod	For stainless steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11306	Una No. 917	M-930	.10 C, 25-30 Cr, .25 Ni, bal. Fe							Welding rod	For stainless steel
11307	Una No. 918	M-930	.15 C, 4-6 Cr, .4-.6 Mo, bal. Fe							Welding rod	For 4-6 Cr steel
11308	Una No. 1500	M-930	.08 C, bal. Fe							*Welding rod*	
11309	Una No. 2150	M-930	.03 C, .13 Mn, .46 Cu, .07 Mo, bal. Fe							Welding rod	For copper bearing steel
11310	Una No. 3175	M-930	.08 C, 2 Ni, 1 Cu, bal. Fe							Welding rod	Shielded coating
11311	Una No. 3200	M-930	.10-.14 C, .35-.55 Mn, bal. Fe							Welding rod	
11312	Uniloy 25-12	M-114	C, 24 Cr, 12 Ni, bal. Fe							Stainless parts	Resists heat to 1800° F.
11313	Union	M-586								Bearings	*Babbitt*
11314	Union Maxcut	M-397	.08-.15 C, bal. Fe							Machinery and case hardened parts	SAE-X-1112
11315	Union Metal	M-931	C, bal. Fe		60000 70000					Bracers, stands, supports	Seamless tubing
11316	Union Multicut	M-397	.10-.20 C, bal. Fe							Case hardened parts	SAE-1115
11317	Universal Alloy No. 10	M-932	Cu alloy		65000	60000	20		125	Electrode tips, seam welding rolls	85% conductivity
11318	U.S.C.O	M-585									
11319	Uso	M-344	C, alloy, bal. Fe							Striking dies	Water hardening
11320	Uso-AD	M-344	1.55 C, 11 Cr, .2 V, .7 Mo, bal. Fe							Blanking and trimming dies	Oil hardening
11321	USO-HE	M-344	1.5 C, .5 Cr, .25 V, 1.6 W, bal. Fe							Dies, gages	Oil hardening, non-deforming
11322	USO-NS	M-344	.8 C, .2 Cr, 1.5 Mn, bal. Fe							Broaches, gages, blanking and forming dies	Oil hardening, non-deforming
11323	Uso—Special Vanadium	M-344	C, bal. Fe							Heading and ripping dies, shear blades	Water hardening
11324	Uso 30CF	M-344	.30 C, 4 Cr, .25 V, 8.8 W, bal							Hot dies and tools	Hot work steel
11325	Uso Tungsten	M-344	4 Cr, V, 18 W, C, bal. Fe							Lathe tools, drills, milling cutters	High speed steel
11326	Uso Vanadium	M-344	C, bal. Fe							Striking dies	Water hardening
11327	Uso 5S	M-344	.1 max. C, 4-6 Cr, .5 Mo, bal. Fe								Corrosion resisting
11328	USS Carilloy	M-604	C, bal. Fe								Formerly "Carnegie-Illinois"
11329	Ute	M-322	.95 C, 2.0 W, .6 Cr, bal. Fe							Tools	Oil hardening
11330	Utility	M-688	.6-.9 C, .25-.60 Mn, bal. Fe							Drills, chisels, blacksmith tools	Water hardening
11331	Valentine Steel		.75 C, 5.25 Cu, 1.2 Mn, 1.2 V, 12.5 W, bal. Fe								
11332	Magnesium FS	M-659	Mg alloy	Extruded Sheet	37000 38000	25000	12 12			Light alloy parts	
11333	Magnesium M	M-659	Mg alloy	Extruded Sheet	32000 35000	22000	3 12			Light alloy parts	
11334	Magnesium O	M-659	Mg alloy	Extruded	43000	29000	9			*Light alloy parts*	
11335	Maxel No. 4 Collet	M-38	.75 C, Cr, Mn, bal. Fe							Collets, feed fingers, spindles	
11336	Maxel Shank Steel	M-38	.50 C, Cr, Mn, bal. Fe							Shanks for tipped tools	
11337	Nail Die Steel	M-24	1.15 C, bal. Fe							Nail dies, pipe threaders	
11338	Vanasil		16 Si, 1.4 Cu, .7 Fe, .03 Ti, 2 Ni, bal. Fe	Cast	25000 40000		.5		100 180	Pistons	Low coefficient friction
11339	Vancolite										

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11340	Van-Lom	M–115	.78-.84 C, 4-4.5 Cr, 8.5-9.5 Mo, 2 V, bal. Fe							Tools, cutters	High speed steel
11341	Vascaloy-Ramet Grade AM	M–329	TaC							Tools, cutters	Bonded
11342	Vascaloy-Ramet Grade AR	M–329	TaC							Tools, cutters for cast iron	Bonded
11343	Vascaloy-Ramet Grade DT	M–329	TaC							Tools, cutters	Bonded
11344	Vascaloy-Ramet Grade DW	M–329	TaC							Tools, cutters	Bonded
11345	Vascaloy-Ramet Grade E	M–329	TaC							Tools, cutters for fast finishing cuts	Bonded 92 Ra
11346	Vascaloy-Ramet Grade EE	M–329	TaC							Tools, cutters for heavy duty roughing cuts	Bonded 90.5 Ra
11347	Vascaloy-Ramet Grade EM	M–329	TaC							Tools, cutters	Bonded 91.2 Ra
11348	Vascaloy-Ramet Grade SS	M–329	TaC							Tools, cutters	Bonded
11349	Vatool	M–357	.95 C, .25 V, .15 max. Ni and Cr, bal. Fe							Shear blades, arbors, dies, rivet sets	
11350	Velvet Antifriction Metal	M–914								Bearings	Babbitt
11351	Velvetouch	M–933	Cu-Pb-Sn-Graphite							Clutch and brake discs, linings, bearings, facings	Sintered
11352	Venango	M–39	.50 C, .2 V, .5 Mo, 1.1 Si, bal. Fe							Chisels, punches, rivet sets	Tough
11353	Veribest Drill Rod	M–822	.9 C, 1.1 Mn, .6 Cr, .9 W, .24 V, bal. Fe								Oil hardening drill rod
11354	Vernalloy	M–934									Heat resistant
11355	Viag	M–935	Al alloy								
11356	Vibrac Steel	M–117	C, Ni, Cr, Mo, bal. Fe		135000		23	59		Steel cylinders	
11357	Vibraloy	M–936	C, alloy, bal. Fe							Vibrating screens	Abrasion resisting
11358	Vibresist Hollow Drill	M–435	1.0 C, 1.25 Cr, .3 Mo, bal. Fe							Mining drills	Oil hardening
11359	Vicalloy	M–22	10 V, 52 Co, bal. Fe							Permanent magnets	Cold workable
11360	Victor Drill Rod	M–38	1.05 C, bal. Fe							Shafts, rollers, pins, dowels, push rods	
11361	Viking	M–140	1.05 C, 1.05 Cr, .45 Mo, bal. Fe							Mandrels, rams	
11362	Violet Label	M–694	C, alloy, bal. Fe							Cutting dies, tools, gages, drawing dies	Non-deforming
11363	Vitallium	M–937	90 Co, Cr, bal. Mo							Dental appliances, castings	
11364	Vitallium		65 Co, 30 Cr, 5 Mo, Mn, Si		97000	58000	4.1			To hold broken bones together	
11365	Vitalu		Al alloy								
11366	Vival	M–807	.5 Si, 1 Mg, .5 Mn, bal. Al		36000	34000	5				Similar to "Lautal"
11367	V.L.W.-1	M–116	Al alloy								Similar to "Scleron"
11368	V.L.W.-2	M–116	Al alloy								Similar to "Silumin"
11369	V.L.W.-3	M–116	Al alloy								Same as "Lautal"
11370	V.L.W.-14	M–116	Al alloy								Same as "Duralumin"
11371	V.L.W.-17	M–116									Same as "Pantal"
11372	V.L.W.-19	M–116									Same as "Scleron"
11373	V.L.W.-23	M–116									Same as "Silumin"
11374	V.L.W.-31	M–116									Same as "Aluman"
11375	V.L.W.-41	M–116									

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11376	V.L.W.-61	M-116									Same as "K. S. Seewasser"
11377	V.L.W.-63	M-116									Same as "B. S. Seewasser"
11378	V.L.W.-99	M-116	Al								Same as pure Al
11379	V-Mang	M-9	C, 12-14 Mn, Mo, bal. Fe							Welding rod	For Mn steel
11380	VM Dreadnaught	M-362	.86 C, 4 Cr, 2 V, 8 Mo, bal. Fe							Tools, cutters	High speed steel
11381	Voizit	Europ.	96.5 Fe, 3.5 Graphite						25 50	Antifriction metal, bearings	Pressed powders, 30-40% porosity
11382	Vokar	Russ.	8-15 C, 78-86 W, Mn, bal. Fe							Cutting tools	Sintered hard alloy
11383	VS 4	M-210	C, alloy, bal. Fe							Cold heading dies	
11384	Vulcan 4 HW	M-275	C, 4 Cr, bal. Fe							Drawing and forming dies, hot bolt and rivet gripper dies	Hot work steel
11385	Vulcan 6 HW	M-275	C, 4 Cr, bal. Fe							Hot gripper dies, severe forming dies	Hot work steel
11386	Vulcan A-41	M-275	C, Cr, V, Mo, bal. Fe							Hot bolt and rivet headers, hot extrusion dies	Hot work steel
11387	Vulcan A-42	M-275	C, W, bal. Fe							Hot punches, die and pressure casting dies	Hot work steel
11388	Vulcan Alidie	M-275	1.55 C, 12 Cr, .75 Mo, .25 V, bal. Fe							Drawing and blanking dies, shear blades, cold swaging dies	Air or oil hardening
11389	Vulcan Blue Edge	M-275	C, W, Cr, bal. Fe							Pneumatic chisels, shear blades, cold rivet sets	Shock resisting
11390	Vulcan Carbon Vanadium	M-275	C, V, bal. Fe							Tools	
11391	Vulcan CK	M-275	C, alloy, bal. Fe							Tools	
11392	Vulcan CWD	M-275	C, alloy, bal. Fe							Tools	
11393	Vulcan Drawing Die	M-275	C, alloy, bal. Fe							Tools, dies	
11394	Vulcan Extra Vanadium	M-275	C, V, bal. Fe							Tools	
11395	Vulcan Heavy Duty	M-275	C, Cr, V, bal. Fe							Flying shears	Tough
11396	Vulcan No. 14	M-275	C, alloy, bal. Fe							Tools	
11397	Vulcan No. 50	M-275	C, alloy, bal. Fe							Tools	
11398	Vulcan No. 212	M-275	1.1-2.2 C, .3 Mn, 12-12.5 Cr, bal. Fe							Tools	Oil hardening
11399	Vulcan No. 700	M-275	C, alloy, bal. Fe							Tools	
11400	Vulcan No. 4870	M-275	.5 C, .2 Si, Mn, .25 V, .25 Cr, alloy, bal. Fe							Cold punches, shears, dies, chisels	Shock resisting
11401	Vulcan Q.A.	M-275	C, W, Cr, V, bal. Fe							Hot punches, dies, shear blades, chisels	Hot work steel
11402	Vulcan Self-Hardening	M-275	C, alloy, bal. Fe							Tools	Self-hardening
11403	Fasaloy No. 6	M-53	Ag, Cu							Contact parts, electrical contacts	
11404	Vulcan Silico Manganese	M-275	C, Si, Mn, bal. Fe							Tools	
11405	Vulcan Vairloy	M-275	C, alloy, bal. Fe							Cutting tools, dies	Air hardening, non-deforming
11406	Vulcan Wolfram Cobalt	M-275	C, 18 W, 4 Cr, 1 V, 4 Co, .5 Mo, bal. Fe							Cutting tools	High speed steel
11407	Vulc-Iron	M-938	C, bal. Fe							Die casting equipment	
11408	W 2	Eng.	.17 C, 3.3 Cr, .8 V, 16 W, 4 Co, .4 Ni, .6 Mo, bal. Fe								
11409	WA-301		Al-Mg-Pb								Free machining, corrosion resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11410	Wabik Metal	M-691									
11411	W-Al-Co Type E-1	M-939	Al							Welding rod	For Al arc welding
11412	W-Al-Co Type G-2	M-939	Al							Welding rod	For Al gas welding
11413	Walde-Loy #100 Metal	M-940	87.5 Pb, 5.5 Sn, 5.3 Sb, 1.6 Cu, .10 As							Storage battery cable terminals and lugs	Resists H_2SO_4
11414	Wando No. 1	M-39	C, alloy, bal. Fe							Tools	
11415	Wando No. 2	M-39	C, alloy, bal. Fe							Tools	
11416	Waukesha Metal	M-941	Ni, bal. Cu		65000					Castings for food and dairy equipment	Resists mild acids
11417	Warplis	M-370	.9 C, .5 Cr, 1.1 Mn, .1 V, .5 W, bal. Fe							Punches, gages, dies, plugs, drills	Non-deforming
11418	Watch Nickel	M-942	12 Ni, 64 Cu, 1 Pb, 23 Zn								
11419	Waterdie B	M-35	1.0 C, .5 Cr, .25 Mn, bal. Fe							Dies, rolls, forming tools	Water hardening
11420	WBZ 6 Bronze	Gefm.	94 Cu, 6 Sn	Cast	35600	15600	32		50		
				Annealed	36900	15650	40		51		
11421	W.D.D.	M-73	C, 3-6 W, bal. Fe							Tools, dies	Hot work steel
11422	Wearaloy	M-655	C, Ni, Mn, Cr, Mo, bal. Fe	Cast						Steam shovels, dipper teeth, sheaves	Wear and abrasion resisting
11423	Wear Devil	M-712								Welding rod	Non-ferrous
11424	Wear Devil A	M-712	C, alloy, bal. Fe						40 Rc	Hard facing welding electrode	Abrasion resisting
11425	Wear Devil B	M-712	C, alloy, bal. Fe						50 Rc	Hard facing welding electrode	Abrasion and erosion resisting
11426	Wear Devil C-1	M-712	Co-Cr-Mo-W						56 Rc	Hard facing welding electrode	Wear resisting
11427	Wear Devil C-2	M-712	Co-Cr-Mo-W						50 Rc	Hard facing welding electrode	Wear resisting
11428	Wear Devil C-3	M-712	Co-Cr-Mo-W							Hard facing welding electrode	Shock and impact resisting
11429	Wearloy	M-571	C, Ni, Cr, bal. Fe							Brake drums	For buses and trucks
11430	Webb Blue Label	M-446	.8-.9 C, bal. Fe							Springs	Music wire
11431	Sturdy Forty	M-669	.43-.50 C, .6-.9 Mn, bal. Fe	Cold rolled	102500	93500	15	52	202	Machinery parts, gears, shafts	Discontinued
11432	Wegner		80 Sn, 20 Zn								
11433	Wegucid	Germ.									
11434	Weidrium	Germ.	Ni, Cu, Zn, Sn, Fe, Mg								
11435	Weircoloy	M-628	C, Cu, bal. Fe							Galvanized	Copper bearing sheet steel
11436	Tritex No. 1	M-669	.32-.39 C, 1.35-1.65 Mn, .08-.13 S, bal. Fe	Cold rolled	103500	93000	15	56	217	Gears, shafts, machinery parts	
11437	Weld-Fast	M-238	Sn, bal. Cu							Welding rod	For bronze
11438	Weldmaco	M-943								Welding rod	
11439	Weldoloy No. 685	M-944								Solder on steel, bronze and cast iron	Flows at 750° F.
11440	Weldoloy No. 690	M-944			35000					Hard solder for Al	Flows at 930° F.
11441	Weldrawn 18-8	M-945	C, 18 Cr, 8 Ni, bal. Fe							Tubing	Welded, stainless
11442	Wellcast No. 3S	M-681	6-8 Cu, 1.5-2 Si, 1.5 Zn, bal. Al		18000		1		60	Crankcases, oil pans, transmission cases	
					21000		3		80		
11443	Wellcast No. 4A	M-681	4-5 Cu, 1 Si, 1 Fe, 1 Mg, bal. Al		20000		1		60	Light alloy castings	Heat treatable
					24000		2		70		
11444	Wellcast No. 5S	M-681	.6 Cu, 4.5-6 Si, bal. Al		17000		2		40	Marine fittings, aircraft engine parts	
					20000		4		55		
11445	Wellcast No. 13A	M-681	2-3 Cu, .6 Fe, 11-13 Zn, bal. Al		24000		1		60	Bearing caps, castings	
					26000		3		80		
11446	Wellcast No. 16S	M-681	12-13 Si, bal. Al		20000		10		40	Light alloy castings	Wear resisting
					24000		15		50		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11447	Wellcast No. 17S	M-681	1.4 Cu, 2 Zn, .3 Mg, 1.4 Mn, .15 Ti, bal. Al		28000 30000		4 6		50 60		
11448	Wellcast No. 65	M-681	55-58 Cu, 38-40 Zn, .2-.5 Mn, 1-1.5 Fe, 1.0 Al		65000 75000		20		110	Gears, valves	Resists salt water corrosion
11449	Wellcast No. 73	M-681	70 Cu, 25 Pb, 5 Sn		22000 25000		19		40	High speed bearings, anti-friction castings	
11450	Wellcast No. 78	M-681	77-79 Cu, 11-12 Zn, 6-8 Pb, 2-3 Sn		25000 27000		8 10		55 65	Castings	
11451	Wellcast No. 80	M-681	80 Cu, 10 Sn, 10 Pb, trace P		25000 30000		6 8		60 70	Bearings	Heavy loads, severe service
11452	Wellcast No. 85	M-681	85 Cu, 5 Sn, 5 Zn, 5 Pb		25000 27000		15		50		Free cutting
11453	Wellcast No. 88	M-681	88 Cu, 10 Sn, 2 Zn, trace P		30000 35000		16 20		70	Valves, nuts, propellers, gears	Navy "G" bronze
11454	Wellcast No. 99C	M-681	98-99 Cu, 1-2 Sn		20000 22000		25		50	Electrode holders	High elec. cond.
11455	Wellcast No. 116	M-681	64 Cu, 16 Ni, 10 Zn, 6 Pb, 4 Sn		28000 30000		18 22		70	Dairy industry castings	Acid resisting
11456	Welmet No. 1	M-946	C, Cr, Ni, Mo, bal. Fe							Steel castings	In SO_2 gas atmosphere
11457	West 60 Stancast	M-465	C, alloy, bal. Fe	Cast	60000	35000	32	54		Annealing boxes, pots, fittings, autoclaves	
11458	West 75 Hy-Cast	M-465	C, alloy, bal. Fe	Cast	75000	42000	28	45		Anvil blocks, car wheels, pump impellers	
11459	West 90 Duracast	M-465	C, alloy, bal. Fe	Cast	90000	58000	22	40		Gears, pipe fittings, clutch jaws	
11460	West 110 Supercast	M-465	C, alloy, bal. Fe	Cast	110000	90000	15	25		Die blocks, car wheels, skip buckets	
11461	Rezistal No. 405	M-38	C, 12 Cr, .2 Al, bal. Fe							Turbine blades	Heat and corrosion resisting
11462	Wheeling Metal	M-451	C, alloy, bal. Fe								
11463	Wheeling Super Steel	M-451	C, alloy, bal. Fe								
11464	White Lead	M-259	C, alloy, bal. Fe								
11465	Chace No. 6850	M-582	Mn, alloy							Thermostatic bimetal	High electrical resistance
11466	Whitworth		C, alloy, bal. Fe							Armor plate	
11467	WI-301		Cu, Mg, Pb, bal. Al								Free machining
11468	Widder	Germ.	10-25 Sn, bal. Pb							Soft solder	
11469	Wilke	Germ.									
11470	Wilco Alloy No. 6	M-237								Electrical contacts	Resists oxidation and corrosion
11471	Wilco Silver Solder No. 2	M-237	65 Ag, 25 Cu, 10 Zn							Silver solder	
11472	Wilco Silver Solder No. 18	M-237	49.5 Ag, 34.5 Cu, 16 Zn							Silver solder	
11473	Wilco Silver Solder No. 25	M-237	22 Ag, 44 Cu, 34 Zn							Silver solder	
11474	Wilco Silver Solder No. 27	M-237	40 Ag, 36 Cu, 24 Zn							Silver solder	
11475	Wilco Thermo-metal Cirflex	M-237								Thermostatic bimetal	Operating temp. 50-300° F.
11476	Wilco Thermometal Midflex 46	M-237								Thermostatic bimetal	Operating temp. 150-450° F.

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11477	Wilco Thermometal Ruflex	M-237								Thermometal for steam traps, gas pilot controls	
11478	Wilrich 300	M-947								Hard facing electrode	Corrosion resisting
11479	Wilrich 301	M-947	Ni-Cr						30-40 Rc	Hard facing electrode	Corrosion resisting
11480	Wilrich 350	M-947	Ni-Cr-Cu							Hard facing electrode	Corrosion resisting
11481	Wilrich 600	M-947	Cr, W						62-65 Rc	Hard facing electrode	Corrosion resisting
11482	Wilrich 625	M-947	Cr, W, Co						65 Rc	Hard facing electrode	Heat, abrasion and corrosion resisting
11483	Wilson		C, alloy, bal. Fe							Armor plate	
11484	Wilson	M-662								Welding rod	
11485	Wilson No. 520	M-237								Welding electrode	
11486	Windsor	M-69	.98 C, 5.25 Cr, .25 V, 1.0 Mo, bal. Fe							Dies	Air hardening
11487	Wipla Metal	Germ.	C, alloy, bal. Fe								Non-rusting
11488	Wire Drawing Alloy Special	M-35	2.35 C, 1.9 Cr, 1.65 Mn, 10.5 W, .6 Si, bal. Fe							Tools, wire drawing dies	Abrasion resisting
11489	WJ-301	M-764	Al								Free cutting
11490	W.M.S.	M-499	C, Ni, bal. Fe	Annealed	74000		27	50		Car axles	Shock resisting
				Heat treated	100000		27	60			
11491	Wortle No. 4 Drawing Die	M-362	1.95 C, 3.0 W, bal. Fe							Drawing dies, tools	
11492	W Tap	M-73	C, W, bal. Fe							Tools	
11493	WT Drill Rod	M-73	1.23 C, 1.27 W, .4 Cr, .3 V, bal. Fe							Drill rod, tools	
11494	Xaloy	M-947	2.5-3.25 C, .7-1.1 B, .5-1.5 Si, .5-1.2 Mn, 3.5-4.5 Ni, bal. Fe		30000				64-70 Rc	Oil field accessories	Abrasion resisting
					45000						
11495	XL Chisel	M-73	.53 C, 2.1 W, 1.3 Cr, bal. Fe							Chisels, punches	Oil hardening
11496	XLO	M-435	.6 C, .75 Cr, .3 Mo, 1.75 Ni, bal. Fe							Drop forge die blocks	
11497	X-B	M-59	33-37 Ni, 13-17 Cr, bal. Fe		64000	36000	5		196	Castings, furnace parts	Resists heat
11498	XX Metal	M-174	C, alloy, bal. Fe								
11499	Yorcalbro	M-948	76.47 Cu, 21.67 Zn, 1.81 Al								
11500	Yorcalnic	M-948	90.47 Cu, 2.97 Ni, 6.56 Al								
11501	Tempalloy B	M-8	89.2 Cu, 5 Ni, .8 Si, 5 Al	Cold rolled	160000	117000	.5		275	Corrosion resistant parts	Corrosion resisting
11502	Yuma Chrome Magnet Steel	M-76	C, Cr, bal. Fe							Magnets	
11503	Z-2	M-949	4 Al, 3 Cu, .03 Mg, bal. Zn	Die cast	50000		4		82	Gears, pumps, motor frames, hardware	Die castings
							8		87		
11504	Zamium		60 Ni, 40 Cr, Mn, W								
11505	Zelnicker Babbitts	M-950								Bearings	Babbitt
11506	Zetonia	Germ.								Bearings, bushings	White anti-friction
11507	Zeus	Germ.	80 Cu, 20 Ag							Safety fuses	
11508	Zincgrip	M-10	C, bal. Fe							Roofing, culverts	Galvanized sheets
11509	Zirkonal	Germ.	.5 Si, 15 Cu, 8 Mn, bal. Al						170-190		
11510	Z. N.	M-140	.45-.50 C, .85 Cr, .7 Mn, bal. Fe							Die casting dies	Hot work steel
11511	Z-Nickel	M-68	98.0 min. Ni, .20 C	Heat treated	150000	120000	20	30	300	Springs	Heat treatable, corrosion resisting
					180000	140000	10	15	350		
11512	Zurco Galvacote	M-290									
11513	Zurco Silvatex	M-290									

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11514	2-81 Molybdenum Permalloy	M-22	2 Mo, 81 Ni, 17 Fe							Cores for loading coils in telephones	High permeability
11515	1.7 V Permendur	M-22 M-205	1.7 V, 50 Co, bal. Fe								
11516	2 B (MC)	M-69	.35 C, 3 Cr, .25 Mn, .3 V, 13.5 W, bal. Fe							Tools	Tough
11517	3-C Die	M-389	C, alloy, bal. Fe							Tools, dies	Non-deforming
11518	6-6 Motung	M-1	C, 6 Mo, 6 W, Cr, V, bal. Fe							Tools, cutters	High speed steel
11519	8 CC Metal	M-265								Electrical contacts	60% cond.
11520	8:2 Copper-Silicon-Aluminum Alloy	M-137	8 Cu, 2.5 Si, .8 Fe, bal. Al	Cast	17000		1		70	Gear boxes, radiator tanks	
11521	11A45	M-64	.40 C, bal. Fe								Water hardening
11522	No. 11 Titan	M-32	1.05 C, bal. Fe							Tools	Water hardening
11523	2IVFS	M-951	2-5 Cu, 1-2.5 Ni, 0.5-2 Mg, Si, Fe, V, bal. Al								
11524	No. 35	M-34	C, Cr, bal. Fe							Hot work tools and dies	Hot work steel
11525	40D	M-28	Si, bal. Al								Same as Silumin
11526	41 S.M.	French	Al alloy							Ornaments	
11527	No. 50 Bronze	M-765	Sn, bal. Cu							Welding electrode for Cu, bronzes	
11528	Cyclops No. 67	M-114	.55 C, .75 Mn, .2 Mo, 2.0 Si, bal. Fe							Chisels, punches, rivet sets	Tough
11529	No. 67 Tap	M-24	1.2 C, .75 Cr, .25 Mn, .2 V, 1.5 W, bal. Fe							Dies, cutting tools, taps, drills	Oil hardening
11530	No. 70W	M-952	C, alloy, bal. Fe						64 Rc	Welding electrode	Oil hardening
11531	No. 71 M	M-765	C, alloy, bal. Fe						62 Rc	Welding electrode	Non-shrinking
11532	No. 72 Hot Work	M-765	C, alloy, bal. Fe						56 Rc	Welding electrode	
11533	89 MC	M-69	C, alloy, bal. Fe								
11534	Circle L-205D	M-74	.30 C, .4 Si, .8 Mn, .6 Cr, .6 Ni, bal. Fe	Cast	155000	125000	13	30	320	*Castings*	
11535	No. 332 Heat Resisting	M-765	C, alloy, bal. Fe							Welding electrode	Stainless
11536	No. 400P	M-765	C, alloy, bal. Fe							Welding rod	Tool steel
11537	Vascoloy Ramet Grade 2A9	M-329	W-Ta-C							Cutters	Sintered
11538	Durex Bronze	M-839	95 Cu, 5 Sn		30000 40000				65 100	Bearings	Sintered
11539	No. 1215 Air Hardening	M-765	C, alloy, bal. Fe						61 Rc	Welding rod	Air hardening
11540	2002 Special	M-96	C, W, Cr, V, bal. Fe								
11541	2129 Alloy	M-108									
11542	30.4 Hot Work	M-210	C, alloy, bal. Fe							Hot work tools and dies	Hot work steel
11543	3581 Chisel	M-40	.55 C, .7 Mn, .2 V, .35 Mo, 1.6 Si, bal. Fe							Chisels, pneumatic tools	
11544	No. 5545	M-765	Cu-Ni							Welding rod	
11545	No. 8510 Water Harden	M-765	C, alloy, bal. Fe						60 Rc	Welding rod	Tool steel
11546	No. 9500-1	M-216	95 Bi-5 Sn								
11547	Zip	M-783	.65 C, 4 Cr, 7.5 Co, 1.65 V, 17.5 W, .85 Mo, bal. Fe							Lathe, planer and shaper tools	High speed steel
11548	2B (HC)	M-69	.48 C, 2.75 Cr, .3 V, 11.25 W, bal. Fe							Piercing punches, mandrels, grippers, heading dies	Hot work steel
11549	2B (LC)	M-69	.30 C, 3.15 Cr, .3 V, 10 W, bal. Fe							Forming dies	Hot work steel
11550	No. 3074 Hot Work	M-365	.40-.45 C, 8-10 W, 2.5 Cr, .10-.15 V, bal. Fe							Hot work tools and dies	Hot work steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11514	2-81 Molybdenum Permalloy	M-22	2 Mo, 81 Ni, 17 Fe							Cores for loading coils in telephones	High permeability
11515	1.7 V Permendur	M-22 M-205	1.7 V, 50 Co, bal. Fe								
11516	2 B (MC)	M-69	.35 C, 3 Cr, .25 Mn, .3 V, 13.5 W, bal. Fe							Tools	Tough
11517	3-C Die	M-389	C, alloy, bal. Fe							Tools, dies	Non-deforming
11518	6-6 Motung	M-1	C, 6 Mo, 6 W, Cr, V, bal. Fe							Tools, cutters	High speed steel
11519	8 CC Metal	M-265								Electrical contacts	60% cond.
11520	8:2 Copper-Silicon-Aluminum Alloy	M-137	8 Cu, 2.5 Si, .8 Fe, bal. Al	Cast	17000		1		70	Gear boxes, radiator tanks	
11521	11A45	M-64	.40 C, bal. Fe								Water hardening
11522	No. 11 Titan	M-32	1.05 C, bal. Fe							Tools	Water hardening
11523	21VFS	M-951	2-5 Cu, 1-2.5 Ni, 0.5-2 Mg, Si, Fe, V, bal. Al								
11524	No. 35	M-34	C, Cr, bal. Fe							Hot work tools and dies	Hot work steel
11525	40D	M-28	Si, bal. Al								Same as Silumin
11526	41 S.M.	French	Al alloy							Ornaments	
11527	No. 50 Bronze	M-765	Sn, bal. Cu							Welding electrode for Cu, bronzes	
11528	Cyclops No. 67	M-114	.55 C, .75 Mn, .2 Mo, 2.0 Si, bal. Fe							Chisels, punches, rivet sets	Tough
11529	No. 67 Tap	M-24	1.2 C, .75 Cr, .25 Mn, .2 V, 1.5 W, bal. Fe							Dies, cutting tools, taps, drills	Oil hardening
11530	No. 70W	M-952	C, alloy, bal. Fe						64 Rc	Welding electrode	Oil hardening
11531	No. 71 M	M-765	C, alloy, bal. Fe						62 Rc	Welding electrode	Non-shrinking
11532	No. 72 Hot Work	M-765	C, alloy, bal. Fe						56 Rc	Welding electrode	
11533	89 MC	M-69	C, alloy, bal. Fe								
11534	Circle L-205D	M-74	.30 C, .4 Si, .8 Mn, .6 Cr, .6 Ni, bal. Fe	Cast	155000	125000	13	30	320	Castings	
11535	No. 332 Heat Resisting	M-765	C, alloy, bal. Fe							Welding electrode	Stainless
11536	No. 400	M-765	C, alloy, bal. Fe							Welding rod	Tool steel
11537	Vascoloy Ramet Grade 2A9	M-329	W-T-C							Cutters	Sintered
11538	Durex Bronze	M-839	95 Cu, 5 Sn		30000 40000				65 100	Bearings	Sintered
11539	No. 1215 Air Hardening	M-765	C, alloy, bal. Fe						61 Rc	Welding rod	Air hardening
11540	2002 Special	M-95	C, W, Cr, V, bal. Fe								
11541	2129 Alloy	M-108									
11542	3074 Hot Work	M-210	C, alloy, bal. Fe							Hot work tools and dies	Hot work steel
11543	3581 Chisel	M-40	.55 C, .7 Mn, .2 V, .35 Mo, 1.6 Si, bal. Fe							Chisels, pneumatic tools	
11544	No. 5545	M-765	Cu-Ni							Welding rod	
11545	No. 8310 Water Harden	M-765	C, alloy, bal. Fe						60 Rc	Welding rod	Tool steel
11546	No. 9500-1	M-216	95 Bi-5 Sn								
11547	Zip	M-783	.65 C, 4 Cr, 7.5 Co, 1.65 V, 17.5 W, .85 Mo, bal. Fe							Lathe, planer and shaper tools	High speed steel
11548	2B (HC)	M-69	.48 C, 2.75 Cr, .3 V, 11.25 W, bal. Fe							Piercing punches, mandrels, grippers, heading dies	Hot work steel
11549	2B (LC)	M-69	.30 C, 3.15 Cr, .3 V, 10 W, bal. Fe							Forming dies	Hot work steel
11550	No. 3074 Hot Work	M-365	.40-.45 C, 8-10 W, 2.5 Cr, .10-.15 V, bal. Fe							Hot work tools and dies	Hot work steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11551	Wizard	M-783	.45 C, .8 Cr, .85 W, bal. Fe							Pneumatic chisels, shock tools	
11552	Wortle Die	M-355	C, alloy, bal. Fe							Tools	
11553	Visto	M-344	C, Cr, V, W, bal. Fe							Tools, cutters	High speed steel
11554	V.L.W. 6	M-116									Same as K. S. Seewasser
11555	Vulcan Auto	M-275	C, Cr, Mo, bal. Fe							Drive shafts, spindles, clutch dogs	
11556	Trimo	M-954	C, alloy, bal. Fe							Pipe wrenches	
11557	Teenax	M-373	C, alloy, bal. Fe							Tools	Non-deforming
11558	Temp Alloy	M-451	C, alloy, bal. Fe							Steel castings	(Discontinued)
11559	Thermo Die	M-38	.45 C, 2.4 Cr, .2 V, bal. Fe							Al and Zn die casting dies	Resists heat checking
11560	Thermo Die	M-362	.40 C, 2.4 Ni, .65 Mn, .20 V, bal. Fe							Zn die casting dies	Resists heat checking
11561	Titanite	M-190 M-955 M-681	Ti, bal. Al		30000		6			Light alloy parts	
11562	Green Label	M-373	C, bal. Fe							Tools	
11563	Green Label	M-341	.5 C, 1.0 Cr, .75 Mn, .18 V, bal. Fe							Gears, crankshafts	Oil hardening, shock resisting
11564	Green Label	M-365	.7-.8 C, bal. Fe							Tools	
11565	Trojan	M-956	C, Si, Mn, bal. Fe								Wrought iron
11566	Truform Special	M-389	C, alloy, bal. Fe							Tools	Non-deforming
11567	Tufaloy	M-957	C, alloy, bal. Fe								Cast iron
11568	Tungsten Hot Work	M-365	.43 C, 2.5 Cr, .1 V, 9 W, bal. Fe							Hot shearing, hot punches, hot drawing	Hot work steel
11569	Aeterna 600 Metal	M-953	60 Cu, 40 Zn, Mn, Si		85000 90000					Gears, levers, cams, cranks	
11570	Agile Actarc	M-661	Pure Fe or low alloy steel							Welding electrode	For sheet metal
11571	Agile Silver Chisel Electrode	M-661	.8-1.0 C, 1.0 Si, 1.5 W, .3-.5 B, bal. Fe						40-62 Rc	Welding electrode for chisels and shock resisting tools	Tough, shock resisting
11572	Agile Silver A-C Electrode	M-661	.9 C, .7 Mn, .7 Cr, 1.5 W, bal. Fe						40-65 Rc	Welding electrode	Deposit should be heat treated
11573	Agile Silver D-C Electrode	M-661	1.8-2.2 C, 12-14 Cr, .5 V, .8 Mo, bal. Fe						40-64 Rc	Welding electrode for punches and cold working dies	Must be heat treated
11574	Aluminum	M-211								Bearing	Self-lubricating
11575	UHB-46	M-111a	.9 C, .3 Si, 1.1 Mn, .5 Cr, .5 W, .1 V, bal. Fe							Gauges, reamers, taps, hobs, knurling tools	Non-deforming, wear resisting
11576	Benson	M-959							27	Bearings	Babbitt
11577	Beryllium-Copper No. 175	M-960	97.5 Cu, 2.15 Be, .35 Ni								
11578	Bethlehem Moco	M-24	.8 C, 5 Mo, 2 V, 5.25 W, 4 Cr, 5.25 Co, bal. Fe							Cutting tools, taps, reamers	High speed steel
11579	Brockhouse	M-961	C, alloy, bal. Fe							Case hardening boxes, steam boiler parts	Heat resisting
11580	Carpenter Free Cut Invar 36	M-32	.12 max. C, .35 Mn, 36 Ni + Co, .20 Se, bal. Fe							Low expansion alloy	
11581	Carpenter 49	M-32	49 Ni, bal. Fe							Low expansion alloy	
11582	Carpenter Temperature Compensator 30	M-32	.15 C, 30 Ni, bal. Fe							Electrical equipment	Compensating alloy
11583	Chace No. 772	M-582	72 Mn, 18 Cu, 10 Ni	Rolled	115000	95000	6.5		220	Precision instruments rheostats	High electrical resistance

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11584	Chenite		Ti, V, Cr, Hf							Cutting tools, dies	
11585	Colmonoy No. 9	M-963								Welding alloy	For tipping tools
11586	Colmonoy WCR 100	M-963								Welding alloy	For tipping tools
11587	Colmonoy WCR 200	M-963								Welding alloy	For tipping tools
11588	Colmonoy WCR 300	M-963								Welding alloy	For tipping tools
11589	Colmonoy WCR 400	M-963								Welding alloy	For tipping tools
11590	Congo	M-140	.8 C, 4 Cr, 1.5 V, 4 W, 5 Mo, 14 Co, bal. Fe							Tools, cutters	High speed steel
11591	Corosoloy	M-964								Hard surfacing electrode	Corrosion resisting
11592	Agile Silver Red	M-661	.75 C, 4 Mo, 6 W, 4 Cr, .8 B, bal. Fe							Welding high speed steel tools	High speed steel
11593	Durface	M-717	C, Ni, Mo, bal. Fe							Hard facing alloy	
11594	Dufro Antifriction Metal	M-709								Bearings, bushings	Babbitt
11595	Econoloy	M-964								Welding rod, hard surfacing	Work hardening (Discontinued)
11596	Elektron A9	M-78	8.5 Al, .5 Zn, .2 Mn, bal. Mg	Cast	21200	15700	2		54	Sand castings	
11597	Elektron A10	M-78	9.5 Al, .5 Zn, .2 Mn, bal. Mg	Cast						Sand castings	
11598	Elektron AZ91	M-78	9.5 Al, .5 Zn, .2 Mn, bal. Mg	Cast						Die castings	
11599	Excelite	M-965	Co-Cr-W							Cutting tools	Cast
11600	Victory Cobalt	M-115	.85 C, 6 W, 5 Mo, 4 Cr, 2 V, 8.5 Co, bal. Fe							Cutting tools	High speed steel
11601	Fastell No. 41	M-53	Ag, Pd						80 Rf	Electrical contacts	Formerly No. 1
11602	Fastell No. 35	M-53	Pd, Ag, Ni						85 Rb	Electrical contacts	Formerly No. 2
11603	Fasaloy No. 3	M-53	Ag, Cu							Electrical contacts	
11604	Fasaloy No. 4	M-53	Ag, Cu							Electrical contacts	
11605	Fasaloy No. 5	M-53	Ag, Cu, Ni							Electrical contacts	
11606	Fasaloy No. 7	M-53	Ag, Cd							Electrical contacts	
11607	Fastell No. 51	M-53	Ag, Pt							Electrical contacts	Formerly No. 10
11608	Fastell No. 72	M-53	Au + others							Electrical contacts	Formerly No. 11
11609	Fasaloy No. 12	M-53	Pt, Au							Electrical contacts	
11610	Fasaloy No. 14	M-53	Pt, [illegible]							Electrical contacts	
11611	Fasaloy No. 24	M-53	Ag, [illegible]u							Electrical contacts	
11612	Fasaloy No. 136	M-53	Ag, [illegible]lloy						82 Rb	Electrical contacts, springs	
11613	Fasaloy No. 136	M-53	Ag, Ni							Electrical contacts	
11614	Fasaloy No. 138	M-53	Ag, Ni							Electrical contacts	
11615	Fasaloy No. 139	M-53	Ag, Ni							Electrical contacts	
11616	Fastell No. 31	M-53	Pd, Ru							Electrical contacts	Formerly No. 928
11617	Fastell No. 42	M-53	Ag, Pd							Electrical contacts	Formerly No. 1090
11618	Fastell No. 142	M-53	Ag, Ni							Electrical contacts	Formerly No. 2647
11619	Fastell No. 130	M-53	Ag, Cd							Electrical contacts	Formerly No. 3653
11620	Fastell E	M-53	Ag, Mo							Electrical contacts	Sintered
11621	Fastell UM	M-53	Ag, W							Electrical contacts	Sintered
11622	Fastell UP	M-53	Ag, W							Electrical contacts, circuit breakers	Sintered
11623	Fastell NL	M-53	Cu, W							Electrical contacts	Sintered. Formerly X
11624	G. E. C. Heavy Alloy	M-978	90 W, 7.5 Ni, 2.5 Cu		90000	83000	4		290	Screens in X-ray tubes	Sintered
11625	Giesche Z13	Germ.	4 Al, .5-1.0 Cu, .03 Mg, bal. Zn	Rolled	44000 71000				75 140		
11626	Giesche Z14	Germ.	.8-1.0 Al, .3-.4 Cu, bal. Zn	Rolled	31000 42500				40 70		
11627	Giesche ZL7	Germ.	4 Cu, .2 Al, bal. Zn	Rolled	28000 59600				45 100		
11628	Giesche ZO4	Germ.	4 Cu, bal. Zn								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11629	Glass Sealing "42"	M-32	.15 max. C, 1.0 Mn, 41.5 Ni, bal. Fe							Sealing into glass	Low expansion
11630	Grillo 2105	Germ.	5 Al, 1 Cu, .02 Ga, bal. Zn								
11631	Grillo 31010	Germ.	10 Al, 1 Cu, .02 Ga, bal. Zn								
11632	High Permeability "49"	M-32	1 C, 49 Ni, bal. Fe							Transformer cores	High permeability
11633	Honda New	Japan	6.7 Ti, 3.7 Al, 18 Ni, 27 Co, 45 Fe	Cast						Permanent magnet	
11634	Hot Work 8	M-24	C, 8.5 Mo, 1.5 V, 3.2 Cr, bal. Fe							Hot work tools and dies, punches	Hot work steel
11635	Armco Cold Rolled Paintgrip	M-10	Zinc flashed and bonderized sheet steel							Structural	
11636	KR Monel	M-68	66 Ni, 29 Cu, .9 Fe, .85 Mn, .5 Si, .15 C, 2.75 Al	Hot rolled	90000	40000	45		140	Springs	Corrosion and abrasion resistant
					120000	85000	30		225		
				Aged	140000	100000	30	40	260		
					170000	130000	15		320		
11637	LAC 10	British	.15-.35 Mg, .6 Si, 9-10.5 Cu, .6 Mn, .3-1.0 Fe, bal. Al							Pistons	
11638	LAC 112	British	.3 Mg, 7-13 Si, 2-3 Cu, .5 Mn, 1.5 Ni, 1.2 Zn, bal. Al							Die castings	
11639	LAC 113A	British	1.3 Si, 2.5-4.5 Cu, 1.0 Fe, 9-13 Zn, bal. Al							Sand castings	
11640	Latrobe LPD	M-73	C, alloy, bal. Fe							Hot work tools and dies	Hot work steel
11641	Sabeco No. 16	M-966	69-71 Cu, 15-16.5 Sn, 13.5-14.5 Pb							Friction rings, heavy duty bearings	
11642	S-Babbitt	M-815	15 Sb, 1 As, 1 Sn, .5 Cu,	70° F.	10350		2		20	Bearings, liners	Babbitt
		M-314	bal. Pb	392° F.	1260		95				
11643	Silvaz 3	M-48	.5 B, 35-40 Si, 6 Al, 10 Ti, 6 Zr, 10 V							Hardening constituent in steel	Adding B to steel
11644	Siminal	M-398	20 Si, 20 Mn, 20 Al, bal. Fe							Steel making	
11645	Raco HD No. 11	M-986	C, bal. Fe							A.C. welding electrodes	For mild steel
11646	Star-Boron	M-32	.5-.6 C, 4-4.5 Cr, 1.5-2 W, 1.5-2 V, 8-9 Mo, 7.75-8.5 Co, .4-.6 B, bal. Fe							Tools, cutters	High speed steel
11647	Strainfree Elastuf Penn	M-307	.35-.45 C, 1.25 Mn, bal. Fe	Cold drawn	120000	110000	10	30	269	Gears, worms, shafts, spindles	
					135000	120000	20	45	300		
11648	Sumet Bronze SM22	M-71	10 Pb, Sn, bal. Cu							Bearings	
11649	Superior Copper Steel	M-967	C, alloy, Cu, bal. Fe							To replace solid copper	Cu plated corrosion resistant steel
11650	Super Oilite 16	M-211								Self lubricating bearings	High oil content
11651	Super Star-Mo	M-57	.80-.88 C, 5-6 W, 3.75-4.5 Cr, 1.7-1.9 V, 4-5 Mo, 8.5-9.5 Co, bal. Fe							Tool bits	High speed steel
11652	Supraloy	M-964								Hard surfacing electrode	
11653	Raco HD6	M-986	C, bal. Fe							Welding electrode	For mild steel
11654	Timken Alcrosil No. 3	M-376	.12 C, 1 Si, .5 Al, 2.8 Cr, .23 Ni, .5 Mo, bal. Fe								
11655	Tombasil A	M-123	80.5-82.5 Cu, 12.7-14.7 Zn, 3.8-5.8 Si								
11656	U-Loy	M-97	.06-.10 C, .25-.40 Mn, .20 min. Cu, bal. Fe	Rolled	42000	27000	34	42		Culverts, roofing	Sheets
					45000	30000	36	47			
11657	Circle L-B	M-74	.25 C, .40 Si, .65 Mn, bal. Fe		70000	40000	30	50	125	Steel castings	
11658	Raco HD 8	M-986	C, bal. Fe							Welding electrode	For mild steel
11659	Waraloy 20X	M-959	20 Sn, 1.25 Ag, bal. Pb		7000		15			Solders	M.P.-440-490° F.
11660	Waraloy 30X	M-959								Solder	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11661	Zamak Alpha	Germ.	4 Al, .5-1 Cu, .03 Mg, bal. Zn	Rolled	44000				75		
					71000				140		
11662	Zamak Beta	Germ.	10 Al, .7 Cu, .03 Mg, bal. Zn	Rolled	45000				75		
					78000				160		
11663	Zamak Eta	Germ.	10 Al, .3 Cu, bal. Zn	Rolled	31000				55		
					45000				65		
11664	Zamak Eta H	Germ.	10 Al, .3 Cu, .01 Mg, bal. Zn		56700				100		
					70000				130		
11665	Zinkal M	Germ.	1 max. Mn, bal. Zn	Rolled	21300				25		
					35500				40		
11666	Z-1R	Germ.	.8-1.0 Al, .3-.4 Cu, bal. Zn	Rolled	31000				40		
					42500				70		
11667	7-70 Perminvar		.6 Mn, 70 Ni, 7 Co, 22.4 Fe							Magnets	Soft
11668	7.5-45-25 Mo-Perminvar		.6 Mn, 7.5 Mo, 45 Ni, 25 Co, 21.9 Fe							Magnets	Soft
11669	45-25 Perminvar	M-22	.6 Mn, 45 Ni, 25 Co, 29.4 Fe							Magnets, coils, transformers	Soft
11670	2 V-Permendur		49 Co, 49 Fe, 2 V							Magnets	Soft
11671	Permendur		50 Co, 50 Fe							Magnets	Soft
11672	12.5-80 Mo-Permalloy		12.5 Mo, 80 Ni, 7.5 Fe							Magnets	Soft
11673	78.5 Permalloy		.6 Mn, 78.5 Ni, 20.9 Fe							Magnets	Soft
11674	45 Permalloy		54.4 Fe, 45 Ni, .6 Mn							Magnets	Soft
11675	4-79 Mo-Permalloy		.6 Mn, 4 Mo, 79 Ni, 16.4 Fe							Magnets	Soft
11676	Hurbenium "B"	M-892	91 Pb, 8 Sn, 1 Bi							Hot dip plating	
11677	Hardsteel No. 2	M-861	47 Co, 26.8 Cr, .7 Mo, trace B, 2.7 Ni, 1.6 W, .4 V, 2 Fe							Hard drills	
11678	Napraloy	M-952	4.5 C, 24 Cr, bal. Fe						60 Rc	Welding rod, hard facing electrode	
11679	Promet	M-956	Sn, bal. Cu							Bearings and wearing parts	Heat treated bronze
11680	Rockrite	M-957	1.0 C, 1.0 Cr, bal. Fe							Bearings, liners	SAE 52100 tubing
11681	Satco	M-[illegible]	94 98 Pb, Sn, Ca				8		22	Bearings	Lining for steel backed bearings
							12		24		
11682	Hewitt Copper-[illegible]	M-959			11050				24	Bearings	Babbitt M.P.-365-590° F.
11683	Hewitt Genu[illegible]	M-9[illegible]	Sn-Cu-Sb		15150				29	Bearings	Babbitt M.P.-460-682° F.
11684	Z-3	M-949	4 Al .04 Mg, bal. Zn	Die cast	37000		4		60	Gears, frames, hardware, die castings	
							6		65	Forgings	
11685	Zineli	M-975	C bal. Fe							Cutting tools for finishing and boring	Sintered, wear resisting
11686	Willeys E-5	M-976	W C							Guide shoes, tools	Abrasion resisting
11687	Trancinyl	M-977	C, alloy, bal. Fe							Steel castings	
11688	Circle L-205 C	M-74	.30 C, .4 Si, .8 Mn, .6 Cr, .2 Mo, .6 Ni, bal. Fe	Cast	125000	105000	16	40	260	Pump liners, gears, castings	Corrosion resisting
11689	McGill No. 1	M-181	Al, bal. Cu							Hydraulic pressure castings	
11690	McGill No. 3	M-181	Sn, bal. Cu							Welding electrode	
11691	Raco Type D	M-986	C, bal. Fe							Light alloy parts	Sheets
11692	Revere Magnesium FS-1	M-238	Al-Zn, bal. Mg							Soft magnets	
11693	3.8-78.5 Cr. Permalloy		3.8 Cr, .6 Mn, 78.5 Ni, 17.1 Fe							Immersion heaters	Corrosion and heat resisting
11694	L-Nickel	M-68	99.4 Ni, .1 Cu, .15 Fe, .2 Mn, .05 Si, .02 max. C.	Annealed	55000	15000	55	75	80		
					75000	25000	35	60	100		
11695	Mocar	M-959	Pb							Bearings for connecting rods and camshafts	Babbitt
11696	Mogul Alloy Babbitt	M-709	Sn, Sb, Cu							Engine bearings	Babbitt, steel and bronze back

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11697	Mo-Mang	M-9	.7-.9 C, 12-14 Mn, bal. Fe							Welding rod	For Mn steel
11698	Mumetal	M-1	71-76 Ni, 4.5-6 Cu, 2 Cr, bal. Fe							Audio transformers, sensitive relays	High permeability
11699	NDHTC-Oilite	M-211			80000						Ferrous, non-porous
11700	Nurex	M-89	C, Cr, Mn, bal. Fe							Mill balls, linings	Corrosion and abrasion resisting
11701	Paliney No. 6	M-349	Pd, Pt, Ag, Cu, Ni	Heat treated	170000		15		270	Pivots, springs, bearings, electrical contacts	Heat treatable, non-magnetic
11702	Paliney No. 7	M-349	35 Pd, 10 Pt, 30 Ag, 15 Cu, 10 Au	Heat treated	180000	150000	10		280	Springs, pivots, bearings, contacts	Non-magnetic, corrosion and wear resisting
11703	Permite 1002	M-6	10 Cu, 1.5 Fe, .4 Mg, bal. Al							Pistons, pumps	Permanent mold castings
11704	Plate-Loy		Pb							Hot lead plating	
11705	Powdiron 55 P	M-632	5 Cu, bal. Fe		12000				40	Bearing	Porous, sintered, 32% oil
11706	Powdiron 59-IC	M-632	Fe		12000					Bearing	25% oil, impregnated
11707	Powdiron 61-IC	M-632	90 Fe, 10 Cu		30000				90	Bearings	25% oil impregnation, sintered
11708	Precision A-74	M-887	7.5 Si, 4 Cu, bal. Al							Die castings	(Obsolete)
11709	Precision ZN-4	M-887	1.5 Al, 1 Cu, .4 Mg, bal. Zn							Die castings	(Obsolete)
11710	Prize Ribbon	M-959	Sn, Cu, Sb		15200				34.4	Bearings	Babbitt
11711	Radium A	M-959			12850				28.6	Bearings	Babbitt M.P.-437-699° F.
11712	Ranalloy Type A	M-964								Hard surfacing electrode	
11713	Ranalloy Type B	M-964								Hard surfacing electrode	
11714	Ranalloy Type C	M-964								Hard surfacing electrode	
11715	Buff-Aloy	M-962	High C, bal. Fe							Wire cloth	Abrasion resisting
11716	NE-8024		.22-.28 C, 1.0-1.3 Mn, .10-.20 Mo, .04 S, .04 P, .20-.35 Si, bal. Fe								
11717	NE-8124		.22-.28 C, 1.3-1.6 Mn, .25-.35 Mo, .04 P, .04 S, .2-.35 Si, bal. Fe								
11718	NE-8233		.30-.36 C, 1.3-1.6 Mn, .10-.20 Mo, .04 P, .04 S, .20-.35 Si, bal. Fe								
11719	NE-8245		.42-.49 C, 1.3-1.6 Mn, .10-.20 Mo, .20-.35 Si, .04 P, .04 S, bal. Fe								
11720	NE-8339		.35-.42 C, 1.3-1.6 Mn, .20 Mo, .04 P, .04 S, .20-.35 Si, bal. Fe								
11721	NE-8442		.38-.45 C, 1.3-1.6 Mn, .30-.40 Mo, .2-.35 Si, .04 S, .04 P, bal. Fe								
11722	NE-8447		.43-.50 C, 1.3-1.6 Mn, .30-.40 Mo, .20-.35 Si, .04 P, .04 S, bal. Fe								
11723	NE-8547		.43-.50 C, 1.3-1.6 Mn, .4-.6 Mo, .2-.35 Si, .04 S, .04 P, bal. Fe								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11724	NE-8620		.18-.23 C, .70-.95 Mn, .4-.6 Ni, .4-.6 Cr, .15-.25 Mo, bal. Fe								
11725	NE-8630		.27-.33 C, .70-.95 Mn, .4-.6 Ni, .4-.6 Cr, .15-.25 Mo, bal. Fe								
11726	NE-8724		.22-.28 C, .70-.95 Mn, .4-.6 Ni, .4-.6 Cr, .2-.3 Mo, bal. Fe								
11727	NE-8739		.35-.42 C, .75-1.00 Mn, .4-.6 Ni, .4-.6 Cr, .2-.3 Mo, bal. Fe								
11728	NE-8744		.40-.47 C, .75-1.0 Mn, .4-.6 Ni, .4-.6 Cr, .2-.3 Mo, bal. Fe								
11729	NE-8749		.45-.52 C, .75-1.0 Mn, .4-.6 Ni, .4-.6 Cr, .2-.3 Mo, bal. Fe								
11730	NE-8817		.15-.20 C, .70-.95 Mn, .4-.6 Ni, .4-.6 Cr, .3-.4 Mo, bal. Fe								
11731	NE-8849		.45-.52 C, 1.0-1.3 Mn, .4-.6 Ni, .4-.6 Cr, .3-.4 Mo, bal. Fe								
11732	NE-1330		.28-.33 C, 1.6-1.9 Mn, .20-.35 Si, bal. Fe								
11733	NE-1335		.33-.38 C, 1.6-1.9 Mn, .20-.35 Si, bal. Fe								
11734	NE-1340		.38-.43 C, 1.6-1.9 Mn, .20-.35 Si, bal. Fe								
11735	NE-1345		.43-.48 C, 1.6-1.9 Mn, .20-.35 Si, bal. Fe								
11736	NE-1350		.48-.53 C, 1.6-1.9 Mn, .20-.35 Si, bal. Fe								
11737	NE-8020		.13-.23 C, 1.0-1.3 Mn, .20-.35 Si, .10-.20 Mo, bal. Fe								
11738	NE-8022		.20-.25 C, 1.0-1.3 Mn, .20-.35 Si, .15-.20 Mo, bal. Fe								
11739	NE-8613		.10-.15 C, .7-.9 Mn, .15-.25 Mo, .4-.6 Cr, .4-.6 Ni, bal. Fe								
11740	NE-8615		.13-.18 C, .7-.9 Mn, .15-.25 Mo, .4-.6 Cr, .4-.6 Ni, bal. Fe								
11741	NE-8617		.15-.20 C, .7-.9 Mn, .15-.25 Mo, .4-.6 Cr, .4-.6 Ni, bal. Fe								
11742	NE-8715		.13-.18 C, .7-.9 Mn, .2-.3 Mo, .4-.6 Cr, .4-.6 Ni, bal. Fe								
11743	NE-8722		.20-.25 C, .7-.9 Mn, .2-.3 Mo, .4-.6 Cr, .4-.6 Ni, bal. Fe								
11744	NE-8735		.33-.38 C, .75-1.0 Mn, .2-.3 Mo, .4-.6 Cr, .4-.6 Ni, bal. Fe								
11745	NE-8740		.38-.43 C, .75-1.0 Mn, .2-.3 Mo, .4-.6 Cr, .4-.6 Ni, bal. Fe								
11746	NE-8949		.45-.50 C, 1.0-1.3 Mn, .3-.4 Mo, .4-.6 Cr, .4-.6 Ni, bal. Fe								
11747	NE-9255		.55-.60 C, .7-.95 Mn, 1.8-2.2 Si, bal. Fe								
11748	NE-9260		.55-.65 C, .75-1.0 Mn, 1.8-2.2 Si, bal. Fe								
11749	NE-9262		.55-.65 C, .75-1.0 Mn, 1.8-2.2 Si, .2-.4 Cr, bal. Fe								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11750	NE-9415		.13-.18 C, .8-1.1 Mn, .4-.6 Si, .08-.15 Mo, .2-.4 Cr, .2-.4 Ni, bal. Fe								
11751	NE-9420		.18-.23 C, .8-1.1 Mn, .4-.6 Si, .08-.15 Mo, .2-.4 Cr, .2-.4 Ni, bal. Fe								
11752	NE-9422		.20-.25 C, .8-1.1 Mn, .4-.6 Si, .08-.15 Mo, .2-.4 Cr, .2-.4 Ni, bal. Fe								
11753	NE-9430		.28-.33 C, .9-1.2 Mn, .4-.6 Si, .08-.15 Mo, .2-.4 Cr, .2-.4 Ni, bal. Fe								
11754	NE-9435		.33-.38 C, .9-1.2 Mn, .4-.6 Si, .08-.15 Mo, .2-.4 Cr, .2-.4 Ni, bal. Fe								
11755	NE-9437		.35-.40 C, .90-1.2 Mn, .4-.6 Si, .08-.15 Mo, .2-.4 Cr, .2-.4 Ni, bal. Fe								
11756	NE-9440		.38-.43 C, .9-1.2 Mn, .4-.6 Si, .08-.15 Mo, .2-.4 Cr, .2-.4 Ni, bal. Fe								
11757	NE-9442		.40-.45 C, 1.0-1.3 Mn, .4-.6 Si, .08-.15 Mo, .2-.4 Cr, .2-.4 Ni, bal. Fe								
11758	NE-9445		.43-.48 C, 1.0-1.3 Mn, .4-.6 Si, .08-.15 Mo, .2-.4 Cr, .2-.4 Ni bal. Fe								
11759	NE-9450		.48-.53 C, 1.2-1.5 Mn, .4-.6 Si, .08-.15 Mo, .2-.4 Cr, .2-.4 Ni bal. Fe								
11760	NE-9537		.35-.40 C, 1.2-1.5 Mn, .4-.6 Si, .15-.25 Mo, .4-.6 Cr, .4-.6 Ni, bal. Fe								
11761	NE-9540		.30-.43 C, 1.2-1.5 Mn, .4-.6 Si, .15-.25 Mo, .4-.6 Ni, .4-.6 Cr, bal. Fe								
11762	NE-9542		.40-.45 C, 1.2-1.5 Mn, .4-.6 Si, .15-.25 Mo, .4-.6 Cr, .4-.6 Ni, bal. Fe								
11763	NE-9550		.48-.53 C, 1.2-1.5 Mn, .4-.6 Si, .15-.25 Mo, .4-.6 Cr, .4-.6 Ni, bal. Fe								
11764	NE-9630		.28-.33 C, 1.2-1.5 Mn, .4-.6 Si, .4-.6 Cr, bal. Fe								
11765	NE-9635		.33-.38 C, 1.2-1.5 Mn, .4-.6 Si, .4-.6 Cr, bal. Fe								
11766	NE-9637		.35-.40 C, 1.2-1.5 Mn, .4-.6 Si, .4-.6 Cr, bal. Fe								
11767	NE-9640		.38-.43 C, 1.2-1.5 Mn, .4-.6 Si, .4-.6 Cr, bal. Fe								
11768	NE-9642		.40-.45 C, 1.3-1.6 Mn, .4-.6 Si .4-.6 Cr, bal. Fe								
11769	NE-9645		.43-.48 C, 1.3-1.6 Mn, .4-.6 Si, .4-.6 Cr, bal. Fe								

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11770	NE-9650		.48-.53 C, 1.3-1.6 Mn, .4-.6 Si, .4-.6 Cr, bal. Fe								
11771	NE-52100A		.95-1.1 C, .25-.45 Mn, .20-.35 Si, .08 max. Mo, 1.3-1.6 Cr, .08 max. Ni, bal. Fe								
11772	NE-52100B		.95-1.1 C, .25-.45 Mn, .20-.35 Si, .08 max. Mo, .90-1.15 Cr, .35 max. Ni, bal. Fe								
11773	NE-52100C		.95-1.1 C, .25-.45 Mn, .20-.35 Si, .08 max. Mo, .4-.6 Cr, .35 max. Ni, bal. Fe								
11774	NE-9261		.55-.65 C, .75-1.0 Mn, 1.8-2.2 Si, .10-.25 Cr, bal. Fe								
11775	NE-9425		.23-.28 C, .80-1.1 Mn, .20-.35 Si, .3-.5 Cr, .3-.6 Ni, .08-.15 Mo, bal. Fe								
11776	NE-9545		.43-.48 C, 1.2-1.5 Mn, .4-.6 Si, .4-.6 Cr, .4-.7 Ni, .15-.25 Mo, bal. Fe								
11777	Sandusky No. 5	M-295	C, 1.25-1.5 Ni, bal. Fe		25000				180	Cast iron rolls	Centrifugal casting
					40000				250		
11778	W-Al-Co Type 2	M-939								Gas welding rod	For Al
11779	W-Al-Co Type 1	M-929								Arc welding electrode	For Al
11780	Lunorium		14.9 Cr, .9 Co, 55.6 Ni, 18.5 Mo, 4 W, 5 Fe, .2 Mn, .4 Si, .2 C	Cast	69000	32000	1.4				
11781	Niranium		28.8 Cr, 64.2 Co, 4.3 Ni, 2 W, .1 Si, .2 C, .7 Al	At 1000° C.	82000	43000	.7				
				At 700° C.	85000	47000	1.3				
11782	Stoody 6	M-202	Co-Cr-W							Hard facing alloy	Impact resistant
11783	Damascite									Gears, retainers, ball bearings	Sintered
11784	Stressite									Gears, retainers, ball bearings	Sintered
11785	Fluomastrip	M-445	C, bal. Fe							Structural	Cold rolled strip steel (Discontinued)
11786	Sup- DBL	M-1	C, V, Mo, Co, bal. Fe							Tools, cutters	High speed steel
11787	Ampcolo Grade 45-22	M-13	Fe, Ni, bal. Cu		95000	50000			207		Extruded
					105000	55000			229		
11788	Electrite CO-6	M-73	.88 C, 5.5 W, 4 Cr, 1.75 V, 4.5 Mo, 9 Co, bal. Fe							Tools, cutters	High speed steel
11789	Armco Aluminized Steel	M-10	Sheet steel coated with Al		45000	30000	15		70 Rb	Structural, mufflers	Corrosion resistant
11790	Rex MMM	M-38	.85 C, 4 Cr, 1.6 V, 5-6 W, 4-5 Mo, 5-5.5 Co, bal. Fe							Cutters, tools, reamers, drills	High speed steel
11791	Ajax		70-30 Fe, 25-50 Ni, 5-20 Cu							Bearings	
11792	Aerolite		97 Al, 1.2 Cu, 1.0 Fe, .5 Si, .4 Mg							Pistons, auto parts	
11793	Bethlehem Air Hardening	M-24	.95 C, 2 Mn, .23 Si, 1.9 Cr, 1.0 Mo, bal. Fe							Tools, dies	
11794	Maxel No. 3	M-235	.45 C, 1-1.2 Mn, .4-.6 Cr, bal. Fe	Rolled	130000	100000	22	62	260	Screws, racks, shafts, gear	
				Heat treated	280000	190000	7.5	29	550		
11795	Maxel No. 2	M-235	.04 C, 1-1.2 Mn, bal. Fe	Rolled	90000	50000	35	60		Shafts, gears	
					110000	65000	23	50			
11796	Genelite	M-306	70.18 Cu, 13.72 Sn, 9 Pb, 5.35 graphite, .2 Fe, 1.4 Zn							Bearings for aero engines	Synthetic bronze
11797	Titan Bronze	M-122	60.0-60.5 Cu, .65-.85 Sn, bal. Zn	Annealed	74700	40300	34	37	101	Marine shafts, fittings	Corrosion resisting
				Drawn	83500	52500	31	44			

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11798	Turbadium Bronze	M-309	51 Cu, .4 Sn, .3 Pb, 2 Mn, 1.75 Ni, 1.3 Fe, bal. Zn							Propellers	
11799	Berlin No. 2	Germ.	48 Cu, 24 Zn, 24 Ni, 3.6 Fe							Ornamental parts, stampings	
11800	Chase Telnic Bronze	M-33	88.5 Cu, 1.1 Ni, .22 P, .5 Te, 9.68 Zn	Drawn	72000	62000	24	50		Forgings and screw machine parts	Heat treatable
11801	Hi-Tem Iron No. 7	M-23	C, alloy, bal. Fe							Retorts, dye and paint equipment	Corrosion and heat resisting, cast iron
11802	Osmiridium Siserokite		57 Os, 34Rh+Ir, 8 Ru							Pen points	
11803	Oriede B		90-81 Cu, 10-15 Zn, 0-4.9 Sn							Hardware, ornamental work	French gold
11804	Nickel Silver Grade B	M-98	55 Cu, 18 Ni, 27 Zn				40		175	Cutlery, jewelry, plumbing	Corrosion resisting
11805	Permalloy Standard	M-22	78.5 Ni, 21.5 Fe, .04 C, .37 Co, .022 Mn							Loading submarine cables	High elec. resisting
11806	Nichrome II	M-44	66 Ni, 22 Cr, bal. Fe		100000					Electric resisting units, annealing pots	Heat and corrosion resisting
11807	Corsonite B	M-280	Cu-Co-Si							For Cu alloys	Foundry alloy
11808	Corsonite C	M-280	Cu-Fe-Si							For Cu alloys	Foundry alloy
11809	Corsonite D	M-280	Cu-Cr-Si							For Cu alloys	Foundry alloy
11810	Corsonite E	M-280	Cu-Cr							For Cu alloys	Foundry alloy
11811	Corsonite F	M-280	Cu-Co							For Cu alloys	Foundry alloy
11812	Enduro S-15	M-97	12.5-14.5 Cr, .5 Ni, .12-.18 C, .5 Si, bal. Fe		100000	80000	25	55		Pump shafts	Corrosion resisting (Discontinued)
11813	Durex Bronze	M-839	89 Cu, 10 Sn, Graphite 0-6	Sintered	10000 25000		2.5		25 40	Bearings	Sintered
11814	Auromet No. 56	M-603	80 Cu, 10.5 Al, 5 Fe, 4.5 Ni		90000	56000	6	10	185	Gears, machine and structural parts	Die castings, corrosion and wear resisting
11815	Auromet No. 52	M-603	86.5 Cu, 9.5 Al, 2.5 Fe, 1.5 Ni		90000	37500	20	20	135	Gears, machine and structural parts	Die castings, corrosion and wear resisting
11816	Auromet No. 12	M-603	87.5 Cu, 9 Al, 2.5 Fe, 1 Ni		80000	29000	30	30	125	Gears, machine and structural parts	Die castings, corrosion and wear resisting
11817	Alloy Iron	M-139	C, Ni, Cr, bal. Fe						147 255	Valve gates, castings	
11818	Carbon Moly Steel	M-139	.25-.45 C, .8-1.1 Cr, .15-.25 Mo, bal. Fe	Heat treated					197 401	Castings	Abrasion and wear resisting, heat treated
11819	Hadfields Manganese Steel	M-139	1.0-1.4 C, 10-14 Mn, bal. Fe	Heat treated	80000 120000	30000 50000	25 35	20 35	170 201	Rails, wear plates, castings	Non-magnetic, wear resisting
11820	Hadfields Cr-Mn Steel	M-139	1.0-1.4 C, 10-14 Mn, 2.8-3.1 Cr, bal. Fe	Heat treated	80000 140000	35000 55000	20 30	15 30	201 255	Wear resisting castings	Non-magnetic
11821	Kissock Steel	M-139	.65-.75 C, 1.9-2.0 Ni, 1.3-1.6 Cr, .35-.45 Mo, bal. Fe						301 550	Castings	Wear resisting
11822	B-36	M-399	86-90 Cu, 6-8 Sn, 2-4 Pb, 1-2 Ni, .2-.7 P		35000 45000				75	Locomotive main cylinder packing and segmental rings	Wear resisting
11823	B-23 Aero Bronze	M-399	78-82 Cu, 15-17 Sn, 4-6 Pb, .5 max. Fe, .5 max. Zn	Sand cast	45000				130 156	Hydraulic sealing rings	
11824	B-18	M-399	78-82 Cu, 18-19.5 Sn, .5 max. Pb, .5 max. Fe, .5 max. Zn		45000 55000				165 195	Oil sealing rings	Corrosion and acid resisting
11825	B-19	M-399	78-82 Cu, 12-14 Sn, 4-6 Pb, .75-1.25 Ni		40000				100	Locomotive main cylinder packing and segmental rings	
11826	Airomat 33 Self-Hardening	M-353	.33 C, 2.5 Cr, .75 Mn, 1.0 Mo, .75 Si, .5 Cu, bal. Fe							Shock tools, dies, punches, shears	Air hardening
11827	Amotun	M-353	.85 C, 4 Cr, 6 Co, 1.75 V, 1.5 W, 8 Mo, bal. Fe							Cutting tools	High speed steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin No.	Uses	Remarks
11828	Atlantic "V"	M-353	.8 C, 4.25 Cr, 2 V, 18.5 W, .65 Mo, bal. Fe							Cutting tools	High speed steel
11829	Atsil	M-353	.5 C, .6 Mn, .5 W, .3 Mo, 1.3 Si, bal. Fe							Shear blades, rivet sets, cutting tools	Shock resisting
11830	Ampco Trode 10	M-13	Al, bal. Cu		60000 70000	25000 32000	25 30	28 30	110 130	Coated welding electrode	Al bronze
11831	Ampcoloy 45	M-13									
11832	Mangaloy	M-964	C, bal. Fe								
11833	Manganend 2M	M-677	.10 C, 1.6 Mn, .35 Mo, bal. Fe							Welding electrode	
11834	Chromend 16/7	M-677	.15 C, 16 Cr, 7 Ni, bal. Fe							Welding electrode	Stainless
11835	Chromend KMO	M-677	.08 C, 2 Mo, 18 Cr, 13 Ni, bal. Fe							Welding electrode	Stainless
11836	Chromang	M-677	.10 C, 4 Mn, 19 Cr, 9 Ni, bal. Fe							Welding electrode	Stainless
11837	Carend	M-677	.03 C, bal. Fe							Welding electrode for sheet metal	Armco iron type
11838	Bronzend P	M-677	5 Sn, 95 Cu							Welding electrode	
11839	Mocasco 40	M-601	C, .35 Mo, bal. Fe		40000				200	Cylinder heads and liners, gears, valves	
11840	F-37	M-399	2.9-3.9 T.C., 2.2-3.1 Si, .4-.8 Mn, .9-1.3 Mo, .2-.4 Cr, .8-1.25 Ni, bal. Fe		65000				290 350	Aero and auto piston rings	Impact resisting
11841	N. D. S.	M-73	.75 C, 1.0 Cr, 1.75 Ni, bal. Fe							Tools	Shock resisting
11842	W. T.	M-73	1.25 C, 1.35 W, .4 Cr, .25 Mo, bal. Fe							Taps	
11843	T. N. W.	M-73	.88 C, 3.85 Cr, 1.7 V, 8 Mo, bal. Fe							Tools, cutters	High speed steel
11844	Select M	M-73	.90 C, 3.5 Cr, .4 Mo, bal. Fe							Hot work tools and dies	Hot work steel
11845	M. G. R.	M-73	.55 C, 1 Si, .3 Mn, 1.25 W, 5 Cr, 1.25 Mo, bal. Fe							Hot work tools and dies	Hot work steel
11846	L. C. X.	M-73	.03 C, .15 Si, .15 Mn, .03 max. Cr, bal. Fe							Dies, tools, cutters	
11847	S. N. C.	M-73	.56 C, 2.0 Si, .9 Mn, .25 Cr, .3 V, bal. Fe							Tools	
11848	HV-6	M-73	1.15 C, .3 Si, 5.75 W, 4 Cr, 3 V, 5.25 Mo, bal. Fe							Tools, cutters	High speed steel
11849	L. C.	M-73	.03 C, .15 Si, .15 Mn, .03 max. Cr, bal. Fe							Tools, cutters, dies for plastics	
11850	Z. T. M.	M-73	.45 C, .50 Si, .75 Mn, .80 Cr, .32 Mo, bal. Fe							Tools, dies, cutters	High speed steel
11851	"V" Moly High Speed	M-81	.80 C, 5.5 W, 4 Cr, 4.25 Mo, 1.5 V, bal. Fe							Tools, dies	High speed steel
11852	Dycast	M-73	.35 C, .95 Si, 1.25 W, 5 Cr, 1.25 Mo, bal. Fe							Die casting dies	
11853	Cobalt Magnet 37%	M-73	.90 C, 2.25 W, 4.25 Cr, 38 Co, bal. Fe							Electrical equipment	Magnet steel
11854	Standard Carbon	M-73	.80-1.3 C, .2 Si, .25 Mn, .10 max. Cr, bal. Fe							Tools	Water hardening
11855	Genessee Nickel Ni-Resist	M-500	C, 2 Cr, 16 Ni, bal. Fe							Castings	Corrosion resisting
11856	Genessee 500	M-500	C, 2 Cr, 4.5 Ni, bal. Fe							Castings	Corrosion and abrasion resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11857	Eclipsaloy No. 1	M-776	3.0-4.5 Si, 1.0-1.8 Fe, 1.5-3.0 Zn, bal. Cu	Cast	45000	15000	15		85	Gears, shafts	
					53000	20000	15		125		
11858	Eclipsaloy No. 2	M-776	60-65.5 Cu, .5-1.5 Sn, .5 max. Fe, 1.0 max. Pb, bal. Zn	Cast							
11859	Eclipsaloy No. 4	M-776	3.75-4.5 Cu, 1.2-1.7 Mg, 1.8-2.2 Ni, .75 max. Fe, bal. Al	Heat treated	45000	20000	1		80	Pistons, cylinders, heads	Heat resisting, heat treatable
					52000	24000	0.5		90		
11860	Eclipsaloy No. 5	M-776	84-86 Cu, 4-6 Sn, 4-6 Zn, 4-6 Pb	Cast	27000		15		58	Hydraulic castings, valves	
11861	Eclipsaloy No. 6	M-776	5.5-6.5 Sn, 1-2 Pb, 1.5-5.0 Zn, 1 max. Ni, bal. Cu	Cast	34000	16000	22		48	Pressure tight castings, valves	
11862	Eclipsaloy No. 12	M-776	86-89 Cu, 9-11 Sn, 1-3 Zn	Cast	40000		20			Bushings, bearings, valves	
11863	Eclipsaloy No. 13	M-776	63-68 Cu, 19.5-23.5 Zn, 2.5-5.0 Mn, 3-6 Al, 2-4 Fe	Cast	115000		12		240	Pistons, gears, shafts	Corrosion and shock resisting
11864	Eclipsaloy No. 15	M-776	5.3-6.7 Al, 2.5-3.5 Zn, bal. Mg	Cast	24000	10000	4		48	Light alloy parts, castings	
				Heat treated	32000	15000	3		65		
11865	Eclipsaloy No. 35	M-776	4.5-6.0 Si, bal. Al	Cast	17000		3			Light alloy castings	Pressure proof
11866	Eclipsaloy No. 38	M-776	4.0-5.0 Cu, 1.0 max. Fe, 1.2 max. Si, bal. Al	Heat treated	32000	18000	3		95	Light alloy castings	
11867	Eclipsaloy No. 56	M-776	8.3-9.7 Al, 1.7-2.3 Zn, .3 max. Mn, bal. Mg	Cast	20000	10000			50	Light alloy castings	Leak proof
				Heat treated	34000	18000	1		95		
11868	Eclipsaloy No. 57	M-776	8-11 Pb, 9-11 Sn, bal. Cu	Cast	28000	20000	13		63	Bearings	Good antifriction qualities
					35000	22000					
11869	Eclipsaloy No. 68	M-776	83.5-90 Cu, 9-11.5 Al, 1-4 Fe	Cast	70000	25000	40	40	115	Gears, shafts	
				Heat treated	90000	45000	5	7	229		
11870	Eclipsaloy No. 320	M-776	3.5-4.25 Mg, .2 max. Ti, bal. Al	Cast	22000	11000	6		46	Light alloy castings	Corrosion resisting
					25000	15000	7		54		
11871	Eclipsaloy No. 322	M-776	4.5-5.5 Si, 1-1.5 Cu, .4-.6 Mg, .08-.3 Cr, .6 max. Fe, bal. Al	Heat treated	32000		2		95	Light alloy parts, pistons, cylinder heads	
11872	Eclipsaloy No. 323	M-776	6.5-7.5 Si, .2-.4 Mg, bal. Al	Heat treated	30000	22000	3		70	Light alloy castings	Corrosion resisting
11873	Nada NT	M-548	86-88 Cu, 3.5-3.75 Sn, .5-1.0 Pb, 3.5-3.75 Ni		40000	20000	30		70	Pressure and structural castings	Corrosion and erosion resisting
					45000		40		75		
11874	Nada NT-2	M-548	86-88 Cu, 4.5-5.0 Sn, .5-1.0 Pb, 3-3.5 Ni		42000	20000	30		72	Pressure and structural castings	Corrosion and erosion resisting
					48000	22000	40		80		
11875	Nada NT-3	M-548	86-88 Cu, 4.5-5.0 Sn, .5-1.0 Pb, 2-2.5 Ni		40000	18000	30		70	Pressure and structural castings	Corrosion and erosion resisting
					43000	20000	40		75		
11876	American Hylastic	M-991	.26-.32 C, 1.5-1.75 Mn, .1 V, bal. Fe	Cast	90000	60000	25	50	180	Railroad and structural castings	
11877	American No. 10	M-991	.25 max. C, .5-.7 Mn, .2-.5 Si, .4-.6 Mo, bal. Fe	Cast	65000	35000	20	30	160	High pressure and valve castings	High temp. steam resisting
									225		
11878	American No. 20	M-991	.20-.25 C, .65-.85 Mn, .20-.50 Si, .65-.85 Cr, .25-.35 Mo, bal. Fe	Cast	100000	70000	20	35	202	Valves, fittings, structural castings	
11879	American No. 22	M-991	.15-.35 C, .65-.85 Mn, 1.0 max. Si, 4.0-6.5 Cr, .4-.6 Mo, bal. Fe	Cast	120000	85000	12	18	250	Oil refinery valves and fittings	
									300		
11880	American No. 31	M-991	.23-.27 C, .7-1.0 Mn, 2.5-3.0 Ni, 1.25-1.5 Cr, .2-.3 Mo, bal. Fe	Cast	130000	120000	13	33	250	Structural and aircraft castings	
11881	American CA-14	M-991	.15 max. C, .85 max. Mn, 1.0 max. Si, 11.5-15 Cr, bal. Fe	Cast	80000	50000	20	30		Valve seats, chemical apparatus castings	Corrosion resisting
11882	American CA-40	M-991	.20-.40 C, .65 max. Mn, 1.0 max. Si, 11-14 Cr, bal. Fe	Cast						Valve seats, castings	Corrosion resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11883	American CE-30	M-991	.30 max. C, 27-30 Cr, 8-11 Ni, bal. Fe	Cast	85000	45000	15	15		Paper mill and copper mine castings	Corrosion resisting
11884	American CF-7	M-991	.07 max. C, 18-20 Cr, 8-10 Ni, bal. Fe	Cast	70000	30000	45	50		Valves, fittings, pumps, castings	Corrosion resisting
11885	American CF-20	M-991	.20 max. C, 18-20 Cr, 8-10 Ni, bal. Fe	Cast	70000	30000	40	45		Corrosion resistant castings	Corrosion resisting
11886	American CF-7-M	M-991	.07 max. C, 18-20 Cr, 8-10 Ni, 2.5-3.5 Mo, bal. Fe	Cast	72500	35000	45	50		Valves, fittings, pumps, castings	Corrosion resisting
11887	American CH-20	M-991	.20 max. C, 23-26 Cr, 10-12 Ni, bal. Fe	Cast	75000	35000	25	25		Furnace castings	Corrosion and heat resisting
11888	American HT	M-991	.16 min. C, 34-37 Ni, 13-17 Cr, bal. Fe	Cast	60000	30000	5	5		Furnace parts, heat treating pots	Heat-resisting
11889	Carpenter No. 874	M-32	.45 C, .90 Mn, .5 Cr, .5 Ni, .22 Mo, bal. Fe	Heat treated	115000 225000	105000 200000	24 10	65 37	235 444	Gears, shafts	
11890	Carpenter No. 872	M-32	.15 C, .8 Mn, .5 Cr, .5 Ni, .22 Mo, bal. Fe							Case hardened gears, shafts	
11891	Precision A-94	M-887	3.5-4.5 Si, 3.0-4.0 Cu, 1.3 max. Fe, .6 max. Zn, bal. Al	Die cast	38000		2		77	Die castings	
11892	Precision M-13	M-887	8.3-9.7 Al, .4-1.0 Zn, bal. Mg	Die cast	29000 34000	20000	2 5		66	Die castings	
11893	Precision BR-1	M-887	63-67 Cu, 32-36 Zn, .7-1.3 Si	Die cast	70000	35000	25		120	Die castings	
11894	Precision BR-2	M-887	81.5 Cu, 14.5 Zn, 4 Si	Die cast	85000	50000	8		170	Die castings	
11895	Precision BR-3	M-887	83 Cu, 10 Zn, 5 Si, 1 Mn, 1 Al	Die cast	105000	60000	5		190	Die castings	
11896	Precision A-218	M 887	8 Mg, 1.8 max. Fe, .2 max. Cu, .3 max. Mn, .1 max. Ni, bal. Al	Die cast						Die castings	
11897	Precision A-360	M-887	10 Si, 8 Mg, bal. Al	Die cast						Die castings	
11898	Alcoa No. 360	M-4	10 Si, 8 Mg, bal. Al	Die cast						Die castings	
11899	Tisco No. 2	M-271	1.0-1.4 C, 11 min. Mn, 1.0 max. Si, 1.9-2.1 Cr, bal. Fe	Cast	95900		11.5	22	190 250	Wear resisting parts	Wear resisting
11900	Tisco No. 6	M-271	.2-.3 C, 10-12 Mn, 1.0 max. Si, 6-8 Ni, .15 max. Cr, bal. Fe	Cast	67500	27400	27.5	37.5	112 150	Abrasion resisting castings	
11901	Tisco No. 23X	M-271	.20-.25 C, 1.3-1.6 Mn, .6-.9 Cr, .2 .3 Mo, bal. Fe	Heat treated (Cast)	90000 110000	68000 90000	20 30	42 65	210 260	Caps, levers, castings	
11902	Tisco No. 80	M-271	.4-.5 C, .6-.8 Mn, 1.75-2.25 Ni, 1.4-1.6 Cr, .3-.4 Mo, bal. Fe	Heat treated	171000 291000	172000 288000	.6 2.6	1.2 3.3	614 522	Sand pump parts	Abrasion resisting
11903	Standard Alnico	M-271	11-13 Al, 19-23 Ni, 4.5-5.5 Co, bal. Fe							Magnets	(Alnico I)
11904	Copper Alnico	M-271	9-11 Al, 16-18 Ni, 12-13 Co, 5.5-6.5 Cu, bal. Fe							Magnets	(Alnico II)
11905	Alni	M-271	11-13 Al, 24-26 Ni, 0-.5 Co, bal. Fe							Magnets	(Alnico III)
11906	Shawinigan CA	M-443	.20 max. C, 12-14 Cr, 1.0 max. Ni, bal. Fe	Annealed	100000	85000	20	35	200	Valve seats	Wear resisting corrosion resisting
11907	Shawinigan HC	M-443	.2-.3 C, 26-30 Cr, 3 max. Ni, bal. Fe	Cast	112000	75000	25	25	225	Furnace parts	Heat resisting
11908	Shawinigan HH	M-443	.25-.35 C, 24-26 Cr, 11-13 Ni, bal. Fe	Cast	85000	40000	25	45	180	Furnace parts	Heat resisting
11909	Shawinigan HT	M-443	.20-.35 C, 35-40 Ni, 15-18 Cr, bal. Fe	Cast	70000	35000	12	15		Furnace parts	Heat resisting
11910	Shawinigan HL	M-443	.25-.35 C, 20-22 Ni, 26-30 Cr, bal. Fe							Furnace parts	Heat resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11911	Robins Ni-Hard	M-460	3.3-3.6 C, .7-1.0 Si, .7-1.0 Mn, 4.25-4.75 Ni, 1.25-1.70 Cr, bal. Fe	Cast					575 650	Rolling mill guides, crusher segments, liners, rolls	
11912	Robins E-5	M-460	3.3-3.5 C, 2.0-2.2 Si, .55-.70 Mn, .9-1.1 Ni, .2-.3 Mo, .1-.3 Cr, bal. Fe	Cast	35000				190 220	Al melting pots	
11913	AM-C52S	M-313 M-4	2.5-3.5 Al, .1 min. Mn, 1.3 max. Zn, bal. Mg	Annealed Rolled	38000 46000	25000 34000	18 10			Formed parts	Sheets
11914	AM-C58S	M-313 M-4	7.8-9.2 Al, .15 min. Mn, .8 max. Zn, .3 max. Si, bal. Mg	Forged Aged	45000 42000	30000 29000	6 5		60	Extrusions, forgings and pressings	Corrosion resisting
11915	NA-6	M-189	C, 22-25 Cr, 13-16 Ni, bal. Fe		85000	50000	20	25	175	Furnace and oil refinery parts	Non-magnetic, high creep resisting to 1800° F.
11916	NA-34	M-189	C, 18 min, Cr, 8 min. Ni, 2-4 Mo, bal. Fe	Heat treated	75000	35000	50	50	200	Castings, pipe	Corrosion resisting
11917	Genessee 190	M-500	C, alloy, bal. Fe							Abrasion resisting parts	Shock resisting, abrasion resisting
11918	Genessee 191	M-500	C, alloy, bal. Fe							Abrasion resisting parts	Shock resisting, abrasion resisting
11919	Genessee 110	M-500	C, alloy, bal. Fe							Magnetic applications	
11920	Genessee 130	M-500	C, alloy, bal. Fe							Gears, shafts	
11921	Roofloy	M-314	.02 Ca, .02 Mg, .02 Sn, bal. Pb							Roofing	Rolled sheet
11922	F-23	M-739	.90-1.25 Sn, 14.75-15.5 Sb, .8-1.1 As, .6 max. Cu, bal. Pb							Bearings	SAE 15
11923	90-10	M-739	9-10 Zn, .25-.75 Sn, bal. Cu							Bushings	SAE 795
11924	Armature Electric	M-806	.04 C, .5 Si, bal. Fe	Annealed	45000	25000	25			Rotating equipment and field poles	High permeability
11925	Improved Electric	M-806	.04 C, .1 Si, bal. Fe	Annealed	50000	30000	20			Small motors	Good magnetic properties
11926	Special Motor	M-806	.04 C, 2.5 Si, bal. Fe	Annealed	67000	50000	15			Rotating equipment, motors	
11927	Special Dynamo	M-806	.04 C, 3.2 Si, bal. Fe	Annealed	75000	55000	12			Induction and power and radio transformers	Low loss
11928	Regular Power Transformer No. 72	M-806	.03 C, 3.75 Si, bal. Fe	Annealed	80000	65000	10			Radio and generators	Good magnetic properties
11929	Special Power Transformer No. 65	M-806	.03 C, 4 Si, bal. Fe	Annealed	73000	62000	8			Power and radio transformers	
11930	Extra Special Power Transformer 52-58	M-806	.03 C, 4.5 Si, bal. Fe	Annealed	75000	68000	2			Power and radio transformers	
11931	N-A-X 9100	M-766	.08-.70 C, .6-.75 Mn, .6-.9 Si, .5-.65 Cr, .05-.15 Zr, bal. Fe							Structural	
11932	N-A-X X9100	M-766	.08-.70 C, .6-.75 Mn, .6-.9 Si, .5-.65 Cr, .05-.15 Zr, .1-.2 Mo, bal. Fe							Structural	
11933	Michigan Metal	M-766	C, bal. Fe		45000	25000				Base for vitreous enameling sheets	Low metalloid steel
11934	Jewell Super Strength Malleable	M-171	C, bal. Fe	Cast	57000	38000	15		150	Castings	
11935	Jewell Steel	M-171	C, bal. Fe	Cast	60000	42000	20		130	Castings	
11936	NH Pig	M-68	44-47 Ni, 15-17 Cr, bal. Fe							Foundry alloy	M.P.-2250° F.
11937	Ni-Resist Low Expansion	M-68	30-36 Ni, 1-4 Cr, 1-2 Si, .8-1.2 Mn, 2-2.8 T.C., bal. Fe	Cast	20000 35000				100 166	Pumps, valves, pistons	Corrosion resisting
11938	Penco	M-39	.95-1.05 C, bal. Fe							Tools	
11939	Warman 13M	M-277	.12 max. C, 11.5-14 Cr, .5-.7 Mo, bal. Fe	Heat treated	95000	65000	25	54		Corrosion resisting castings	Corrosion resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11940	Caloxo 28	M-277	.25 max. C, 26-30 Cr, bal. Fe							Corrosion and heat resisting castings	Corrosion and heat resisting
11941	Calmar 19-9	M-277	.15 max. C, 18-21 Cr, 8-10 Ni, bal. Fe	Heat treated	85000	40000	64			Stainless castings	Stainless
11942	Calmar 19-9S	M-277	.07 max. C, 18-21 Cr, 8-10 Ni, bal. Fe	Heat treated	75000	37000	55			Stainless castings	Stainless
11943	Calmar 19-9M	M-277	.15 max. C, 18-21 Cr, 8-10 Ni, bal. Fe	Heat treated	90000	45000	50			Stainless castings	Stainless
11944	Caloxo 35-15	M-277	.35 max. C, 15-18 Cr, 35-38 Ni, bal. Fe							Heat and corrosion resisting castings	Heat and corrosion resisting
11945	Red-X-5	M-906	1-2 Cu, .2-.5 Mg, .2-.6 Mn, 4.5-6.5 Si, bal. Al	Cast	32000	20000	1.5		65	Forgings and castings	
11946	Drawalloy 340	M-765	C, Cr, Ni, bal. Fe							Hard facing electrode	
11947	#73 Hot Work	M-765	C, Cr, bal. Fe							Welding electrode	
11948	Eureka	M-765	C, Cr, W, V, bal. Fe							High speed steel welding electrode	
11949	Suttonite	M-765	C, Cr, W, V, bal. Fe							High speed steel welding electrode	
11950	#75X Water Hardening	M-765	C, bal. Fe							Welding electrode	Water hardening
11951	Hammond Alloy No. 1	M-992	80-82 Cu, 2.75-3.5 Sn, 6.5-7.5 Pb, 8-10 Zn	Cast	29000 39000	13700 17000	16 30	12 27	50 60	Valve and plumbing castings	
11952	Hammond Alloy No. 3	M-992	84-86 Cu, 4-6 Sn, 4-6 Pb, 4-6 Zn	Cast	33000 48000	17000 24000	18 35	12 32	55 65	Steam valves, bearings	Free cutting
11953	Hammond Alloy No. 4	M-992	78.5-81.5 Cu, 9-11 Sn, 9-11 Pb, .75 max. Zn	Cast	32000 38000	17000 22000	15 20	6 17	60 70	Motor bearings, castings	
11954	Hammond Alloy No. 5	M-992	86-89 Cu, 9-11 Sn, 1.0 Pb, 1.0-2.5 Zn	Cast	36000 46000	20000 26000	17 25	12 26	70 80	Bearings, bushings, gears	
11955	Hammond Alloy No. 6	M-992	86-89 Cu, 9-11 Sn, .2 max. Pb, 1.5 max. Zn	Cast	38000 45000	21000 26000	22 28	20 28	70 80	Gears, worms, hydraulic castings	
11956	Hammond Alloy No. 7	M-992	87-88.5 Cu, 7.75-8.5 Sn, .3 max. Pb, 3-5 Zn, .4-.6 Ni	Cast	40000 50000	18000 23000	25 40	22 37	65 75	Gears, bolts, pipe fittings, valves	Steam metal
11957	Hammond Alloy No. 11	M-992	84.5-86.5 Cu, 8.5-9.5 Sn, 3.5-4.5 Pb, 1-2 Zn	Cast	36000 38000	20000 26000	24 30		65 75	Bearings	Shock resisting
11958	Hammond Alloy No. 13	M-992	80-82 Cu, 10.5-11.5 Sn, 5.5-6.5 Pb, 1.5-2.5 Ni, .4-.5 P	Cast	38000 42000	20000 24000	15 22		75 85	Bearings	Shock resisting
11959	Hammond Alloy No. 2	M-992	83 Cu, 4 Sn, 6 Pb, 7 Zn	Cast	30000	14000	16		55	Hydraulic pumps	
11960	Hammond Alloy No. 9	M-992	75 Cu, 8 Sn, 15 Pb, 2 Zn	Cast	26000	15000	10		50	Bearings, bushings	
11961	Cambriloy 2	M-727	C, alloy, bal. Fe							Mesh belts for furnaces	
11962	Cambriloy 3	M-727	C, alloy, bal. Fe							Mesh belts for furnaces	Resists heat to 1400° F.
11963	Cambriloy 4	M-727	C, alloy, bal. Fe							Mesh belts for furnaces	Heat resisting to 1500° F.
11964	Hammond Alloy No. 8	M-992	88 Cu, 10 Sn, 2 Pb	Cast	36000	19000	22		65	Gears, bearings	
11965	Hammond Alloy No. 10	M-992	86 Cu, 7 Sn, 7 Pb	Cast	31000	19000	15		55	Bearings	Acid resisting
11966	Hammond Alloy No. 12	M-992	82 Cu, 17 Sn, 1 max. P	Cast						Journals, trunnions	
11967	Hammond Alloy No. 14	M-992	80 Cu, 8 Sn, 10 Pb, .5 P, 1.5 Ni	Cast	32000	18000	15		70	Bearings	High speed
11968	Hammond Alloy No. 15	M-992	Si, bal. Cu	Cast	45000	22000	18		90	Worms, gears, pinions	Acid resisting
11969	Hammond Alloy No. M16	M-992	55-60 Cu, 38-42 Zn, 1.5 max. Sn, 3.5 max. Mn	Cast	60000	28000	30		90	Valve stems, hubs	Free machining
11970	Hammond Alloy No. M17	M-992	Zn, Fe, Mn, bal. Cu	Cast	70000	30000	20		125	Castings	
11971	Hammond Alloy No. M-18	M-992	Zn, Fe, Mn, bal. Cu	Cast	80000	40000	20		150	Castings	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
11972	Hammond Alloy No. M-19	M-992	Zn, Fe, Mn, bal. Cu	Cast	90000	45000	15		170	Castings	
11973	Hammond Alloy No. M-20	M-992	Zn, Fe, Mn, bal. Cu	Cast	100000	60000	10		235	Castings	High strength
11974	Hammond Alloy No. A-21	M-992	74.5 Cu, 8 Fe, 13 Al, .5 Mn, 4 Ni	Cast	60000	60000	0		295	Guides, dies, pistons	
11975	Hammond Alloy No. A-22	M-992	85 Cu, 3 Fe, 12 Al, .25 Mn	Cast	68000	45000	1		225	Castings	
11976	Hammond Alloy No. A-23	M-992	87 Cu, 4 Fe, 9 Al, .1 Mn, .1 Ni	Cast	78000	27000	32		100	Castings	
11977	Hammond Alloy No. A-24	M-992	89 Cu, 1 Fe, 10 Al, .1 Mn, .25 Ni	Cast	80000	28000	25		115	Castings	
11978	Hammond Alloy No. A-25	M-992	86 Cu, 4 Fe, 10 Al, .1 Mn, .25 Ni	Cast	87000	28000	18		125	Gears, bushings	
11979	Hammond Alloy No. A-26	M-992	83.5 Cu, 4.5 Fe, 10.75 Al, 1.25 Mn	Cast	90000	35000	10		165	Gears	
11980	Hammond Alloy No. A-27	M-992	79 Cu, 5 Fe, 11 Al, .1 Mn, 5 Ni	Cast	105000	50000	5		175	Castings	
11981	Vascoloy-Ramet Grade 2A3	M-329	TaC						200 228	Cutting tools	Cemented carbides
11982	Airdi 150	M-38	1.5 C, 11.5 Cr, .2 V, .8 Mo, bal. Fe							Blanking dies, punches, plug gauges	
11983	Airdi 110	M-38	1.1 C, 11.5 Cr, .2 V, .8 Mo, bal. Fe							Dies, gauges, rolls	
11984	Coppco Ace C-Temper	M-682	.20 C, .6 Mn, .55 Cr, 1.5 Ni, bal. Fe							Carburized tools and parts	
11985	Chace No. 4700	M-582								Thermostatic Bimetal	
11986	Weirzin	M-628	Zn coated steel							Structural sheets	Electrolytic plate
11987	Weiralead	M-628	Pb coated steel							Structural sheets	Hot dip
11988	Balcut X-1314	M-516	.10-.20 C, 1.0-1.3 Mn, .15-.25 Pb, bal. Fe							Gears, shafts	Free machining
11989	Balcut X-1335	M-516	.15-.25 Pb, .30-.40 C, 1.35-1.65 Mn, bal. Fe							Gears, shafts	Free machining
11990	Balcut 1035	M-516	.15-.25 Pb, .30-.40 C, bal. Fe							Gears, shafts	Free machining
11991	Turbine Metal	M-129	55 Cu, 38 Zn, bal. Ni, Fe, Al, Mn	Cast	80000	40000	20	20	125	Turbine runners	Corrosion and erosion resisting
11992	Jefaloy 55M	M-170	2.85-3.05 T.C., .5-.7 Mn, Si, .7-.9 Mo, bal. Fe	Cast	50000 60000				248 269	Castings	Wear resisting
11993	Hoskin 10	M-65	37.5 Cr, 7.5 Al, bal. Fe				0	0		Heating elements	Heat resisting to 2400° F.
11994	Atmodie	M-35	1.5 C, 12 Cr, .8 Mo, .85 V, bal. Fe							Dies	Air hardening
11995	Extra	M-35	.60-1.15 C, .25 Si, .25 Mn, bal. Fe							Tools	
11996	Special	M-35	.60-1.15 C, .15 Cr, .04 V, .25 Si, bal. Fe							Tools	
11997	Standard	M-35	.60-1.15 C, .25 Mn, .25 Si, bal. Fe							Tools	
11998	Ryalloy	M-240	.85-1.0 C, 1.6-1.9 Mn, .20-.30 Mo, bal. Fe							Tools	
11999	R.D.X.	M-240	.7-.8 C, .2-.3 Mo, bal. Fe							Tools	
12000	N.C.M.	M-240	C, Ni, Cr, Mo, bal. Fe		125000	105000	16	50	270 310		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12001	Fluxrite	M-88	Pb, Sn							Solder	
12002	Milrite	M-88	Sn, Sb, Cu, bal. Pb	Cast						Bearings	Babbitt
12003	Coating Metal 560	M-88	95 Pb, 2½ Sn							Coated iron for roofing, pipes	
12004	Hoyt 11	M-88	Pb, Cu, Sb, bal. Sn	Cast						Bearings	Babbitt
12005	Nicral AD2012	M-93	Al alloy			41000				Airplane wing ribs, bus body panels	Sheets
12006	Nicral AD018	M-93	Al alloy							Rivets	
12007	Nicral XD018	M-93	Al alloy							Structural shapes	
12008	Nicral FM09	M-93	Al alloy							Sash assemblies	Extruded
12009	Nicral BO	M-93	Al alloy							Bezels, reflectors, switch covers	Deep drawing temper
12010	Nicral AO	M-93	Al alloy							Rolled trim, shells	
12011	Mallory D-54	M-265	Ag-CdO		16000				45 Rf	Electrical contacts	
12012	Mallory D-53	M-265	Ag-CdO		16000				32 Rf	Electrical contacts	
12013	Mallory D-52	M-265	Ag-CdO		16000				20 Rf	Electrical contacts	
12014	Mallory D-50	M-265	Ag-Ni		30000				54 Rf	Electrical contacts	
12015	Elkonite G-12	M-265	Ag, bal. WC		35000				65 Rb	Electrical contacts	
12016	Elkonite G-14	M-265	Ag, bal. WC		60000				102 Rb	Electrical contacts	
12017	Elkonite 35S	M-265	Ag, bal. W		55000				87 Rb	Electrical contacts	
12018	Elkonite 50S	M-265	Ag, bal. W		15000				75 Rb	Electrical contacts	
12019	Elkonite G-18	M-265	Ag, bal. Mo		32000				82 Rb	Electrical contacts	
12020	Elkonite 5W-53	M-265	Ag, bal. W	Heat treated	120000				106 Rb	Resistance welding dies	Heat treatable
12021	Elkonite 10W-53	M-265	Cu, bal. W	Heat treated	160000				112 Rb	Resistance welding dies	Heat treatable
12022	Elkonite 100M	M-265	Mo		80000				95 Rb	Resistance welding electrode	
12023	Elkonite TC-5	M-265	Cu, bal. WC		75000				98 Rb	Resistance welding electrode and dies	
12024	Elkonite TC-10	M-265	Cu, bal. WC		75000				102 Rb	Resistance welding electrode and dies	
12025	Elkonite TC-20	M-265	Cu, bal. WC		80000				40 Rc	Resistance welding electrode and dies	
12026	Elkonite TC-53	M-265	Cu, bal WC	Heat treated	168000				48 Rc	Resistance welding dies	
12027	Elkonium 17	M-265	Ag							Electrical contacts	
12028	Elkonium 3	M-265	Ag							Electrical contacts	
12029	Elkonium 117	M-265	Ag							Electrical contacts	
12030	Elkonium 217	M-265	Ag							Electrical contacts	
12031	Elkonium 40	M-265	Pd							Electrical contacts	
12032	Elkonium 45	M-265	Pd							Electrical contacts	
12033	Elkonium 33	M-265	Pt							Electrical contacts	
12034	Elkonium 37	M-265	Pt							Electrical contacts	
12035	Elkonium 70	M-265	Au							Electrical contacts	
12036	Elkonium 71	M-265	Au							Electrical contacts	
12037	Elkonium 301	M-265	Pt							Electrical contacts	
12038	Filnic H	M-44	99.9 Ni							Filaments	
12039	Filnic I	M-44	Si, bal. Ni							Filaments	
12040	Filnic J	M-44	3 Si, bal. Ni							Filaments	
12041	Filnic K	M-44	Al-Ni							Filaments	
12042	Filnic T	M-44	Ni							Filaments	
12043	Filnic M	M-44	45 Co, 55 Ni							Filaments	
12044	Gridnic T	M-44	Ni-Ti-Fe							Grid wire	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12045	Red Brass	M–33	85 Cu, 15 Zn	Annealed	42000	14000	45			Plumbing, pipe, tubes,	Corrosion resisting
				Rolled	70000	58000	5			hardware	
12046	Low Brass	M–33	80 Cu, 20 Zn	Annealed	44000	14000	50			Clocks, flexible hose, bellows	Corrosion resisting
				Rolled	74000	58000	7				
12047	70-30 Brass	M–33	70 Cu, 30 Zn	Annealed	47000	15000	62			Cartridge cases, primer cups,	Deep drawing
				Rolled	76000	64000	8			springs	
12048	Muntz Metal	M–33	61 Cu, 39 Zn	Annealed	54000	21000	45			Trim, brazing rod, valve	
				Rolled	80000	60000	5			stems, condenser tubes	
12049	Leaded Commercial Bronze	M–33	89 Cu, 9 Zn, 2 Pb	Drawn	52000	45000	18	60		Hardware, screw machine parts	Free cutting
12050	Low Leaded Tube Brass	M–33	66.5 Cu, 33 Zn, 0.5 Pb	Annealed	47000	15000	60			Pump liners, plumbing	
12051	High Leaded Tube Brass	M–33	66 Cu, 32.25 Zn, 1.75 Pb	Annealed	52000	20000	50			Screw machine products	Free cutting
				Drawn	75000	60000	7				
12052	Light Leaded Brass	M–33	65 Cu, 34.75 Zn, 0.25 Pb	Annealed	47000	15000	62			Drawn and stamped parts	
				Drawn	74000	60000	8				
12053	Medium Leaded Brass	M–33	65 Cu, 34 Zn, 1 Pb	Annealed	47000	15000	60			Screws, rivets, nuts	Free cutting
				Rolled	74000	60000	7				
12054	High Leaded Brass	M–33	64 Cu, 34 Zn, 2 Pb	Rolled	74000	60000	7			Clocks, gears, engravings	Free cutting
12055	Leaded Naval Brass	M–33	60 Cu, 37.25 Zn, 0.75 Sn, 2 Pb	Annealed	55000	30000	45			Nuts, valve stems, hardware	Corrosion resisting
				Drawn	72000	55000	25				
12056	Chamet Bronze B	M–33	62.25 Cu, 37.1 Zn, 0.65 Sn	Drawn	62000	35000	35			Rivets, screws, bolts	Corrosion resisting
12057	Aluminum Brass	M–33	76 Cu, 22 Zn, 2 Al	Annealed	57000	23000	53			Condenser and heat exchanger tubes	Corrosion resisting
12058	Phosphor Bronze Grade A	M–33	95 Cu, 4.75 Sn, 0.25 P	Annealed	51000		55			Springs, diaphrams, wire rope	Corrosion resisting
				Rolled	79000		7				
12059	Phosphor Bronze Grade C	M–33	92 Cu, 7.75 Sn, 0.25 P	Annealed	60000		70			Springs, welding rod	Corrosion resisting
				Rolled	93000		12				
12060	Phosphor Bronze Grade E-1	M–33	98.25 Cu, 1.75 Sn	Annealed	45000		45			Welding rod, springs	Corrosion resisting
				Drawn	105000		* 3				
12061	Cadmium Bronze	M–33	99 Cu, 1 Cd	Drawn	80000					Trolley wire, electrical conductors	High conductivity
12062	Alnico I	M–60	12 Al, 20 Ni, 5 Co, bal. Fe							Permanent magnet	
12063	Alnico II	M–60	10 Al, 17 Ni, 12.5 Co, 6 Cu, bal. Fe							Permanent magnet	
12064	Alnico III	M–60	12 Al, 25 Ni, bal. Fe							Permanent magnet	
12065	Alnico IV	M–60	12 Al, 28 Ni, 5 Co, bal. Fe							Permanent magnet	
12066	Alnico V	M–60	8 Al, 14 Ni, 24 Co, 3 Cu, bal. Fe							Permanent magnet	
12067	Silver Magnet Alloy	M–60	86.75 Ag, 8.8 Mn, 4.45 Al							Permanent magnet	High coercive force
12068	No. 426 Alloy	M–60	35 Co, 18 Ni, 6 Al, 8 Ti, bal. Fe							Permanent magnet	High coercive force
12069	Cunico	M–60	Ni-Co, Fe							Permanent magnet	High coercive force
12070	Cunife	M–60	60 Cu, 20 Ni, 20 Fe							Permanent magnet	High coercive force
12071	Fahrite N-71	M–95	.3-.6 C, 65-68 Ni, 15-19 Cr, bal. Fe	Cast	75000	45000	9			Furnace parts	Heat resisting
12072	Fahrite N-51	M–95	.3-.6 C, 37-40 Ni, 17-21 Cr, bal. Fe	Cast	69000	41000	11.5			Furnace parts	Heat resisting
12073	Fahrite N-31	M–95	.30 max. C, 23-26 Ni, 19-23 Cr, bal. Fe	Cast						Heat resisting castings	Heat resisting
12074	Fahrite N-63	M–95	.4 max. C, 19-21 Ni, 23-26 Cr, bal. Fe	Cast	73000	46000	17			Heat resisting castings	Heat resisting
12075	Fahrite N-73	M–95	.30 max. C, 8-11 Ni, 27-30 Cr, bal. Fe	Cast						Heat resisting castings	Heat resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12076	Ohio O-1	M-95	.35 max. C, .55-.8 Mn, bal. Fe	Heat treated	70000	38000	24	38	160	Steel castings	General
12077	Fahrite C-28	M-95	.35 max. C, 3 Ni, 27-30 Cr, bal. Fe	Annealed	96000	57000	19			Heat and corrosion resisting castings	Resists S atmospheres
12078	Fahrite HC-28	M-95	2.5 max. C, 3 max. Ni, 27-30 Cr, bal. Fe	Cast						Castings	Abrasion resisting
12079	Ohio O-2	M-95	.35 max. C, 1.0 max. Mn, .4 Mo, bal. Fe	Cast	70000	45000	22	35	143	Valves, fittings	
12080	Ohio O-4	M-95	.30 max. C, 1.0 max. Mn, 4-6 Cr, .5 Mo, bal. Fe	Cast	90000	65000	18	30	197	Oil refinery fittings and valves	
12081	Ohio O-5	M-95	.3 max. C, 1.0 max. Mn, 1.5-2.25 Cr, .45-.65 Mo, bal. Fe	Cast	90000	60000	18	30	197	Fittings and valves	
12082	Ohio O-6	M-95	.6-.7 C, .5-.8 Mn, 1.5 max. Cr, .2 max. V, bal. Fe	Cast						Castings	Abrasion resisting
12083	Ohio O-11	M-95	.3 max. C, 1.0 max. Mn, 8-10 Cr, 1.0 Mo, bal. Fe	Cast	90000	60000	18	30	197	Castings	
12084	Ohio O-12	M-95	.30-.45 C, .9 Mn, .8-1.1 Cr, .15-.25 Mo, bal. Fe	Cast	110000	85000	16	35	223	Castings, fittings	
12085	Ohio O-15	M-95	.35 max. C, 1.0 Mn, .15-.25 Mo, .7 Ni, .6 Cr, bal. Fe	Heat treated	105000	85000	15	30	229	Castings	
12086	Macco Superior High Speed	M-80	.72 C, 4 Cr, 1 V, 18.5 W, bal. Fe							Tools, cutters	High speed steel
12087	Macco Special	M-80	1.0-1.1 C, bal. Fe							Tools	Water hardening
12088	Macco Kromax Special	M-80	1.6 C, 12.4 Cr, .72 Mo, bal. Fe							Tools, dies	
12089	Macco Fool-Proof	M-80	C, alloy, bal. Fe								Chisels
12090	Choice No. 2	M-115	.9 C, 3.9 Cr, .5 Mo, bal. Fe							Die steel	Hot work steel
12091	Hotform No. 2	M-115	.33 C, .9 Si, 4.7 Cr, 1.3 Mo, bal. Fe							Hot work dies	Hot work steel
12092	Hotform No. 3	M-115	.52 C, .9 Si, 4.75 Cr, 1.4 Mo, 1.2 W, bal. Fe							Dies	Air hardening
12093	Mosil	M-115	.57 C, 1.9 Si, .8 Mn, .25 Cr, .33 Mo, bal. Fe							Punches, chisels	
12094	Stainless 420	M-115	.35 C, 13.25 Cr, bal. Fe							Corrosion resisting parts	Corrosion resisting
12095	Stainless 440	M-115	.65 C, 16.5 Cr, bal. Fe							Corrosion resisting parts	Corrosion resisting
12096	Stainless 410	M-115	.12 max. C, 13 Cr, bal. Fe							Corrosion resisting parts	Corrosion resisting
12097	Stainless 416	M-115	.12 max. C, 13 Cr, .30 S, bal. Fe							Corrosion resisting parts	Free machining
12098	Stainless 430	M-115	.12 max. C, 17 Cr, bal. Fe							Corrosion resisting parts	Corrosion resisting
12099	Stainless 441	M-115	.95 C, 17.5 Cr, bal. Fe							Corrosion resisting parts, bearings	Corrosion resisting
12100	Stainless 302	M-115	.15 max. C, 19 Cr, 9 Ni, bal. Fe							Stainless parts	Stainless
12101	Vanadium 6-6-2	M-115	.8 C, 5.75 W, 4.1 Cr, 1.6 V, 4.75 Mo, bal. Fe							Tools, cutters	High speed steel
12102	Carbon-Vanadium Drill Rod	M-342	1.0 C, .2 V, bal. Fe							Drill rod	
12103	Non-Shrinkable Drill Rod	M-342	.95 C, 1.2 Mn, .5 Cr, .5 W, .2 V, bal. Fe							Tools	
12104	Red Star Tungsten Drill Rod	M-342	1.2 C, 1.6 W, .7 Cr, .25 Mo, .2 V, bal. Fe							Drill rod	
12105	Sicromo 2½	M-376	.15 max. C, .5-1.0 Si, 2.25-2.75 Cr, .45-.65 Mo, bal. Fe	Annealed	60000	25000	30	50	163	High temperature tubing	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12106	Sicromo 5S	M-376	.15 max. C, 1-2 Si, 4-6 Cr, .45-.65 Mo, bal. Fe	Annealed	60000	25000	30	50	163	High temperature tubing	
12107	Sicromo 7	M-376	.15 max. C, .5-1.0 Si, 6-8 Cr, .45-.65 Mo, bal. Fe	Annealed	60000	25000	30	50	179	High temperature tubing	
12108	Sicromo 9M	M-376	.15 max. C, .5-1.0 Si, 8-10 Cr, .9-1.1 Mo, bal. Fe	Annealed	60000	25000	30	50	179	High temperature tubing	
12109	Timken TW	M-376	1.0-1.1 C, .05 V, bal. Fe								
12110	O. B. Alloy No. 26	M-94	89 Cu, 6 Sn, 1.5 Pb, 3.5 Zn	Cast	38000	17000	30		65	Valves	Navy M
12111	Enduron	M-494	1.8 C, 15 Cr, bal. Fe	Annealed	80000				280	Castings	Centrifugal, corrosion resisting
				Cast	100000				320		
12112	Loded Centricast	M-494	3.2 C, 2.8 Si, 0.8 Cr, bal. Fe	Cast	36000				240 300	Cylinder liners	Centrifugal
12113	Nicrosilal	M-494	1.8 C, 5 Si, 18 Ni, 2 Cr, bal. Fe	Cast	23000				140 200	Castings	Heat resisting
12114	Ni-Hard	M-494	3 C, 3.5-4.5 Ni, 1.5 Cr, bal. Fe	Cast	40000				500 650	Castings	Abrasion resisting
12115	Ni-Resist	M-494	2.8 C, 14 Ni, 7 Cu, 2 Cr, bal. Fe	Cast	28000				140 200	Castings	Heat and corrosion resisting
12116	G. D. H. No. 350	M-816	1.25-1.35 C, 3.5-3.7 W, bal. Fe							Drills, dies, gear cutters, taps	
12117	G. D. H. No. 212	M-816	.45-.50 C, .85-1.05 Cr, .9-1.2 W, .15-.25 Mo, bal. Fe							Chisels, shear blades, die blocks	
12118	G. D. H. No. 280	M-816	.5 C, 1.3-1.6 Si, .3-.4 Mo, bal. Fe							Tools, punches, shear blades	
12119	G. D. H. No. 33	M-816	.35 C, .8-1.0 Si, 4.5-5.0 Cr, 1.0-1.2 W, 1.3-1.5 Mo, bal. Fe							Forging dies, hot piercing and punching dies	Hot work steel
12120	Aristoloy 310	M-682	.25 max. C, 24-26 Cr, 19-21 Ni, bal. Fe							Heat and corrosion resisting parts	Resists scaling to 2000° F.
12121	Aristoloy 321	M-682	.10 max. C, 2 max. Mn, 1 max. Si, 17-19 Cr, 8-11 Ni, Ti=4×C, bal. Fe							Heat and corrosion resisting parts	Heat and corrosion resisting
12122	Aristoloy 420	M-682	.15 max. C, .7 max. Mn, .5 Si, 11-14 Cr, bal. Fe							Corrosion resisting parts	Air or oil hardening
12123	Aristoloy 446	M-682	.35 max. C, 23-30 Cr, bal. Fe							Heat and corrosion resisting parts	Resists scaling to 2000° F.
12124	Armco Galvanized Paintgrip	M-10	Galvanized steel								
12125	Armco High Strength 55Y	M-10	.12 max. C, alloy, bal. Fe	Annealed	75000	53000	20				
12126	Arsenical Copper	M-33	99.7 Cu, 0.2 As, .02 P	Annealed	32000	10000	40			Condenser, heat exchanger, boiler tubes	Corrosion resisting
				Drawn	50000	45000	12				
12127	Atlantic 44	M-353	.44 C, .75 Cr, .4 Mn, .75 Mo, .6 Si, .7 Cu, bal. Fe							Dies, shear blades, pneumatic tools	
12128	Atsco AR	M-353	.9 C, .7 Mn, .3 Mo, bal. Fe							Shovel teeth, bucket lips	
12129	Atsco Special	M-353	.5-1.0 C, .5-1.0 Mn, .3 Mo, bal. Fe							Rock drills, concrete wreckers, demolition tools	
12130	Beralite		40 Be, bal. Al	Drawn	62800	58400	1.5		94		
				Annealed	41400	23100	14.5		68		
12131	Republic Silicon Electric Grade	M-97	1.0 Si, bal. Fe							Electric motors	
12132	Bethadur 420	M-24	.35 C, 13 Cr, .15 Mo, bal. Fe	Heat treated	250000	214000	10	22	514	Surgery and dental tools, table cutlery	Corrosion resisting
12133	Bethadur 410	M-24	.10 C, 12 Cr, .3 Mo, bal. Fe	Heat treated	100000	70000	20	60	200 240	Turbine blades, valves	Corrosion resisting

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12134	Bethadur 431	M–24	.05 C, 1.5 Ni, 17 Cr, bal. Fe							Starter cylinders	Corrosion resisting
12135	Riverside No. 32	M–98	97.65 Cu, 2 Be, .35 Ni	Heat treated	65000 200000		.5 50		350	Springs, gears	
12136	Bethlehem Abrasion Resisting No. 235	M–24	.35-.50 C, 1.4-2.0 Mn, bal. Fe						235	Abrasion equipment	Abrasion resisting
12137	Bethlehem Cr-Mo-W Hot Work	M–24	.35 C, .95 Si, 5 Cr, 1.3 Mo, 1.3 W, bal. Fe							Spike cutters, hot headers, trimmers	Hot work steel
12138	Bethlehem No. 57 Special Hot Work	M–24	.4 C, 3.5 Cr, 14 W, .3 V, bal. Fe							Spike cutters, hot headers, punches	Hot work steel
12139	Bethlehem 5% Chromium Air Hardening	M–24	1.0 C, 5.25 Cr, 1.1 Mo, .25 V, bal. Fe							Dies	Wear resisting, air hardening
12140	Bethlehem Pivot Steel	M–24	1.2 C, 1.65 Cr, .4 Mo, bal. Fe							Pivot bearings	Wear resisting
12141	Bethlehem Shank Steel	M–24	.55 C, .9 Mn, 2 Si, .25 V, bal. Fe							Tool shanks	Tough, shock resisting
12142	Republic Silicon Armature Grade	M–97	.50 Si, bal. Fe							Armatures	
12143	Broaching Steel	M–24	C, bal. Fe							Stone working tools	
12144	Carmet Grade CA-1	M–1	WC							Tipped tools	For steel
12145	Carmet Grade CA-2	M–1	WC							Tipped tools	For finishing cuts
12146	Carmet Grade CA-3	M–1	WC							Tipped tools	For roughing cuts
12147	Carmet Grade CA-4	M–1	WC							Tipped tools	For soft metals
12148	Central Pure Iron	M–97	.14 C, Mn, S, P, Si, Cu, bal. Fe	Rolled	38000 42000	22000 25000	38 42	55 60		Culverts	
12149	Chromium Molybdenum Bearing Steel	M–24	1.05 C, 1.35 Cr, .25 Mo, bal. Fe							Bearing races	Wear resisting
12150	Cobaflux Magnet A	M–24	.7 C, 5 Cr, 4 W, 37 Co, bal. Fe							Permanent magnets	
12151	Kramer Grade I	M–346	1.0 Fe, 10 min. Al, bal. Cu	Cast	67000 74000	28000 30000	15 25		120 140	Castings	Al bronze
12152	Kramer Grade L	M–346	4 max. Fe, 10 min. Al, .5 max. Mn, bal. Cu	Cast	87000 91000	29000 32000	15 25		140 160	Castings	Al bronze
12153	Kramer Grade M	M–346	3-4 Fe, 9.5 Al, bal. Cu	Cast	78000 87000	29000 32000	20 37		125 140	Castings	Al bronze
12154	Kramer Grade N	M–346	4-5 Fe, 10.5-11.5 Al, 4-5 Ni, 3 max. Mn, bal. Cu	Cast	100000 105000	48000 52000	5 10		190 215	Castings	Al bronze
12155	Kramer Grade O	M–346	6-7 Fe, 11.5-12.5 Al, 3-4.5 Ni, .5 max. Mn, bal. Cu	Cast	90000	70000	1 3		265 300	Castings	Al bronze
12156	68 Permalloy	M–22	68 Ni, bal. Fe							Magnetic apparatus	High permeability
12157	Alclad XB75S	M–4	Al alloy	S-O ST	32000 76000	16000 66000	14 10			Structural parts for aircraft	Clad sheet
12158	XB75S	M–4	Al alloy	S-O ST	40000 86000	20000 78000	12 10			Aircraft parts	Extrusions
12159	R-303	M–671	Al alloy	Annealed Heat treated	28000 82000	14000 75000	20 12			Light alloy parts	High strength
12160	Clad R-303	M–671	Al alloy	Annealed Heat treated	27000 75000	11500 69000	19 9			Light alloy structures	Clad
12161	Michiana No. 241	M–184	2.6-2.8 C, 28 Cr, 1.25 Si, 1.0 Mn, bal. Fe	Cast						Coal-coke handling equipment	Abrasion resisting
12162	Michiana No. 233	M–184	20 Ni, 3 Cr, 1.5 Si, 1.5 Mn, 2.2-2.4 C, bal. Fe	Cast						Chemical handling equipment	Corrosion resisting
12163	Michiana No. 119	M–184	25 Cr, 20 Ni, 1.25 Si, 1.5 Mn, .2 C, bal. Fe	Cast						Heat and corrosion resisting parts	Heat and corrosion resisting
12164	H & R No. 57	M–363	.8 C, 3.75 Cr, 5.75 W, 4.5 Mo, 1.5 V, bal. Fe							Taps, chasers, broaches, reamers	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12165	H & R No. 15	M-363	.37 C, 3 Mo, 15.5 W, 4 Cr, 2 Ni, bal. Fe							Extrusion dies, hot piercing punches	Hot work steel
12166	H & R Hot Work No. 2	M-363	.33 C, 3.5 Cr, 9.25 W, .5 V, bal. Fe							Die casting dies, extrusion dies	Hot work steel
12167	H & R Hot Work No. 4	M-363	.97 C, 3.9 Cr, bal. Fe							Upsetting dies, gripper dies	
12168	Tritex No. 2	M-669	.4-.5 C, 1.3-1.6 Mn, .24-.33 Si, bal. Fe		90000	60000	26	58	193	Gears, shafts	
12169	Vascoloy-Ramet Grade 3150	M-329	TaC							Cutters	Abrasion resisting
12170	H & R No. 225	M-363	.5 C, 1.5 Cr, 2.5 W, .25 V, bal. Fe							Dies, shear blades, cutters	
12171	H & R No. 60	M-363	1.2 C, .7 Cr, .25 Mo, 1.6 W, .2 V, bal. Fe							Taps, broaches, punches, gauges	Non-distorting
12172	H & R Tungsten Oil Hardening	M-363	.9 C, 1.1 Mn, .5 W, .2 V, .5 Cr, bal. Fe							Hobs, reamers, broaches, gauges	
12173	H & R No. 4	M-363	.8 C, 18.5 W, 4.5 Cr, 1.75 V, 7.5 Co, .8 Mo, bal. Fe							Cutters	
12174	H & R Heading Die Steel	M-363	.9-1.0 C, bal. Fe							Embossing dies, cold heading dies	
12175	H & R Carbon	M-363	.9-1.05 C, bal. Fe							Punches, dies, tools	
12176	H & R Hot Work No. 5	M-363	.35 C, 1.0 Si, 5 Cr, .4 V, 1.0 Mo, bal. Fe							Die casting dies, tools, hot punches	Hot work steel
12177	H & R Hot Work No. 6	M-363	.35 C, 1.0 Si, 5 Cr, 1.35 W, 1.75 Mo, bal. Fe							Extrusion dies, piercing mandrels	Hot work steel
12178	H & R Special Carbon	M-363	C, bal. Fe							Tools	
12179	H & R No. 19	M-363	.9 C, 1.5 Mn, .3 Mo, bal. Fe							Precision tools, dies	Oil hardening
12180	Nickel Bronze	M-309	85-90 Cu, 3-6 Sn, 3-7 Ni, 1-3 Zn	Heat treated	50000 80000	25000 60000	15 25	15 25	95 170	Gears	Cast
12181	Aluminum Bronze	M-309	85-89 Cu, 8-10 Al, 1-2 Fe	Heat treated	60000 75000	34000 40000	10 25	10 20	130 150	Gears	
12182	Aluminum Nickel Bronze	M-309	78-82 Cu, 9-11 Al, 3-6 Fe, 3-6 Ni	Heat treated	90000 115000	40000 70000	5 20	5 15	172 300	Structural parts	Acid resisting
12183	Coppco Ace A-Temper	M-682	.7 C, .55 Cr, 1.5 Ni, bal. Fe							Punches, collets, forming dies	
12184	Coppco Ace B-Temper	M-682	.50 C, .55 Cr, 1.5 Ni, bal. Fe							Collets, shear blades, pawls	Tough
12185	Coppco Fast Finishing	M-682	1.3 C, 3.75 W, bal. Fe							Fast finishing tools	
12186	Rezistal KA2SCb	M-38	.10 max. C, 18 Cr, 10.5 Ni, Cb = 8×C, bal. Fe	Annealed	85000	35000	57	70	150	Heat and corrosion resisting parts	Heat and corrosion resisting
12187	Rezistal Stainless 122	M-38	.15 max. C, 12.5 Cr, 1.75 Ni, bal. Fe							Corrosion resisting parts	Corrosion resisting
12188	Rezistal Stainless B-80	M-38	.85 C, 17 Cr, bal. Fe							Cutlery	
12189	Rezistal Stainless 162	M-38	.20 max. C, 16 Cr, 2 Ni, bal. Fe							Propeller shafts, fittings, bolts	Corrosion resisting
12190	Rezistal Turbine	M-38	.15 max. C, 12 Cr, bal. Fe							Turbine parts	Corrosion resisting
12191	Superior Tool	M-38	C, .48 Cr, bal. Fe							Die casting dies	
12192	No-Co-Ro	M-97	.04 max. C, .10-.15 Mn, .20 min. Cu, bal. Fe	Rolled	40000 43000	25000 28000	35 38	45 50		Culverts	
12193	Non-Tempering Tool	M-24	.35 C, .7 Mn, .8 Cr, .3 Mo, .3 Cu, bal. Fe							Chisels, punches, blacksmith tools	Shock resisting
12194	Oxygen Free Copper	M-33	99.98 Cu	Annealed Rolled	32000 50000	10000 45000	40 8			Electrical conductors	
12195	Pure Ore Air Chrome	M-335	C-Cr-Mn-bal. Fe							Dies, tools	Air hardening
12196	Pure Ore Clipper	M-335	C-Cr-W-V, bal. Fe							Cutters, tools	High speed steel
12197	Pure Ore D-C-33	M-335	C-Cr-W-Si-Mo, bal. Fe							Hammer dies, press tools	Hot work steel

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12198	Pure-Ore D-C-66	M-335	C, W, Cr, bal. Fe							Hammer dies, press tools	Hot work steel
12199	Pure Ore Finishing Steel	M-335	C, W, bal. Fe							Cutting tools	Wear resisting
12200	Pure Ore Hi-Run	M-335	C, Cr, Mo, bal. Fe							Dies, tools	
12201	Pure-Ore Kapo	M-335	High C, high Cr, W, bal. Fe							Dies, tools	
12202	Pure Ore Moly 6-6	M-335	C, W, Mo, Cr, V, bal. Fe							Cutting tools	High speed steel
12203	Pure Ore No. 14	M-335	C, Cr, bal. Fe							Jewelry dies	Water hardening
12204	Pure Ore Prior	M-335	C, W, Cr, V, bal. Fe							Cutting tools	High speed steel
12205	Pure Ore Rolmo	M-335	C, Cr, Mn, Mo, bal. Fe							Tools, dies	Wear resisting
12206	Pure Ore Solid Drill	M-335	C, bal. Fe							Rock drills	Water hardening
12207	Nitralloy 125	M-38	.25 C, 1.15 Cr, .2 Mo, 1.15 Al, bal. Fe	Heat treated	122000	103000	61	67	255	Nitrided parts	Nitralloy H
12208	Nitralloy 135	M-38	.35 C, 1.15 Cr, .2 Mo, 1.15 Al, bal. Fe	Heat treated	138000	120000	20	58	280	Nitrided parts	Nitralloy G
12209	Rexite Grade CR-6	M-38	WC							Cutting tools	Sintered, carbide, tough
12210	Channeler Steel	M-24	.80 C, bal. Fe							Quarry tools	Water hardening
12211	Bethlehem 5% Cr Air Hardening	M-24	1.0 C, 5.25 Cr, 1.1 Mo, .25 V, bal. Fe							Dies	Air hardening, low distortion
12212	Timken DM2-45	M-376	.35-.45 C, .6-.9 Mn, .8-1.1 Cr, .4-.6 Mo, bal. Fe							High temperature bolting	
12213	Imperial	M-210	1.2-1.3 C, 4-5 W, 1-1.25 Cr, .2-.25 V, bal. Fe							Reamers	
12214	Red Shadow	M-783	.40 C, 3.1 Cr, .25 Mn, .25 V, 10 W, bal. Fe							Tools, dies	
12215	Special Vanadium	M-38	.67 C, .45 Cr, .2 V, bal. Fe							Dies, cold punches, impact tools	Tough
12216	McGill No. 4	M-181	67-62 Cu, 38-41 Zn, 1.5 Pb, .8 Sn								
12217	Elektron AZ91	M-784	9.5 Al, 0.4 Zn, .3 Mn, 0.2 Si, bal. Mg	Cast	20000	11000	3		50	Aircraft engine parts, crankcases	
				Heat treated	34000	18000	1		80		
12218	Elektron A8	M-784	7.9 Al, 0.4 Zn, 0.3 Mn, 0.2 Si, bal. Mg	Cast	22000	11000	5		50	Gear and blower casings for aero engines	
				Heat treated	32000	11000	9		60		
12219	Elektron AZG	M-784	8.9 Al, 0.9 Zn, 0.3 Mn, 0.2 Si, bal. Mg	Cast	22000	11000	3		50	Light alloy castings	
				Heat treated	34000	11000	8		55		
12220	Elektron AM503	M-784	1.8 Mn, 0.2 Si, bal. Mg	Cast	14000		3		45	Light alloy parts	
12221	Elektron AZM	M-784	6.2 Al, 1.0 Zn, 0.3 Mn, 0.2 Si, bal. Mg	Forged	40000	24000	10		70	Aircraft wings and fuselage	
12222	Elektron AZ855	M-784	7.8 Al, 0.3 Zn, 0.1 Mn, 0.1 Si, bal. Mg	Forged	44000	28000	8		75	Propeller blades, forgings	
12223	Elektron AM537	M-784	1.8 Mn, 0.4 Ce, bal. Mg	Rolled	32000	19000	17			Fuselages, wing ribs and covering	
12224	Circle L-106	M-74	.17 C, 1.3 Mn, .25 Mo, bal. Fe	Cast	125000	90000	10	22	260	Castings	
12225	Circle L-206	M-74	.17 C, .8 Mn, .6 Cr, .6 Ni, .2 Mo, bal. Fe	Cast	130000	95000	10	22	270	Castings	
12226	Circle L-9	M-74	.20 C, .65 Mn, .5 Mo, bal. Fe	Cast	70000	45000	30	50	140	Turbines, valves, fittings	
12227	Circle L-119 (19M)	M-74	.20 C, .65 Mn, 1.75 Ni, bal. Fe	Cast	78000	52000	28	50	165	Castings	
12228	Circle L-219 (19XM)	M-74	.15 C, .65 Mn, 3.25 Ni, .25 Mo, bal. Fe	Cast	85000	57000	25	48	170	Castings	
12229	Circle L-230	M-74	.15 C, 1.25 Si, 24.5 Cr, 11 Ni, 2.25 Mo, bal. Fe	Cast	85000	45000	25		170	Chemical equipment	Stainless
12230	Circle L-446	M-74	.35 C, 1.25 Si, 24.5 Cr, 20 Ni, bal. Fe	Cast	75000	32000	30		140	Castings	Stainless

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12231	HSC-SS Extra Carbon	M–908	1.0-1.1 C, bal. Fe							Tools	Water hardening
12232	SS Extra Cold Heading	M–908	1.0-1.1 C, bal. Fe							Cold heading dies	
12233	C. W. Oil Hardening	M–908	.85-.95 C, 1.0-1.2 Mn, .4-.6 Cr, .4-.6 W, bal. Fe							Tools, dies	Non-deforming
12234	HSC No. 265 Hi Carbon Hi Chrome	M–908	1.55-1.7 C, 11.5-12.5 Cr, .7-.9 Mo, .15-.25 V, bal. Fe							Dies, tools	
12235	HSC No. 422	M–908	.45-.50 C, .85-1.05 Cr, .9-1.2 W, .15-.25 Mo, bal. Fe							Tools	Shock-resisting
12236	HSC No. 350	M–908	1.25-1.35 C, 3.5 W, bal. Fe							Tools	Fast finishing
12237	HSC No. 33	M–908	.3-.35 C, .9 Si, 5 Cr, 1.2 W, 1.5 Mo, bal. Fe							Hot work tools	Hot work steel
12238	HSC No. 280	M–908	.55 C, 1.5 Si, .35 Mo, bal. Fe							Tools	
12239	Circle L-430	M–74	.35 C, 1.25 Si, 24.5 Cr, 11 Ni, bal. Fe	Cast	90000	50000	15		190	Chemical equipment	Stainless
12240	Circle L-431	M–74	.35 C, 1.25 Si, 28.5 Cr, 9.5 Ni, bal. Fe	Cast	85000	45000	15		170	Chemical equipment	Stainless
12241	Circle L-33	M–74	.07 C, 3.25 Si, 19.5 Cr, 23.5 Ni, 2.5 Mo, 1.7 Cu, bal. Fe	Cast	75000	35000	45		150	Castings	
12242	T-Alloy "N"	M–140	.28 C, .25 Mo, 10.5 W, 3 Cr, .25 V, 1.6 Ni, bal. Fe							Tools	
12243	Dumore	M–289	.95-1.05 C, 5-5.5 Cr, .95-1.25 Mo, bal. Fe							Blanking, forming and drawing dies	Air hardening
12244	Midvaloy No. 11-Mo	M–85	C, .6-.9 Cr, 2.6-3.2 Ni, .2-.3 Mo, bal. Fe		125000 160000	100000 140000	22 15	55 45	250 325	Shafts, gears	
12245	Republic Silicon, Field Grade	M–97	.25 Si, bal. Fe							Armatures, electrical equipment	
12246	Republic Silicon, Special Dynamo Grade	M–97	3.0 Si, bal. Fe							Electrical equipment	
12247	Republic Silicon, Special Motor Grade	M–97	2.25 Si, bal. Fe							Electrical equipment	
12248	Republic Silicon, Transformer Grade	M–97	3.5 Si, bal. Fe							Transformers	
12249	Shenango-Penn No. 8	M–974	84 Cu, 8 Sn, 8 Pb		25000	15000	8			Bearings, liners	
12250	Shenango-Penn No. 10	M–974	75 Cu, 6 Sn, 19 Pb		21000	20000	1		45	Bearings	
12251	Shenango-Penn No. 12	M–974	70 Cu, 30 Zn		28000	16000	22		65	Liners, ball bearing cages	
12252	Shenango-Penn No. 14A	M–974	85 Cu, 11 Al, 4 Fe		80000	40000	12		170	Sleeves, gears	
12253	Shenango-Penn No. 14B	M–974	88 Cu, 9 Al, 3 Fe		65000	32000	20		115	Bearings, sleeves, gears	
12254	Shenango-Penn No. 14C	M–974	78 Cu, 7-12 Al, 3.5 Mn, 3.5 Fe, 3.5 Ni, 1 others		75000	35000	15		140	Sleeves, gears	
12255	Shenango-Penn No. 15S	M–974	60 Cu, 1.5 Al, 3.5 Mn, 2.0 Fe, bal. Zn		90000	40000	18		174	Liners, sleeves, gears	
12256	Shenango-Penn No. 15HT	M–974	63 Cu, 5.5 Al, 3.0 Mn, 3.5 Fe, bal. Zn		110000	55000	12		223	Liners, sleeves, gears	
12257	Shenango-Penn No. 16B	M–974	63 Cu, 2.5 Al, bal. Zn		62000	35000	18		120	Sleeves, washers	
12258	Shenango-Penn No. 13A	M–974	94.5 Cu, 4.5 Si, 1.0 Mn		45000 50000	30000	24		99	Bearings, washers	
12259	Shenango-Penn No. 13B	M–974	90 Cu, 3.0 Si, 1.5 Mn, 3 Zn, 1.5 Fe, 1.0 Sn		50000	25000	40		90	Bearings, rings	
12260	Shenango-Penn No. 20	M–974	65 Cu, 15 Zn, 2 Sn, 6 Pb, 12 Ni		34000	17500	30		50	Washers	
12261	Amercut 4640	M–12	.38-.43 C, .6-.8 Mn, 1.65-2.0 Ni, .2-.3 Mo, bal. Fe	Heat treated	125000	110000	17	50		Engine studs, bolts, shafts	

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12262	Amerhead A-4037	M-12	.35-.40 C, .75-1.0 Mn, .2-.3 Mo, bal. Fe	Drawn	85000	75000	15	50		Bolts, shafts, screws	
					100000	85000	25	65			
12263	Amerhead NE8620	M-12	.18-.23 C, .7-.9 Mn, .4-.6 Cr, .4-.7 Ni, .15-.25 Mo, bal. Fe	Drawn	78000	68000	15	50		Bolts, shafts	Case hardening
					93000	80000	25	65			
12264	Amerhead NE9437	M-12	.35-.40 C, .9-1.2 Mn, .3-.5 Cr, .3-.6 Ni, .08-.15 Mo, bal. Fe	Drawn	90000	75000	12	45		Bolts, shafts	
					105000	85000	25	65			
12265	U.S.S.-2520	M-12	.25 max. C, 2.0 max. Mn, 1.5 max. Si, 24-26 Cr, 19-22 Ni, bal. Fe	Annealed	90000	40000	35	45		Corrosion and heat resisting parts	High heat resisting
					110000	60000	50	60			
12266	Milwaloy Mn Bo	M-475	.3-.4 C, 1.1-1.4 Mn, .003 B, bal. Fe	Cast	80000	50000	20	35	174	Tractors, road machinery	Wear resisting
					95000	65000	30	55	196		
12267	*Milwaloy Mn Mo Bo*	M-475	.3-.4 C, 1.1-1.4 Mn, .15-.20 Mo, .003 B, bal. Fe	Cast	90000	70000	20	35	179	Tractor parts, road machinery	Wear resisting
					110000	80000	30	55	217		
12268	Milwaloy CC	M-475	.4-.5 C, .5-.8 Mn, .9-1.1 Cr, bal. Fe	Cast	85000	50000	17	25	179	Crusher machinery, screen plates, wear segments	Wear resisting
					100000	70000	22	45	210		
12269	Milwaloy Cr Ni	M-475	.35-.45 C, .6-.9 Mn, 1.25-1.75 Ni, .6-.9 Cr, bal. Fe	Cast	90000	55000	18	30	180	Gears, cams, rollers	Wear resisting
					110000	75000	25	50	220		
12270	Milwaloy 18-8	M-475	.08-.15 C, 8-10 Ni, 17-20 Cr, bal. Fe	Cast	70000	25000	40	35	160	Food machinery	Stainless
				Heat treated	80000	40000	70	60	187		
12271	Milwaloy 29-9	M-475	.10-.20 C, 8-10 Ni, 27-31 Cr, bal. Fe	Cast	80000	40000	35	35	187	Paper mill machinery	Heat resisting
				Heat treated	90000	50000	50	60	207		
12272	Milwaloy KA2SMO	M-475	.4-.6 C, 8-10 Ni, 18-20 Cr, 2-4 Mo, bal. Fe	Cast	70000	30000	35	45	178	Corrosion resisting castings	Corrosion resisting
				Heat treated	80000	40000	50	70	196		
12273	Milwaloy 35-15	M-475	.2-.4 C, 32-38 Ni, 13-17 Cr, bal. Fe	Cast						Heat resisting castings	Heat resisting
12274	Milwaloy Cr Ni Mo	M-475	.35-.45 C, .5-.8 Mn, 1.25-1.75 Ni, .6-.9 Cr, .3-.4 Mo, bal. Fe	Cast	95000	65000	12	25	189	Castings	Wear resisting
					155000	135000	24	50	255		
12275	Milwaloy Nit	M-475	.20-.30 C, .5-.9 Mn, 2.5-3.0 Cr, .35-.55 Mo, .2 V, bal. Fe	Cast	80000	70000	20	30	170	Pistons, cylinders, valve parts	Nitriding alloy
					95000	80000	30	55	200		
12276	Milwaloy Commercial	M-475	.25-.35 C, .5-.8 Mn, bal. Fe	Cast	65000	38000	25	40	140	Structural and machine castings	
					80000	55000	35	55	165		
12277	Milwaloy Hi-Carbon	M-475	.4-.5 C, .5-.8 Mn, bal. Fe	Cast	80000	47000	20	30	170	Gears, racks, sprockets	
					95000	65000	30	50	196		
12278	Milwaloy Dynamo	M-475	.05-.15 C, .20 max. Mn, bal. Fe	Cast	50000	25000	30	50	130	Magnet bodies, armature frames, electrical machinery	
					65000	37000	37	70	150		
12279	Milwaloy 1¼ Mn	M-475	.3-.4 C, 1.1-1.4 Mn, bal. Fe	Cast	75000	45000	23	30	160	Tractor parts, road machinery, sprockets	
					95000	60000	30	55	196		
12280	Phono Electric Bronze No. 810	M-141	4 Sn, bal. Cu	Annealed	40000		50			Trolley wire, hardware	40% min. cond.
				Drawn	70000		10				
12281	Phono Hi-Conductivity	M-141	.9 Cd, bal. Cu	Annealed	37000		50			Trolley wire, hardware	80% min. cond.
				Drawn	65000		6				
12282	Plumrite Copper	M-141	99.9 Cu	Annealed	30000		40			Piping, water tube	
				Drawn	48000		4				
12283	Bridgeport Forging Rod	M-141	59.5 Cu, 1.75 Pb, bal. Zn	Soft	50000		45			Forgings	Free cutting
12284	Bridgeport No. 192 Bronze	M-141	Cu alloy							Welding rod	Non-fuming
12285	Bridgeport Manganese Bronze	M-141	58.5 Cu, 1.0 Fe, .75 Sn, .3 Mn, bal. Zn	Annealed	60000		15			Welding rod, forgings	Corrosion resisting
				Drawn	85000		35				
12286	Bridgeport Phosphor Bronze Grade A	M-141	5.5 Sn, .15 P, bal. Cu	Annealed	50000		50			Springs, diaphragms, clutch discs	Corrosion and fatigue resisting
				Drawn	80000		3				
12287	Bridgeport Phosphor Bronze Grade C	M-141	8 Sn, .10 P, bal. Cu	Annealed	60000		65			Springs, diaphragms	Corrosion and fatigue resisting
				Drawn	112000		5				
12288	Arsenical Admiralty Tubing	M-141	71 Cu, 1.0 Sn, .03 As, bal. Zn	Annealed	50000		65			Condenser tubing	
				Drawn	85000		10				

Serial No.	Alloy	Mfg. No.	Composition	*Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12289	Phono Hi-Strength No. 715	M-141	3 Al, .35 Si, bal. Cu	Annealed	50000		50			Cable	15% cond.
				Drawn	125000		5				
12290	Phono Telephone No. 830	M-141	1.7 Sn, bal. Cu	Annealed	40000		50			Cable	30% cond.
				Drawn	90000		10				
12291	Phono Electric No. 865	M-141	.4 Sn, bal. Cu	Annealed	35000		50			Trolley wire	65% cond.
				Drawn	63000		10				
12292	Phono Cadmium No. 955	M-141	.85 Cd, .55 Sn, bal. Cu	Annealed	40000		50			Trolley wire, cable	55% cond.
				Drawn	85000		10				
12293	Phono Hi-Conductivity No. 985	M-141	.75 Cd, bal. Cu	Annealed	37000		50			Cable	85% cond.
				Drawn	65000		6				
12294	Riverside No. 400	M-98	12 Ni, 21.5 Zn, 1.5 Pb, bal. Cu							Screw machine parts	Free cutting
12295	Tantung G2	M-53	Cr-W-Co, TaC-CbC	Cast						Cutting tools	Cast
12296	Z-Alloy	M-205	1 Pt, bal. Ag							Inductance coils	Low magnetic core loss
12297	2-81 Molybdenum Permalloy	M-205	2 Mo, 81 Ni, bal. Fe								
12298	Amsco F-12	M-9	C, 27-30 Cr, 7-10 Ni, bal. Fe							Heat treating furnaces, valves	Creep resisting
12299	Amsco F-13	M-9	C, 25-28 Cr, 34-37 Ni, bal. Fe							Furnace parts	Resists heat and S atm. to 2100° F.
12300	Amsco F-14	M-9	C, 24-27 Cr, 19-22 Ni, bal. Fe							Furnace parts	Heat resisting
12301	Farmface	M-9	C, Cr, Mn, Si, bal. Fe							Welding rod for hard surfacing	Wear resisting
12302	U.S.S. 12 Cr Al	M-90	.08 max. C, 11-13.5 Cr, .10-.30 Al, bal. Fe	Annealed	60000	30000	25		163	Oil and chemical industries	Corrosion and oxidation resisting
12303	Scovill High Brass	M-102	64.5-66.5 Cu, .3 max. Pb, bal. Zn	Annealed	48000		60			Deep drawing, spinning, stamping	High ductility
				Hard	74000		8		150		
12304	Scovill Cartridge Brass	M-102	68.5-71.5 Cu, .05 max. Pb, bal. Zn	Annealed	47000		62			Cartridge cases	High conductivity
				Hard	76000		8				
12305	Scovill Low Brass	M-102	79-81 Cu, .05 max. Pb, bal. Zn	Annealed	43000		50		159	Drawn and formed parts	Corrosion resisting
				Hard	73000		8		156		
12306	Scovill Commercial Bronze	M-102	89-91 Cu, bal. Zn	Annealed	37000		45			Hardware, bullet jackets	Deep drawing
				Hard	60000		5				
12307	Gilding Metal	M-102	94-96 Cu, bal. Zn	Annealed	35000		45			Drawn and spun parts	Corrosion resisting
				Hard	55000		5		114		
12308	Scovill Forging Brass	M-102	58-61 Cu, 1.5-2.5 Pb, bal. Zn	Forged	55000		40			Hardware, forgings	
12309	Free Cutting Brass	M-102	60-63 Cu, 2.5-3.7 Pb, bal. Zn	Annealed	49000		53	58		Screw machine products	Free cutting
				½ Hard	58000		25	50	144		
12310	Engravers Brass	M-102	62.5-64.5 Cu, 1.5-2.5 Pb, bal. Zn	Annealed	45000		50			Gears, watch and clock backs	Free cutting
				Hard	73000		7				
12311	Lancashire Brass	M-102	72-75 Cu, 2.5-3.0 Pb, bal. Zn	Annealed	43000		50			Watch and clock parts	Free cutting
				Hard	73000		8				
12312	Phosphorized Admiralty Metal	M-102	70-73 Cu, .9-1.2 Sn, .10 max. P, bal. Zn	Annealed	52000		65			Condenser tubes, ferrules	Corrosion resisting
				Hard	85000		10				
12313	Scovill Oreide	M-102	88-91 Cu, .35-.65 Sn, bal. Zn	Annealed	40000		40			Bearings, jewelry	Corrosion resisting
				Hard	75000		4				
12314	Platers Metal	M-102	85-88 Cu, 1.75-2.5 Sn, bal. Zn	Annealed	50000		55			Springs, diaphragms	
				Hard	94000		1				
12315	Phosphor Bronze Grade A	M-102	4-6 Sn, .35 max. P, bal. Cu	Annealed	50000		50			Springs, diaphragms	
				Hard	95000		2				
12316	Phosphor Bronze Grade C	M-102	7-9 Sn, .35 max. P, .20 max. Zn, bal. Cu	Annealed	55000		60			Springs, bearings	
				Hard	110000		2				
12317	Aluminum Brass	M-102	76 min. Cu, 1.75-2.5 Al, bal. Zn	Annealed	60000		50			Condenser tubes	Corrosion resisting
				Hard	85000		15				

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12318	Rustless 18-8	M-100	.08-.20 C, 2.0 max. Mn, 1.0 max. Si, 17-19 Cr, 8-10 Ni, bal. Fe	Annealed Worked	85000 250000	30000 225000	60	70	150	Screws, bolts, stainless parts	Stainless
12319	Rustless 18-8FM (Sulphur)	M-100	.20 max. C, 2.0 max. Mn, 1.0 max. Si, .18-.35 S, 17-19 Cr, 8-10 Ni, bal. Fe	Annealed	88000	33000	54	60	165	Shafting, valve parts	Stainless, free cutting
12320	Rustless 18-8FM Selenium	M-100	.20 max. C, 1.0 max. Mn, .10-.35 Se, 17-19 Cr, 8-10 Ni, bal. Fe	Annealed	88000	33000	54	60	165	Shafting, valve parts	Stainless, free cutting
12321	Rustless 25-20	M-100	.25 max. C, 2.0 max. Mn, 1.5 max. Si, 24-26 Cr, 19-22 Ni, bal. Fe	Annealed	90000	40000	50	66	170	Welding electrodes, furnace parts	Resists heat to 2000° F.
12322	Rustless 18-12-3 Mo	M-100	.10 max. C, 16-18 Cr, 10-14 Ni, 1.75-2.5 Mo, bal. Fe	Annealed	85000	30000	60	70	150	Process industries, stainless parts	Heat and corrosion resistant
12323	Rustless 18-12-4 Mo	M-100	.10 max. C, 17.5-20 Cr, 10-14 Ni, 3-4 Mo, bal. Fe	Annealed	85000	30000	60	70	150	Stainless parts	Heat and corrosion resistant
12324	Rustless 18-8 Ti	M-100	.10 max. C, 17-19 Cr, 8-11 Ni, Ti = 4×C, bal. Fe	Annealed	85000	30000	55	70	150	Welded parts	Stainless
12325	Rustless 8-20	M-100	.25 max. C, 7-10 Cr, 19-23 Ni, bal. Fe	Annealed	75000	30000	50	70	125	Valves	Heat and corrosion resistant
12326	Rustless 18-8 Cb	M-100	.10 max. C, 17-19 Cr, 9-12 Ni, Cb = 8×C, bal. Fe	Annealed	87000	32000	50	70	165	Welded parts	Stainless
12327	Rustless 12 T	M-100	.15 max. C, 11.5-13 Cr, 1.0 max. Mn, 1.0 max. Si, bal. Fe	Annealed	78000	40000	35	73	148	Turbine blades	Corrosion resistant
12328	Rustless 12 Al	M-100	.08 max. C, 11.5-13.5 Cr, .10-.30 Al, bal. Fe	Annealed	75000	45000	30	70	165	Turbine blades	Corrosion resistant
12329	Rustless 12	M-100	.15 max. C, 11.5-13.5 Cr, 1.0 max. Mn, 1.0 max. Si, bal. Fe	Annealed	78000	40000	35	73	148	Valves, bolts	Corrosion resistant
12330	Rustless 12-2	M-100	.15 max. C, 11.5-13.5 Cr, 1.25-2.5 Ni, bal. Fe	Annealed	115000	93000	20	65	245	Valves, bolts	Corrosion resistant
12331	Rustless 12 FM	M-100	.15 max. C, 12-14 Cr, .6 max. Mo, .15-.35 S, bal. Fe	Annealed	78000	40000	31	62	148	Screw machine parts	Free cutting
12332	Rustless 13 C 35	M-100	C. 12-14 Cr, 1.0 max. Si, 1.0 max. Mn, bal. Fe	Annealed Hardened	98000 250000	60000 225000	28 8	65 25	170 500	Surgical and dental instruments	Corrosion resistant
12333	Rustless 17 2	M-100	.2 max. C, 15-17 Cr, 1.25-1.75 Ni, 1.0 max. Mn, 1.0 max. Si, bal. Fe	Annealed	120000	95000	21	60	245	Bolts, shafting	Corrosion resistant
12334	Rustless 17-C-60	M-100	.6-.7 C, 16-18 Cr, 1.0 max. Mn, 1.0 max. Si, bal. Fe	Annealed	105000	65000	23	50	205	Cutlery	Wear resistant
12335	Rustless 17-C-80	M-100	.7-.9 C, 16-18 Cr, 1.0 max. Mn, 1.0 max. Si, bal. Fe	Annealed	107000	62000	19	40	220	Cutlery	Wear resistant
12336	Rustless 17-C-100	M-100	.95 C, 16-18 Cr, 1.0 max. Mn, 1.0 max. Si, bal. Fe	Annealed Hardened	110000 288000	60000 275000	15 2	30 10	230 580	Cutlery	Wear resistant
12337	Rustless 27	M-100	.35 max. C, 23-27 Cr, 1.0 max. Mn, 1.0 max. Si, bal. Fe	Annealed	80000	40000	27	60	175	Exhaust manifolds, furnace parts	Heat resistant
12338	Rustless 5	M-100	.10 max. C, 4-6 Cr, 1.0 max. Mn, 1.0 max. Si, bal. Fe	Annealed Worked	70000 90000	26000 80000	36 20	69 70	135 190	Bolts, nuts	Corrosion resistant
12339	Stewart Aluminum 10	M-514	3.5-4.5 Cu, 4.5-5.5 Si, bal. Al	Cast	37000	18000	2.5		78	Castings	Die cast
12340	Stewart Aluminum 10R	M-514	3-4 Cu, 8.5-9.5 Si, bal. Al	Cast	44000	21000	2		80	Castings	Die cast
12341	Stewart Zinc No. 3	M-514	.10 max. Cu, 3.75-4.25 Al, .04 Mg, bal. Zn	Cast	40300		4.7		74	Castings	Die cast
12342	Stewart Zinc No. 5	M-514	.75-1.2 Cu, 3.7-4.2 Al, .04 Mg, bal. Zn	Cast	45400		3		79	Castings	Die cast

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12343	Stewart Zinc No. 2	M-514	2.5-3.5 Cu, 3.7-4.2 Al, .04 Mg, bal. Zn	Cast	47900		5		83	Castings	Die cast
12344	Stewart Magnesium No. R	M-514	8.3-9.7 Al, .13 min. Mn, .5 max. Si, .4-1.0 Zn, bal. Mg	Cast	33000		3		60	Castings	Die cast
12345	H & R No. 7	M-363	1.3 C, 5.5 W, 4.5 Cr, 4.5 Mo, 4 V, bal. Fe							Broaches, reamers, chasers	High speed steel
12346	Red Arrow	M-73	Co-Cr-W							Cutting tools	Cast
12347	Carboloy Grade 779	M-31	WC							Dies	Hard and tough
12348	Carboloy Grade 78B	M-31	WC							Cutters	Tough
12349	Carboloy Grade 78C	M-31	WC							Cutters	Tough
12350	H & R Super Cobalt	M-363	.8 C, 20-21 W, 4-4.5 Cr, 1.3 V, 12 Co, .6 Mo, bal. Fe							Cutters, hobs, millers	High speed steel
12351	Croloy 9	M-17	C, 9 Cr, 1 Mo, bal. Fe							Tubing	
12352	Croloy 16-13-3	M-17	C, 16 Cr, 13 Ni, 3 Mo, bal. Fe	Annealed	75000		35		200	Tubing	Corrosion resistant
12353	Compo 63-H-2	M-632	89 Cu, 9.75 Sn, 1.25 graphite		12000					Bearings	Porous, oil impregnated
12354	Compo 66-H-2	M-632	88.5 Cu, 10 Sn, 1.5 graphite		14700					Bearings	Porous. Impregnated with 23% oil
12355	Chase 149 Bronze	M-33	88.5 Cu, 1.1 Ni, .22 P, .5 Te, 9.7 Zn		60000 70000	40000 50000	6 15			Screw machine parts, forgings	
12356	Vancorum Ferro Vanadium Open Hearth Grade A	M-394	35-45 V, 3.5 max. C, 12 max. Si, bal. Fe							In manufacture of steel	
12357	Vancorum Ferro Vanadium Crucible Grade B	M-394	35-45 V, .5 max. C, 3.5 max. Si, bal. Fe							In steel manufacturing	
12358	Vancorum Ferro Vanadium Primos Grade C	M-394	35-45 V, .2 max. C, 1.25 max. Si, bal. Fe							In steel manufacturing	
12359	Vancorum Ferro Vanadium Special High Vanadium	M-394	50-80 V, .5 max. C, 3.5 max. Si, bal. Fe							In steel manufacturing	
12360	Vanadium Grainal No. 1	M-394	25 V, 15 Ti, 10 Al, 0.2 B, bal. Fe							In steel manufacturing	To increase hardenability
12361	Vanadium Grainal No. 6	M-394	13 V, 20 Ti, 12 Al, 0.2 B, bal. Fe							In steel manufacturing	To increase hardenability
12362	Grainal No. 79	M-394	20 Ti, 13 Al, 4 Zr, 8 Mn, 0.5 B, bal. Fe							In steel manufacturing	To increase hardenability
12363	Graphidox No. 4	M-394	10 Ti, 48 Si, 6 Ca, bal. Fe							In iron manufacturing	For graphitization
12364	V-5 Alloy	M-394	40 Cr, 10 Mn, 15 Si, bal. Fe							In iron manufacturing	For chill reduction
12365	V-7 Alloy	M-394	30 Cr, 15 Mn, 18 Si, bal. Fe							In iron manufacturing	For chill reduction
12366	EM 3	M-162	.25-.35 C, 1.25-1.5 Mn, bal. Fe	Heat treated	90000	55000	25	40	200	Drill bits, valve bodies, drills	Castings
12367	EM 3A	M-162	.25-.35 C, 1.5-1.75 Mn, bal. Fe	Heat treated	95000	60000	22	35	210	Drill bits, valve bodies, drills	Castings
12368	EM 4	M-162	.15-.25 C, .5-.6 Mn, .4-.6 Mo, bal. Fe	Annealed	75000	45000	25	40		Turbines, locomotives	Castings
12369	EM 4A	M-162	.25-.35 C, .7-.9 Mn, .25-.35 Mo, bal. Fe	Heat treated	85000	55000	22	35	200	Turbines, locomotives	Castings
12370	EM 4B	M-162	.25-.35 C, .5-.6 Mn, .4-.6 Mo, bal. Fe	Heat treated	90000	60000	18	30	220	Turbines, locomotives	Castings
12371	EM 5	M-162	.25-.35 C, 1.0-1.2 Mn, .25-.35 Mo, bal. Fe	Heat treated	80000	55000	25	40		Cars, excavating machinery sheaves	Castings
12372	EM 5A	M-162	.25-.35 C, 1.0-1.25 Mn, .25-.35 Mo, bal. Fe	Heat treated	85000	60000	22	35		Excavating machinery sheaves	Castings

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12373	EM 5B	M-162	.35-.45 C, 1.5-1.75 Mn, .25-.35 Mo, bal. Fe	Heat treated	110000	70000	18	30		Excavating machinery sheaves	Castings
12374	EM 6	M-162	.25-.35 C, .5-.6 Mn, 1.75-2.25 Ni, bal. Fe	Heat treated	95000	60000	25	40		Mining, excavating and ship castings	Castings
12375	EM 7	M-162	.25-.35 C, .5-.6 Mn, 1.0-1.5 Cr, bal. Fe	Heat treated	95000	60000	20	35		Car parts, sheaves, machine tools	Castings
12376	EM 7A	M-162	.8-.9 C, .5-.6 Mn, 1.0-1.5 Cr, bal. Fe	Annealed	100000	70000	15	15		Cement mills, paddles, crushers	Castings
12377	EM 8	M-162	.25-.35 C, .6-.9 Mn, 1.0-1.25 Cr, .2-.3 Mo, bal. Fe	Annealed	95000	50000	20	35	210	Railroads, connecting rods, valves	Castings
12378	EM 85	M-162	.2-.25 C, 4-6 Cr, .4-.6 Mo, bal. Fe	Heat treated	95000	65000	20	35	220	Pumps, valves	Castings
12379	EM 9	M-162	.25-.35 C, 1.75-2.25 Ni, .6-.9 Cr, .2-.3 Mo, bal. Fe	Heat treated	110000	70000	18	35	230	Valve bodies, turbines, gears	Castings
12380	EM 9A	M-162	.25-.35 C, 2.2-2.7 Ni, 1.0-1.2 Cr, .3-.4 Mo, bal. Fe	Heat treated	115000	65000	20	40		Impellers, pump casing	Castings
12381	Nivan	M-357	C, 1.4 Ni, .35 Cr, .2 V, bal. Fe							Cutlery	
12382	Dissteel 812	M-357	1.8 C, 12 Cr, bal. Fe							Dies	
12383	Flexible Hack Band	M-357	1.3 C, .15 Cr, bal. Fe							Tools, dies	
12384	Elkro	M-357	.5 C, .95 Cr, .2 V, bal. Fe							Dies	
12385	Morex	M-487	C, Mo, W, bal. Fe							Tools, cutters	High speed steel
12386	Celero	M-357	1.35 C, .25 Cr, 2.75 W, bal. Fe							Finishing tools	
12387	Semi High	M-357	1.1 C, .3 Cr, 1.1 W, .2 V, bal. Fe							Tools	Semi-High speed
12388	Clicking Die	M-357	.4 C, .7 Cr, bal. Fe							Clicking dies	
12389	Lawn Mower	M-357	1.0 C, 1.15 Cr, bal. Fe							Lawn mower blades	
12390	Segment Steel	M-357	.85 C, .75 Cr, bal. Fe							Tools	
12391	Chipper Knife	M-357	.7 C, 1.15 Cr, .25 V, .7 Mo, bal. Fe							Shears, dies, chipper knives	
12392	D-29 Knife	M-357	.65 C, 1.4 Si, .1 V, .4 Mo, bal. Fe							Chipper knives	
12393	Seneca Hot Die	M-435	.35 C, 11 W, 3.5 Cr, .5 V, bal. Fe							Punches, hot dies	Hot work steel
12394	Plastiron	M-357	.12 max. C, bal. Fe							Plastic molds	
12395	Disston Stainless D	M-357	.45 C, 1.0 Si, 8.75 Cr, 1.4 Mo, 2.6 Cu, bal. Fe							Stainless parts	No. 98 Stainless
12396	Pneu-Die	M-357	.48 C, 2.15 Cr, .3 Mo, bal. Fe							Chisels	
12397	Clicker Die	M-357	.75 C, .25 Mo, bal. Fe							Tools, knives	
12398	D Mo	M-357	1.15 C, .2 Mo, bal. Fe							Taps, knives	
12399	Wood Saw	M-357	.75 C, .7 Ni, .2 Cr, bal. Fe							Saws	For wood
12400	Clicking Die	M-357	.55 C, .2 Mo, bal. Fe							Dies	
12401	Tack Die	M-357	2.05 C, 1.05 Mn, .85 Si, 1.25 Cr, 9.5 W, bal. Fe							Tack dies	
12402	D2-Disston	M-357	C, bal. Fe							Tools	
12403	B.A. 40M	M-28	10-13 Si, bal. Al	Cast	24000 33000		4 5		70 75	Light alloy parts	
12404	Rexite Grade CR-7	M-38	WC							Cutting tools	Tough, wear resistant, sintered
12405	Rexite Grade CR-8	M-38	WC							Cutting tools	High speed finishing, sintered
12406	Rexite Grade UC-16	M-38	WC							Cutting tools	Shock resistant, sintered
12407	Rexite Grade UC-14	M-38	WC							Cutting tools	Hard, wear resistant, sintered

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12408	Delloy G-P	M-756	C, W, Cr, V, bal. Fe							Cutters, tools	High speed steel
12409	Delloy DC-7	M-756	Carbide							Cutters for iron and non-ferrous	Sintered
12410	Delloy DS-8	M-756	Carbide							Cutters for steel	Sintered
12411	Alchrome 6	M-61	19-21 Cr, 5.25-6.5 Al, bal. Fe	Annealed	100000		18			Electrical resistors and heating elements	Resists S-atm.
12412	Beraloy A	M-61	1.9-2.2 Be, .25-.50 Co, bal. Cu	Annealed	66000	26000	60			Diaphragms, springs	
				Heat treated	200000	179000	2				
12413	Beraloy B	M-61	1.9-2.2 Be, .25-.50 Ni, bal. Cu	Annealed	66000	26000	60			Diaphragms, springs	
				Heat treated	200000	179000	2				
12414	Beraloy C	M-61	.4-.5 Be, 2.5-2.7 Co, bal. Cu	Annealed	30000					Springs	
				Heat treated	110000		10				
12415	Manganin	M-44	9.5-10.5 Mn, 3-4 Ni, bal. Cu	Annealed	70000					Instrument resistors and shunts	Low thermal EMF
12416	Mangrid D	M-61	4.5 Mn, bal. Ni	Annealed	75000	35000	40		140	Vacuum tube grid wire	Magnetic
12417	Mangrid E	M-61	20 Mn, bal. Ni	Annealed	79000					Furnace lead wire, grid wire	Magnetic
12418	Silicon Nickel	M-61	95 Ni, 2.5 Si, 2.5 Mn	Annealed						Electrical resistances	
12419	Sironze	M-61	96 Cu, 3 Si, 0.1 Fe	Annealed	70000		17	26		Bolts, nuts, screws	Corrosion resistant
				Drawn	110000	83000	15	22	189		
12420	Sylvaloy	M-61	97 Ni, 3 Si	Annealed	75000			35		Vacuum tube filaments	Magnetic
12421	Tensite	M-61	2 Al, 98 Ni	Annealed	56500					Vacuum tube filaments	
12422	Nilstain X	M-61	7-9 Ni, 17-19 Cr, 1.5-3.0 Cu, 4-6 Mn, C, bal. Fe	C.D.	80000		50			Lock washers, cold heading parts	Non-magnetic, stainless
12423	Nilstain 304	M-61	8-10 Ni, 18-20 Cr, .08 max. C, 2.0 max. Mn, bal. Fe	C.D.	85000	35000	60	70	140	Springs, screws, bolts	Stainless wire
					250000	200000	5	55	455		
12424	Nilstain 308	M-61	10-12 Ni, 19-22 Cr, .08 max. C, bal. Fe	C.D.	85000	35000	60	70	140	Weaving wire, bolts, nuts, screws	Stainless
					350000	300000	5	55	400		
12425	Nilstain 309	M-61	12-14 Ni, 22-26 Cr, .2 max. C, bal. Fe	C.D.	100000	52000	75	60	160	Weaving wire, heat resisting baskets	Heat resistant
					225000	150000	5	50	400		
12426	Nilstain 309 Cb	M-61	13-15 Ni, 23-25 Cr, 1.5-2.0 Mn, .07 max. C, Cb = 15×C, bal. Fe							Welding wire	Stainless
12427	Nilstain 310	M-61	19-22 Ni, 24 Cr, .25 max. C, bal. Fe	C.D.	105000	50000	50	55	165	Welding wire, furnace parts	Heat resistant
12428	Nilstain 316	M-61	14 max. Ni, 16-18 Cr, 2-3 Mo, .10 max. C, bal. Fe	C.D.	95000	45000	55	75	185	Welding wire, weaving wire	Stainless
12429	Nilstain 317	M-61	14 max. Ni, 18-20 Cr, 3-4 Mo, .10 max. C, bal. Fe	C.D.	95000	45000	55	75	185 300	Weaving wire	Heat resistant
12430	Nilstain 321	M-61	7-10 Ni, 17-20 Cr, .10 max. C, Ti = 4×C, bal. Fe	C.D.	85000	35000	55	70	130 300	Welding wire	Stainless
12431	Nilstain 325	M-61	19-23 Ni, 7-10 Cr, 1-1.5 Cu, .25 max. C, bal. Fe	C.D.	90000	50000	30	45	160	Corrosion resisting parts	Corrosion resistant
							40	55	190		
12432	Nilstain 330	M-61	33-36 Ni, 14-16 Cr, .25 max. C, bal. Fe	C.D.	75000		15			Heat resisting parts	Heat resistant
							25				
12433	Nilstain 347	M-61	17-20 Cr, 8-12 Ni, .10 max. C, Cb = 10×C, bal. Fe	C.D.	85000	35000	55	65	130	Welding wire	Corrosion resistant
							60	75	300		
12434	Nilstain 430	M-61	14-18 Cr, .12 max. C, bal. Fe	C.D.	75000	50000	35	75	140	Instruments	Corrosion resistant
					100000	90000	10	60	250		
12435	Nilstain 416	M-61	23-30 Cr, .35 max. C, bal. Fe	C.D.	85000	60000	20	40	160	Glass sealing wire	Heat resistant
							30	50	200		
12436	Electronic Bronze	M-279	98.75 Cu, 1.25 Sn	Hard	77000		5			Springs, contacts, diaphragms	
				Soft	40000		45				
12437	Western Bronze No. 222	M-279	92 Cu, 2.3 Fe, bal. Zn	Hard	68000		5			Refrigeration evaporators	Resists grain growth
				Soft	48000		35				

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12438	Western Bearing Bronze	M–279	88 Cu, 4 Zn, 4 Sn, 4 Pb	Hard	78000		7			Bushings, bearings, clutch plates	
				Soft	45000		40				
12439	Cupro Nickel	M–279	93.2 Cu, 6-8 Ni	Hard	58000		6				Corrosion resistant
				Soft	40000		38				
12440	Lubaloy X	M–279	90 Cu, 1.75 Sn, 8.25 Zn	Hard	81000		4			Contact springs, radio tube sockets	
				Soft	48000		40				
12441	Super-X-Leaded Nickel Silver	M–279	61.5 Cu, 13 Ni, 1.5 Pb, 24 Zn	Hard	91500		5			Key and cylinder blocks	Blanking qualities
				Soft	60500		40				
12442	Super-X-18% Nickel Silver Grade A	M–279	72 Cu, 18 Ni, 10 Zn	Hard	78500		5			Deep drawn shells and tubes	Good deep drawing
				Soft	48000		34				
12443	Super-X-18% Nickel Silver Grade B	M–279	55 Cu, 18 Ni, 27 Zn	Hard	99500		4			Springs, switch blades, radio parts	Tarnish resistant
				Soft	50000		25				
12444	Super-X-18% Nickel Silver Grade C	M–279	65 Cu, 18 Ni, 17 Zn	Hard	91000		38			Coins, jewelry, hardware	Severe cold work
				Soft	55000		4				
12445	Super-X-Phosphor Bronze Grade C	M–279	92 Cu, 8 Sn, P	Hard	93500		13			Springs, diaphragms, fuse clips	Good fatigue resistant
				Soft	57000		65				
12446	Super-X-Phosphor Bronze Grade D	M–279	90 Cu, 10 Sn, P	Hard	103000		13			Springs, diaphragms	
				Soft	65000		60				
12447	Super-X-Phosphor Bronze Grade E	M–279	96.5 Cu, 3.5 Sn, P	Hard	79500		8			Fuse clips, springs	
				Soft	47000		45				
12448	Simbrax	M–338	85-97 Cu, 1.5 Fe, 1-3.5 Si, 2-7 Zn	Soft	45000	20000	50		40	Pressure gauges	Corrosion resistant
				Hard	120000		2		250		
12449	Booth Cap Copper	M–338	96-97.5 Cu, bal. Zn	Soft	35000		50		35	Small pressings	
				Hard	50000		10		80		
12450	Hinge	M–338	62-63.5 Cu, 1-2 Pb, bal. Zn	Soft	50000		50		65		Engraving brass
				Hard	85000		0		150		
12451	Naval	M–338	61 Cu, 1-1.5 Sn, bal. Zn	Drawn	52000	30000	35		100	Extrusions	Corrosion resistant
12452	Booth 20S	M–338	56-62 Cu, .75 Fe, 1.25 Mn, .5 Pb, .5 Sn, bal. Zn		70000	30000	28		120	Extrusions	
12453	S.A.M.B.	M–338	1.2-1.9 Al, 56-59 Cu, .8-1.2 Fe, .2-2.0 Mn, .8-1.5 Sn, bal. Zn		75000	35000	20		140	Extrusions	
12454	Booth TSK	M–338	56-62 Cu, .75 Fe, .75 Mn, .5 Pb, 1.2-2 Sn, bal. Zn		75000	30000	25		120	Extrusions	
12455	Booth 20S A	M–338	57-63 Cu, .75 Fe, 1.0-1.2 Mn, bal. Zn		70000	30000	25		120	Extrusions	
12456	Booth Y.D.A.	M–338	57-59 Cu, .5 Fe, 1-1.5 Mn, .5 Ni, 1.0 Sn, bal. Zn		70000	30000	25		120	Extrusions	
12457	Booth T2	M–338	2-3 Al, 54-56 Cu, .5 Fe, 1.0 Mn, 1.5-2 Pb, bal. Zn		80000	40000	15		150	Extrusions	
12458	Booth B2C	M–338	58-61 Cu, .75 Pb, bal. Zn		60000	24000	35		100	Extrusions	
12459	Booth AD	M–338	70-72 Cu, 1.0 Sn, bal. Zn		54000	18000	45		65	Tubes	
12460	Booth ADA	M–338	70-72 Cu, .01-.05 As, 1.0 Sn, bal. Zn		56000	18000	40		75	Condenser tubes	
12461	Booth 76A	M–338	1.8-2.5 Al, 76-78 Cu, bal. Zn		60000	20000	30		70	Condenser tubes	Corrosion resistant
12462	Booth A1	M–338	55-60 Cu, 2-3.5 Pb, bal. Zn	Annealed	60000	30000	30		100	Screws, nuts, bolts	Free cutting
				C.D.	75000	60000	20		170		
12463	Booth B1	M–338	56.5-60 Cu, 1-2.5 Pb, bal. Zn	Annealed	60000	25000	40	35	100	Screws, bolts, nuts	Free cutting
				C.D.	70000	50000	25		170		
12464	Booth MV3	M–338	59-61 Cu, 2-3 Pb, bal. Zn	Annealed	60000	20000	30		100	Screws, bolts, nuts	Free cutting
				C.D.	70000	50000	20		160		
12465	Booth Y.D.B.	M–338	60-61 Cu, .75-1.0 Pb, bal. Zn	Annealed	55000	20000	40		80		Free cutting
				C.D.	70000	40000	25		150		

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12466	Booth B76	M–338	61-63 Cu, 1.5-2 Pb, bal. Zn	Annealed	55000	20000	40		80		Free cutting
				C.D.	66000	35000	25		150		
12467	Denine	M–435	1.2 C, 1.5 W, bal. Fe							Taps, drawing dies	
12468	MG 5	M–338	.5 max. Fe, 4.5-5.5 Mg, bal. Al		40000	19000	30		60	Light alloy parts	Not heat treatable
12469	Duralumin S	M–338	3.5-4.8 Cu, 1.0 max. Fe, 1.0 max. Mg, 1.2 max. Mn, bal. Al	Heat treated	75000	62000	12		130	Light alloy parts	Heat treatable
12470	Duralumin T	M–338	1.5-4 Cu, .5-1.5 Fe, .3-1.5 Mg, 1 max. Mn, 2 max. Ni, bal. Al	Heat treated	62000	41000	12		130	Forgings	
12471	Duralumin HX	M–338	0-1 Cu, .7 max. Fe, .5-1.2 Mg, 0-1 Mn, .7-1.2 Si, bal. Al	Heat treated	52000	40000	13		100	Light alloy parts	Spinnings and pressings
12472	Duralumin M	M–338	1.5-3 Cu, .7 max. Fe, .2-.5 Mg, .7 max. Si, bal. Al	Heat treated	40000	18000	25		90	Rivets	
12473	Lynite	M–4	89 Al, 11 Cu, .5 Mg							Pistons	(Discontinued)
12474	Alcoa 56S	M–4	5.2 Mg, .1 Mn, .1 Cr, bal. Al	¼ H	48000	36000	20		95	Rivets and fine wire	
12475	Alcoa 61S	M–4	1 Mg, .6 Si, .2 Cu, .25 Cr, bal. Al	W	35000	21000	22		65	Light alloy parts	Cold work
				T	45000	39000	12		95		
12476	Alcoa A214	M–4	3.8 Mg, 1.8 Zn, bal. Al	P.M.	27000	16000	5		60	Cooking utensils	Permanent mold cast
12477	Alcoa 172	M–4	8 Cu, 2.5 Si, bal. Al	Sand cast	23000	15000	1		65	Match plates and patterns	Small solidification shrinkage
12478	Alcoa 79	M–4	4 Cu, 7 Si, bal. Al	Die cast	36000	20000	2.5			Die castings	General purpose
12479	AM 52S	M–4	2.5-3.5 Al, .2 min. Mn, 1.3 max. Zn, .3 max. Si, bal. Mg	Extruded	40000	30000	17		50	Extruded parts	Low cost alloy
12480	AM-C 74S	M–4	2.5-3.5 Al, 2.5-3.5 Zn, .3 max. Si, bal. Mg	Extruded	42000	30000	19		51	Pressings and extrusions	Corrosion resistant
				Aged	44000	34000	13		54		
12481	AM 244	M–4	3.5-5.0 Al, .2 min. Mn, .3 max. Zn, .3 max. Si, bal. Mg	Cast	24000	9000	6		44	Fittings	Sand cast
12482	AM 88S	M–4	9.5-10.5 Al, .1 min. Mn, 2.0 max. Zn, bal. Mg	Extruded						Welding rod	
12483	U.S.S. 17-7	M–604	.08-.20 C, 16-18 Cr, 6-8 Ni, bal. Fe	Annealed	75000	30000	40			Aircraft, trailers, car construction	Stainless Type 301
12484	U.S.S. 5	M–604	.10 min. C, 4-6 Cr, bal. Fe							Petroleum industry—temperature service	Type 501
12485	U.S.S. 5S	M–604	.10 max. C, 4-6 Cr, bal. Fe							Petroleum industry—temperature service	Type 502
12486	U.S.S. Open Hearth Iron	M–604	.02 C, .03 Mn, .01 P, .02 S, bal. Fe							Culverts, drainage products	
12487	U.S.S. Radio Transformer 52	M–604	Si, bal. Fe							Audio transformers	Sheets
12488	U.S.S. Radio Transformer 58	M–604	Si, bal. Fe							Audio transformers	Sheets
12489	U.S.S. Transformer 52	M–604	Si, bal. Fe							Transformers	Sheets
12490	U.S.S. Radio Transformer 65	M–604	Si, bal. Fe							Audio transformers	Sheets
12491	Deoxidized Copper 939	M–8	99.9+Cu, 0.02 P	Soft	35000	10000	45			Water tube, pipe, condenser tubes	
				Hard	45000	40000	10				
12492	Deoxidized Arsenical Copper—108	M–8	99.68 Cu, .3 As, .02 P	Soft	35000	10000	45			Condenser and heat exchanger tubes	
				Hard	45000	40000	10				
12493	Leaded Copper—946	M–8	99.0 Cu, 1.0 Pb	Soft	32000	10000	45			Screw machine parts	Free cutting
				Hard	45000	40000	12				
12494	Selenium Copper	M–8	99.5 Cu, 0.5 Se	Soft	32000	10000	45			Electrical conductors	Hot work qualities
				Hard	45000	40000	15				

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12495	Signal Bronze	M-8	98.25 Cu, 1.75 Sn	Soft	45000					Trolley and line wire	
				Hard	105000						
12496	Phosphor Bronze 4%-903 Grade A	M-8	95.75 Cu, 4.0 Sn, .25 P	Soft	48000	20000	50			Cotter pins, diaphragms, welding rod	
				Hard	110000	55000	30				
12497	Muntz Metal-66	M-8	60 Cu, 40 Zn	Soft	54000	20000	45			Brazing rod, condenser tubes	
				Hard	80000	60000	8				
12498	Phosphor Bronze-314	M-8	95.25 Cu, 4 Sn, .25 Mn, .50 Fe	Soft	48000	20000	50			*Hot work parts*	
				Hard	65000	55000	30				
12499	Phosphor Bronze-316	M-8	88 Cu, 10 Sn, 1.0 Mn, 1.0 Fe	Soft	65000		65			Hot work parts	
				Hard	85000		25				
12500	Ambraloy 917	M-8	82 Cu, 9.5 Al, 1.0 Mn, 5 Ni, 2.5 Fe	Soft	90000		12			Forgings	
				Hard	105000		12				
12501	Tempaloy 917	M-8	82 Cu, 9.5 Al, 1.0 Mn, 5 Ni, 2.5 Fe	Hard	105000	60000	12			Propeller shafting	
12502	Hitenso C-965	M-8	98.6 Cu, .8 Cd, .6 Sn	Soft	42000			40		Electrical conductors	
				Hard	95000			1			
12503	Everdur-1014	M-8	91 Cu, 7 Al, 2 Si		95000	53000	25			Bolts, nuts, gears, forgings	
12504	Cupro-Nickel 20%-712	M-8	80 Cu, 20 Ni	Soft	48000	20000	40			Condenser and heat exchanger tubes	
				Hard	74000	67000	5				
12505	Nickel Silver 10%-752	M-8	65 Cu, 25 Zn, 10 Ni	Soft	55000	20000	42			White metal parts	
				Hard	88000	70000	7				
12506	Nickel Silver 18%-719	M-8	65 Cu, 17 Zn, 18 Ni	Soft	58000		40			Hardware, marine trim	
				Hard	70000						
12507	Nickel Silver 18%-724	M-8	55 Cu, 27 Zn, 18 Ni	Soft	60000	22000	45			Springs, hardware	
				Hard	80000	60000	20				
12508	Beryllium Copper-175	M-8	97.5 Cu, 2.15 Be, .35 Ni	Soft	70000	30000	45			Springs, diaphragms	
				Hard	190000	97000	2				
12509	Die Casting Alloy-624	M-8	60 Cu, 37.65 Zn, 1.0 Sn, 1.0 Pb, .1 Al	Cast	55000	35000	8			Die castings	
12510	Die Casting Alloy-1026	M-8	81.5 Cu, 14.1 Zn, 4.25 Si, .15 Mn	Cast	85000	50000	8			Die castings	
12511	Ambrac 815	M-8	64.5 Cu, 20 Ni, 7.5 Zn, 3 Sn, 5 Pb	Cast	40000	25000	15			Hardware, plumbers fixtures	
12512	Benedict Nickel-812	M-8	55 Cu, 12.5 Ni, 20 Zn, 2 Sn, 10.5 Pb	Cast	30000	20000	15			Hardware, plumbers fixtures	
12513	Tempaloy 841	M-8	91.2 Cu, 4 Ni, 4 Al, .8 Si	Cast	70000	45000	15			Castings	High strength
					80000	60000	8				
12514	Butt Brass-226	M-8	64.25 Cu, 35.25 Zn, 0.5 Pb	Soft	45000	17000	55			Pipe, tube, hardware	
				Hard	73000	60000	9				
12515	Leaded Muntz Metal-274	M-8	60 Cu, 39.5 Zn, .5 Pb	Soft	54000	20000	45			Condenser and heat exchanger head plates	
				Hard	80000	60000	8				
12516	Muntz Metal 293	M-8	60 Cu, 39 Zn, 1 Pb	Soft	54000	20000	40			Screw machine parts	Free cutting
				Hard	80000	60000	6				
12517	Forging Brass-250	M-8	60 Cu, 38 Zn, 2 Pb	Soft	54000	20000	45			Hardware, plumbing	Forgings
12518	Architectural Bronze-280	M-8	56 Cu, 41.5 Zn, 2.5 Pb	Soft	65000		25			Architectural decorative shapes	Extruded
12519	Oreide-420	M-8	87.25 Cu, 11.5 Zn, 1.25 Su	Soft	43000	16000	47			*Weather strip*	
				Hard	72000	60000	8				
12520	Trumpet Brass-435	M-8	81 Cu, 18 Zn, 1 Sn	Soft	48000		60			Bourdon gauge tubes	
				Hard	80000		10				
12521	Admiralty Alloy-442	M-8	70 Cu, 29 Zn, 1 Sn	Soft	48000	18000	65			Condenser and heat exchanger tubes, ferrules	
				Hard	85000		10				
12522	Arsenical Admiralty-439	M-8	70 Cu, 28.95 Zn, 1.0 Sn, 0.05 As	Soft	52000	20000	65			Condenser and heat exchanger tubes	
				Hard	85000		10				

Serial No.	Alloy	Mfg. No.	Composition	Treatment	T.S.	Y.P.	% El.	% R.A.	Brin. No.	Uses	Remarks
12523	Naval Brass-452	M-8	60 Cu, 39.25 Zn, 0.75 Sn	Soft	56000	22000				Condenser plates, marine hardware	
				Hard	83000	62000					
12524	Leaded Naval Brass-612	M-8	60 Cu, 37.25 Zn, 0.75 Sn, 2 Pb	Soft	56000	22000	35			Marine hardware, valve stems	
				Hard	63000	35000	25				
12525	Chromium-Copper 999	M-8	99.05 Cu, .85 Cr, .10 Si	Soft	35000	15000	40			Electrical apparatus	
				Hard	72000	61000	20				
12526	Silicon Red Brass-1027	M-8	82 Cu, 17 Zn, 1.0 Si	Soft	55000	20000	60			Resistance welding	
				Hard	90000	80000	8				
12527	Willeys E-6	M-976	WC							Cutting tools for roughing and semi-finishing	Sintered, tough.
12528	Willeys E-8	M-976	WC							Cutters for heavy interrupted cuts	Sintered, tough and wear resistant
12529	Willeys E-12	M-976	WC							Cutters, rest blades, centers	Sintered, tough.
12530	Willeys 710	M-976	WC							Cutters for general machining	Sintered
12531	Willeys 509	M-976	WC							Cutters for turning and boring	Sintered
12532	Armco Trancor 52	M-10	4.7 Si, bal. Fe							Transformers	
12533	Armco Grade X	M-10	Fe alloy							Transformers	Oriented
12534	Michigan Grade C	M-545	56 Cu, 2.5 hardener, bal. Zn	Cast	60000	25000	15	30	80	Castings	Mn bronze
					70000	40000	25	40	95		
12535	Michigan Grade A	M-545	56 Cu, 3 hardener, bal. Zn	Cast	70000	30000	25	25	114	Castings	Mn bronze
					80000	35000	40	35	140		
12536	Michigan Grade AX	M-545	57 Cu, 4 hardener, bal. Zn	Cast	80000	40000	25	20	120	Castings	Mn bronze
					90000	46000	40	30	130		
12537	Michigan Grade X	M-545	56 Cu, 6 hardener, bal. Zn	Cast	85000	40000	20	20	135	Castings	Mn bronze
					95000	45000	30	25	155		
12538	Michigan Grade XX	M-545	57 Cu, 9 hardener, bal. Zn	Cast	95000	45000	20	18	150	Castings	Mn bronze
					110000	55000	30	25	175		
12539	Michigan Grade XXX	M-545	62 Cu, 13 hardener, bal. Zn	Cast	110000	75000	12	12	200	Castings	Mn bronze
					125000	90000	18	17	240		
12540	Michigan No. 90	M-545	90 Cu, 10 Al	Cast	77000	30000	30		120	Castings	Al bronze
				Heat treated	90000	55000	5		160		
12541	Michigan Apex	M-545	86.5 Cu, 3.5 Fe, 10 Al	Cast	85000	35000	20		160	Castings	Al bronze
				Heat treated	95000	50000	7		200		
12542	Michigan No. 90S	M-545	88 Cu, 3.5 Fe, 8.5 Al	Cast	65000	22000	20		115	Castings	Al bronze
					85000	30000	30		135		
12543	Michigan No. 90M	M-545	85.5 Cu, 3.5 Fe, 11 Al	Cast	80000	40000	10		166	Castings	Al bronze
				Heat treated	90000	50000	7		200		
12544	Michigan No. 90H	M-545	84.5 Cu, 3.5 Fe, 12 Al	Cast	85000	40000	10		160	Castings	Al bronze
				Heat treated	95000	50000	5		200		
12545	Michigan No. 90V	M-545	79 Cu, 5 Fe, 5 Ni, 11 Al	Cast	90000	45000	3		190	Castings	Al bronze
					105000	60000	7		215		
12546	Tiscor	M-997	C, Cr, Cu, Si, bal. Fe		65000	45000	20			Structural work	
12547	Volco No. 8	M-998	65 Cu, 28 Zn, 8 Ni	Hard	82000		7				9% cond.
				Soft	53000		45				
12548	Volco No. 11	M-998	65 Cu, 25 Zn, 10 Ni	Hard	88000		7				8.4% cond.
				Soft	55000		42				
12549	Volco No. 12	M-998	65 Cu, 23 Zn, 12 Ni	Hard	83000		6				6.3% cond.
				Soft	54000		41				
12550	Volco No. 14	M-998	65 Cu, 21 Zn, 14 Ni	Hard	84000		5				6.2% cond.
				Soft	45000		40				

SECTION III

ALLOY CLASSIFICATION AND USES INDEX

THIS section is primarily a grouping of alloys classified according to the uses listed in Section II. Thus, alloys recommended by various manufacturers for the same type of service are conveniently grouped so that it is only necessary to refer to the serial number in Section II to locate information regarding the manufacturer and some of the properties of the alloy in question.

Since the uses cited in the preceding Section are generally indicative of a class of service for which the particular alloy is considered suitable, in most cases this classification comprises general rather than specific uses. This may be an unsatisfactory treatment from the point of view of a person wishing to know just what alloy is recommended for the specific application which interests *him*. There are other peints of view in this connection that must also be considered.

The manufacturer supplying data realized that only a limited number of uses could be included under his alloys in the data section and naturally preferred to indicate the widest possible range of application. Furthermore, the applications for which a given alloy may be suitable depend in large measure on its mechanical properties which in turn are subject to adjustment over a very wide range depending on thermal and mechanical treatment. Nevertheless, the properties must be in conformity with those demanded by the conditions of the proposed use and failure to recognize this situation may lead one into difficulties resulting from use of the right alloy in the wrong physical state. This possibility is an argument advanced by some manufacturers against citing specific applications at all unless the corresponding conditions of alloy treatment as well as composition can be stipulated. However it is clearly impracticable in a work of this kind to give the full range of properties for different conditions of alloy treatment nor has it been deemed necessary to restrict the uses listed to correspond solely to the selected properties and treatment as given in Section II.

In a relatively few instances where specific applications were cited by one manufacturer and alloys for the same application were not mentioned by other manufacturers, the authors omitted such applications in this index (but not in Section II) feeling that to list only one company's alloy or alloys in such instances would place undue emphasis on that company's products inasmuch as the chances are exceedingly small that no other alloys listed could serve the same purpose equally well. Rather it has been the policy to offer a choice of alloys under every classification so the user of this book will be in position to obtain comparative data from various alloy manufacturers. For reasons developed later the reader is urged to seek such information from the manufacturers before making his selection of an alloy for his particular application problem.

In view of the need for something more directly useful than a classification according to generalities such as corrosion-resistant parts, light alloy parts, heat-resistant parts, electrical purposes, and tools there have been added in this section some more specific listings based on data received from the alloy producers which lack of space prevented listing under "Uses" in Section II. (The index could be expanded almost indefinitely on this basis as is obvious if one but considers the multitude of possible specific uses that *might be cited* for any given commercial alloy. The authors have been conservative in regard to such expansion both because of the voluminous character of this book and because in seeking data from the manufacturers the item of many specific uses was not stressed and any elaborate treatment of recommended uses would, with the data on hand, possibly present a distorted picture. The limitations inherent in a classification such as this one warrant that further elaboration be deferred until the present set-up has had the test of time.) A few special classifications that group related alloys into classes have also been introduced, as for example, the classification of bearings, light alloys, and corrosion-resisting alloys according to composition.

In this connection it should be noted that such composition groupings are necessarily incomplete since they are based on Section II which itself is not complete in regard to detailed analysis of the alloys listed. The classification of corrosion-resistant alloys according to composition did not lend itself well to inclusion in Section III and appears in the appendix. The classification of corrosion-resistant alloys according to their suitability in the presence of specified corrosive chemicals, etc., is based on data obtained by the authors from the manufacturers.

Mention was made above that the authors suggest that the reader will do well to refer to the manufacturer of a given alloy prior to adopting it for a particular use. This point can hardly be overemphasized. The factors involved in the selection of an alloy for a specific application involve a consideration of cost, availability, and suitability for the intended use and the ultimate decision may involve

some compromise between conflicting elements. The service requirements often entail properties concerning which the usual laboratory test data contribute little or no pertinent information, as for example is true in regard to service under corrosive influences. The properties which are significant, measurable, and subject to satisfactory inclusion in purchase specifications are generally capable of wide variation dependent on factors such as mass, mechanical and thermal treatment. The alloy manufacturers are the ones logically fitted to weigh the many factors involved and to give sound advice based on the wealth of experience which they have accumulated in dealings with customers who have required alloys for purposes similar to or the same as the one the reader may have in mind. Since the benefit of this store of experience is generally available to interested parties upon request, and since there is still no substitute for experience, it is urged that advantage be taken of this means for avoiding costly mistakes.

SECTION III

Alloy Classification and Uses Index

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Corrosion - Resistant to Ammonium Sulphate: 5, 29, 32, 38, 62, 63, 125, 141, 158, 177, 210, 234, 273, 301, 302, 304, 342, 375, 378, 379, 380, 412, 540, 543, 545, 582, 587, 634, 635, 636, 640, 645, 646, 647, 732, 743, 752, 758, 798, 805, 816, 817, 818, 854, 917, 943, 953, 955, 1068, 1100, 1135, 1136, 1215, 1216, 1217, 1219, 1233, 1236, 1237, 1250, 1251, 1252, 1253, 1254, 1272, 1274, 1275, 1304, 1306, 1315, 1344, 1345, 1508, 1569, 1576, 7830-7832

Corrosion - Resistant to Amyl Acetate: 5, 29, 61, 62, 63, 103, 114, 210, 234, 342, 412, 415, 454, 540, 543, 545, 587, 732, 752, 758, 798, 805, 817, 854, 855, 943, 955, 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1231, 1233, 1237, 1250, 1251, 1253, 1254, 1255, 1272, 1274, 1275, 1303, 1304, 1315, 1569

Corrosion - Resistant to Amyl Chloride: 5, 103, 114, 210, 234, 342, 412, 454, 540, 543, 545, 587, 732, 758, 854, 855, 943, 1068, 1100, 1251, 1253, 1254, 1255, 1303, 1304

Corrosion - Resistant to Aniline: 29, 61, 62, 63, 135, 375, 399, 400, 412, 545, 587, 758, 798, 817, 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1250, 1311, 1315, 1317, 1319, 1569, 1576

Corrosion - Resistant to Aqua Regia: 914, 1005, 1050, 1068, 1524, 2686

Corrosion - Resistant to Aromatic Aldehydes: 61

Corrosion - Resistant to Arsenic Acid (Aqueous): 273, 1005, 2630, Also nickel bronzes

Corrosion - Resistant to Atmosphere — (See also Stainless Parts, etc.): 29, 61, 62, 63, 50, 519, 521, 591, 623, 680, 731, 758, 937, 1006, 1032, 1050, 1068, 1083, 1098, 1108, 1133, 1134, 1135, 1136, 1174, 1187, 1188, 1199, 1207, 1257, 1331, 1332, 1333, 1338, 1346, 2235, 2426, 2427, 2428, 2630, 2878, 3698, 3730, 3731, 3733, 4783, 5602, 5659, 5660, 5854, 6068, 6071, 6469, 8050, 8081

Corrosion - Resistant to Barium Chloride: 818, 1252, 1576, 5364

Corrosion - Resistant to Barium Nitrate: 818, 1576

Corrosion - Resistant to Beer: 1127, 1467, 1775, 2233, 4141, 5286, 5289, 5793

Corrosion - Resistant to Beet Juice: 818, 1576

Corrosion - Resistant to Benzaldehyde: 103, 114, 141, 234, 342, 379, 415, 454, 587, 758, 798, 854, 855, 943, 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1233, 1237, 1250, 1251, 1254, 1255, 1303, 1311, 1315

Corrosion - Resistant to Benzoic Acid: 61, 412, 758, 798, 1078, 1252, 1524, 1525, 1526

Corrosion - Resistant to Benzoyl Chloride: 61

Corrosion - Resistant to Bichromates (Neutral Solution): 61, 1657, 4362

Corrosion - Resistant to Blood: 7834

Corrosion - Resistant to Borates (Neutral Solution): 1656

Corrosion - Resistant to Boric Acid (Solutions): 758, 798, 1524, 1656, 1657, 4362

Corrosion - Resistant to Brass (Molten): 286. Also 20% Chromium steel

Corrosion - Resistant to Brine—(See Sea Water)

Corrosion - Resistant to Bromide Solutions (Neutral): 798, 1524, 1657, 4362

Corrosion - Resistant to Bromine: 61, 103, 114, 135, 234, 273, 342, 454, 545, 798, 805, 854, 855, 943, 1068, 1069, 1100, 1108, 1135, 1136, 1250, 1254, 1255, 1303, 1524, 1528, 2630

Corrosion - Resistant to Bromine Water: 273, 1524

Corrosion - Resistant to Butyl Acetate: 5, 29, 62 63, 114, 210, 234, 342, 412 454, 540, 545, 587, 758, 798 805, 817, 854, 855, 943 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1233, 1237, 1250, 1251, 1254, 1255, 1303, 1304, 1315

Corrosion - Resistant to Calcium Bisulfite: 1657, 4362

Corrosion - Resistant to Calcium Chloride: 5, 29, 37, 38, 62, 63, 103, 114, 125, 158, 176, 177, 180, 210, 234, 273, 295, 296, 297, 298, 299, 301, 302, 304, 342, 375, 377, 378, 379, 380, 412, 415, 452, 453, 454, 540, 543, 545, 582, 587, 610, 634, 635, 636, 640, 645, 646, 647, 732, 743, 758, 796, 798, 805, 816, 817, 854, 855, 917, 943, 955, 1068, 1100, 1135, 1136, 1214, 1216, 1217, 1218, 1219, 1233, 1236, 1237, 1250, 1251, 1252, 1254, 1255, 1268, 1272, 1274, 1275, 1303, 1304, 1306, 1315, 1317, 1318, 1344, 1345, 1367, 1508, 1576

Corrosion - Resistant to Calcium Hydrosulfite: 61

Corrosion - Resistant to Calcium Hypochlorite: 32, 103, 114, 234, 342, 375, 379, 412, 415, 454, 545, 587, 732, 743, 758, 798, 805, 816, 854, 943, 953, 1068, 1134, 1135, 1136, 1137, 1215, 1216, 1217, 1218, 1219, 1231, 1234, 1237, 1250, 1251, 1254, 1255, 1267, 1272, 1274, 1303, 1569, 5364

Corrosion - Resistant to Camphor: 61, 135, 758

Corrosion - Resistant to Carbolic Acid — (See Phenol)

Corrosion-Resistant to Hot Carbon Dioxide Gas: 61, 241, 758, 5872, 7102

Corrosion - Resistant to Carbon Disulfide: 29, 61, 62, 63, 135, 377, 378, 379, 380, 412, 545, 582, 587, 732, 743, 758, 798, 817, 955, 1068, 1100, 1101, 1133, 1135, 1136, 1214, 1218, 1231, 1233, 1237, 1250, 1272, 1274, 1315, 1531, 1569, 1595, 1596, 1597

Corrosion - Resistant to Carbonic Acid: 29, 37, 38, 50, 61, 62, 63, 103, 114, 141, 234, 273, 295, 296, 297, 298, 299, 301, 302, 304, 342, 375, 377, 378, 379, 380, 412, 454, 543, 545, 582, 634, 635, 636, 640, 645, 646, 647, 732, 743, 758, 798, 805, 816, 817, 854, 855, 943, 955, 1083, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1214, 1215, 1216, 1217, 1219, 1231, 1233, 1236, 1237, 1251, 1252, 1254, 1255, 1272, 1274, 1303, 1315, 1344, 1345, 1508, 1531, 1569, 1576, 1596, 1597

Corrosion - Resistant to Carbon Monoxide: 241, 1068, 1723, 3709, 3710, 3711, 3712, 5872, 7102

Corrosion - Resistant to Carbon Tetrachloride: 5, 29, 61, 62, 63, 103, 114, 135, 158, 234, 273, 301, 302, 304, 341, 342, 375, 377, 378, 379, 380, 392, 412, 415, 429, 454, 540, 545, 582, 587, 634, 635, 636, 640, 645, 646, 647, 732, 743, 758, 798, 805, 816, 817, 854, 855, 857, 858, 917, 943, 953, 1068, 1100, 1101, 1214, 1216, 1217, 1218, 1219, 1236, 1237, 1250, 1251, 1252, 1253, 1254, 1255, 1272, 1274, 1303, 1304, 1306, 1315, 1317, 1318, 1569, 1595, 1596, 1597, 1656, 4362

Corrosion - Resistant to Caustic Alkali: 758, 815, 3695

Corrosion - Resistant to Chloracetic Acid: 545, 587, 758, 798, 1050, 1068, 1237, 1250

Corrosion - Resistant to Chlorates (Aqueous Solutions): 1657, 4362

Corrosion - Resistant to Chlorbenzene: 758, 1657, 4362

Corrosion - Resistant to Chloride of Lime (Aqueous): 818, 1078, 1657, 4362

Corrosion - Resistant to Chloride Solutions (Neutral): 798, 1524, 1657, 4362

Corrosion - Resistant to Chlorine Gas: 125, 135, 273, 412, 545, 582, 634, 635, 636, 640, 645, 646, 647, 743, 758, 798, 914, 950, 1068, 1108, 1216, 1217, 1219,

1236, 1237, 1250, 1657, 1744, 2630, 4362

Corrosion - Resistant to Chlorine Water: 5, 103, 114, 125, 234, 273, 342, 375, 412, 454, 540, 543, 545, 743, 943, 1068, 1216, 1217, 1219, 1250, 1253, 1254, 1255, 1303, 1304, 1657, 4362

Corrosion - Resistant to Chlorsulfonic Acid (SO_3HCl) 1317, 1318 (Dry); 4362 (Dilute)

Corrosion - Resistant to Chromates (Neutral Solution): 61

Corrosion - Resistant to Chromic Acid: 29, 61, 62, 63, 273, 286, 377, 378, 379, 380, 392, 412, 545, 587, 732, 743, 955, 1068, 1078, 1133, 1134, 1135, 1136, 1137, 1214, 1216, 1217, 1218, 1219, 1231, 1233, 1250, 1272, 1274, 1315, 1317, 1318, 1524, 1569, 1576, 1595, 1596, 1597, 2630, 4362

Corrosion - Resistant to Citric Acid: 5, 29, 37, 38, 61, 62, 63, 103, 114, 120, 122, 123, 141, 158, 177, 210, 220, 234, 295, 298, 299, 301, 302, 304, 341, 342, 375, 377, 378, 379, 380, 399, 400, 412, 452, 453, 454, 540, 543, 545, 582, 587, 610, 634, 635, 636, 640, 645, 646, 647, 732, 743, 758, 796, 798, 805, 816, 817, 856, 857, 858, 943, 955, 1050, 1068, 1078, 1100, 1101, 1135, 1136, 1216, 1217, 1218, 1219, 1231, 1233, 1236, 1237, 1250, 1251, 1252, 1253, 1254, 1255, 1268, 1272, 1274, 1275, 1303, 1304, 1311, 1315, 1319, 1344, 1345, 1508, 1531, 1569, 1576, 1596, 1597, 1655, 1657, 4362, 5442, 5443

Corrosion - Resistant to Copper Acetate: 1078, 4362

Corrosion - Resistant to Copper Cyanide: 4362

Corrosion - Resistant to Copper Nitrate: 1657, 4362

Corrosion - Resistant to Copper Sulphate: 5, 37, 38, 103, 114, 120, 122, 123, 141, 158, 177, 234, 296, 301, 302, 304, 342, 399, 412, 454, 540, 545, 582, 587, 634, 635, 636, 640, 645, 646, 647, 743, 805, 817, 917, 943, 955, 1050, 1068, 1069, 1133, 1134, 1135, 1136, 1137, 1214, 1216, 1217, 1218, 1231, 1236, 1250, 1251, 1252, 1253, 1254, 1255, 1268, 1272, 1274, 1275, 1303, 1304, 1306, 1311, 1315, 1344, 1345, 1368, 1369, 1569, 1576, 1595, 1596, 1597

Corrosion - Resistant to Creosote: 758, 818, 1576

Corrosion - Resistant to Cyanides (Fused): 241, 464, 1075, 1076, 7099, 7102, 8116

Corrosion - Resistant to Essential Oils: 61

Corrosion - Resistant to Ethyl Acetate: 5, 29, 62, 63, 103, 114, 120, 122, 123, 210, 234, 342, 375, 421, 454, 540, 545, 587, 758, 796, 805, 817, 943, 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1233, 1237, 1250, 1253, 1254, 1255, 1275, 1303, 1304, 1315

Corrosion - Resistant to Ethyl Alcohol- See Alcohol, Ethyl

Corrosion - Resistant to Ethyl Chloride: 61, 622, 1002

Corrosion - Resistant to Ethylene Bromide: 61

Corrosion - Resistant to Ethylene Chloride: 61, 273, 341, 1317, 1318

Corrosion - Resistant to Fatty Acids: 5, 29, 32, 37, 38, 61, 62, 63, 103, 114, 120, 122, 125, 158, 177, 210, 234, 246, 273, 295, 298, 299, 301, 302, 304, 342, 377, 378, 379, 380, 399, 400, 412, 421, 454, 540, 543, 545, 587, 634, 635, 636, 640, 645, 646, 647, 732, 752, 758, 798, 805, 817, 856, 857, 858, 917, 943, 955, 1005, 1068, 1078, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1231, 1233, 1236, 1237, 1250, 1251, 1252, 1253, 1254, 1255, 1272, 1273, 1274, 1275, 1303, 1304, 1315, 1344, 1345, 1368, 1369, 1508, 1524, 1525, 1526, 1528, 1569, 1576, 1595, 1596, 1597, 1656, 1657, 2512, 4362

Corrosion - Resistant to Ferric Chloride: 412, 545, 758, 798, 816, 1068, 1237, 1250, 1306, 1315

Corrosion - Resistant to Ferric Sulphate: 37, 38, 141, 399, 400, 412, 421, 545, 955, 1068, 1069, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1214, 1218, 1233, 1250, 1251, 1272, 1274, 1275, 1311, 1315, 1344, 1345, 1508, 1595, 1596, 1597

Corrosion - Resistant to Ferrous Chloride: 5, 114, 120, 122, 123, 210, 234, 342, 540, 545, 645, 805, 816, 817, 943, 1068, 1101, 1234, 1253, 1254, 1255, 1303, 1304, 1315

Corrosion - Resistant to Ferrous Sulphate: 5, 32, 37, 38, 103, 114, 120 122, 123, 141, 210, 234, 301, 302, 304, 342, 399, 412, 421, 452, 453, 454, 540, 545, 645, 646, 647, 743, 758, 798, 805, 816,

817, 917, 943, 953, 955, 1068, 1069, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1216, 1217, 1218, 1219, 1231, 1233, 1236, 1237, 1250, 1251, 1253, 1254, 1255, 1272, 1274, 1303, 1304, 1306, 1311, 1315, 1344, 1345, 1508, 1569, 1576, 1595, 1596, 1597

Corrosion - Resistant to Flue Gases—(See Smoke Gases; Sulfurous Atmosphere)

Corrosion - Resistant to Fluorine: 273, 689, 914, 1005, 2630

Corrosion - Resistant to Fluosilicic Acid: 1657, 4362

Corrosion - Resistant to Formaldehyde: 5, 29, 32, 37, 38, 61, 62, 63, 103, 114, 120, 122, 123, 141, 158, 176, 177, 180, 210, 234, 295, 296, 297, 298, 299, 301, 302, 304, 341, 342, 377, 378, 379, 380, 399, 400, 412, 421, 454, 540, 543, 545, 582, 587, 743, 758, 798, 805, 816, 817, 943, 953, 955, 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1214, 1216, 1217, 1218, 1219, 1231, 1233, 1237, 1250, 1251, 1252, 1253, 1254, 1255, 1272, 1274, 1303, 1304, 1311, 1315, 1317, 1318, 1344, 1345, 1367, 1368, 1369, 1508, 1531, 1569, 1595, 1596, 1597, 1657, 4362

Corrosion - Resistant to Formic Acid: 5, 32, 61, 103, 114, 120, 122, 123, 210, 234, 286, 301, 302, 304, 341, 342, 369, 379, 412, 416, 421, 454, 540, 543, 545, 587, 634, 635, 636, 640, 732, 743, 758, 798, 816, 817, 917, 943, 953, 955, 1050, 1068, 1135, 1136, 1216, 1217, 1219, 1233, 1237, 1250, 1253, 1254, 1255, 1268, 1272, 1273, 1274, 1303, 1304, 1315, 1319, 1344, 1524, 1595, 1596, 1597

Corrosion - Resistant to Fruit Acids: 61, 62, 1252, 1642, 1775, 2233, 2512, 4419, 4420, 5501, 5502

Corrosion - Resistant to Fuel Ashes: 3709, 3710, 3711, 3712

Corrosion - Resistant to Gallic Acid (Aqueous): 1078, 1657, 4362

Corrosion - Resistant to Gas Oils: 758, 7102, 8119, 8120

Corrosion - Resistant to Gasoline: 61, 135, 273, 341, 429, 818, 1083, 1199, 1466, 1971, 7102

Corrosion - Resistant to Glue (Animal): 61, 758, 1005, 1083, Also Bronzes

Corrosion - Resistant to Hydrobromic Acid: 5, 32, 103, 114, 120, 210, 234, 342, 454, 540, 545, 798, 805, 943, 1068, 1237, 1250, 1253, 1254, 1255, 1303, 1304

Corrosion - Resistant to Hydrocarbon Gases: 29, 38, 62, 63, 125, 141, 273, 276, 301, 302, 304, 305, 377, 378, 380, 399, 412, 545, 582, 610, 634, 635, 636, 640, 645, 646, 647, 732, 758, 790, 796, 816, 950, 955, 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1231, 1236, 1237, 1250, 1251, 1252, 1267, 1272, 1274, 1317, 1344, 1345, 1508, 1569, 1576, 1595, 1596, 1597, 1612, 1616, 1618, 1744, 2511, 2513, 2514, 2515

Corrosion - Resistant to Hydrochloric Acid: 103, 114, 120, 122, 123, 125, 178, 234, 342, 412, 449, 454, 543, 544, 545, 914, 943, 1005, 1068, 1078, 1108, 1254, 1255, 1303, 1319, 1494, 1495, 1524, 2630, 2686, 4434, 5795, 5951, 7308, 7430, 7940, 8071, 8955, 9884, 10006, 10395, 10407, 10408, 10409, 12241

Corrosion - Resistant to Hydrocyanic Acid: 61, 412, 758, 914, 1078, 1199, 1525, 1526, 4362

Corrosion - Resistant to Hydrofluoric Acid: 758, 7834

Corrosion - Resistant to Hydrogen Gas (Hot): 61, 758, 1068, 8119

Corrosion - Resistant to Hydrogen Chloride Gas (Dry): 61, 135, 914, 1005, 1068, 1078, 1108, 1524, 1657, 2630, 2686, 4362

Corrosion - Resistant to Hydrogen Peroxide: 29, 37, 62, 63, 176, 177, 180, 295, 296, 297, 298, 299, 301, 302, 304 412, 587, 732, 743, 752, 816, 917, 955, 1068, 1133, 1134, 1135, 1136, 1137, 1216, 1217, 1219, 1231, 1250, 1251, 1252, 1268, 1272, 1273, 1274, 1344, 1345, 1367, 1368, 1369, 1531, 1569, 1576, 1595, 1596, 1597, 1729, 1731, 1744, 2511

Corrosion - Resistant to Hydrogen Sulfide Gas: 29, 38, 61, 62, 63, 125, 141, 273, 295, 296, 298, 299, 304, 369, 377, 378, 412, 543, 582, 634, 635, 636, 640, 645, 646, 647, 732, 743, 790, 816, 914, 950, 955, 1050, 1068, 1133, 1134, 1135, 1136, 1137, 1216, 1217, 1231, 1235, 1239, 1251, 1272, 1274, 1311, 1344, 1345, 1430, 1508, 1569, 1576, 1595, 1597, 2511, 2514, 2515, 2518, 1729, 5491, 7102, 8116, 8118, 8119, 8120

Corrosion - Resistant to Hydrogen Sulfide Solution: 61, 286, 758, 7102, 8119, 8120

Corrosion - Resistant to Hydrosulfite Solutions (Neutral): 798, 1083

Corrosion - Resistant to Illuminating Gas: 61, 135, 758

Corrosion - Resistant to Iodic Acid: 273

Corrosion - Resistant to Iodide Solutions (Neutral): 798, 1524, 1657, 4362

Corrosion - Resistant to Iodine: 114, 120, 234, 342, 454, 545, 805, 817, 955, 1068, 1231, 1250, 1254, 1255, 1268, 1272, 1274, 1303, 1595, 1596, 1597, 1731, 2518

Corrosion - Resistant to Lactic Acid: 5, 29, 37, 38, 61, 62, 63, 103, 114, 120, 122, 123, 177, 210, 234, 276, 341, 342, 369, 375, 399, 400, 412, 421, 454, 540, 543, 545, 610, 634, 635, 636, 640, 732, 743, 752, 758, 796, 798, 805, 817, 854, 855, 856, 857, 858, 917, 943, 955, 1050, 1068, 1078, 1100, 1101, 1134, 1135, 1136, 1137, 1216, 1217, 1219, 1231, 1233, 1237, 1250, 1251, 1252, 1253, 1254, 1255, 1267, 1268, 1269, 1272, 1273, 1274, 1304, 1306, 1315, 1344, 1345, 1508, 1531, 1569, 1576, 1595, 1596, 1597, 1657, 1731, 1744, 1775, 2511, 2512, 2513, 2514, 2515, 4362

Corrosion - Resistant to Lead (Molten): 135, 241, 459, 536, 537, 538, 811, 1076, 1077, 1620, 4362, 5294, 7102, 7325, 8116

Corrosion - Resistant to Lead Acetate (Neutral): 798, 1656, 1657, 4362

Corrosion - Resistant to Lead Nitrate (Neutral): 4362

Corrosion - Resistant to Linseed Oil: 61, 341, 4362

Corrosion - Resistant to Magnesium Chloride: 5, 103, 114, 120, 122, 123, 125, 177, 210, 234, 273, 295, 298, 342, 375, 378, 379, 380, 412, 540, 543, 545, 582, 587, 634, 635, 636, 640, 645, 646, 647, 732, 752, 758, 798, 943, 950, 955, 1068, 1101, 1133, 1134, 1135, 1136, 1137, 1233, 1236, 1237, 1250, 1251, 1252, 1253, 1254, 1255, 1268, 1272, 1274, 1303, 1315, 1344, 1569, 1595, 1596, 1697, 1729, 1731, 1744, 2511, 2518

Corrosion - Resistant to Magnesium Sulphate: 5, 37, 38, 103, 114, 120, 122, 141, 177, 210, 234, 295, 298, 342, 378, 379, 380, 399, 400, 412, 416, 421, 454, 540, 543, 545, 582, 634, 635, 636, 640, 645, 646, 647, 732, 752, 758, 798, 805, 816, 817, 917, 943, 950, 955, 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1233, 1236, 1237, 1250, 1251, 1252, 1253, 1254, 1255, 1268, 1272, 1273, 1274, 1275, 1303, 1304, 1311, 1315, 1317, 1318, 1344, 1345, 1508, 1569, 1576, 1595, 1596, 1597, 1729, 1731, 1744, 2511, 2518

Corrosion - Resistant to Malic Acid Solution: 758, 1083, 1252, 5364

Corrosion - Resistant to Manganous Chloride (Neutral): 1078, 1557, 4362

Corrosion - Resistant to Mercuric Chloride (Solution): 798, 1050, 1524, 1657, 7833

Corrosion - Resistant to Mercury: 758

Corrosion - Resistant to Mercury Fulminate: 61

Corrosion - Resistant to Methyl Alcohol: (See Alcohol Methyl)

Corrosion - Resistant to Methylene Chloride: 4362

Corrosion - Resistant to Mine Waters: 61, 158, 228, 273, 288, 303, 304, 421, 543, 545, 660, 664, 757, 758, 1050, 1133, 1709, 3313, 3391, 4141, 5504, 5846

Corrosion - Resistant to Mineral Oils: 758

Corrosion - Resistant to Mixed Acid: 61, 273, 304, 399, 412, 421, 587, 610, 743, 796, 817, 1068, 1069, 1133, 1134, 1135, 1136, 1137, 1216, 1217, 1218, 1219, 1231, 1233, 1250, 1268, 1272, 1274, 1315, 1569, 1576, 1595, 1596, 1597, 1652, 2511, 2513, 2514, 2515, 2520, 2523, 4362, 7616

Corrosion - Resistant to Mortar & Cement: 135, 1083

Corrosion - Resistant to Napthalene Sulfonic Acids: 4362

Corrosion - Resistant to Napthol: 61

Corrosion - Resistant to Nickel Salts (dilute): 61

Corrosion - Resistant to Nitrates (Neutral Solution): 61, 798, 1656, 1657, 4362, 5879

Corrosion - Resistant to Nitric Acid (Very Dilute): 37, 125, 141, 176, 177, 180, 273, 276, 295, 298, 299, 301, 302, 304, 375, 377, 378, 379, 380, 399, 400,

412, 421, 545, 582, 587, 610, 634, 635, 636, 640, 645, 646, 743, 752, 790, 796, 817, 914, 950, 955, 1068, 1069, 1134, 1135, 1136, 1137, 1215, 1216, 1217, 1218, 1219, 1231, 1233, 1236, 1250, 1251, 1252, 1268, 1269, 1272, 1274, 1275, 1306, 1311, 1315, 1344, 1345, 1367, 1368, 1369, 1494, 1495, 1508, 1531, 1569, 1576, 1595, 1596, 1597, 1612, 1616, 1618, 1724, 1729, 1731, 1744, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2523, 2630, 2959, 4362, 7298, 7299, 7301, 7302

Also, strength not stated: 38, 1334, 1335, 1786, 2801, 4885, 4887, 4888, 4979, 5093-5096, 5103, 5286, 5289, 5502, 5841, 5842, 5846, 5858, 6001, 6096, 6097, 7616, 8072, 8105, 8137, 8346, 8349, 8352, 8359, 8360, 8877, 8952, 8953, 9003, 9416, 9523, 10004, 10005, 10006, 10239, 10240, 10241, 10254, 10395, 10407, 10408, 10409, 10440, 10941, 11125

Corrosion - Resistant to Nitric Acid, Conc.: 29, 37, 61, 62, 63, 141, 176, 177, 180, 273, 276, 295, 298, 299, 377, 378, 379, 380, 399, 400, 412, 421, 545, 582, 587, 610, 634, 635, 636, 640, 645, 646, 647, 743, 752, 790, 796, 817, 914, 950, 955, 1050, 1068, 1069, 1078, 1133, 1134, 1135, 1136, 1137, 1215, 1216, 1217, 1218, 1219, 1231, 1233, 1236, 1250, 1251, 1252, 1268, 1272, 1274, 1306, 1311, 1315, 1317, 1318, 1344, 1367, 1368, 1369, 1494, 1495, 1508, 1531, 1569, 1576, 1595, 1596, 1597, 1612, 1616, 1618, 1657, 1724, 1729, 1731, 1744, 2511, 2514, 2515, 2516, 2517, 2518, 2523, 2630, 2801, 2959, 4362, 4885, 4887, 4888, 4979, 5093, 5096, 7301, 7302, 7616, 8137

Corrosion - Resistant to Nitrites (Neutral): 61

Corrosion - Resistant to Nitrobenzene: 61

Corrosion - Resistant to Nitrogen Gas (Hot): 135, 341, 1005, 1068, 2630

Corrosion - Resistant to Nitrogen Oxides, Gaseous: 29, 37, 61, 62, 63, 141, 273, 304, 377, 378, 380, 412, 544, 545, 582, 610, 634, 635, 636, 640, 645, 646, 647, 732, 790, 796, 816, 817, 950, 955, 1005, 1068, 1133, 1134, 1135, 1136, 1137, 1231, 1236, 1239, 1250, 1268, 1272, 1273, 1274, 1311, 1344, 1345, 1508, 1524, 1569, 1595, 1596, 1597, 1657, 1729, 2511, 2513, 2514, 2515, 2516, 2518, 4362

Corrosion - Resistant to Nitroglycerine: 61

Corrosion - Resistant to Nitrous Acid: 37, 38, 141, 295, 298, 299, 412, 545, 582, 587, 636, 640, 645, 646, 647, 743, 817, 955, 1068, 1133, 1134, 1135, 1136, 1137, 1216, 1217, 1218, 1219, 1231, 1233, 1251, 1252, 1268, 1272, 1311, 1315, 1344, 1345, 1508, 1569, 1576, 1595, 1596, 1597, 1729, 1731, 1744, 2511, 2516

Corrosion - Resistant to Oils: See Essential, Gas, Linseed, Petroleum, Rosin, Turpentine Oils

Corrosion - Resistant to Oleum: 412, 1078, 1317, 1318, 1657, 2630, 4362

Corrosion - Resistant to Oxalates (Neutral Solution): 1656

Corrosion - Resistant to Oxalic Acid: 5, 61, 103, 114, 120, 122, 123, 210, 234, 295, 298, 299, 301, 302, 304, 342, 375, 377, 378, 379, 380, 412, 454, 540, 543, 544, 545, 582, 587, 645, 646, 647, 732, 743, 758, 798, 805, 816, 817, 854, 855, 917, 943, 950, 953, 1050, 1068, 1078, 1100, 1101, 1135, 1136, 1215, 1216, 1217, 1218, 1219, 1233, 1236, 1237, 1250, 1251, 1252, 1253, 1254, 1255, 1272, 1274, 1303, 1304, 1315, 1524, 1569, 1576, 1595, 1596, 1597, 1657, 1729, 1731, 1744, 2511, 2518, 4362

Corrosion - Resistant to Oxidizing Atmosphere (See also Heat Resist.): 19, 29, 33, 37, 38, 61, 62, 63, 141, 241, 273, 276, 295, 298, 299, 304, 305, 377, 378, 379, 380, 399, 412, 532, 533, 536, 537, 538, 543, 545, 578, 579, 582, 592, 605, 610, 613, 632, 634, 635, 636, 637, 640, 645, 646, 647, 655, 724, 732, 735, 736, 743, 746, 747, 748, 758, 767, 790, 796, 798, 816, 817, 821, 928, 955, 998, 1050, 1068, 1075, 1076, 1077, 1100, 1101, 1130, 1133, 1134, 1135, 1136, 1137, 1204, 1214, 1215, 1216, 1217, 1218, 1219, 1231, 1234, 1235, 1236, 1237, 1238, 1239, 1250, 1251, 1252, 1267, 1268, 1274, 1311, 1333, 1336, 1344, 1345, 1350, 1367, 1441, 1453, 1454, 1455, 1456, 1457, 1480, 1508, 1556, 1569, 1595, 1597, 1612, 1616, 1618, 1720-1724, 1744, 2488, 2510, 2511, 2513, 2514, 2515, 2516, 2518, 2630, 2741, 2780,

2875, 3475, 3682, 3709-3712, 4384, 4389, 4778, 5118, 5428, 5560, 5561, 5699, 5704, 5706, 5707, 5708, 5709, 5710, 5711, 5712, 5713, 5714, 5872, 5873, 6090, 6100, 7099-7102, 7619, 7620, 8083, 8084, 8115-8120

Corrosion - Resistant to Oxygen Gas (Hot): 61, 273, 758, 1068, 2630, 7102, 8120

Corrosion - Resistant to Ozone: 914, 2630. Also 25% Chromium steel

Corrosion - Resistant to Paraffin: 61

Corrosion - Resistant to Perborates (Neutral): 61

Corrosion - Resistant to Perchlorates (Neutral Solution): 1657, 4362

Corrosion - Resistant to Persulfates (Neutral Solution): 758

Corrosion - Resistant to Petroleum: 61, 135, 273, 286, 454, 758, 818, 1083, 1576, 5775, 6249, 6250, 7102, 7374, 7614, 7615, 8074, 8118-8120, 8872, 9197, 9569, 9819, 9980

Corrosion - Resistant to Phenol: 5, 29, 61, 62, 63, 103, 114, 120, 122, 123, 158, 176, 180, 210, 234, 295, 296, 297, 298, 299, 301, 302, 304, 342, 392, 399, 400, 412, 421, 454, 540, 582, 587, 634, 635, 636, 640, 645, 646, 647, 732, 758, 798, 805, 854, 855, 917, 943, 950, 955, 1068, 1133, 1134, 1135, 1136, 1137, 1231, 1233, 1236, 1237, 1250, 1253, 1254, 1255, 1268, 1272, 1274, 1275, 1303, 1304, 1311, 1315, 1367, 1569, 1595, 1596, 1597, 1657, 1730, 2511, 4362, 5993

Corrosion - Resistant to Phosgene: 61, 135, 1199

Corrosion - Resistant to Phosphates (Neutral Solution): 798, 1656

Corrosion - Resistant to Phosphoric Acid: 5, 37, 103, 114, 120, 122, 123, 125, 177, 210, 234, 273, 295, 298, 299, 301, 302 304, 342, 369, 399, 412, 416, 421, 454, 540, 544, 545, 585, 587, 634, 635, 636, 640, 645, 646, 647, 732, 743, 758, 798, 805, 816, 817, 917, 943, 950, 955, 1050, 1068, 1078, 1215, 1216, 1217, 1218, 1219, 1233, 1236, 1237, 1250, 1251, 1253, 1254, 1255, 1268, 1272, 1273, 1274, 1303, 1304, 1306, 1311, 1319, 1344, 1498, 1508, 1529, 1569, 1595, 1596, 1597, 1612, 1616, 1618, 1657, 1729, 1731, 2515, 2516, 2518, 2520, 2630, 2686, 4362, 5143, 5364, 8072, 8079, 8952, 8953, 9003, 9523, 10004, 10005, 10006, 10254, 10440

Corrosion - Resistant to Phosphorus Pentachloride: 758, 798

Corrosion - Resistant to Picric Acid: 61, 412, 1083, 1656

Corrosion - Resistant to Potassium Cyanide (Fused): 464, 1075.

Corrosion - Resistant to Potassium Ferricyanide: 1524, 1657, 4362

Corrosion - Resistant to Potassium Permanganate (Neutral): 798, 1050, 1657, 4362

Corrosion - Resistant to Pyrogallol: 61, 412

Corrosion - Resistant to Reducing Atmosphere: 12, 29, 37, 38, 62, 63, 125, 141, 241, 276, 304, 305, 377, 378, 379, 380, 412, 543, 545, 582, 610, 634, 635, 636, 640, 645, 646, 647, 732, 743, 758, 790, 796, 798, 816, 928, 955, 1050, 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1214, 1216, 1217, 1218, 1219, 1231, 1235, 1236, 1237, 1238, 1239, 1268, 1272, 1274, 1311, 1344, 1345, 1508, 1569, 1576, 1595, 1596, 1597, 1612, 1616, 1618, 1723, 1729, 1731, 1744, 2511, 2513, 2514, 2515, 2516, 2518, 3709, 3710, 3711, 3712, 5872, 7102, 8118-8120

Corrosion - Resistant to Resorcin: 61

Corrosion - Resistant to Rosin: 61, 135, 341, 412, 798

Corrosion - Resistant to Rosin Oil: 341, 758

Corrosion - Resistant to Salicylic Acid: 61, 758, 798, 1083, 1656

Corrosion - Resistant to Scaling (at elevated temp.) — See Corrosion-Resistant to Oxidizing Atmosphere, Heat Resistant

Corrosion - Resistant to Sea Water & Brine: 5, 29, 32, 33, 37, 38, 59, 99, 103, 114, 120, 122, 123, 125, 127, 141, 158, 176, 177, 180, 210, 220, 234, 269, 273, 276, 301, 302, 304, 341, 342, 345, 369, 375, 377, 378, 379, 380, 399, 400, 412, 416, 421, 454, 528, 540, 543, 545, 582, 587, 610, 622, 634, 635, 636, 640, 645, 646, 647, 710, 731, 732, 735, 736, 743, 765, 758, 769, 796, 798, 805, 813, 816, 817, 856, 857, 858, 917, 943, 950, 955, 959, 991, 1050, 1068, 1069, 1100, 1101, 1112, 1134, 1135, 1136, 1137, 1214, 1215,

1216, 1217, 1218, 1219, 1223, 1233, 1234, 1236, 1237, 1250, 1251, 1252, 1253, 1254, 1268, 1269, 1272, 1273, 1274, 1275, 1303, 1304, 1311, 1315, 1317, 1318, 1338, 1344, 1345, 1364, 1368, 1369, 1466, 1480, 1508, 1531, 1576, 1595, 1596, 1597, 1612, 1616, 1618, 1724, 1729, 1731, 1744, 1775, 2089, 2119, 2233, 2235, 2503, 2511, 2512, 2513, 2514, 2515, 2518, 3020, 3022, 3129, 3699, 3701, 3702, 3703, 3704, 3706, 4141, 4783, 4789, 4792, 5384, 5435, 5442, 5443, 5502, 5846, 5879-5881, 5965, 6206, 6207, 6669-6671, 7830-7837, 7847-7850, 8050, 8121, 8226, 8396, 8569, 8587, 8626, 8900, 9207, 9460, 9464, 9503, 9504, 9898, 9947, 9948, 9949, 10255, 10633, 11448, 11863, 11865

Corrosion - Resistant to Sewage: 818, 1576, 4112

Corrosion - Resistant to Silicate Solutions: 61

Corrosion - Resistant to Silicon Tetrachloride: 1002

Corrosion - Resistant to Silver Nitrate: 1050, 1656, 1657, 4362

Corrosion - Resistant to Smoke Gases: 241, 758, 1050, 1188, 1318, 1521, 1522, 2521, 6904, 7102, 7855, 8115, 8116. See also Sulfurous Atmosphere

Corrosion - Resistant to Soap Solutions: 61, 798, 1467, 1656, 5283, 5286, 5289

Corrosion - Resistant to Sodium Bisulfate: 5, 29, 62, 63, 103, 114, 120, 122, 123, 125, 234, 273, 342, 375, 379, 399, 400, 412, 421, 454, 540, 543, 545, 587, 743, 758, 798, 805, 816, 917, 943, 955, 1068, 1100, 1135, 1136, 1216, 1217, 1233, 1237, 1250, 1252, 1253, 1254, 1267, 1268, 1272, 1274, 1275, 1303, 1304, 1306, 1311, 1315, 1531, 1576, 1595, 1596, 1597, 1744, 2511, 2518

Corrosion - Resistant to Sodium Bisulfite: 5, 32, 37, 103, 114, 120, 122, 123, 210, 234, 342, 375, 379, 421, 454, 540, 545, 587, 743, 758, 798, 805, 917, 943, 955, 1068, 1135, 1136, 1215, 1216, 1217, 1219, 1233, 1237, 1250, 1253, 1254, 1255, 1268, 1272, 1274, 1303, 1304, 1306, 1315, 1344, 1531, 1569, 1595, 1596, 1597, 1744, 2511, 2518

Corrosion - Resistant to Sodium Carbonate: 5, 32, 37, 38, 103, 114, 120, 122, 123, 141, 210, 220, 234, 269, 295, 296, 298, 299, 301, 302, 304, 341, 342, 375, 377, 378, 379, 380, 392, 412, 416, 421, 454, 540, 543, 545, 582, 587, 634, 635, 636, 640, 645, 646, 647, 732, 743, 758, 798, 805, 816, 817, 854, 855, 856, 857, 858, 917, 943, 950, 955, 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1214, 1215, 1216, 1217, 1218, 1219, 1231, 1233, 1236, 1237, 1250, 1251, 1252, 1253, 1254, 1255, 1267, 1268, 1269, 1272, 1274, 1275, 1303, 1304, 1306, 1315, 1317, 1318, 1344, 1345, 1508, 1531, 1569, 1576, 1595, 1596, 1597, 1612, 1616, 1618, 1731, 1744, 2511, 2512, 2513, 2514, 2515, 2516, 2518, 5442

Corrosion - Resistant to Sodium Cyanide (Fused): 464, 1075, 1076

Corrosion - Resistant to Sodium Ferricyanide: 5, 32, 103, 114, 120, 122, 123, 210, 234, 342, 412, 454, 540, 587, 805, 817, 943, 955, 1068, 1100, 1101, 1135, 1136, 1252, 1253, 1254, 1255, 1267, 1272, 1274, 1303, 1304, 1569, 1595, 1596, 1597, 1744, 2511, 2516, 2518

Corrosion - Resistant to Sodium Hydrosulfite: 5, 37, 63, 103, 114, 120, 123, 125, 210, 234, 273, 342, 379, 412, 454, 540, 543, 587, 645, 646, 647, 758, 798, 817, 943, 955, 1068, 1135, 1136, 1233, 1236, 1237, 1250, 1251, 1253, 1254, 1272, 1274, 1303, 1304, 1315, 1344, 1531, 1595, 1596, 1597, 1744, 2511, 2518

Corrosion - Resistant to Sodium Hydroxide—Dilute and Conc.: 5, 37, 114, 125, 135, 141, 176, 177, 180, 220, 234, 269, 273, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 341, 342, 369, 377, 379, 380, 392, 399, 400, 421, 454, 540, 543, 545, 582, 587, 645, 646, 647, 743, 758, 798, 805, 816, 817, 856, 857, 858, 943, 950, 1005, 1050, 1069, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1214, 1216, 1217, 1218, 1219, 1233, 1236, 1237, 1239, 1250, 1251, 1253, 1254, 1255, 1267, 1303, 1304, 1306, 1344, 1345, 1367, 1528, 1531, 1612, 1616, 1618, 1657, 1729, 2511, 2518, 2630, 3695, 4362, 8952, 8953, 9003, 9414, 9523, 10004, 10006, 10211, 10239, 10240, 10241, 10254, 10440, 11106

Corrosion - Resistant to Sodium Hydroxide (Molten): 758, 798, 1005, 1657, 2630, 4362

Corrosion - Resistant to Sodium Hypochlorite: 114, 295, 298, 299, 301, 302, 479, 412, 545, 587, 634, 635, 636, 640, 743, 758, 798, 816, 854, 855, 1068, 1133, 1134, 1135, 1136, 1137, 1215, 1216, 1217, 1218, 1219, 1231, 1237, 1250, 1254, 1255, 1303, 1306, 1311, 1569, 1729, 1731, 2511, 2518

Corrosion - Resistant to Sodium Nitrate: 5, 29, 37, 38, 62, 63, 103, 114, 120, 122, 123, 141, 176, 177, 180, 210, 220, 234, 269, 295, 296, 297, 298, 299, 301, 302, 304, 341, 342, 369, 377, 378, 379, 412, 416, 421, 454, 540, 545, 582, 587, 634, 635, 636, 640, 645, 646, 647, 743, 758, 798, 805, 816, 817, 943, 950, 955, 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1214, 1215, 1216, 1217, 1218, 1219, 1231, 1233, 1236, 1237, 1250, 1251, 1252, 1253, 1254, 1255, 1268, 1272, 1274, 1275, 1303, 1304, 1317, 1344, 1345, 1367, 1508, 1569, 1576, 1595, 1596, 1597, 1612, 1616, 1618, 1729, 1731, 1744, 2511, 2516, 2518

Corrosion - Resistant to Sodium Phosphates: 5, 37, 38, 103, 114, 120, 122, 123, 141, 158, 210, 220, 234, 269, 295 296, 297, 298, 299, 304, 341, 342, 375, 377, 378, 379, 380, 412, 421, 454, 540, 545, 582, 587, 634, 635, 636, 640, 645, 646, 647, 732, 743, 758, 798, 805, 816, 817, 854, 943, 950, 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1214, 1215, 1216, 1217, 1218, 1219, 1231, 1233, 1236, 1237, 1251, 1253, 1254, 1255, 1303, 1304, 1311, 1315, 1344, 1345, 1508, 1569, 2511, 2516, 2518, 5442

Corrosion - Resistant to Sodium Silicate (Water Glass): 1466

Corrosion - Resistant to Sodium Sulfide: 37, 38, 125, 141, 176, 177, 180, 273, 301, 302, 304, 375, 377, 378, 379, 380, 392, 412, 421, 545, 587, 743, 758, 798, 816, 817, 955, 1068, 1069, 1133, 1134, 1135, 1136, 1137, 1214, 1215, 1216, 1217, 1218, 1219, 1231, 1233, 1237, 1250, 1251, 1252, 1268, 1269, 1272, 1274, 1275, 1306, 1315, 1317, 1344, 1345, 1367, 1508, 1531, 1569, 1595, 1596, 1597, 1729, 1731, 1744, 2511, 2512, 2513, 2514, 2515, 2516, 2518, 3706

Corrosion - Resistant to Sodium Sulfite: 5, 32, 37, 38, 103, 114, 120, 122, 123, 125, 141, 176, 177, 180, 210, 220, 234, 269, 273, 301, 302, 304, 341, 342, 375, 379, 416, 421, 454, 540, 545, 587, 634, 635, 636, 640, 743, 758, 798, 805, 817, 917, 943, 953, 955, 1068, 1069, 1135, 1136, 1214, 1215, 1216, 1217, 1218, 1233, 1236, 1237, 1250, 1251, 1252, 1253, 1254, 1255, 1268, 1272, 1274, 1303, 1304, 1306, 1315, 1344, 1345, 1367, 1508, 1531, 1569, 1595, 1596, 1597, 1729, 1731, 1744, 2516, 2518, 2524, 5442, 5761

Corrosion - Resistant to Sodium Thiosulfate: See Sodium Hyposulfite

Corrosion - Resistant to Stannic Chloride: 758, 798, 1078, 1524, 1657, 4362

Corrosion - Resistant to Stannous Chloride: 798, 1524, 1657, 4362

Corrosion - Resistant to Sugar Solutions: 61, 818, 1467, 1576

Corrosion - Resistant to Sulfates (Neutral): 61, 798, 1524, 1657, 4362, 5879, 5880, 5881

Corrosion-Resistant to Sulfite Liquors: (Note Corrosion-Resistant to Sodium Sulfite, Sulfites, also Paper Mfg., etc.): 752, 1594, 5806, 6934, 7298, 7299, 7303, 7304, 7429, 7618

Corrosion - Resistant to Sulfites (Neutral): 1078, 1216, 1524, 1656, 1657, 4362, 5761, 5806, 5879, 5880, 6934, 7303, 7304, 7618, 8879, 8957, 8958

Corrosion - Resistant to Sulfur (Molten): 61, 286, 1078, 2630, 7102, 8118-8120

Corrosion - Resistant to Sulfur Mono Chloride: 135, 273, 286, 341, 689, 758, 798, 1050, 1199, 1657, 4362

Corrosion - Resistant to Sulfuric Acid (Dilute and Conc.): 103, 114, 120, 122, 123, 125, 158, 234, 273, 276, 342, 412, 421, 452, 453, 454, 543, 544, 545, 587, 610, 796, 805, 816, 914, 943, 953, 1069, 1078, 1100, 1101, 1233, 1250, 1254, 1255, 1267, 1303, 1315, 1524, 1729, 2510, 2630

Also, concentration not stated: 178, 1494, 1495, 1529, 1565, 2959, 4112, 4832, 4893-4895, 4983, 5009, 5371, 5858, 5993, 7308, 7420, 7940, 8072, 8105, 8346, 8349, 8352, 8879, 8955, 9523, 10004, 10005, 10006, 10242, 10395, 10407, 10408, 10409, 11413, 12241

Corrosion - Resistant to Sulfurous Acid: 5, 29, 37, 38, 61, 62, 63, 103, 114, 122, 123, 125, 210, 220, 234, 273, 304, 341, 342, 416, 421, 452, 453, 454, 540, 544, 545, 645, 646, 647, 743, 820, 854, 855, 917, 943, 953, 955, 1068, 1069, 1135, 1136, 1216, 1217, 1219, 1233, 1236, 1250, 1253, 1254, 1255, 1272, 1274, 1303, 1304, 1306, 1315, 1344, 1345, 1508, 1569, 1571, 1597, 1657, 1729, 1731, 1744, 2511, 2514, 2515, 2518, 2523, 2630, 4889, 5088, 5108, 5109, 5202, 5209, 5364, 5443, 5500, 5888, 8879, 8895, 9819

Corrosion - Resistant to Sulfurous Atmosphere: 80, 158, 421, 543, 545, 1050, 1077, 1305, 1335, 1336, 1350, 1587, 1699, 1722, 1747, 2520, 2521, 2805, 3709, 3710, 3711, 3712, 5395, 5503, 5760, 7102, 7620, 7855, 8118-8120

Corrosion - Resistant to Sulphur Dioxide Gas: 29, 38, 61, 62, 63, 80, 125, 141, 273, 299, 304, 399, 412, 543, 545, 582, 634, 635, 636, 640, 645, 646, 647, 732, 743, 758, 790, 816, 917, 950, 955, 1068, 1133, 1134, 1135, 1136, 1137, 1199, 1214, 1215, 1216, 1217, 1218, 1219, 1231, 1236, 1250, 1267, 1268, 1272, 1311, 1344, 1345, 1350, 1508, 1524, 1569, 1576, 1595, 1597, 1657, 1722, 1729, 1744, 2511, 2514, 2515, 2518, 2630, 7102, 8118-8120

Corrosion - Resistant to Sulfur Trioxide Gas: 29, 62, 63, 125, 273, 399, 412, 545, 790, 816, 1100, 1250, 1267, 1268, 1272, 1273, 1311, 1317, 1318, 1350, 1576, 1596, 1722, 1729, 2518, 7102, 8118-8120

Corrosion - Resistant to Sulfuryl Chloride: 273, 1005, 1199

Corrosion - Resistant to Superheated Steam: 241, 286, 724, 753, 758, 798, 966, 1005, 1050, 1068, 1721-1724, 1785, 2422, 2517, 2928, 3306, 3454, 3709-3712, 3730, 3731, 4794, 4817, 5269, 5282, 5448, 5780, 5781, 5872, 5873, 5874, 7068, 7099-7102, 7614, 7834-7837, 8115-8120, 9512, 12327

Corrosion - Resistant to Tannic Acid: 5, 29, 32, 62, 63, 103, 114, 120, 122, 123, 158, 177, 220, 234, 295, 296, 297, 298, 299, 304, 341, 342, 369, 375, 377, 378, 379, 380, 412, 416, 421, 454, 540, 582, 587, 634, 635, 636, 640, 645, 646, 647, 732, 743, 758, 798, 805, 816, 817, 854, 855, 917, 943, 950, 953, 955, 1068, 1100, 1101, 1133, 1134, 1135, 1136, 1137, 1214, 1215, 1216, 1217, 1218, 1219, 1231, 1233, 1234, 1236, 1237, 1250, 1251, 1252, 1253, 1254, 1255, 1267, 1268, 1269, 1272, 1273, 1274, 1275, 1303, 1304, 1306, 1311, 1315, 1569, 1576, 1595, 1596, 1597, 1729, 1731, 1744, 2511, 2512, 2513, 2514, 2515, 2516, 5442, 5443

Corrosion - Resistant to Tannin Solution: 1078, 1657, 4362

Corrosion - Resistant to Tar: 61, 273

Corrosion - Resistant to Tartaric Acid (Solution): 1078, 1657, 4362

Corrosion - Resistant to Tartrates (Neutral Solution): 798

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8212, 8214, 8220, 8224, 8225, 8232, 8241, 8243, 8245-8266, 8293, 8315, 8319, 8430, 8452, 8468-8470, 8479-8487, 8492, 8497, *8508, 8510, 8541, 8627, 8673-8678, 8687, 8695-8701, 8759, 8760, 8761, 8798-8826, 8839, 8850, 8854, 8855, 8860, 8865-8886, 8893, 8904-8907, 8920, 8924, 8928-8936, 8972, 9016, 9017, 9018, 9022, 9061, 9063, 9074, 9123-9128, 9164, 9192-9195, 9216, 9217-9221, 9280, 9301, 9390, 9391, *9483, 9485, 9533, 9537, 9552, 9601, 9658, 9703-9710, 9738, 9746, 9762, 9837, 9863, 9864-9871, 9874-9879, 9892, 9991-10003, 10042, 10043-10077, 10118, 10139, 10160, 10166, 10167, 10185, 10186-10188, 10260, 10282, 10296-10307, 10414, 10429, 10430-10433, 10470, 10493, 10494-10510, 10518-10540, 10582, 10584, 10585, 10621, 10627, 10646, 10678, 10703, 10704, 10711, 10712, 10714, 10717, 10718, 10765-10777, 10781, 10844-10846, 10848, 10849-10852, 10919, 10926, 10927-10936, 10939, 10998, 11001-11003, 11017, 11039, 11040, 11047, 11087, 11088, 11090, 11130, 11131, 11202, 11203, 11206, 11214, 11285, 11286-11311, 11379, 11411, 11412, 11423-11428, 11438, 11465, 11484, 11527, 11530, 11532, 11535, 11536, 11539, 11544, 11545, 11570, 11571-11573, 11585-11589, 11591, 11592, 11595, 11645, 11652-11653, 11658, 11678, 11691, 11697, 11712-11714, 11778, 11779, 11830, 11833, 11834-11838, 11946-11950, 12526

Wheels: 117, 118, 119, 200, 234, 429, 435, 451, 466, 471, 474, 480, 484, 526, 655, 732, 763, 768, 1788, 2038, 2334, 2468, 2478, 3068, 3734, 4283, 4286, 5337, 5433, 5822, 5823, 5824, 5958, 8614, 9227, 9700, 10213, 11460

Wheel Centers: 1132, 5336, 5338, 5402

Wheel Spiders—See Spiders

Whistles: 166, 3201, 3291

White Gold—See also, Jewelry; Ornamental Parts: 3463

Window Frames: 1002, 1290, 5286, 5430

Window Screens—See also, Screens: 220, 2149, 5282, 5296

Wine Fermentation Vats: 5286, 5289

Wing Covering, Aircraft—See Aircraft

Wire: 31, 32, 34, 40, 56, 61, 62, 114, 120, 121, 122, 123, 217, 240, 332, 341, 344, 567, 622, 765, 1001, 1178, 1179, 1180-1182, 1184, 1185, 1223, 1662, 1672, 1706, 1707, 1841, 1977, 2067, 2141, 2585, 2906, 3048, 3051, 3308, 3309, 3310, 3693, 3758, 3790, 3819, 4309, 4422, 4808, 4926, 4929, 5187, 5260, 5282, 5284, 5388, 5389, 5391, 5896, 6053, 6367, 6368, 6532, 7489, 7847-7850, 8088-8093, 8199, 8316, 9231, 10668, 10729

Wire-Drawing Dies: 475, 1228, 1478, 3271, 3604, 3613, 5310, 5316, 5521, 5522, 6489, 7112, 7902

Wire-Drawing Grips: 549, 3275

Wire Drawing Plates: 549, 987, 3275, 5619, 5678, 5694, 5696

Wire Fencing—See Fences

Wire Gauges—See also, Gauges: 5275, 5284, 5296

Wire Netting—See also, Screening: 1223, 5275, 5282, 5296

Wireless: See Radio

Wood-Working Tools: 426, 473, 531, 643, 1003, 1518, 1635, 1962, 3510, 5527, 5533, 5539, 7513, 7866, 7886, 7994-7996

Worm Gears/Worms: 419, 471, 479, 568, 585, 673, 1113, 1549, 1623, 1821, 2054, 2059, 3413, 3414, 3417, 3419, 3431, 3496, 3497, 4438, 4439, 4440, 4546, 4988, 5417, 5890, 5893, 6119, 6120, 6123, 6470, 6545, 7127, 7480, 8043, 8062, 8461, 8576, 8978-8980, 9092, 11647, 11955, 11968

Worm Wheels (Gears): 6, 514, 527, 583, 585, 782, 856, 857, 1028, 1072, 1113, 1294, 1623, 1816, 1993, 2052, 2054, 3034, 3047, 3313, 3477, 3700, 3702-3704, 4280, 4614, 4624, 4781, 4816, 4973, 5396, 5429, 5823, 5890, 6394, 6405, 6407, 6413, 7117, 7144, 8232, 8284, 8430, 8447, 8646, 8688, 9469, 10373, 10381, 10640, 10688, 11453

Worm Shafts: 478, 480, 733, 5271

Wortle Plates: 475, 5310

Wrappers: See Foil

Wrenches: 275, 448, 474, 925, 976, 1148, 1202, 3267, 3849, 4432, 7651, 8985, 9246

Wrist Pins: 1149, 3033, 3078, 3103, 3762, 6158, 8043, 8062

X

X-Ray Tube Windows: 174

Y

Yacht Fittings—See also Marine Hardware

Yokes, Magneto: 5320, 5321

Z

Zinc Die Castings—See Die Castings

SECTION IV

DIRECTORY OF MANUFACTURERS AND THEIR ALLOYS

IN this Section, the manufacturers, with their respective addresses, are listed in alphabetical order. In addition, under each company appears a list of those of its alloys which are included in this book. The alloy serial numbers are given and the data may be obtained by referring to the corresponding serial number in Section II.

This arrangement serves a two-fold purpose. It enables each concern to readily locate the data on its various alloys which, due to their having been listed intermittently, were of necessity irregularly arranged in Section II. It also serves as a directory to the user to whom it offers a choice of selection in the usual commercially important types of alloys, and information regarding a company's alloys and address.

Here, as elsewhere in this book, the words "manufacturer" and "agent" have been used in a very broad sense. It has been expedient to use the word "manufacturer" to imply, for example, any company advertising an alloy under a name which the company has caused to be associated in the public mind with this alloy and with itself. Such a company might be either an alloy producer or manufacturer in the strict sense of the word, or it might be a dealer, jobber or distributor. Likewise, the word "agent" has been used in its broadest sense although in specific instances a more appropriate description might have been "distributor," "sales representative," "affiliate" or "agent" in the narrow legal sense. The point is that an effort has been made to bring out relationships of interest and it was not considered essential to undertake the very considerable task of ascertaining in every instance the exact nature of the relationships.

Alloys listed in the First Edition, which have become obsolete or have been discontinued by the manufacturer, are still shown in Section I and Section II of the revised edition for information and reference but are not listed in Section IV. The latter section shows only those alloys now being manufactured.

The manufacturers were invited to supply data *only* on their proprietary alloys. In many cases such alloys represent but a small part of the company's business, the major part of it being in the production of commercial alloys according to standard specifications and specifications drawn up by the customer. Concerns dealing only in the latter class of alloys consequently are not included. However, it is believed that the concerns listed include nearly all American alloy manufacturers whose products have more than local repute. The list of manufacturers is admittedly incomplete in regard to foreign concerns, but will, nevertheless, still offer considerable choice of selection in alloys of foreign origin.

SECTION IV. MANUFACTURERS AND THEIR ALLOYS

M-608 Achorn Steel Company, Boston, Massachusetts
(Agent for Fagersta Bruks A.B., Gimo-Osterby Bruks A.B., Horndals Jernverks A.B., and Klosters A.B., q.v.)

7196 Achorn Fagersta Best
7197 Achorn Fagersta Chisel
7198 Achorn Fagersta Cold Heading
7199 Achorn Fagersta Envelope Die
7200 Achorn Fagersta Extra
7201 Achorn Fagersta Extra Cutlery
7202 Achorn Fagersta Finishing
7203 Achorn Fagersta High Production
7204 Achorn Fagersta Hot Die
7205 Achorn Fagersta Shoe Die
7206 Achorn Fagersta Silver Die
7207 Achorn Fagersta Smooth Bor Hollow
7208 Achorn Fagersta Solid Drill
7209 Achorn Fagersta Special Alloy Die
7210 Achorn Fagersta Standard
7211 Achorn Fagersta Standard Cutlery
7212 Achorn Fagersta Superior Oil
7213 Achorn Fagersta Unbreakable Chisel
7214 Achorn Fagersta White Gold
7215 Achorn Kloster Brilliant AX
7216 Achorn Kloster Brilliant WKE
7217 Achorn Kloster Prior Extra
7218 Achorn Kloster Rema
9055 Dannemora DB-59
9393 Fagersta Alloy Shoe Die
9394 Fagersta Alloy 30 Drill
9395 Fagersta Brilliant H. H.
9396 Fagersta Brilliant WKE Extra
9397 Fagersta Brilliant W. W.
9398 Fagersta Broach
9399 Fagersta Die Casting
9400 Fagersta Engraver Plates
9401 Fagersta Hollow Drill
9402 Fagersta Non Deforming
9403 Fagersta Overcoat Axe
9404 Fagersta Pavement Breaker
9405 Fagersta Polhem Wire Drawing
9406 Fagersta Regular
9407 Fagersta Rolled Auger
9408 Fagersta Special

M-281 Acieral Co. of America

1 Acieral

M-771 Acieres de Imphy, France

9202 Durinval

M-884 Acieres de Pompey, France

10586 P.M.-20

M-694 Ackerlind Steel Company, Inc., New York City, N. Y.

8546 AS No. 46 Green Label
8547 AS Tri-Mo
8548 AS White Label
11362 Violet Label

M-654 Acme Foundry and Machine Company, Blackwell, Oklahoma

8215 Acmeloy Metal

M-568 Acme Steel Co., Chicago, Illinois

8217 Acme Colorstrip
8218 Acme Satinstripe
8219 Acme Stainless Steel Type 301X
7535 Acme 18-8 Stainless Steel Type 302
7536 Acme Stainless Steel Type 304
7537 Acme Stainless Steel Type 410
7538 Acme Stainless Steel Type 425
7539 Acme Stainless Steel Type 430

M-209 Acme Steel and Malleable Iron Works, Buffalo, New York
(Division of Buffalo Brake Beam Co.)

1202 Z-Metal

M-656 Adams, J. D., Company, Indianapolis, Indiana

8224 Adams HFA
8225 Adams HFB

M-655 Adirondack Steel Foundries Corporation, Watervliet, New York

8223 Adalloy No. 3
11422 Wearaloy

M-898 Advance Foundry Company, Dayton, Ohio

10879 Strenes
10880 Strenes "AA"
10881 Strenes "B"
10882 Strenes "C"
10883 Strennis Metal

M-732 A.F.C., France

8842 Central "A"
8843 Central "V"

M-783 Agawam Tool Company, Springfield, Massachusetts

9383 Extra
10485 Harqus
10030 Hobalite
10041 Hollow Drill
10787 Solid Drill
10895 Super
11551 Wizard
11547 Zip

M-663 Air Reduction Sales Company, New York, New York

8249 Airco 25-12
8245 Airco Electrode
8247 Airco KA2S
8248 *Airco KA2SMo*
8246 Airco No. 1
8250 Airco No. 48
8251 Airco No. 55
8252 Airco No. 57
8253 Airco No. 58
8254 Airco No. 62
8255 Airco No. 70
8256 *Airco No. 72*
8257 Airco No. 76
8258 Airco No. 77
8259 Airco No. 78
8260 Airco No. 82
8261 Airco No. 83
8262 Airco No. 84
8263 *Airco No. 85*
8264 Airco No. 86
8265 Airco No. 87
8266 Airco Stainless Ply

M-689 A.J.A.G., Switzerland

8498 Anticorodal (Special)
8499 Anticorodal (Wrought)
8598 Avional 411
8599 Avional M
8600 Avionplat
9765 G-97
10898 Super-Avional
11277 U-20

M-123 Ajax Metal Co., Philadelphia, Pennsylvania

1815 Ajax Acid Resisting Bronze
8273 Ajax Aluminum Bronze
8274 Ajax Anti-Acid Metal
21 Ajax Bull
8275 Ajax Extra Manganese Bronze
4624 Ajax Gear Bronze, Grade M
4614 Ajax Gear Bronze, Grade S
1816 Ajax Gear Bronze, Grade X
1817 Ajax Golden Glow Brass
22 Ajax Honest Solder
8276 Ajax Hydraulic Metal
23 Ajax Mangauese Bronze
8277 Ajax Navy Tombasil
1818 Ajax Nickalloy Bronze, Grade 12
4629 Ajax Nickalloy Bronze, Grade 21
5732 Ajax Nickalloy Bronze, Grade 23
8288 Ajax Nickel Plastic Bronze
8290 Ajax No. 1 Manganese Bronze
24 Ajax Phosphor Bronze
25 Ajax Plastic Bronze
1702 Ajax Plastic Brouze, Grade A
1703 Ajax Plastic Bronze, Grade B
1704 Ajax Plastic Bronze, Grade C
1819 Ajax Pressure Bronze, Grade M
5953 Ajax Pressure Bronze, Grade S
6156 Ajax Pressure Bronze, Grade X
1820 Ajax Special Valve Stem Bronze
8431 Ajax Structural Bronze, Grade S
1821 Ajax Structural Bronze, Grade X
8292 Ajax Super Manganese Bronze
26 Ajax Wiping Solder
2816 Mitifine
2933 Plumbite
1296 Steam Metal
3227 Tinite
1097 Tombasil
11655 Tombasil "A"

M-404 Aktiebolaget Skandinaviska Armaturfabriken, Sweden

1831 Alco Bronze

M-882 Aktiebolaget Svenska Metallverken, Sweden

10579 Pinsbac

M-666 Aladdin Rod and Flux Manufacturing Company, Grand Rapids, Michigan

8293 Aladdin

M-620 Alais, Forges et Camargue, Paris, France

7445 Alpax
7446 A.P. 33
5716 Eutectal
7447 J.L.
7448 L.M.

M-559 Alamo Iron Works, San Antonio, Texas

27 Alamo

M-512 Albertson and Company, Sioux City, Iowa

7534 Sioux H
6257 Sioux Super Cast

M-595 Alemite Die Casting and Manufacturing Company, Woodstock, Illinois

6746 Alemite

M-658 Alfa Romeo, Italy

8227 Adriatical
10727 Silicalfa

M-124 Allan & Son, A., Harrison, New Jersey

2498 Allan No. 2 Red Metal
36 Allan Red Metal

M-1 Allegheny-Ludlum Steel Company, Pittsburgh, Pennsylvania (Consolidation of the Allegheny Steel Company of Brackenridge, Pa., and the Ludlum Steel Company of Watervliet, New York.)

28 Albany
8332 Allegheny Armature
8333 Allegheny Andio Transformer "A"
8334 Allegheny Audio Transformer "B"
8335 Allegheny Audio Transformer "C"
8336 Allegheny Dynamo
8337 Allegheny Dynamo Special
8338 Allegheny Electric Metal
8339 Allegheny Electric Sheet Steel
8340 Allegheny H 17
8341 Allegheny L 12
8361 Allegheny-Ludlum 88
5798 Allegheny Metal A
5799 Allegheny Metal A-Mo
5800 Allegheny Metal A-Ti
5801 Allegheny Metal B
7020 Allegheny Metal B (Special)
5802 Allegheny Metal B-Ti
5803 Allegheny Metal C
1378 Allegheny Metal Clad Steel
5815 Allegheny Metal FM
8363 Allegheny Metal M-17
7021 Allegheny Metal Type 345
7022 Allegheny Metal Type 346
7023 Allegheny Metal Type 347
7024 Allegheny Metal Type 348
8342 Allegheny Metal 15-35
8343 Allegheny Metal 18-8
8344 Allegheny Metal 18-8 EZ
8345 Allegheny Metal 18-8 M
8346 Allegheny Metal 18-8 S
8347 Allegheny Metal 18-8 SM
8348 Allegheny Metal 18-11 C
8349 Allegheny Metal 19-10 M
8350 Allegheny Metal 19-10 SM
8351 Allegheny Metal 20-10 S
8354 Allegheny Metal 20-25 S
8355 Allegheny Metal 20-25 SM
8356 Allegheny Metal 21
8357 Allegheny Metal 25-12
8352 Allegheny Metal 25-12 S
8353 Allegheny Metal 25-20 S
8358 Allegheny Metal 28
8359 Allegheny Metal 28-4
8360 Allegheny Metal 29-9
8361 Allegheny Metal 29-9 S
5804 Allegheny Ohmalloy
8364 Allegheny Radio Transformer
8365 Allegheny Super Dynamo
8366 Allegheny Transformer "A"
8367 Allegheny Transformer "B"
8368 Allegheny Transformer "C"
8322 Allegheny 12
8323 Allegheny 12 EZ
8324 Allegheny 12 NH
8325 Allegheny 12 TB
8326 Allegheny 12 W
8327 Allegheny 17
8328 Allegheny 18-8 C
8329 Allegheny 18-8 S
5805 Allegheny 20-10
5748 Allegheny 22
5806 Allegheny 22
5807 Allegheny 22 Sp.
5808 Allegheny 25-20
8330 Allegheny 28
1708 Allegheny 33

5809 Allegheny 33 FM
5810 Allegheny 33 NH
5811 Allegheny 33 Turbine
5812 Allegheny 33 W
7019 Allegheny 34
1709 Allegheny 44
4431 Allegheny 46
6953 Allegheny 46 Mo
6954 Allegheny 46 W
8331 Allegheny 47-50
1710 Allegheny 55
38 Allegheny 66
5813 Allegheny 66 W
5814 Allegheny 67
6479 Alpha
8563 Atlas A
8565 Atlas B
146 Atlas Hot Die
8572 Atlas No. 50 A
8573 Atlas No. 50 B
1768 Atlas No. 93
8306 B—Carbon Vanadium
12144 Carmet Grade CA-1
12145 Carmet Grade CA-2
12146 Carmet Grade CA-3
12147 Carmet Grade CA-4
6476 Caroga
8975 Caroga
145 Chrome Die
283 Chrome Magnet
6569 Commercial Drill Rod
8974 Corinth
362 Crow
9065 DBL
387 Deward
9149 Double Chrome Vanadium
9152 Double Six
9163 Dragon
9169 Dundie
9247 EB Alloy
9371 Extra Carbon Vanadium
4155 F.C.C. Air Hardening
1715 F.C.C. No. 1
1717 F.C.C. No. 14
1718 F.C.C. No. 19
1719 F.C.C. No. 22
5754 F.C.C. Oil Hardening
9929 H.I.A.
576 Huron
9536 Iroquois Special
7784 LMW
9748 LSC
6475 LSD
9752 Ludlite
9753 Ludlum DBL
9754 Ludlum LMW
9755 Ludlum ML
9757 Ludlum SSV
9756 Ludlum No. 545
6474 Ludlum No. 602
676 LXX
6473 M.L. Steel
754 Mohawk Hot Die
11698 Mumetal
10647 Nicaloi
10451 Nitralloy
10448 Nitralloy E Z
10449 Nitralloy E Z 505
824 Nitralloy G
10450 Nitralloy G, Grade 69
825 Nitralloy H
10453 Nitralloy N
10452 Nitralloy 135, Type G Modif.
7464 Nitralloy 230
3697 No. 93 Cr-Mo
859 Ontario
10542 Panther Extra
875 Panther Special
4033 Panther Super
10543 Panther X X
2934 Pompton
10602 Pompton Extra
2935 Pompton Special
7310 Premet
934 Python
10992 Radimetal
3708 Saratoga
4592 Seminole
10654 Seminole Hard
10655 Seminole Medium
6478 Shoe Die
3517 Silcrome H-17
3818 Silcrome H-17 EZ
3849 Silcrome KA2
6845 Silcrome KA2B
3873 Silcrome KA2EZ
3881 Silcrome KA2M
3927 Silcrome KA2S
3952 Silcrome KA2T
5183 Silcrome KM
4004 Silcrome L-12
4011 Silcrome M-17
5588 Silcrome RA
10721 Silcrome X
10722 Silcrome XB
10723 Silcrome XCR
10724 Silcrome X-9
10725 Silcrome X-10
4026 Silcrome 12
4152 Silcrome 12 EZ
4383 Silcrome 12-2
4464 Silcrome 17
5149 Silcrome 21
5189 Silcrome 25-12
5377 Silcrome 28
5408 Silcrome 46M
10807 Special M
10808 Special No. 13
10816 Special Wortle Die
11786 Super DBL
876 Super Panther
11149 Tarpon
3729 Teton
11198 Tioga
6477 Tungsten Magnet
11273 Twin Six
11502 Yuma Chrome Magnet Steel
11518 6-6-Mo-Tung

M-210 Allen & Co., Edgar, Sheffield, England
(American Agent—Edgar Allen Steel Co., Inc., New York, N. Y.)

8901 Class E
8902 Class H
3581 Double Seven
3580 Double Six Die
5740 Double Six Super Die
3582 Draco
3509 Edgar Allen Carbon Tool Steel Class C
3510 Edgar Allen Carbon Tool Steel Class E
3511 Edgar Allen Carbon Tool Steel Class F
3512 Edgar Allen Carbon Tool Steel Class H
3513 Edgar Allen Carbon Tool Steel Class P
3514 Edgar Allen Carbon Tool Steel Class V

3515 Edgar Allen Double Shear Temper
4113 Edgar Allen Drift Steel
4118 Edgar Allen Drill Steel
4115 Edgar Allen Dunter-Pick
4116 Edgar Allen Feather Steel
3516 Edgar Allen Genuine Double Shear
4114 Edgar Allen Granite Chisel
3519 Edgar Allen Imperial C. S.
3520 Edgar Allen Iron-fibred
3521 Edgar Allen K-9
3522 Edgar Allen Maxchip No. 1
3523 Edgar Allen Maxchip No. 2
4119 Edgar Allen Maximum Steel
3524 Edgar Allen Maxnap
3525 Edgar Allen Maxtack
4110 Edgar Allen Miners Drill
3526 Edgar Allen Minerva Steel
3527 Edgar Allen No. 4 Hot Die
3528 Edgar Allen No. 5 Hot Die
4117 Edgar Allen Plug Steel
3529 Edgar Allen Red Label
4111 Edgar Allen Silver Steel
3532 Edgar Allen Special Chrome
3533 Edgar Allen Stagpick
2166 Hymax 3% Cobalt Magnet
2167 Hymax 6% Cobalt Magnet
2168 Hymax 9% Cobalt Magnet
2169 Hymax 15% Cobalt Magnet
2170 Hymax 35% Cobalt Magnet
12213 Imperial
2179 Imperial (Stag) Airhardening
2177 Imperial (Stag) Extra Special
2176 Imperial (Stag) Major
3890 Imperial Major
1506 Imperial Manganese Steel
2171 Imperial Permanent Magnet
2178 Imperial (Stag) Special
2174 Imperial Stainless Iron
2173 Imperial Stainless Steel
4329 Imperial Tool
3661 Lominium Steel
724 Maxhete
3682 Maxhete No. 1A
2172 Maxilvry
6114 Maxilvry A.D.S.
6115 Maxilvry A.M.
6116 Maxilvry A.T.
6117 Maxilvry A.W.
6118 Maxilvry A.W.P.
3926 Minerva Special
10294 M. S. M.
4016 Special Chrome-Vanadium
10843 Stag Allenite
10465 Stag Mo
4453 Talon
11542 No. 3074 Hot Work

M-242 Allen Co., L. B., Chicago, Illinois

6552 Allen
6553 Allen Alumiflux
6554 Allen Extra Strong
6555 Allen Non-Dulling

M-668 Allen Manufacturing Co., Hartford, Connecticut

8369 Allenoy
11383 V S 4

M-2 Allgemeines Deutsches Metallwerk, G.m.b.H., Berlin, Germany (American Agent—International Development Corp., New York, N. Y.)

9 Admiro
1424 Admiro V
10 Admiros
5789 A.R. Alloy
5788 D.G. Alloy
2089 Iron Bronze
1602 Rubel Bronze DW
964 Rubel Bronze H-1
965 Rubel Bronze H-2
1599 Rubel Bronze H-2W
1600 Rubel Bronze L
1601 Rubel Bronze LW
966 Rubel Bronze W-1
967 Rubel Bronze W-2
1598 Rubel Bronze W-3
968 Rubelit
1099 Topal H
1622 Topal W
1113 Turbo
1623 Turbo S

M-621 Allgemeine Elektrizitäts Gesellschaft, Metallwerke Oberspree, Berlin, Germany, (American affiliate—General Electric Co., Schenectady, N. Y.)

7449 Alsex
7450 Bahnaluminium
8049 Blombit
8050 Spreemetall

M-125 Allied Die Casting Corp., New York, N. Y.

952 Renyx

M-953 Allied Process Corp., New York, New York

11569 Aeterna 600 Metal

M-642 Allis Chalmers Manufacturing Co., Milwaukee, Wisconsin

2372 Everbrite

M-248 Alloy Metal Wire Co., Moore, Pennsylvania

8216 Acme
8393 Alray C
8394 Alray D
2541 Excelsior
10622 Premier
10623 Premier "C" Nickel Chrome Iron
1223 Premier Nickel Chrome
6942 Stainless Iron
6957 Superior
10908 Superior "A" Nickel Chrome

M-692 Alloy Rods Co., York, Pennsylvania

8541 Armoarc

M-126 Alloys & Products, Inc., New York, N. Y.

3333 Admiralty Bronze, Modified
3334 Admiralty Nickel
3335 *Alpro No. 4*
6333 Alpro No. 12
3337 Alpro No. 15
3338 Alpro No. 19AX
3339 Alpro No. 19AZ
3340 Alpro No. 19BX
3341 Alpro No. 19CX
8390 Alpro No. 30A
3342 Alpro No. 31
3343 Alpro No. 34
8391 Alpro No. 35
3344 Alpro No. 39
3345 Alpro No. 40
3346 Alpro No. 41
3347 Alpro No. 42
3348 Alpro No. 44
3349 Alpro No. 46
3350 Alpro No. 50B
3351 Alpro No. 55
6334 Alpro No. 112
3352 Alpro No. 126A
3353 Alpro No. 126C
3354 Alpro No. 126D
3355 Alpro No. 139
3356 Alpro No. 140
3357 Alpro No. 143
6315 Alpro No. 146
6316 Alpro No. 157
3358 *Alpro No. 158*
6317 Alpro No. 159
52 Alpro No. 220
53 Alpro No. 221
54 Alpro No. 223
55 Alpro No. 224
6318 Alpro No. 300
6319 Alpro No. 301
6320 Alpro No. 302
3559 Alpro No. 304
3360 Alpro No. 306
6321 Alpro No. 307
6322 Alpro No. 308
6323 Alpro No. 309
6324 Alpro No. 310
6325 Alpro No. 311
3361 Alpro No. 312
3362 Alpro No. 314
6326 Alpro No. 315
3363 Alpro No. 316
3364 Alpro No. 317
6327 Alpro No. 320
6328 Alpro No. 330
6329 Alpro No. 331
6330 Alpro No. 332
6331 Alpro No. 333
3365 Alpro No. 335
3366 Alpro No. 338
3367 *Alpro No. 351*
3368 Alpro No. 352
3369 Alpro No. 360
3370 Alpro No. 361
3371 Alpro No. 363
3372 Alpro No. 364
3373 Alpro No. 365
3374 Alpro No. 370
3375 Alpro No. 371
6332 Alpro No. 380
3376 Alpro No. 385
8392 Alprolite
3401 Deoxoloy
3437 Heat Resisting Acid Metal
3450 Modified Ounce Metal
3454 Nickel Bronze
866 Ounce Metal
3477 Standard Admiralty Bronze
3478 Standard Nickel Bronze
3479 Steam Metal

M-541 Alluminio S.A., Milano (112), Italy

7860 Duralite
7856 Xantal A
7857 Xantal B
7858 Xantal S
7859 Xantal X

M-464 Allyne-Ryan Foundry Co., Cleveland, Ohio

5763 Ryanite
11133 Ryanite No. 2

M-393 Alumaweld Co. of America, Chicago, Illinois

4403 Alumaweld

M-622 Aluminium Belge S.A., Lüttich, Belgium

7451 Aluma
7452 Magaluma
7453 Sigmalumin
7454 Supermagaluma

M-871 Aluminium Francais, France

10131 Magdal

M-249 Aluminium Industrie A.G., Neuhausen, Switzerland

34	Aldrey	1302	Aluminum Alloy, G-97	1300	Avional D
1299	Alufont H	1290	Anticorodal, Casting Alloy	8601	Avional S.K.
1320	Alufont W	1289	Anticorodal, Wrought Alloy	1301	Avional Z
5431	Alufont II			7861	Peraluman 7
1298	Aluman			5432	Peraluman 2

M-644 Aluminium Union, Ltd., England

8410	Aluminium Union 35	8418	Aluminium Union A51S	8425	Aluminium Union 160 Lo-Ex
8411	Aluminium Union 14S	8419	Aluminium Union 57S	8426	Aluminium Union 218 (Y-Alloy)
8412	Aluminium Union 17S	8420	Aluminium Union 123	8427	Aluminium Union 225
8413	Aluminium Union 22S	8421	Aluminium Union 125	8428	Aluminium Union 350
8414	Aluminium Union 24S	8422	Aluminium Union 126		
8415	Aluminium Union 27S	8423	Aluminium Union 135		
8416	Aluminium Union 35S	8424	Aluminium Union 160		
8417	Aluminium Union 51S				

M-493 Aluminium Walzwerke Singen, Singen-Hohentwiel, Germany

5820 Aluminium AW-15

M-302 Aluminiumwerk Maulbronn, Maulbronn, Württ, Germany

4222	Electron AZ	3444	L.M.O.	4223	Z-Guss
1742	Electron V-1	3451	Motal		
3617	Ferrocal	2374	Silferal		

M-555 Aluminiumwerke Nürnberg, G.m.b.H., Nürnberg, Germany

7025	Nüral	7030	Nüral 85S	7034	Nüral 132B
7026	Nüral 30	7031	Nüral 93	7035	Nüral 142
7027	Nüral 43	7032	Nüral 122	7036	Nüral 195
7028	Nüral 77	6537	Nüral 132	7037	Nüral 200
7029	Nüral 85	7033	Nüral 132A		

M-4 Aluminum Co. of America, Pittsburgh, Pennsylvania (See also affiliate—American Magnesium Corp.)

29	Alclad 17ST	67	Alcoa 14	78	Alcoa 93
6245	Alclad 24S	4773	Alcoa 14S	79	Alcoa 100
12157	Alclad XB75S	68	Alcoa 17S	6459	Alcoa 108
30	Alcoa Alloys	4719	Alcoa 18S	82	Alcoa 109
69	Alcoa A17S	3738	Alcoa 24S	83	Alcoa 112
6574	Alcoa A51S	72	Alcoa 25S	84	Alcoa 122
6575	Alcoa A108	6573	Alcoa 27S	6578	Alcoa 138
12476	Alcoa A214	4720	Alcoa 32S	85	Alcoa 142
4728	Alcoa A334	73	Alcoa 43	6579	Alcoa 144
4729	Alcoa A355	74	Alcoa 45	12477	Alcoa 172
6576	Alcoa B113	75	Alcoa 47	87	Alcoa 195
6580	Alcoa B195	5797	Alcoa 52S	88	Alcoa 196
4744	Alcoa B214	4721	Alcoa 53S	89	Alcoa 212
6577	Alcoa C113	12474	Alcoa 56S	4726	Alcoa 214
8309	Alcoa X76S	12475	Alcoa 61S	4725	Alcoa 216
62	Alcoa 2S	4722	Alcoa 70S	8307	Alcoa 218
63	Alcoa 3S	12478	Alcoa 79	4727	Alcoa 220
1346	Alcoa 4S	6246	Alcoa 81	8308	Alcoa 231
8060	Alcoa 11S	6282	Alcoa 82	7041	Alcoa 314
65	Alcoa 12	77	Alcoa 83	90	Alcoa 355
66	Alcoa 13	3539	Alcoa 85	91	Alcoa 356

11898 Alcoa 360
80 Alcoa 406
4730 Alcoa 645
61 Aluminum
7015 AM 2S
690 AM 3S
12479 AM 52S
7042 AM 55S
1563 AM 57S
3487 AM 58S
7016 AM 59S
695 AM 61S
3489 AM 65S
12482 AM 88S
7017 AM 230
1562 AM 240
12481 AM 244
3492 AM 246
10179 AM 260
10180 AM 263
3493 AM 265
7018 AM 403
11913 AM C52S
10182 AM C57S
11914 AM C58S
648 Lo-Ex (Alcoa A-132)
12473 Lynite Piston Alloy
686 Magnalite
689 Magnesium
12158 XB75S

M-6 Aluminum Industries, Inc., Cincinnati, Ohio

7045 Permite A2023 Special
11703 Permite No. 1002
7043 Permite 1002/2002
5459 Permite No. 1003 (Low Expansion Alloy)
5460 Permite No. 1004 (2004)
5462 Permite No. 1006 (2006)
5463 Permite No. 1007 (2007)
5464 Permite No. 1008 (2008)
5465 Permite No. 1009 (2009)
10566 Permite 1010
5467 Permite No. 1011 (2011)
5470 Permite No. 1014 (2014) (Y-Alloy)
5471 Permite No. 1015 (2015)
5472 Permite No. 1016
7044 Permite 1018
5475 Permite No. 1019 (2019)
5461 Permite No. 2005
5466 Permite No. 2010
5468 Permite No. 2012
5469 Permite No. 2013
5473 Permite No. 2017 (Pattern Alloy)
5474 Permite No. 2018
5476 Permite No. 2020
5477 Permite No. 2021
5478 Permite No. 2022
5479 Permite No. 2023

M-750 Amalgamated Steel Co., Cleveland, Ohio

8986 Creston
8987 Creston No. 5
8988 Creston No. 6
8989 Creston No. 7
9213 Dymal A-H
9214 Dymal O-H
9596 Kromal
9597 Kromal No. 2
9598 Kromal No. 3
9599 Kromal No. 4
10140 Malax
10141 Malax AA
10142 Malax AAA
10143 Malchrome
10144 Malga
10145 Malgaloy
11182 Thermal B
11183 Thermal BB
11234 Tru-Die
11266 Tufcut

M-127 Ambold Machine Tool Co., New York, N. Y.

365 Cupal

M-250 American Abrasive Metals Co., Irvington, New Jersey

58 Alumalun
219 Bronzalun
4161 Feralun
4160 Nicalun

M-661 American Agile Corporation, Cleveland, Ohio

11570 Agile Actarc
11571 Agile Silver Chisel Electrode
11572 Agile Silver A-A Electrode (Silver-Blue)
10470 Agile Silver Black
11573 Agile Silver D-C Electrode (Silver-Yellow)
11592 Agile Silver Red
8241 Agile Yellow Rod

M-761 American Art Metals, Inc., Detroit, Michigan

9107 Dirilyte

M-7 American Boron Producta Co., Buffalo, New York

4444 Boronic Alloys

M-8 American Brass Co., Waterbury, Conn.

12521 Admiralty Alloy 442
5 Admiralty Brass
6 Admiralty Bronze
102 Aluminum Brass
103 Aluminum Bronze
104 Aluminum Bronze
112 Aluminum Iron Bronze
114 Ambrac Grade A
1705 Ambrac Grade B
12511 Ambrac 815
8438 Ambrac 850
6563 Ambraloy 901
12500 Ambraloy 917
8439 Ambraloy 927

6959 Ambraloy 928
7046 Ambraloy 929
4311 Anaconda Beryllium Copper
1875 Anaconda Bronze
8488 Anaconda Electro Sheet Copper
6565 Anaconda Leaded Copper 946
4159 Anaconda Phosphor Bronze, Grade E
8494 Anaconda Special Phosphor Bronze
8495 Anaconda Super Nickel
2989 Anaconda "67"
3163 Anaconda "85"
8489 Anaconda 271
8490 Anaconda 624
8491 Anaconda 719
8492 Anaconda 997
8493 Anaconda 1026
12518 Architectural Bronze 280
12522 Arsenical Admiralty 439
155 Avialite 915
1939 Benedict Metal
12512 Benedict Nickel 812
12508 Beryllium Copper 175
3381 Brazing Brass
12514 Butt Brass 226
2152 Butt Brass 229
8755 Calsun Bronze 951
206 Cartridge Brass
12525 Chromium Copper 999
309 Clock Brass 243
1974 Commercial Brass
220 Commercial Bronze
207 Common High Brass
341 Copper
12504 Cupro-Nickel,20%-712
208 Deep Drawing Brass
12493 Deoxidized Arsenical Copper 108
12491 Deoxidized Copper 939
12509 Die Casting Alloy 624
12510 Die Casting Alloy 1026
9250 Economy Bronze
9385 Everdur 1000
454 Everdur 1010
6566 Everdur 1012
12503 Everdur 1014
5933 Everdur 1015
6046 Everdur 1026
12517 Forging Brass 250
2637 Gilding
9818 Grade A Phosphor Bronze 351
540 Hardware Bronze
567 Hitenso "BB" 961
12502 Hitenso C 965
12493 Leaded Copper 946
12515 Leaded Muntz Metal 274
12524 Leaded Naval Brass 612
121 Leaded Phosphor Bronze 5% (Grade B) 979
212 Low Brass
710 Manganese Bronze 937
744 Millard
12497 Muntz Metal
12516 Muntz Metal 293
12523 Naval Brass 452
799 Nickel Alloy, Grade A
12505 Nickel Silver 10%, 752
12506 Nickel Silver 18%, 719
12507 Nickel Silver 18%, 724
860 Oranium Bronze M
12519 Oreide 420
213 Percussion Cap Brass
12498 Phosphor Bronze 314
12499 Phosphor Bronze 316
12496 Phosphor Bronze 4% (Grade A) 903
120 Phosphor Bronze 5% (Grade A) 351
122 Phosphor Bronze 8% (Grade C) 353
123 Phosphor Bronze 10% (Grade D) 354
2014 Rule Brass 238
12494 Selenium Copper
12495 Signal Bronze 361
12526 Silicon Red Brass 1027
6564 Special Free Cutting Phosphor Bronze 610
1303 Super Nickel 701
4398 Tempaloy
11501 Tempaloy B
12513 Tempaloy 841
12501 Tempaloy 917
1093 Tobin Bronze
12520 Trumpet Brass 435
1105 Tube Brass

M-877 American Bridge Co., Pittsburgh, Pennsylvania

10557 Pencoyd

M-653 American Chain and Cable Co., Inc., Bridgeport, Connecticut
(No longer manufacture alloys)

M-956 American Crucible Products Co., Lorain, Ohio

11679 Promet

M-276 American Cutting Alloys, Inc., New York, N. Y.

742 Cutanit

M-399 American Hammered Piston Ring Co., Baltimore, Maryland
(Division of Koppers Company)

6682 American Hammered Piston Ring Co. Standard Iron
11824 B-18
11825 B-19
11823 B-23 Aero. Bronze
11822 B-36
6678 F-8 Alloy
7540 F-16 Alloy
6681 F-17 Alloy
11840 F-37 Alloy
4437 K-6 Metal
6679 XL-Metal

M-128 American Injector Co., Detroit, Michigan

17 Agrilite Alloy No. 5
18 Agrilite Bearing Metal

M-299a American Lurgi Corp., New York, N. Y.
(See Parent Company—Metallgesellschaft A-G)

M-524 American Machine & Foundry Co., Brooklyn, N. Y.

1869 Amaloy

M-313 American Magnesium Corp., Cleveland, Ohio
(Subsidiary of Aluminum Company of America)

7015	AM 2S	3489	AM 65S	10180	AM 263
690	AM 3S	12482	AM 88S	3493	AM 265
10181	AM 52S	7017	AM 230	7018	AM 403
7042	AM 55S	1562	AM 240	11913	AM-C 52S
1563	AM 57S	12481	AM 244	10182	AM-C 57S
3487	AM 58S	3492	AM 246	11914	AM-C 58S
7016	AM 59S	10179	AM 260		

M-129 American Manganese Bronze Co., Holmesburg, Philadelphia, Pennsylvania

10640	Hy-ten-Sl Bronze, Gr. 1	8430	Hy-ten-Sl Bronze, Gr. 4	8646	Hy-ten-Sl No. 3
				7144	Hy-Ten-Sl No. 4
7117	Hy-ten-Sl Bronze, Gr. 2	8688	Hy-ten-Sl No. 1	11029	Resistac No. 1
		585	Hy-ten-Sl No. 1A	11030	Resistac No. 2
8232	Hy-ten-Sl Bronze, Gr. 3	8284	Hy-ten-Sl No. 2	11991	Turbine Metal

M-197 American Manganese Mfg. Co., Dunbar, Pennsylvania (Company out of business)

M-9 American Manganese Steel Division, American Brake Shoe Co., Chicago, Illinois

8486	Amsco Dieweld	4493	Amsco No. 459 Alloy	5075	Amsco F-10
119	Amsco Manganese Steel	458	Amsco F-1	12298	Amsco F-12
		460	Amsco F-3	12299	Amsco F-13
8487	Amsco Nickel Manganese Steel	462	Amsco F-5	12300	Amsco F-14
		5827	Amsco F-6	9251	Economy Hardface
7047	Amsco No. 217	463	Amsco F-8	12301	Farmface

M-558a American Metal Co., Ltd., New York, N. Y.
(Metal Sales Agent for U. S. Metals Refining Co. q.v.)

M-285 American Metal Products Co. (See Ampco Metal, Inc., Successors)

M-538 American Nickeloid Co., Peru, Illinois

7543	Brassoid	7050	Chrome Nickel Silver	7550	Nickel Copper
7541	Brass Steel	7051	Chrome Steel	6752	Nickeloid
7542	Brass Tin	7545	Chrome Tin	7052	Nickel Steel
5791	Chromaloid	7548	Copperoid	7551	Nickel Tin
7544	Chrome Brass	7546	Copper Steel		
7049	Chrome Copper	7549	Nickel Brass		

M-686 American Platinum Works, Newark, New Jersey

8506 A.P.W. Solders

M-684 American Radiator Co., New York, New York.

M-10 American Rolling Mill Co., Middletown, Ohio

11789	Armco Aluminized Steel	7829	Armco Enameling Iron	7811	Armco Grade 17 Type 430
7821	Armco Armature	7822	Armco Field Grade	7804	Armco Grade 18-8
11635	Armco Cold Rolled Paintgrip	12124	Armco Galvanized Paintgrip	7805	Armco Grade 18-8 Type 304
7820	Armco Electric	12533	Armco Grade X	2801	Armco Grade 18-10 T

7809 Armco Grade 20-10 Type 308
7810 Armco Grade 25-12 Type 309
8539 Armco High Tensile
7814 Armco High Strength (50Y)
12125 Armco High Strength (55Y)
7818 Armco Intermediate Transformer
135 Armco Iron
7823 Armco Radio No. 1
7824 Armco Radio No. 2
7825 Armco Radio No. 3
7826 Armco Radio No. 4
7827 Armco Radio No. 5
7828 Armco Radio No. 6
7819 Armco Special Electric
12532 Armco Tran-Cor Grade 52
7815 Armco Tran-Cor Grade 58
7816 Armco Tran-Cor Grade 65
7817 Armco Tran-Cor Grade 72
4570 Armco Zincgrip Paintgrip
8532 Armco 13 (Type 410)
8533 Armco 17-7 (Type 301X)
5833 Armco 18-8 Stainless Steel
8534 Armco 18-10 Cb (Type 347)
8535 Armco 18-12-Mo
8536 Armco 18-12 SMo (Type 316)
8537 Armco 19-12 Mo
5834 Armco 20-10
8538 Armco 27 (Type 446)
11508 Zincgrip

M-314 American Smelting & Refining Co., Perth Amboy, New Jersey

7048 Asarcoloy No. 27
9764 G. Alloy
716 Mannheim Gold
11921 Roofloy
10235 Tubeloy

M-293 American Stainless Steel Co., Pittsburgh, Pennsylvania (Licensor)

4931 Stainless Iron
6000 Stainless Iron C-1
6001 Stainless Iron C-2
6002 Stainless Iron C-3
6003 Stainless Iron C-4
1268 Stainless Steel
5998 Stainless Steel A
5999 Stainless Steel B

M-551 American Steel Co., Pittsburgh, Pennsylvania

6525 Afual

M-991 American Steel Castings Co., Newark, New Jersey

11881 American CA-14
11882 American CA-40
11883 American CE-30
11884 American CF-7
11886 American CF-7-M
11885 American CF-20
11887 American CH-20
11888 American HT
11876 American Hylastic
11877 American No. 10
11878 American No. 20
11879 American No. 22
11880 American No. 31

M-473 American Steel Foundries, Chicago, Illinois

5787 Hylastic

M-12 American Steel and Wire Company, Cleveland, Ohio (Subsidiary of the United States Steel Corp.)

7766 Alloy Gas Welding 2317
7767 Alloy Gas Welding 2320
7768 Alloy Gas Welding 2330
7742 Amercut B-14
7744 Amercut B-19
7746 Amercut B-28
8443 Amercut X1020
7749 Amercut X1314
7750 Amercut X1315
7751 Amercut X1330
7752 Amercut X1335
7753 Amercut X1340
8442 Amercut 1020
7747 Amercut 1115
7748 Amercut 1120
12261 Amercut 4640
7757 Amerhead X1335
7755 Amerhead 1330
7756 Amerhead 1335
7754 Amerhead 14-20
7758 Amerhead 2315
7759 Amerhead 2330
7760 Amerhead 3115
7761 Amerhead 3120
7762 Amerhead 3135
12262 Amerhead 4037
7763 Amerhead 4140
7764 Amerhead 4615
12263 Amerhead 8620
12264 Amerhead 9437
7769 Hard Surface Welding 6120
7765 Premier H S Weld
7771 U.S.S. 5
1133 U.S.S. 12
8099 U.S.S. 17
8088 U.S.S. 18-8
8133 U.S.S. 18-8FM
8092 U.S.S. 18-8J
8093 U.S.S. 18-8SMo
7770 U.S.S. 18-10Cb
8091 U.S.S. 25-12
12265 U.S.S. 25-20
8090 U.S.S. 27
8134 U.S.S. 1210Cu
8136 U.S.S. 9260 Wire
8135 U.S.S. 52100 Wire

M-252 Amesbury Brass & Foundry Co., Amesbury, Massachusetts

372 Dairy Metal

M-13 Ampco Metal, Inc., Milwaukee, Wisconsin

103 Aluminum Bronze
7414 Ampco Beryllium Copper
8477 Ampco Grade 18-13
8448 Ampco Grade 18-22
8449 Ampco Grade 18-23
8451 Ampco Grade 20-13
5821 Ampco No. 12
5822 Ampco No. 16
5823 Ampco No. 18
5824 Ampco No. 20
5825 Ampco No. 21
5826 Ampco No. 22
11830 Ampco Trode 10
8480 Ampco Trode Grade 12
8481 Ampco Trode Grade 16
8482 Ampco Trode Grade 18
8483 Ampco Trode Grade 20
8484 Ampco Trode Grade 21
8485 Ampco Trode Grade 22
8453 Ampcoloy 30
8454 Ampcoloy 32
8455 Ampcoloy 34
8456 Ampcoloy 40
8457 Ampcoloy 42
8458 Ampcoloy 43
8459 Ampcoloy 44
11831 Ampcoloy 45
11787 Ampcoloy 45-22
8460 Ampcoloy 46
8461 Ampcoloy 50
8462 Ampcoloy 54
8463 Ampcoloy 62
8464 Ampcoloy 64
8465 Ampcoloy 66
8466 Ampcoloy 72
563 Ampcoloy 79
8467 Ampcoloy 80
8468 Ampcoloy 91
8469 Ampcoloy 97
8471 Ampcoloy A-3
8472 Ampcoloy A-323
8473 Ampcoloy E-1
8476 Ampcoloy E-117
8477 Ampcoloy E-123

M-211 Amplex Division, Chrysler Corp., Detroit, Michigan
(See Chrysler Corp., Amplex Division)

Anaconda Copper Co. (See American Brass Co.)

M-342 Anchor Drawn Steel Co., Latrobe, Pennsylvania
(Parent Company—Vanadium Alloys Co., q.v.)

2209 Blue Anchor Drill Rod
12102 Carbon-Vanadium Drill Rod
3854 Gold Anchor
12103 Non-Shrinkable Drill Rod
2499 Red Anchor Drill Rod
12104 Red Star Tungsten Drill Rod

M-351 Andrews Steel Co., Newport, Kentucky

1765 Asco

M-641 Andrews, Thos. & Co., Ltd., Royds Works, Attercliffe Road, Sheffield, England
(See under Affiliate—Hardenite Steel Co., Ltd.)

M-352 Andrews, Toledo, Ltd., 110 Cannon St., London, England

9609 N.W.S.
4052 Toledo Extra
4053 Toledo High Speed
4054 Toledo Non-Shrinking
4055 Toledo Scimitar
4056 Toledo Special
4057 Toledo Superior

M-639 Antaciron, Inc., Wellsville, New York

8072 Antaciron

M-564 Apex Bronze Foundry Co., Oakland, California

7053 Apex 12 (Ounce Metal)
7054 Apex 16
7056 Apex 22
7057 Apex 24 (Composition G)
7058 Apex 44
7059 Apex 66

M-130 Apex Smelting Co., Chicago, Illinois

1880 Apex No. 400 Alloy
7552 Apex No. 12 Aluminum Alloy
7553 Apex 50-50 Aluminum-Copper
7554 Apex 60-40 Aluminum-Copper
7555 Apex 95-5 Aluminum Silicon Alloy
7556 Apex Patent Aluminum Alloy
7557 Apex Piston Alloy
7558 Apex Pressure Aluminum Alloy
7559 Apex 11-13% Silicon Aluminum Alloy
7560 Apex 25-75 Silicon Aluminum
7561 Apex "T" series Zinc-base Alloys
7562 Apex No. 7 Zinc-base Alloy
7563 Apex No. 405 Zinc-base Alloy
7564 Apex No. 4100 Zinc-base Alloy
7565 Apex No. 4102 Zinc-base Alloy

M-485 Apex Steel Co., Ltd., Sheffield, England

5828	Angel	5830	Archangel	5948	Finis

M-687 Apollo Metal Works, Chicago, Illinois

8505	Apollo Chromsteel

M-131 Apollo Steel Co., Apollo, Pennsylvania

128	Apolloy	7691	Highway Metal

M-448b Appleby-Frodingham Steel Co., Ltd., Sheffield, England
(See parent company, United Steel Companies, Ltd.)

M-14 Arcade Malleable Iron Co., Worcester, Massachusetts

8545	Arzite Metal	1321	Arzon Metal	1202	Z. Metal

M-677 Arcos Corporation, Philadelphia, Pa.

8405	Alumend	8871	Chromend 2M	8883	Chromend 28/3 Mo
8696	Bronzend	8872	Chromend 5M	8884	Chromend 29/9
8697	Bronzend E	8873	Chromend 8/18	8886	Chromend Special
8698	Bronzend H	8874	Chromend 12	11833	Manganend 2M
11838	Bronzend P	8875	Chromend 13/60	10160	Manganend 13
11837	Carend	8876	Chromend 15/35	10260	Mixend
11836	Chromang	8877	Chromend 16	10432	Nickelend
8865	Chromend 15/85	11834	Chromend 16/7	11017	Reformend
8866	Chromend HC	8878	Chromend 18	10844	Stainlend 18/8 Mo
8867	Chromend HCN	8879	Chromend 18/8 Mo	10845	Stainlend H. H. C.
8868	Chromend K	8880	Chromend 19/9 Ch	10846	Stainlend K
11835	Chromend KMo	8881	Chromend 25/12 Cb		
8870	Chromend KS	8882	Chromend 28		

M-581 Ardal Ltd., Worle, Weston-Super-Mare, England

6615	Ardal Metal

M-563 Ariston Metal Co., New York, N. Y.

829	Noheet

M-132 Armstrong Bros. Tool Co., Chicago, Illinois

136	Armide

M-670 Arnold Engineering Co., Chicago, Illinois

8377	Alnico

M-87 Ashby, Morris, Ltd., London, England

4772	Mazak

M-15 Associated Alloy Steel Co., Cleveland, Ohio
(Out of business Jan. 1933. See Ludlum Steel Co. or Timken Steel & Tube Co.)

M-674 Ateliers de la Gironde, France

8401	Alugir

M-637 Athens Foundry Co., Athens, Pennsylvania

7639	Ni-Bar Iron

M-567 Atkinson Co., Rochester, New York

6523	Plata Metal No. 5

M-492 Atkinson, E. Frank and Co., Sheffield, England

5949	Franco

M-569 Atlantic Steel Castings Co., Chester, Pennsylvania

6645	Chrome Cast

M-353 Atlantic Steel Co., New York, N. Y.

8221 ACT Carbide
11826 Airomat 33 Self Hardening
11827 Amotun
8550 Atlan
9894 Atlan H.C.C. Die
8551 Atlan Non Shrink Die
8562 Atlantic High Speed
1767 Atlantic 33 Non-Tempering Tool Steel
12127 Atlantic 44
11828 Atlantic "V"
8577 Atloy
5035 Atsco
12128 Atsco AR
12129 Atsco Special
11829 Atsil
9872 Hardnair
11271 Tuncro

M-591 Atlantic Zinc Works, New York, N. Y.

6723 AZ-Alloy

M-696 Atlas Pattern and Model Works, Brooklyn, New York

8574 Atlas No. 57
8575 Atlas No. 83-A

M-253 Atlas Steel Corporation, Dunkirk, New York
(See Allegheny-Ludlum Steel Co., Successor)

M-435 Atlas Steels, Ltd., Welland, Ontario (Formerly the Canadian Atlas Steels, Ltd.)

8564 Atlas Alpha
8566 Atlas CM
7079 Atlas Double Extra
7080 Atlas Extra
6501 Atlas Hollow Drill
7081 Atlas Q
7082 Atlas Refined
7083 Atlas Special Alloy
7084 Atlas Triple Extra
8570 Atlas XX-95
8571 Atlas XXX
7085 Badger
8991 Crodie
9010 Cro-Mo-Loy
12467 Denine
7086 E. B. Alloy
7087 Falcon
9418 Falcon 4
9419 Falcon 6
7088 FNS
9858 Hardy Nickel Iron
7089 Hot Die
9507 Impacto
7090 Keewatin
9568 K.K.
7091 LXX
10171 Maple Leaf
10270 Mohican
7092 Monark
10285 Monark 1
10286 Monark 2
7093 Nipigon
7096 NN
10457 No-Kor-O-H
5116 No-Kor-O-12
7094 No-Kor-O-12F
5117 No-Kor-O-14
5115 No-Kor-O-18
10459 No-Kor-O-18H-60
5114 No-Kor-O-18-2
5111 No-Kor-O-18-8
10458 No-Kor-O-18-8F
5109 No-Kor-O-18-8M
5110 No-Kor-O-18-8S
7095 No-Kor-O-25-20
12393 Seneca Hot Die
10760 Six-Max
10796 Spartan
10835 SPS 245
7097 Trojan
11180 Trojan Shank
11283 Ultimo 4
7098 Ultimo 6
11358 Vibresist Hollow Drill
11496 XLO

M-936 Audubon Wire Cloth Corporation, Philadelphia, Pennsylvania

11357 Vibraloy

M-603 Aurora Metal Company, Aurora, Illinois

8586 Auromet
8588 Auromet No. 11
11816 Auromet No. 12
11815 Auromet No. 52
8599 Auromet No. 55
11814 Auromet No. 56
8590 Auromet No. 145
8591 Auromet No. X-10
8592 Auromet No. X-14
3593 Stronger-Than-Steel

M-937 Austenal Laboratories, New York, New York

11363 Vitallium

M-16 Avesta Jernverks, Avesta, Sweden
(American Agent, A. Johnson & Co., Inc., New York, N. Y.)

5841 Avesta 249
5842 Avesta 249H
5843 Avesta 254
151 Avesta No. 393
4224 Avesta 393S
152 Avesta No. 739
4225 Avesta No. 739H
153 Avesta No. 831
4226 Avesta No. 831H
154 Avesta No. 832
4227 Avesta No. 832S

M-701 A.W.A.G., Singen, Germany

8604 A.W. 160

M-703 Axelson Mfg. Co., Los Angeles, California

8607 Axloy 20
8608 Axloy 30 CN
8609 Axloy 30 CNM
8610 Axloy 30 CRN
8611 Axloy 35 CN
8612 Axloy 35 CNM
8613 Axloy 50 CN
8614 Axloy 50 CNM

M-469 Ayedeecee Metals Co., Ltd., Merthyr Tydfil, S. Wales

6089 Brillum

M-447 Babcock & Wilcox Co., Barberton, Ohio

3 Adamanite
6567 B&W Nirosta KA-2
6568 B&W Nirosta KA-2S
5079 B & W No. 400
5080 B & W No. 401
5081 B & W No. 402
5082 B & W No. 420
5845 B & W No. 441
5083 B & W No. 450
5084 B & W No. 600
6946 B & W No. 602
7004 B & W No. 603
5085 B & W No. 610
5086 B & W No. 640
5087 B & W No. 642
5088 B & W No. 650
5089 B & W No. 661
6974 B & W No. 690
6948 B & W No. 692
5090 B & W No. 700
5091 B & W No. 701
5092 B & W No. 800
5846 B & W No. 900
5093 B & W No. 902
5094 B & W No. 910
5095 B & W No. 912
5096 B & W No. 950
1228 B & W No. 1000
1229 B & W No. 1100
5097 B & W No. 1101
5098 B & W No. 1102
5099 B & W No. 1200
5100 B & W No. 1300
5101 B & W No. 1400
5102 B & W No. 1500
8740 B & W No. 5150
6945 B & W 12-14 Cr
1231 Chromium Iron
1230 Chromium Steel
435 Elverite "A"
5742 Elverite "B"
9323 Elverite "C"

M-17 Babcock & Wilcox Tube Co., Beaver Falls, Pa.
(Parent company is Babcock & Wilcox Co.)

8993 Croloy 2
8994 Croloy 2 1/4
8996 Croloy 5
9000 Croloy 7
12351 Croloy 9
9001 Croloy 12
12352 Croloy 16-13-3
9003 Croloy 18
9004 Croloy 18-8
9005 Croloy 18-8 Stabilized
9007 Croloy 25-20
9008 Croloy 27

M-704 Bachite Development Corp.

8617 Bachite

M-18 Baker & Co., Newark, New Jersey

6522 Aristaloy
8619 Baker No. 175L
914 Platinum
10467 No. 712 Alloy
12296 Z Alloy

M-616a Baker, Fred, Inc., Larchmont, New York (Agent for Schöller-Bleckman q.v.)

M-134 Baker, Perkins & Co., Ltd., Peterborough, England

830 Noil

M-814 Baldwins, Ltd., Victoria Embankment, London, England

9767 Galvamatt

M-412 Ballard, F. J. & Co., Tividale, Tipton Staff., England
(No longer manufacture alloys listed)

M-19 Barber Asphalt Co., Philadelphia, Pennsylvania
(No longer manufacture alloys listed)

M-705 Barium Stainless Steel Corp., Canton, Ohio

8623 Barium 13Cr
8624 Barium 17Cr
8625 Barium 18-8

M-135 Barker & Allen, Ltd., Birmingham, England

113	Amberoid	7060	Nickeloid	5996	Spedex
5848	Bazar	5995	Scimitars		
5976	Mungoose	7061	Silmet		

M-20 Barronia Metals, Ltd., London, England
(American Agent—William E. Williams, New York, N. Y.)

160	Barronia	171	Berdo No. 2	4842	Berdo No. 6
170	Berdo No. 1	172	Berdo No. 3	4843	Berdo No. 7

M-619 Barrow Haematite Steel Co., Ltd., Barrow-in-Furness, Lancashire, England

7797	Barrow B.H. Brand Pig Iron	7801	Barrow B.H.R. Brand (Cupola Grade) Pig Iron	7794	Barrow B.X.X. Brand Pig Iron
7798	Barrow B.H.S. Brand Bessemer Haematite Pig Iron	7799	Barrow Brand Foundry Haematite Pig Iron	7795	Barrow B.X.X. Brand Swedish Type
7900	Barrow B.H.S. Brand Foundry Haematite Pig Iron	7796	Barrow B.X. Brand Pig Iron	7444	Barrow S. P. Pig Iron

M-758 Bartlett Hayward (Division of Koppers Co., Baltimore, Maryland)

9091	D.H.S. Bronze No. 1	9093	D.H.S. Bronze No. 3
9092	D.H.S. Bronze No. 2	9094	D.H.S. Bronze No. 4

M-21 Batterium Metal & Vislok, Ltd., Market Harborough, England

161 Batterium

M-254 Baush Machine Tool Co., Springfield, Massachusetts
(No longer manufacture alloys listed)

M-431 Bearium Metals Corp., Rochester, New York

4404	Bearium B-2	4716	Bearium B-6	4718	Bearium B-11
4697	Bearium B-4	4717	Bearium B-10		

M-706 Becker Brothers Carbon Co., Cicero, Illinois

8627 BBB Welding Electrode

M-544 Beckett Bronze Co., Muncie, Indiana

6514	Beckett Metal	6531	Nic-Motal

M-455 Bédel & Cie, Paris, France

5551	Bédel B.C.N.	5511	Bédel "Diamant-Bedel"	5577	Bédel I.N.O.21
5552	Bédel B.C.N.3S.2			5578	Bédel I.N.O.22
5555	Bédel B.C.N.4S.	5510	Bédel Double Trèfle	5579	Bédel I.N.O.23
5547	Bédel B.K.3B	6769	Bédel Double Trèfle E	5563	Bédel I.N.O.31
5585	Bédel B.N.23	5558	Bédel I.N.O. 2	5564	Bédel I.N.O.32
5586	Bédel B.N.33	5559	Bédel I.N.O. 3	5565	Bédel I.N.O.33
5553	Bédel B.N.A.V.0.	5584	Bédel I.N.O.5	5580	Bédel I.N.O.40
5556	Bédel B.N.A.V.1	5571	Bédel I.N.O.11	5581	Bédel I.N.O.41
5554	Bédel B.N.A.V.2	5562	Bédel I.N.O.12	5582	Bédel I.N.O.50
5549	Bédel B.N.A.V.3	5572	Bédel I.N.O.13	5583	Bédel I.N.O.51
5519	Bédel Chromé 4	5573	Bédel I.N.O.14	5569	Bédel M.G.B.A.
5548	Bédel C.K.N.	5574	Bédel I.N.O.15	5570	Bédel M.G.B.C.
5545	Bédel C.3	5575	Bédel I.N.O.16	5568	Bédel M.G.B.S.
5546	Bédel C.5	5576	Bédel I.N.O.20	5550	Bédel No. 600 C.

5507 Bédel No. 644
5505 Bédel Quatre Trèfles
6767 Bédel Quatre Trèfles C
5566 Bédel R.B.6
5567 Bédel R.B.7
5560 Bédel S.O.C.
5561 Bédel S.O.C. 2
5521 Bédel Spécial F.
5524 Bédel Spécial F.A.
5525 Bédel Spécial F.B.
5526 Bédel Spécial F.K.
5522 Bédel Spécial F.L.
5520 Bédel Spécial X
5516 Bédel Special Y.2
5517 Bédel Special Y.5
5518 Bédel Special Z
6770 Bedel Special Z-3
6771 Bedel Special Z-4
5523 Bédel Spécial 000
5509 Bédel Triple Trèfle
5506 Bédel Triple Trèfle E.S.
6768 Bedel Triple Trefle E.S.D.
5508 Bédel Triple Trèfle F.R.
5512 Bédel Un Trèfle Couronne
5513 Bédel Un Trèfle 1
5514 Bédel Un Trèfle 2
5515 Bédel Un Trèfle 3
5539 Bédel 1 Couronne 0
5540 Bédel 1 Couronne 1
5541 Bédel 1 Couronne 2
5542 Bédel 1 Couronne 3
5543 Bédel 1 Couronne 4
5545 Bédel 1 Couronne 5
5533 Bédel 2 Couronnes 0
5534 Bédel 2 Couronnes 1
5535 Bédel 2 Couronnes 2
5536 Bédel 2 Couronnes 3
5537 Bédel 2 Couronnes 4
5538 Bédel 2 Couronnes 5
5527 Bédel 3 Couronnes 0
5528 Bédel 3 Couronnes 1
5529 Bédel 3 Couronnes 2
5530 Bédel 3 Couronnes 3
5531 Bédel 3 Couronnes 4
5532 Bédel 3 Couronnes 5
5557 Bédel 1 Trèfle 5

M-22 Bell Telephone Laboratories, New York, N. Y.

1067 Chrome Permalloy
1141 Molybdenum Permalloy
11514 2-81 Molybdenum Permalloy
7683 45 Permalloy
12156 68 Permalloy
7684 78.5 Permalloy
11805 Permalloy Standard
7505 Permendur
11515 1.7V Permendur
895 25-45 Perminvar
11669 45-25 Perminvar
7507 7.5-70 Perminvar
11026 Remalloy
11359 Vicalloy
7506 Vanadium Permendur

M-707 Belle City Malleable Cast Iron Co., Racine, Wisconsin

8628 Belectric No. 0
8629 Belectric No. 1
8630 Belectric No. 2
8631 Belectric No. 3
8632 Belectromal
8634 Belmalloy

M-459a Benecke, Alex, New York, N. Y.
(American representative for Deutsche Edelstahlwerke A.G., q.v.)

M-708 Bergman Elektrizitatswerke, Berlin, Germany

8636 Bergal

M-646 Beryllium Corp. of Pennsylvania, Reading, Pennsylvania

8641 Berylco No. 10
8642 Berylco No. 25
8643 Beryclo No. 70
8644 Beryclo No. 185

M-255 Beryllium Products Corp., New York, N. Y.

5455 Beryllium Copper
5457 Beryllium Iron
5456 Beryllium Nickel

M-23 Bethlehem Foundry & Machine Co., Bethlehem, Pennsylvania
(No longer manufactures the alloys listed)

M-24 Bethlehem Steel Co., Bethlehem, Pennsylvania

8244 A.H.
176 Bethadur 1
177 Bethadur 2
178 Bethadur 3
1368 Bethadur 6
1369 Bethadur 8
8647 Bethadur 301
8648 Bethadur 301X
177 Bethadur 302
8649 Bethadur 302B
5849 Bethadur 304
5850 Bethadur 305
5851 Bethadur 306
5852 Bethadur 307
5853 Bethadur 308
8650 Bethadur 309
8651 Bethadur 316
8652 Bethadur 320
8653 Bethadur 321
8654 Bethadur 345
8655 Bethadur 346
8656 Bethadur 347
8657 Bethadur 348
8278 Bethadur 403
12133 Bethadur 410
12132 Bethadur 420
8279 Bethadur 425
1367 Bethadur 430
12134 Bethadur 431
5104 Bethadur 440
5103 Bethadur 442
179 Bethadur 446
5855 Bethadur 501A
8280 Bethadur 501B
8281 Bethadur 501C
8282 Bethadur 501D
8283 Bethadur 502
7063 Bethalon D
5105 Bethalon B

180 Bethalon 416
7062 Bethalon 430F
7064 Bethanized Products
7065 Bethco Machine Screw
7066 Bethco Wood Screw
5854 Beth-Cu-Loy
12136 Bethlehem Abrasion Resisting Steel No. 235
8285 Bethlehem Air Die
11793 Bethlehem Air Hardening
4853 Bethlehem Best Tool Steel
4854 Bethlehem Chrome Ball Race Steel
333 Bethlehem Comokut
12137 Bethlehem Cr-Mo-W Hot Work
8286 Bethlehem Extra Special
4459 Bethlehem Extra Special High Speed Tool Steel
1946 Bethlehem Fast Finishing
2201 Bethlehem Finishing
8658 Bethlehem H. M.
8287 Bethlehem H. T. W.
7067 Bethlehem H.V.
11578 Bethlehem Moco
8659 Bethlehem Mokut
8660 Bethlehem Moly
4856 Bethlehem No. 1 Permanent Magnet Steel
3307 Bethlehem No. 5 Nickel Steel
6488 Bethlehem No. 6 Nickel Steel
8661 Bethlehem No. 7 Nickel Steel
6470 Bethlehem No. 33A
6471 Bethlehem No. 33B
6472 Bethlehem No. 33C
185 Bethlehem No. 57 Hot Work
12138 Bethlehem No. 57 Special Hot Work
8662 Bethlehem No. 66 High Speed
186 Bethlehem No. 67
11529 Bethlehem No. 67 Tap Steel
187 Bethlehem No. 71 Alloy
5856 Bethlehem 88-80
8663 Bethlehem No. 235
8664 Bethlehem No. 300
188 Bethlehem No. 445 Hot Work
3955 Bethlehem Penco
4855 Bethlehem Piston Steel
12140 Bethlehem Pivot Steel
12141 Bethlehem Shank Steel
6637 Bethlehem Silvery Mayari Iron
6495 Bethlehem Special Gear Steel
1947 Bethlehem Special High Speed
181 Bethlehem Stainless Type A
8666 Bethlehem Standard
182 Bethlehem Superior Hollow Drill
183 Bethlehem Superior Tool Steel
184 Bethlehem Superior Tool Steel No. 6
4460 Bethlehem "Tool Room" Oil Hardening
4458 Bethlehem Tough
189 Bethlehem X
192 Bethlehem XCL
190 Bethlehem XX
191 Bethlehem XXX
12139 Bethlehem 5% Chromium
12143 Broaching Steel
12210 Channeler Steel
12149 Chromium-Molybdenum Bearing Steel
12150 Coboflux Magnet A
9800 Collet Steel
9353 Enduria
11634 Hot Work 8
628 Lehigh Die & Tool Steel
9649 Lehigh Die L Temper
9651 Lehigh Die & Tool Steel H Temper
9656 Lehigh Die & Tool Steel S Temper
4859 Mayari Engine Bolt Steel
727 Mayari Pig Iron
10178 Mayari R
4858 Mayari Staybolt Steel
728 Mayari Steel A
729 Mayari Steel B Bolts
7068 Mayari Superheater Bolt Steel
10291 Mo-Tiger
11337 Nail Die Steel
10439 Nikrome M
12193 Non Tempering Tool Steel
853 Omega
11012 Red Tiger
4860 Resilia
8665 Silico-Manganese Spring Steel
10797 Special
10788 Solid Drill
7069 Steelton L.P. Iron
1066 Supertemp
11208 Tough M. Temper
8597 Avial
9510 Imperium

M-698 Bidault, France

M-410 Billington & Newton, Ltd., Longport, Staffordshire England

2665 Hawk Brand White Metal

M-25 Binney Castings Co., Toledo, Ohio

746 Min-Ox Grade A
747 Min-Ox Grade DV
748 Min-Ox Grade 51C
7440 Min-Ox Grade JR-3

M-136 Birdsboro Steel Foundry & Machine Co., Birdsboro, Pennsylvania

193 Birdsboro No. 26
194 Birdsboro No. 30

M-577 Birkett and Sons, Ltd., T. M., Hanley, England

6642 Altior Brand Aluminum Solder
6641 Altior Brand Antifriction Metal

M-325 Birmabright, Ltd., Birmingham, England
(See parent company, Birmingham Aluminium Casting Co.)

M-137 Birmingham Aluminium Casting (1903) Co., Ltd., Birmingham, England

8383 Alpax
8384 Alpax Alpha
8385 Alpax Beta
8386 Alpax Gamma
8668 Birmal
8669 Birmalite
1654 Birmabright
8670 Birmasil
1691 Birmasil Special
1213 Birmidium Y-Alloy
9295 Elektron A5
9296 Elektron A7
9297 Elektron A8
9299 Elektron A9V
9300 Elektron A11V
9389 Elektron AZ31
9302 Elektron AZ91
9303 Elektron AZ551
9388 Elektron AZG
559 Hiduminium RR 50
10489 Hiduminium RR 53 Alloy
9932 Hiduminium RR 53 B Alloy
9667 Lo-Ex Alloy
10486 L-5
10487 L-8
10488 L-11
10464 No. 1222 Alloy
10491 P2 Alloy
6673 Zimal
4810 Z-3 Alloy
11520 8:2 Copper Silicon-Aluminum Alloy

M-334 Bissett Steel Co., Cleveland, Ohio

124 Annite
1773 Best
4866 Bissett Tool Steel Tubing
4867 Bisco Cemented Carbide
2224 Carbon Chisel
2227 Checkno
2251 Cromo
2252 Cromva
3863 Gripmore
9846 Gripmore Tool
3878 Headmore
3888 Hypro
3843 Non-shrink
4047 Tiger
4081 Very Best
4094 Woco

M-861 Black Drill Co., Cleveland, Ohio

11677 Hardsteel No. 2

M-26 Blackor Co., Los Angeles, California

197 Blackor

M-413 Blackwell's Metallurgical Works, Ltd., Liverpool, England

4787 Lion Brand Antifriction
4788 Lion Brand Plastic White Metal

M-382 Bleiwerk Goslar, Goslar a. Harz, Germany

3436 Harz Refined Lead

M-516 Bliss & Laughlin, Inc., Harvey, Illinois

11990 Balcut 1035
8620 Balcut 1115
11988 Balcut X1314
11989 Balcut X1335
6267 Ultra Cut

M-27 Böhler Bros. & Co., Vienna, Austria
(American Agent—Houghton & Richards, Inc., Boston, Mass.)

5601 Böhler Amutit
5602 Böhler Autinit NG
5603 Böhler AS-2
5604 Böhler AS-4
5605 Böhler AS-8
5606 Böhler Auto Extra NC
5607 Böhler Auto First Quality NC
5608 Böhler Auto MS
5609 Böhler Auto Special PA
5610 Böhler Bats
5611 Böhler B-Elite
5612 Böhler B-Elite U
5613 Böhler B-Elite 18
5614 Böhler BH
5615 Böhler BH-Extra
5616 Böhler BHW
5617 Böhler Blade Steel
5618 Böhler BM
5619 Böhler Boreas
5620 Böhler Brownie
5621 Böhler Brownie Extra
5622 Böhler B-Special
5623 Böhler BW
5624 Böhler BW VII
5625 Böhler BW IX
5626 Böhler CC
5627 Böhler CC Special
5628 Böhler Celsit
5629 Böhler Chronos
5630 Böhler C O H
5631 Böhler COK
5632 Böhler C O M
5633 Böhler Crucible
5634 Böhler C S
5635 Böhler E N A

5636 Böhler E S
5637 Böhler E S C
5638 Böhler ES Special
5639 Böhler Extra H
5640 Böhler Extra Hard
5641 Böhler Extra K
3834 Böhler Extra MG
5642 Böhler Extra Middling Hard
5643 Böhler Extra Tough
5644 Böhler FM
5645 Böhler GA
5646 Böhler GNM
5647 Böhler GSI
5648 Böhler Hard Core
5649 Böhler Invar Steel
5650 Böhler Jar Steel
5651 Böhler K-3
5652 Böhler K-3S
5653 Böhler K-100
5654 Böhler K-100/1
5655 Böhler K-100 S
5656 Böhler KK
1962 Böhler KL
5657 Böhler Knife Steel
5658 Böhler KP
5659 Böhler KW-10
5660 Böhler KW-60
5661 Böhler Lightning
1963 Böhler Magnet Steel
5662 Böhler Martin Steel
5663 Böhler ME
5664 Böhler ME-6
5665 Böhler ML
5666 Böhler Middling Hard
5667 Böhler Molette
5668 Böhler MST
3930 Böhler MY
3931 Böhler MY Extra
5669 Böhler NBS
5670 Böhler NBSN
5671 Böhler Needle Die Steel
5672 Böhler NI
5673 Böhler NW
5674 Böhler Panther
5675 Böhler PPA
1964 Böhler Rapid Steel
5676 Böhler Remanenceless Iron
4018 Böhler Special K
5677 Böhler Special KN
5678 Böhler Special KV
5679 Böhler Special W-43
5680 Böhler SSW
1965 Böhler Super Rapid
5681 Böhler Super Rapid Extra
5682 Böhler Super Rapid Extra 214
5683 Böhler Super Rapid Extra HV
5684 Böhler Super Rapid Extra 500
5685 Böhler Tough
5686 Böhler TW
5687 Böhler TWV
5688 Böhler TWW
5689 Böhler US
5690 Böhler WB
4560 Böhler WKZ
5691 Böhler WON
5692 Böhler WPD
5693 Böhler WPZ
5694 Böhler Z-11
5695 Böhler ZCS
5696 Böhler ZE
5698 Böhler ZM
5697 Böhler ZNM
5699 Böhler No. 2 Si
5700 Böhler No. 3 Nw
5701 Böhler No. 5 Nm
5702 Böhler No. 36 N
5703 Böhler No. 90
5704 Böhler No. 701
5705 Böhler No. 711

M-138 Bohn Aluminum & Brass Corp., Detroit, Michigan

6431 Bohnalite B
6444 Bohnalite C
6432 Bohnalite E
6433 Bohnalite F
6434 Bohnalite I
6435 Bohnalite J
6445 Bohnalite L
6436 Bohnalite O
6437 Bohnalite O-2
6446 Bohnalite S
6447 Bohnalite S-3
6448 Bohnalite S-17
6449 Bohnalite S-25
6450 Bohnalite S-43
6451 Bohnalite S-51
6438 Bohnalite U
6439 Bohnalite W
6440 Bohnalite W-3
6441 Bohnalite W-4
6234 Bohnalite X-1S
6235 Bohnalite X-2
6455 Bohnalite X-3
6236 Bohnalite X-3S
6237 Bohnalite X-4
6457 Bohnalite X-5
6458 Bohnalite X-6
6238 Bohnalite X-7
8682 Bohnalite X-10
6239 Bohnalite X-11S
6442 Bohnalite Y
6443 Bohnalite Y-2
6402 Bohn No. R-42
6403 Bohn No. R-43
6404 Bohn No. R-47
6369 Bohn No. R-55
6396 Bohn No. R-56
6397 Bohn No. R-57
6398 Bohn No. R-57
6370 Bohn No. R-59
6372 Bohn No. R-59C
6373 Bohn No. R-59T
6374 Bohn No. R-60
6375 Bohn No. R-60N
6376 Bohn No. R-61
6405 Bohn No. R-90
6406 Bohn No. R-90A
6409 Bohn No. R-90H
6408 Bohn No. R-90M
6407 Bohn No. R-90S
6410 Bohn No. R-90V
6411 Bohn No. 90
6412 Bohn No. 90A
6415 Bohn No. 90H
6414 Bohn No. 90M
6413 Bohn No. 90S
6416 Bohn No. 90V
6417 Bohn No. 2
6418 Bohn No. 3
6419 Bohn No. 4
6420 Bohn No. 5
6421 Bohn No. 6
6422 Bohn No. 7
6423 Bohn No. 10-90
6424 Bohn No. 20-80
6425 Bohn No. 25-75
6426 Bohn No. 30-70
6427 Bohn No. 35-65
6428 Bohn No. 40-60
6429 Bohn No. 50-50

6430 Bohn No. 60-40
6399 Bohn No. 56
6400 Bohn No. 57
6401 Bohn No. 58
6377 Bohn No. 68
6378 Bohn No. 75
6379 Bohn No. 79
6380 Bohn No. 85
6382 Bohn No. 70
6383 Bohn No. 70D
6384 Bohn No. 80
6385 Bohn No. 80C
6386 Bohn No. 82
6387 Bohn No. 82D
6388 Bohn No. 84
6389 Bohn No. 86
6390 Bohn No. 86D
6391 Bohn No. 87
6392 Bohn No. 88
6393 Bohn No. 88C
6394 Bohn No. 89
6395 Bohn No. 91
6367 Bohn No. 100
6368 Bohn No. 100C

M-345 Boker & Co., Inc., H., New York, N. Y.

8681 B.O.H.
4462 Boker Power Chisel
4463 Boker Special 847
2684 Ia-Ia
3891 Intra
611 Kinite
835 Novo
3946 Novo Special
2880 Novo Superior
10989 Self Hardening
4028 Super Chrome Die

M-575 Bolton and Sons, Thos., Widnes, England

7493 Aloi
7494 Bolton's Special
6655 Bush Bearing Metal
7495 Combarloy
7496 Durode
7497 Hazel Bronze
7498 "M" Alloy
7499 Moonstone Bronze
7500 Utility Bearing Metal

M-139 Bonney-Floyd Co., Columbus, Ohio

11817 Alloy Iron
1427 Bonney-Floyd HT Low Carbon
6689 Bonney-Floyd Hard Kote H
6690 Bonney-Floyd Hard Kote T
200 Bonney-Floyd MM Steel
1426 Bonney-Floyd NCM
6691 Bonney-Floyd Niresist
11818 Carbon-Moly Steel
11820 Hadfield's Cr-Mn Steel
11819 Hadfield's Manganese Steel
11821 Kissock Steel

M-975 Bonny Tool & Forge Co., Allentown, Pennsylvania

11685 Zinnell

M-338 Booth & Co., Ltd., Jas., Birmingham, England

3765 AM 503
5423 AZ-855
6675 B.H.T.A. Metal
12459 Booth A.D.
12460 Booth A.D.A.
12462 Booth A.1.
12463 Booth B.1.
12458 Booth B.2.C.
12466 Booth B.76.
12449 Booth Cap Copper
12454 Booth J.5.K.
12464 Booth M.V.3.
12457 Booth T.2.
12456 Booth Y.D.A.
12465 Booth Y.D.B.
12455 Booth 20 S.A.
12452 Booth 20 S. Brass
12461 Booth 76 A.
5421 D-2 Alloy
5188 Duralumin B
9185 Duralumin DM 31
9179 Duralumin E
5034 Duralumin G
5422 Duralumin H
12471 Duralumin HX
12472 Duralumin M
12469 Duralumin S
12470 Duralumin T
9180 Duralumin 681A
9181 Duralumin 681B
9182 Duralumin 681H
9184 Duralumin 681ZB
1740 Elektron "AZM"
12450 Hinge
12468 M.G.5
4789 M.G.7
12451 Naval
6502 No. 40D
12453 S.A.M.B.
6601 Silmalec
12448 Simbrax
2194 Vicker's Duralumin
836 Y-Alloy

M-304 Bosch, Robert A.-B., Metallwerk, Stuttgart, Germany

1673 Bosch Al-5
1674 Bosch Al-7
1675 Bosch Al-9
8106 Bosch Al-1
8107 Bosch Al-12
1676 Bosch Al-20
8108 Bosch Al-25
1677 Bosch Al-34
1678 Bosch Al-36
8105 Bosch Am-14
8109 Bosch Am-158
1668 Bosch Br-6
1669 Bosch Br-14
1670 Bosch Br-32
1672 Bosch Cu-28
1659 Bosch Me-1
1660 Bosch Me-2
1661 Bosch Me-3
1662 Bosch Me-4
1663 Bosch Me-5
1664 Bosch Me-6
8102 Bosch Me-15
1665 Bosch Me-16
1666 Bosch Me-17
1667 Bosch Me-25
8103 Bosch Ns-1
8104 Bosch Pb-7
1679 Bosch Zn-4

M-632 Bound Brook Oil-Less Bearing Co., Bound Brook, New Jersey

7490 Compo
12353 Compo 63 H-2
12354 Compo 66 H-2
11705 Powdiron 55P
11706 Powdiron 59-I
11707 Powdiron 61-IC

M-379 Bourne-Fuller Co.
(See Upson Nut Division, Republic Steel Corp., Successor)

M-336 Boyd-Wagner Co., Chicago, Illinois
(Distributor of Soderfors Alloys)

1763 Arrow Oil Hardening
7597 B-W Point 5
1772 Best
7594 Boyd-Wagner No. 4 Swedish
7595 Boyd-Wagner No. 9 Swedish
6285 Bowco
6285 Bowco Cobalt
7596 Boyd-Wagner No. 41 Swedish
6360 Bowco Water Hardening
7598 Die Cast
3839 E. Z. 14W
7599 Hy-Lo
3889 Hypro No. 62
7600 Impress
7601 Moldie
7602 Record Eminent
2493 Record Extra
7603 Record Select
2492 Record Superior
4865 Soderfors Chrome Magnet
4467 Soderfors Crown W
4864 Soderfors Tungsten
4023 Special No. 18
4024 Special No. 19
4025 Special No. 20
4163 Standard
6361 Swedish Steel No. 4
4082 Very Best
6362 Swedish Steel No. 9
6363 Swedish Steel No. 41

M-846 Bradley Laboratories, England

10109 Hypersilid

M-140 Braeburn Alloy Steel Company, Braeburn, Pennsylvania

8272 Airque
2191 Alloy Finishing
8595 Automotive Die
5847 Bakadie
8618 Bakadie No. 2
2213 Bonded Carbide
7070 Braeburn Cobalt
1970 Braeburn High Speed
5106 Braeburn Stainless
8944 Brae-cast
8684 Braemow
8685 Brake-die
8888 Chrome Vanadium D
8889 Chrome Vanadium Die Casting
8890 Chrome Vanadium G
8891 Chrome Vanadium H
8892 Chrome Vanadium K
315 Cobalt Steel
8945 Co Mo
11590 Congo
4336 Cr-Va Tool
9101 Die Casting
3828 Extra
4473 Gyro
9909 Helios D
9910 Helios G
9911 Helios H
9912 Helios K
3886 Hot Die No. 2
3898 Keystone
612 Kiski
7071 Mo-Cut
10581 Piston
7072 Pressurdie No. 1
10625 Pressurdie No. 2
7073 Pressurdie No. 3
4472 R. B. Chisel
10997 R.B. Special
4013 Special
10984 Standard
7074 Superior No. 1
7075 Superior No. 2
10911 Superior No. 3
4325 T Alloy
11138 T. Alloy A
12242 T. Alloy N
11228 Triton A
7076 Triton
4067 Twin Van
4083 Vibro
11361 Viking
7077 Viking Extra
1160 Vinco
7078 Vinco H.W.
11510 Z.N.

M-597 Braun-Steeples Co., Ltd., San Francisco, California

6747 Alumetal

M-141 Bridgeport Brass Co., Bridgeport, Connecticut

12288 Arsenical Admiralty Tubing
12283 Bridgeport Forging Rod
12285 Bridgeport Manganese Bronze
12284 Bridgeport No. 192 Bronze
12286 Bridgeport Phosphor Bronze Grade A
12287 Bridgeport Phosphor Bronze Grade C
8687 Bridgeport No. 1232
9029 Cuzinal
416 Duronze I
5772 Duronze II
5773 Duronze III
9206 Duronze IV
9207 Duronze V
627 Ledrite

901 Phono Bronze
12292 Phono Cadmium
12291 Phono Electric No. 865
12280 Phono Electric Bronze No. 840
12281 Phono Hi Conductivity
12293 Phono Hi Conductivity No. 985
10577 Phono Hi Strength
12289 Phono Hi Strength No. 715
12290 Phono Telephone No. 830
12282 Plumrite Copper
4369 Plumrite, Standard
2305 Plumrite 67
2411 Plumrite 85

M-509 Bridgeport Deoxidized Bronze and Metal Co., Bridgeport, Connecticut

6271 Nickolite

M-424 Brighton Electric Steel Casting Co., Beaver Falls, Pennsylvania

8741 B-XX
5107 Bescoloy

M-28 British Aluminium Co., Ltd., London, England
(American Distributors—Arthur Seligman & Co., Inc., New York, N. Y.)

101 Aluminum Alloy 3-L-5 Specification
4158 Aluminum Alloy 3-L-8 Specification
2753 Aluminum Alloy 4-L-11 Specification
4371 B.A. 20
3186 B.A. 23
4372 B.A. 24
4373 B.A. 24 MS
2337 B.A. 25
4370 B.A. 29
6481 B.A. 31
2907 B.A. 34
8616 B.A. 35 Free Cutting Alloy
3154 B.A. 37
99 B.A./40D
8051 B.A. /40J
12403 B.A. /40M
1995 B.A. 42
6503 B.A. /60A
1191 B.A. /Y
11525 40D

M-416 British Driver-Harris Company, Ltd., Manchester, England
(See parent company—Driver-Harris Co., Harrison, New Jersey)

M-978 British General Electric Company, Ltd., England

11624 G.E.C. Heavy Alloy

M-711 British Insulated Cables, Ltd., England

8667 Bicop Oxygen Free Copper
9380 Copperweld Wire

M-699 British Metal Corp., London, England

8602 Avonmouth
8615 AZ
8837 CCR

M-396 British Non-ferrous Metals Research Association, London, England

4402 B.N.F. Lead Alloy No. 1
4407 B.N.F. Lead Alloy No. 2
5590 B.N.F. Lead Alloy No. 3

M-667 British Oxygen Co., Ltd., London, England

8315 Aida

M-715 British Piston Ring Co., Ltd., Coventry, England

8689 Brilybdenum

M-478 British Rolling Mills, Ltd., Tipton, Staffordshire, England

5859 Brymill BRM-1
5860 Brymill BRM-2
5861 Brymill BRM-4
5862 Brymill BRM-5
5863 Brymill BRM-6
5864 Brymill CH-1
5865 Brymill CH-2
5866 Brymill CH-8
5867 Brymill CH-10
5868 Brymill DH-11
5869 Brymill DH-13
5870 Brymill FC-3 (Scooter)
5871 Brymill X

M-504 British Standards Institution, London, England

5766 British Standard Specification (B. S. S. or B. S. I. Alloys)

M-306 British Thomson Houston Co., Ltd., Rugby, Warwickshire, England

5831 Ardoloy
11796 Genelite

M-961 Brockhouse Casting Co., Wolverhamptone, England

11579 Brockhouse

M-593 Bronze Die Casting Company, Pittsburgh, Pennsylvania

6744 Albro

M-996 Brookside Metal Co., Ltd., England

1849 Broo-Zinc

M-472 Brown, Bayley's Steel Works, Ltd., Sheffield, England

5784 Anka
6095 BB4K
6096 Brearley "A"
6097 Brearley "K"
6639 Brown Bayley's Anka H
6640 Brown Bayley's Brearley SI
6098 Cutlery
6099 Engineering
6100 Hotspur
6101 Inventor
6102 Kalloy
6103 Lowscore
6104 Pyralloy
6105 QS
6106 QSS
6107 Twoscore
6108 Weldanka
6094 No. 33

M-476 Brown, David & Sons, Ltd., Huddersfield, England

6010 Taurus Bronze Mark I
6011 Taurus Bronze Mark II
6012 Taurus Bronze Mark III
6013 Taurus Bronze Mark IV
6014 Taurus Bronze Mark V
6015 Taurus Bronze Mark VI
6016 Taurus Bronze Mark VII
6017 Taurus Bronze Mark VIII
6018 Taurus Bronze Mark IX
6019 Taurus Bronze Mark X
6020 Taurus Bronze Mark XI
6021 Taurus Bronze Mark XII

M-213 Brown-Wales Co., Boston, Massachusetts

238 "BW" Standardized
8043 Elastuf Chro-Moly
2181 Elastuf Media Precision Finish
2180 Elastuf Media Steel
2182 Elastuf Penn Steel
8045 Elastuf SAE 2335
8044 Elastuf SAE 3140
420 Elastuf Type A Steel No. 9
8062 Elastuf Type A Steel No. 14

M-385 Brukskoncernen A.B., Fagersta, Sweden
(American Representative—Swedish Steel Mills A.A., New York, N. Y. See also Achorn Steel Co. and Kloster Steel Corp.)
See subsidiaries:
M-52 Fagersta Bruks A.B.
M-609 Gimo-Osterby Bruks A.B.
M-610 Horndal Jernverks A.B.
M-611 Klosters A.B.

M-256 Buckeye Brass & Mfg. Co., Cleveland, Ohio

10110 Hy-speed
560 High Speed Brass
654 Lubrico No. 1
3325 Lubrico No. 2
3326 Lubrico No. 3

M-142 Buffalo Bronze Die Casting Co., Buffalo, New York (Out of business)

M-143 Buffalo Foundry & Machine Co., Buffalo, New York

2220 Buflokast
4880 Thermo-Lectric Copper-hardened Babbitt
1080 Thermo-Lectric Nickel Babbitt

M-962 Buffalo Wire Works, Buffalo, New York

11715 Buff-aloy

M-719 Bulls Metal & Melloid Co., Ltd., Yoker, Glasgow, Scotland

11176 Template

M-401 Bundy Tubing Co., Detroit, Michigan

4435 Bundyweld Steel Tubing

M-720 Bunting Brass & Bronze Co., Toledo, Ohio

8707 Bunting
8708 Bunting No. 27
8709 Bunting No. 51
8710 Bunting No. 72
8711 Bunting No. 96
8712 Bunting No. 98
8713 Bunting No. 116
8714 Bunting No. 122
8715 Bunting No. 124

8716 Bunting No. 125
8717 Bunting No. 135
8718 Bunting No. 143
8719 Bunting No. 147
8720 Bunting No. 156
8721 Bunting No. 158
8722 Bunting No. 161
8723 Bunting No. 162
8724 Bunting No. 164
8725 Bunting No. 170
8726 Bunting No. 178

M-721 Burden Iron Co., Troy, New York (Out of business)

M-29 Burgess-Parr Co., Freeport, Illinois

587 Illium G
9506 Illium R

M-722 Burndy Engineering Co., New York, New York

8729 Burndy No. 101
8730 Burndy No. 111
8731 Burndy No. 113
8732 Burndy No. 202
8733 Burndy No. 302
8735 Burndy No. 308
8736 Burndy No. 309
8737 Burndy No. 314
8738 Burndy No. 316
8739 Burndy No. 329

M-292 Byers, A. M. Co., Pittsburgh, Pennsylvania

1317 Alloyed Genuine Wrought Iron
1188 Genuine Wrought Iron

M-723 Byrwill Co., Cincinnati, Ohio

8742 Byrwill "B" Metal

M-214 Cadman Mfg. Co., A. W., Pittsburgh, Pennsylvania

1270 Acorn Brand
164 Bearite
8702 Bronzstox
10437 Nicuite

M-725 Calbite Tungsten Corp., Union City, New Jersey

8748 Calliflex
8749 Callinite
8752 Calmolloy
10480 No Wear
10945 SA-50
11220 Trimet

M-511 Calloy, Ltd., Avonmouth, England

7583 Baral
7584 Barmag
6232 Calloy (Calal)
7589 Calloy Cadmium-Barium
7590 Calloy Cadmium-Calcium
7591 Calloy Cadmium-Strontium
7586 Calloy Lead-Barium
7587 Calloy Lead-Calcium
7588 Calloy Lead-Strontium
7585 Calloy Strontium Aluminum

M-726 Caloriz Corp. of Great Britain, Ltd., London, England

8751 Calmet

M-30 Calorizing Co., Pittsburgh, Pennsylvania

241 Calite A
1350 Calite B-18
1722 Calite B-28
1721 Calite E
7101 Calite E-28
1723 Calite NN
5872 Calite NCT-3
8119 Calorized DM Steel
7102 Calorized Steel
8120 Calorized 1% Moly Steel
8118 Calorized 4-6 Chr Moly

M-727 Cambridge Wire Cloth Company, Cambridge, Maryland

8757 Cambriloy 1
11961 Cambriloy 2
11962 Cambriloy 3
11963 Cambriloy 4

M-490 Cameron & Son, L., Sheffield, England

5874 Camloy

M-347 Campbell, Wyant & Cannon Fdy. Co., Muskegon Heights, Michigan

3485 Cannonite
7566 Molybdenum Silicon
3495 Proferall

M-570 Canada Electric Steel Castings, Ltd., Orillia, Ontario, Canada

6703 Burloy A
6704 Burloy B
6705 Burloy C
6706 Burloy C-1

M-435 Canadian Atlas Steels, Ltd., Welland, Ontario, Canada

7079 Atlas Double Extra
7080 Atlas Extra
6501 Atlas Hollow Drill
7081 Atlas "Q"
7082 Atlas Refined
7083 Atlas Special Alloy
7084 Atlas Triple Extra
7085 Badger
7086 E.B. Alloy

7087 Falcon
7088 FNS
7089 Hot Die
7090 Keewatin
7091 LXX
7092 Monark
7093 Nipigon
7096 NN
5116 No-Kor-O 12
7094 No-Kor-O 12F
5117 No-Kor-O 14
5115 No-Kor-O 18
5114 No-Kor-O 18-2
5111 No-Kor-O 18-8
5109 No-Kor-O 18-8M
5110 No-Kor-O 18-8S
7095 No-Kor-O 25-20
7097 Trojan
7098 Ultimo No. 6

M-354 Cannon-Stein Steel Co., Syracuse, New York

7103 Rita Alloys
11054 Rita Alloy No. 2
11055 Rita Alloy No. 4
11056 Rita Alloy No. 5
2463 Rita Alloy No. 7
4476 Rita Car-Van Die
2462 Rita Chrome-Vanadium
2461 Rita Cobalt High Speed
2460 Rita Electric
7104 Rita Endur
2458 Rita Extra
2459 Rita Extra Special
2457 Rita High Speed
2455 Rita Hot Forging Die No. 1
2456 Rita Hot Forging Die No. 2
2454 Rita Nochange
4477 Rita Oil-Hardening Drill Rod
2453 Rita Special
4474 Rita Special Drill Rod
2451 Rita Standard
2452 Rita Standard Drill
4475 Rita T.C.V. Alloy
2450 Rita Three Point
2449 Rita Vanadium Drill

M-31 Carboloy Co., Detroit, Michigan

4173 Alloy No. 548
246 Carboloy Grade A-44
6131 Carboloy Grade 44A
6132 Carboloy Grade 55A
6133 Carboloy Grade 77A
6134 Carboloy Grade 77B
8763 Carboloy Grade 78
12348 Carboloy Grade 78B
12349 Carboloy Grade 78C
224 Carboloy Grade 119A
222 Carboloy Grade 715
12347 Carboloy Grade 779
221 Carboloy Grade 831
6135 Carboloy Grade 831A
6136 Carboloy Grade 883
6137 Carboloy Grade 905
6138 Carboloy Grade 906
6139 Carboloy Grade 907
8764 Carboloy Grade 999
8765 Carboloy Grade 1078A

M-604 Carnegie-Illinois Steel Corporation, Pittsburgh, Pennsylvania (Subsidiary of U. S. Steel Corp. q.v.)

8544 AR Steel
7740 Bain Bolt Steel
7739 Bain Flange Steel
6618 Bain Steel
7738 Bain Tube Steel
7736 Carbon Vanadium
8167 Carnegie-Illinois Carbon-Manganese
8168 Carnegie-Illinois Carbon-Manganese
8169 Carnegie-Illinois Carbon-Manganese
8173 Carnegie-Illinois Carbon-Manganese
8174 Carnegie-Illinois Carbon-Manganese
8175 Carnegie-Illinois Carbon-Manganese
8176 Carnegie-Illinois Carbon-Manganese
8170 Carnegie-Illinois Carbon-Manganese-Copper
8159 Carnegie-Illinois Carbon-Molybdenum
8185 Carnegie-Illinois Carbon-Molybdenum
8186 Carnegie-Illinois Carbon-Molybdenum
8187 Carnegie-Illinois Carbon-Molybdenum
8188 Carnegie-Illinois Carbon-Molybdenum
8189 Carnegie-Illinois Carbon-Molybdenum
8160 Carnegie-Illinois Carbon-Vanadium
8161 Carnegie-Illinois Carbon-Vanadium
8162 Carnegie-Illinois Carbon-Vanadium
8163 Carnegie-Illinois Carbon-Vanadium
8195 Carnegie-Illinois Carbon-Vanadium
8196 Carnegie-Illinois Carbon-Vanadium
8197 Carnegie-Illinois Carbon-Vanadium
8183 Carnegie-Illinois Chromium-Manganese-Silicon
8184 Carnegie-Illinois Chromium-Manganese-Silicon
8166 Carnegie-Illinois Chromium-Molybdenum
8198 Carnegie-Illinois Chromium-Vanadium
8199 Carnegie-Illinois High Carbon Low Chromium
8200 Carnegie-Illinois High Carbon Low Chromium
8201 Carnegie-Illinois High Chromium Molybdenum
8153 Carnegie-Illinois High Chromium-Nickel
8140 Carnegie-Illinois High Nickel
8141 Carnegie-Illinois High Nickel

8142 Carnegie-Illinois High Nickel
8143 Carnegie-Illinois High Nickel
8144 Carnegie-Illinois High Nickel
8145 Carnegie-Illinois High Nickel
8148 *Carnegie-Illinois* Low Nickel-Chromium
8149 Carnegie-Illinois Low Nickel-Chromium
8150 Carnegie-Illinois Low Nickel-Chromium
8151 Carnegie-Illinois Low Nickel-Chromium
8152 Carnegie-Illinois Low Nickel-Chromium
8190 Carnegie-Illinois Manganese-Molybdenum
8191 Carnegie-Illinois Manganese-Molybdenum
8192 Carnegie-Illinois Manganese-Molybdenum
8193 Carnegie-Illinois Manganese-Molybdenum
8194 Carnegie-Illinois Manganese-Molybdenum
8146 Carnegie-Illinois Medium Nickel
8147 Carnegie-Illinois Medium Nickel
8155 Carnegie-Illinois Nickel-Chromium-Molybdenum
8156 Carnegie-Illinois Nickel-Chromium-Molybdenum
8157 Carnegie-Illinois Nickel-Chromium-Molybdenum
8154 Carnegie-Illinois Nickel-Chromium-Molybdenum Vanadium
8158 Carnegie-Illinois Nickel-Vanadium-Molybdenum
8202 Carnegie-Illinois Nickel Steel
7772 Carnegie-Illinois Spec. No. 2
7773 Carnegie-Illinois Spec. No. 3
7774 Carnegie-Illinois Spec. No. 4
7775 *Carnegie-Illinois* Spec. No. 5
7776 Carnegie-Illinois Spec. No. 6
7777 Carnegie-Illinois Spec. No. 7
7778 Carnegie-Illinois Spec. No. 13
7779 Carnegie-Illinois Spec. No. 19
8171 Carnegie-Illinois Structural Manganese
8172 Carnegie-Illinois Structural Manganese
8177 Carnegie-Illinois Structural Nickel
8178 Carnegie-Illinois Structural Nickel
8179 Carnegie-Illinois Structural Nickel
8180 Carnegie-Illinois Structural Nickel
8181 Carnegie-Illinois Structural Nickel
8182 Carnegie-Illinois Structural Nickel
8101 Cromansil
8205 Cor-Ten
8100 Hadfield Manganese Steel
6496 Illinois Chrome Nickel-Moly
7731 Intermediate Manganese Abrasion Steel
8204 Man-Ten
7737 *Normalloy*
8203 Structural Silicon (Sil-Ten)
11328 U.S.S. Carilloy
8094 U.S.S. 4/6 Cr
6027 U.S.S. 4/6 Cr-Mo
7741 U.S.S. 4/6 Cr-Mo-Ti
6028 U.S.S. 4/6 Cr-Ti
5769 U.S.S. Lynore
5768 U.S.S. Manganese-Nickel-Copper
12486 U.S.S. *Open Hearth* Iron
12487 U.S.S. Radio Transformer 52
12488 U.S.S. Radio Transformer 58
12490 U.S.S. Radio Transformer 65
12489 U.S.S. Transformer 52
5770 U.S.S. Vitrenamel
12484 U.S.S. 5
12485 U.S.S. 5S
6899 U.S.S. 5W
8095 U.S.S. 12
1136 U.S.S. 12A1
7732 U.S.S. 12 FM
1135 U.S.S. 12 Turbine
6900 U.S.S. 12W
5225 U.S.S. 12Z
6901 U.S.S. 16-6
8137 U.S.S. 17
6902 U.S.S. 17W
12483 U.S.S. 17-7
8096 U.S.S. 18-8
7733 U.S.S. 18-8 FM
6029 U.S.S. 18-8 Mo
4900 U.S.S. 18-8S
6903 U.S.S. 18-8S Mo
2511 U.S.S. 18-8 Stabilized
6904 U.S.S. 18-8 Ti
8139 U.S.S. 18-8 Ti
8098 U.S.S. 19-9
6905 U.S.S. 19-9 S
7734 U.S.S. 19-9 Ti
8099 U.S.S. 20-10
6906 U.S.S. 20-10S
4899 U.S.S. 21
8097 U.S.S. 25-12
7735 U.S.S. 25-12 *Ti*
6097 U.S.S. 25-20
8138 U.S.S. *27*

M-251 Carobronze, Ltd., London, England

5739 Carobronze

M-32 Carpenter Steel Co., Reading, Pennsylvania

8772 Carpenter Chrome Bearing Steel
249 Carpenter Chrome Magnet
250 Carpenter Flexo

11580 Carpenter Free Cut Invar
251 Carpenter High Nickel
8773 Carpenter Invar "36"
11581 Carpenter Invar "49"
5372 Carpenter No. 2-317
5373 Carpenter No. 2-408
5380 Carpenter No. 2-720
252 Carpenter No. 3-314
253 Carpenter No. 3-427
254 Carpenter No. 3-547
5379 Carpenter No. 3-720
255 Carpenter No. 4 Samson
257 Carpenter No. 4-317
256 Carpenter No. 4-408
8774 Carpenter No. 5 Samson
1323 Carpenter No. 5-317
6728 Carpenter No. 5-427
258 Carpenter No. 5-720 Type D
2277 Carpenter No. 11 Extra Tool
3543 Carpenter No. 11 Special
5374 Carpenter No. 158
5381 Carpenter No. 436
8776 Carpenter No. 484
6486 Carpenter No. 500
1327 Carpenter No. 500 Extra Special
6727 Carpenter No. 547
11890 Carpenter No. 872
11889 Carpenter No. 874
8777 Carpenter No. 883
8775 Carpenter N-30
8778 Carpenter Permanent Magnet Type A
8779 Carpenter Permanent Magnet Type B
8780 Carpenter Permanent Magnet Type C
8781 Carpenter Permanent Magnet Type D
8782 Carpenter Permanent Magnet Type E
8783 Carpenter Permanent Magnet Type F
8784 Carpenter Permanent Magnet Type G
8796 Carpenter Stainless No. D-1
1432 Carpenter Stainless No. N-1
260 Carpenter Stainless No. 1
8785 Carpenter Stainless No. 1 JR
261 Carpenter Stainless No. 2
1433 Carpenter Stainless No. 2-B
8786 Carpenter Stainless No. 2-FM
262 Carpenter Stainless No. 3
263 Carpenter Stainless No. 4
8787 Carpenter Stainless No. 4A
8788 Carpenter Stainless No. 4B
8789 Carpenter Stainless No. 4C
8790 Carpenter Stainless No. 4 Cb
8791 Carpenter Stainless No. 4 Ti
264 Carpenter Stainless No. 5
1434 Carpenter Stainless No. 6
8792 Carpenter Stainless No. 6-20
5118 Carpenter Stainless No. 7
8793 Carpenter Stainless No. 7 Mo
1435 Carpenter Stainless No. 8
8794 Carpenter Stainless No. 321
8795 Carpenter Stainless No. 347
5876 Carpenter V-Chrome Steel
11582 Carpenter Temperature Compensator "30"
4337 Comet (Carpenter No. 11)
7105 D.Y.O.
4338 Excelo
9386 Extra
11629 Glass Sealing "42"
3856 Gold Star
9839 Green Label Drill Rod
535 Hampden
11632 High Permeability "49"
10027 H-9 Extra
3904 K-W
11522 No. 11 Titan
4863 No. 610 Air Hardening
3466 Presto Steel No. 9-266
7106 R.D.S.
1604 Samson No. 1
1605 Samson No. 2
10958 Samson No. 2-547
1606 Samson No. 3
10959 Samson No. 3-427
10960 Samson No. 3-547
1607 Samson No. 4A
1608 Samson No. 4B
1609 Samson No. 4C
10961 Samson No. 4-408
10962 Samson No. 5-317
10963 Samson No. 5-720
10955 Samson No. 158
10956 Samson No. 436
10957 Samson No. 500
10763 SM
1020 Solar
11646 Star-Boron
10863 Star-Max
7781 Star-Moly
1047 Star-Zenith
1051 Stentor
4051 T-K

M-405 Carr, Ltd., Chas., Birmingham, England

4775 Carnolia
4776 Galicar
4777 Ruscar

M-904 Castings Corporation, Buffalo, New York

10982 Sterling
9382 Z-Metal

M-144 Central Alloy Steel Corporation, Canton, Ohio
(See M-97, Republic Steel Corp.)

M-215 Central Brass & Aluminum Fdy. Co., Cincinnati, Ohio

8840 Cenco
553 Hibbo No. 100
554 Hibbo No. 125
555 Hibbo No. 150
556 Hibbo No. 175
557 Hibbo No. 225
558 Hibbo No. 275

M-736 Central Engineering & Supply Co., Passaic, New Jersey

8896 Chrom Super-service Alloy

M-592 Central Foundry Company, Joplin, Missouri

6743 Aceroid

M-515 Central Institute of Metals, Leningrad, Russia

6154 Smena No. 2
6153 Sormite
10764 Swena

M-649 Central Iron and Steel Co., Harrisburg, Pennsylvania

8841 Centralloy

M-845 Central Pattern and Foundry Co., Chicago, Illinois

10096 H.T.S. 33

M-216 Cerro de Pasco Copper Corp., New York, N. Y.

4879 Cerrobase
168 Cerrobend
7038 Cerromatrix
3707 Cerrosafe
11546 No. 9500-1

M-582 Chace Co., W. M., Detroit, Michigan

6591 Chace Bi-metal
11583 Chace No. 772
10051 Chace No. 3700
11985 Chace No. 4700
9100 Chace No. 6125
10483 Chace No. 6650
11465 Chace No. 6850
8860 Chace Thermoflex No. 6150

M-566 Chain Belt Co., Milwaukee, Wisconsin

6500 Rex "Z"

M-474 Chambersburg Engineering Co., Chambersburg, Pennsylvania

5790 Cecolloy A
7581 Cecolloy B
7582 Cecolloy C
8838 Cecolloy Iron

M-712 Champion Rivet Co., Cleveland, Ohio

8673 Black Devil
8675 Blue Devil 85
8676 Blue Devil 100
8677 Blue Devil Yoloy
8854 Champion
8855 Champion Grey Devil No. 2
9837 Gray Devil
9864 Hard Devil
10118 Machinable Cast Iron
10993 Rail End
11001 Red Devil
11002 Red Devil 75
11003 Red Devil 85
11206 Tough Devil
11423 Wear Devil
11424 Wear Devil A
11425 Wear Devil B
11426 Wear Devil C-1
11427 Wear Devil C-2
11428 Wear Devil C-3

M-145 Chapman Valve Mfg. Co., Indian Orchard, Massachusetts

375 Davis Metal

M-33 Chase Brass & Copper Co., Inc., Waterbury, Connecticut

8 Admiralty Metal
51 Alpha
12057 Aluminum Brass
8500 Antimonial Admiralty
12126 Arsenical Copper
12061 Cadmium Bronze
269 Chamet Bronze A
12056 Chamet Bronze B
5442 Chase Admiralty Brass
9272 Chase Alloy No. 58
5437 Chase Architectural Bronze
5435 Chase Bronze No. 444
5440 Chase Clock Brass
5879 Chase Cupro-Nickel, 70-30
5441 Chase Forgiug Brass
5438 Chase Free-turning Brass
5439 Chase Manganese Bronze
5443 Chase Nickel Aluminum Bronze
5446 Chase Nickel Silver, 10%
1254 Chase Nickel Silver, 18% A

5881 Chase Nickel Silver, 20%
12355 Chase No. 149 Bronze
5444 Chase Olympic Bronze B
5445 Chase Olympic Bronze C
8857 Chase Tellurium Copper Type A
8858 Chase Tellurium Copper Type B
11800 Chase "Telnic" Bronze
200 Commercial Bronze
207 Common High Brass
341 Copper, Electrolytic
5884 Corvic Bronze
342 Deoxidized Copper
540 Hardware Bronze
12054 High Leaded Brass
12051 High Leaded Tube Brass
12049 Leaded Commercial Bronze
12055 Leaded Naval Brass
12052 Light Leaded Brass
12046 Low Brass
12050 Low Leaded Tube Brass
12053 Medium Leaded Brass
12048 Muntz Metal
769 Naval Brass
1304 Olympic Bronze A
9957 Olympic Bronze D
9958 Olympic Bronze G
12194 Oxygen Free Copper
12058 Phosphor Bronze Grade A
12059 Phosphor Bronze Grade C
12060 Phosphor Bronze Grade E-1
10999 Redalloy
12045 Red Brass
12047 70-30 Brass

M-257 Chateaugay Ore & Iron Co., Standish, N. Y.
272 Chateaugay Low-Phosphorus Pig

M-520 Chatillon & Sons, John, New York, N. Y.
3728 Iso-Elastic

M-217 Chemische Fabrik Griesheim Elektron Co., Frankfurt, Germany. (Now division of I.G. Farbenindustrie, A.G.)

M-810 Chicago Hardware Foundry Co., North Chicago, Illinois
9746 Fusewell No. 28
10282 Moly-Nickel

M-902 Chicago Malleable Casting Co., Chicago, Illinois
10923 Super-Y

M-146 Chicago Steel Foundry Co., Chicago, Illinois
10632 Pyrasteel No. 18
10638 Pyrasteel Special 2000

M-147 Chrome Alloys Mfg. Co., Oakland, California
614 Krom-aloy

M-148 Chrome Steel Corp., Carteret, New Jersey (Out of business)

M-680 Chrysler Corp., Detroit, Michigan
8445 Amola

M-211 Chrysler Corp., Amplex Division, Detroit, Michigan
11574 Aluminum Oilite
9535 Iron Oilite
11699 NDHTC Oilite
851 Oilite
10918 Super Oilite
11650 Super Oilite "16"

M-807 Cie Francaise des Metaux, Paris, France
8727 Fortal
9941 Super Nerva
11366 Vival

M-867 Cinaudagraph Corp., Stamford, Connecticut
10441 Nipermag

M-437 Cincinnati Steel Castings Co., Cincinnati, Ohio
5126 Nevastain RA

M-298 Cindal Metals, Ltd., Liverpool, England
2235 Cindal Alloy E-11A
2236 Cindal Alloy E-11B
2234 Cindal Alloy J-12
2233 Cindal Alloy J-51
1775 Cindal Alloy J-551
2237 Cindal Alloy L-316
2238 Cindal Alloy 50A

M-149 Cleveland Automatic Machinery Co., Cleveland, Ohio (No longer manufacture alloys listed)

M-480 Cleveland Brass Mfg. Co., Acimet Division, Cleveland, Ohio
5792 Acimet C-1
5793 Acimet C-2
5794 Acimet C-3
5795 Acimet C-4
5796 Acimet Hard Lead Alloy

M-739 Cleveland Graphite Bronze Co., Cleveland, Ohio

8908 Clevite
8909 Clevite No. 8
8910 Clevite No. 10
8911 Clevite No. 25
8912 Clevite No. 35
9045 D-2
11522 F-23
10466 No. 444
11923 90-10

M-738 Cleveland Tungsten, Inc., Cleveland, Ohio

8904 Cletaloy CT-A
8907 Cletaloy CT-14
8905 Cletaloy CT-65
8906 Cletaloy CT-86

M-612 Cleveland Twist Drill Co., Cleveland, Ohio

10231 Mezzo Steel
6498 Mo-Max

M-150 Clifford & Son, Ltd., Chas., Birmingham, England

35 Aldurbra

M-151 Climax Molybdenum Co., New York, N. Y.

7487 Climax Ferro-Molybdenum

M-218 Coan, Ltd., R. W., Duncan St., Islington, London, England.

311 Coanailium

M-503 Cochrane Corp., Philadelphia, Pennsylvania

5883 Cochrome

M-657 Cohn, A., & Co., Ltd., London, England

8226 Admiralty C.A.G.
8633 Bell Bronze
9013 Crown
9348 Endurance AA
9349 Endurance BB
9350 Endurance CC
9351 Endurance DD
9353 Endurance EE
10994 Railway Axle Box
10861 Star

M-740 Cold Metal Products Co., Youngstown, Ohio

8914 CMP Strip
10614 Precision

M-744 Colonial Alloys Co., Philadelphia, Pennsylvania

8926 Colalloy
8938 Colonial No. 301
10221 Metaljoiner

M-34 Colonial Steel Co., Monaca, Pennsylvania
(See also affiliate Vanadium Alloys Steel Co.)

4482 Colonial No. 4
1425 Colonial No. 6
319 Colonial No. 7
6621 Colonial No. 14
846 Ohio Air Die
945 Red Cut Cobalt
9913 Red Cut Cobalt Type B
946 Red Cut Superior
2964 Red Star Tool
2193 Red Star Tungsten 9 Temper
948 Red Star Tungsten 10 Temper
949 Red Star Tungsten 12 Temper
6624 Red Star Vanadium
3159 Silman
328 Stainless 302
327 Stainless Iron 410
324 Stainless Iron 416
325 Stainless Iron 420
1259 Stainless Iron 430
326 Stainless Iron 440
1266 Stainless Iron 441

M-35 Columbia Tool Steel Co., Chicago Heights, Illinois

8267 Airex
140 Art Die
11994 Atmodie
237 Buster Brand
306 Clarite
330 Columbia Double Special
2199 Columbia Extra
8940 Columbia Extra Vanadium
2197 Columbia Special
8941 Columbia Special Wire Drawing
331 Columbia Spring
2198 Columbia Standard
8942 Columbia Standard Vanadium
367 Cutter Alloy
4487 Die Block
9204 Durite
422 Electrex
9386 Eureka
9367 Exl-die
11995 Extra
9329 Extra Vanadium
9491 Firedie
413 Formite
725 Maxite
10274 Molite
10281 Molyite
849 Oildie
900 Phoenix
4005 Self-Hardening

1003 Silvanite
11996 Special
10815 Special Wire Drawing Die
5127 Stainex No. 1
5128 Stainex No. 2
5129 Stainex No. 3
11997 Standard
10858 Standard Vanadium
1063 Superdie
1070 Tap-Die
4837 Uni-Die
7107 Vanite
1172 Water Die
11419 Water Die B
11488 Wire Drawing Alloy (Special)

M-835 Columbus-McKinnon Chain Corp., Tonawanda, New York

9822 Hercalloy

M-530 Colvilles, Ltd., Glasgow, Scotland

2280 Colville Stainless
6533 Ducol Steel
6534 Dalzell Steel

M-152 Commercial Alloys Co., San Francisco, California

353 Cristite

M-623 Comp. des Alliages Speciaux d' Aluminium Asnieres, Asnieres, France

2239 Aeral
7455 Inalium

M-921 Compagnie Francaise de L'Etain, Paris, France

11200 Tinca

M-258 Compagnie d'Orleans, France

867 Packing, Piston

M-780 Compound Electro Metals, Ltd., 42 Pall Mall, London, England

9316 Elmet C
9317 Elmet Cu
9318 Elmet H 1
9319 Elmet H 2
9320 Elmet H 3
9321 Elmet U

M-734 Compressed Industrial Gases Co., Chicago, Illinois

8850 CIG No. 400 Ready Fluxed Bronze Rod
8851 CIG No. 401 Ready Fluxed Manganese Bronze Rod

M-636 Consolidated Ashcroft Hancock Co., Inc., Bridgeport, Connecticut (Parent Company is Manning, Maxwell & Moore, Inc., New York)

753 M.M.M.

M-920 Consolidated Car Heating Co., Albany, New York

11191 Ticonium

M-746 Constrictor, England

8947 Conloy

M-676 Continental Industries Corp.

8405 Alumasod

M-451 Continental Roll & Steel Foundry Co., E. Chicago, Indiana (Successor to M-159 Duquesne Steel Fdy. Co., M-207 Wheeling Mold & Fdy. Co., M-225 Hubbard Steel Fdy. Co.)

8743 C-1
8984 Crasfloy
5399 Cromonite
5400 Duquesne Special
5401 Dynamic Steel C-2
5402 Dynamic Steel C-3
9222 Dynamic Steel C-3A
9223 Dynamic Steel C-4
9224 Dynamic Steel C-5
5403 Dynamic Steel C-6
9225 Dynamic Steel C-7
9226 Dynamic Steel C-9
9227 Dynamic Steel C-10
574 Hubbard Special
5404 Molybdenite
11462 Wheeling Metal
11463 Wheeling Super Steel

M-36 Cooper Alloy Foundry Co., Elizabeth, New Jersey

8952 Cooper No. 14
6005 Cooper No. 17 Mo
8953 Cooper No. 17 SCB
8954 Cooper No. 19A
8955 Cooper No. 21A
8956 Cooper No. 21C
8958 Cooper No. 22M
8957 Cooper No. 22PM
5132 Cooper Stainless CA-5
2517 Cooper Stainless 16
2518 Cooper Stainless 17
2519 Cooper Stainless 18
2520 Cooper Stainless 19
2521 Cooper Stainless 20
2522 Cooper Stainless 21
2523 Cooper Stainless 22
1788 Cooper Stainless 18-8
7108 Cooper Stainless S-21 W
7109 Cooper Stainless S-23

5130 Sweetaloy KA-4
5131 Sweetaloy KNC-3
6006 Sweetaloy 17S
6007 Sweetaloy 17Se
6008 Sweetaloy 17S-Mo
6009 Sweetaloy 21A

M-693 Copper Development Association, Millbank, London, England

8543 Armstrong Metal

M-682 Copperweld Steel Co., Warren, Ohio

8513 Aristoloy 302
8514 Aristoloy 303
8515 Aristoloy 304
8516 Aristoloy 305
8517 Aristoloy 306
8518 Aristoloy 307
8519 Aristoloy 308
8520 Aristoloy 309
12120 Aristoloy 310
8521 Aristoloy 316
8522 Aristoloy 317
12121 Aristoloy 321
8523 Aristoloy 347
8524 Aristoloy 410
8525 Aristoloy 414
8526 Aristoloy 416
12122 Aristoloy 420
8527 Aristoloy 430
12123 Aristoloy 446
8528 Aristoloy 4/6 CRMO
8529 Aristoloy 7/9 CRMO
8960 Coppco Ace
12183 Coppco Ace A Temper
12184 Coppco Ace B Temper
11984 Coppco Ace C Temper
8961 Coppco Cro-Tung
8962 Coppco Extra
12185 Coppco Fast Finishing
8963 Coppco Hot Work 1
8964 Coppco Shock
8965 Coppco Special
8966 Coppco Standard
8967 Coppco Universal
8968 Coppco .75
8969 Coppco 1.10
8970 Coppco 1.20
8971 Coppco 2.00

M-917 Cornish Wire Co., New York, New York

11175 Temperite Alloys

M-337 Craine-Schrage Steel Co., Detroit, Michigan

1923 Crasco Alloy Chisel Steel
2249 Crasco Black Label
3831 Crasco Broach Steel
2246 Crasco Green Label
2248 Crasco Red Label
2247 Crasco White Label
2250 Crasco Special Vanadium
8983 Crasco No. 7

M-309 Cramp Brass & Iron Foundries Division, Baldwin Locomotive Works, Eddystone, Pennsylvania

12181 Aluminum Bronze
12182 Aluminum Nickel Bronze
5885 Cramp Alloy No. 5
5886 Cramp Alloy No. 7
5887 Cramp Alloy No. 12
5888 Cramp Alloy No. 13
5889 Cramp Alloy No. 45 (Parsons' MN Alloy)
5890 Cramp Alloy No. 49 (Superstrength Bronze)
5892 Cramp Alloy No. 69 (Hydraulic Metal)
5893 Cramp Alloy No. 71
5894 Cramp Alloy No. 78
5895 Cramp Alloy No. 91
5896 Cramp Alloy No. 97
8977 Cramp Alloy No. 99
5897 Cramp Alloy No. 100 (P.M.G. Metal)
5898 Cramp Alloy No. 101 (Parsons' Turbadium)
4442 Cramps Elfur Iron 1
5900 Cramps Elfur Iron 2
4443 Cramps Elfur Iron 3
5901 Cramp's Elfur Iron No. 4
5902 Cramp's Elfur Iron No. 5
5903 Cramp's Elfur Iron No. 6
5904 Cramp's Elfur Iron No. 7
5905 Cramp's Elfur Iron No. 8
5906 Cramp's Elfur Iron No. 9
5907 Cramp's Elfur Iron No. 11
4438 Cramp's Superstrength Bronze Grade A
4439 Cramp's Superstrength Bronze Grade B
4440 Cramp's Superstrength Bronze Grade C
4441 Cramp's Superstrength Bronze Grade D
8978 Cramps Super Strength 49A
8979 Cramps Super Strength 50
9880 Cramps Super Strength 50A
12180 Nickel Bronze
917 P.M.G. Metal
883 Parson's White Brass SA (Cramp's No. 54)
11798 Turbadium Bronze

M-748 Crane Co., Chicago, Illinois

8981 Crane 5 Cr-Mo Cast Steel
8982 Crane 18-8 Mo

M-749 Crescent Tool Co., Jamestown, New York

8985 Crestaloy

M-355 Crowley, John A., New York, N. Y.

1762 Arrow High Speed
1764 Arrow Special
2376 Diamonite
9387 Extra Tool
11552 Wortle Die

M-356 Crucible Electric Steel Co., Homestead, Pennsylvania

7472 Cesco Diamond Special

M-153 Crucible Steel Casting Co., Cleveland, Ohio

4868 "Par 1"
4869 "Par 2"
10544 "Par 2C"
4870 "Par 3"
4871 "Par 4"
4872 "Par 5"
4873 "Par 6"
4874 "Par 7"
4875 "Par 8"
4876 "Par 9"
10545 "Par 9A"
4877 "Par 10"
10546 "Par 10A"
4878 "Par 11"
10547 "Par 11A"

M-38 Crucible Steel Co. of America, Pittsburgh, Pennsylvania. (See also Halcomb Steel Co.)

8233 Aero 12-3
11983 Airdi 110
11982 Airdi 150
2184 Airdi 225
8270 Airkool
8378 Alnico I
8379 Alnico II
8380 Alnico III
8381 Alnico IV
8382 Alnico V
1530 Alva Duplex Forging
1756 Alva Extra
1757 Alva Special
7110 Atha Champion
7111 Atha Chrome Roll
6539 Atha No. 2600
3817 Atha Pneu
1766 Atha Rim Roll
7641 Auto No. 1
1771 Baltoc
2206 Black Diamond Drill
1769 Black Diamond Tool
7112 C.C.A.
7642 CC Chisel
4547 CCS
8756 Calumet Box and Pin Steel
8853 Champaloy
2373 Champion Extra
2275 Champion Non-changeable
7113 Champion Tool
7643 Chrome Ball Steel
7644 Chrome Bearing Steel
7645 Chrome Magnet M-31
7646 Chrome Magnet 154
7647 Chrome Moly Roll
7648 Chrome Vanadium
8895 Chro-Mow
8903 Clermont Drill Rod
7145 Climax Machinery
7649 Cobalt Magnet Steel 17%
7650 Cobalt Magnet Steel 36%
7114 Crescent Double Special
7115 Crescent Extra
2253 Crescent Hot Work No. 2
7116 Crescent Rim Roll
2254 Crescent Special
7118 Crescent Tool
6940 Cro-Sil No. 10
3819 Crucible Copper Bond
4491 Crucible Double Special
2255 Crusca New Process Hollow Drill
7119 Crusca Solid Drill
6482 Duplex C.H. No. 1
6483 Duplex C.H. No. 2
6484 Duplex C.H. No. 3
396 Duplex Gear Steel No. 1
397 Duplex Gear Steel No. 2
398 Duplex Gear Steel No. 3
4332 Extra Special
3837 Extra Tool
9820 Granada Tool
9896 H.C. Pick Steel
9897 H.C. Poker Bar Steel
4142 H.Y.C.C.
3870 Halco
4547 Halcomb C.C.S.
7651 Halcomb C.S.M.
9853 Halcomb C.S.M. 2
9852 Halcomb Cold Hubbing Steel
2673 Halcomb Double Special
2382 Halcomb Dreadnought
9854 Halcomb First Quality
3871 Halcomb Halcut
2672 Halcomb High Speed
7652 Halcomb Hot Work
3915 Halcomb L.C.T.
7653 Halcomb L.C.T. 2
3917 Halcomb L.L.C.T.
9855 Halcomb Nu-Die
3975 Halcomb Pyro
2670 Halcomb S.R.B.
2671 Halcomb Special
5053 Halcomb Standard
4029 Halcomb Super Dreadnought
7655 Halcomb Super Van Dreadnought
4045 Halcomb Thermo Die
9855 Halcomb 218
5054 Halcomb 999
3872 Haldi

7656 Haldi No. 2
7657 Hoballoy
10078 Howe Brown Extra
10079 Howe Brown Special
4142 H.Y.C.C.
2708 Ketos
7658 Krosil
3902 Krovan
9340 L.C.T.
9641 L.C.T. No. 2
9662 L.L.C.T.
7120 La Belle C C V
3905 La Belle C & H
7122 La Belle CSD
7121 La Belle Cromonic
3906 La Belle Eagle
7123 La Belle Extra 2½
7124 La Belle Extra 3A
7125 La Belle Extra 3½
3916 La Belle Liberty
3908 La Belle No. 24 Die
3909 La Belle No. 89 Die
4153 La Belle No. 211 Die
3907 La Belle 2-70
3912 La Belle Silicon 2
3913 La Belle Special Hot Die
7604 La Belle Type 3
5135 Lo-Cro 46
5136 Lo-Cro 46W
5137 Lo-Cro 46Mo
9664 Lo-Cro Type 501
9665 Lo-Cro Type 502
3922 Marathon
11336 Maxel Shank Steel
7126 Max-el 1-B
7127 Max-el 2-B
7128 Max-el 3½
11335 Maxel No. 4 Collet
9613 Max-el 7
10292 Moly Van
7659 Needle Wire
10393 NCR No. 238
10448 Nitralloy EZ
10453 Nitralloy N
12207 Nitralloy 125
12208 Nitralloy 135
10452 Nitralloy 135 Modified
7464 Nitralloy 230
3936 No. 2B
7129 Paragon A
3951 Paragon Oil Hardening
3953 Park Silver
10552 Park Special
887 Peerless A
7130 Peerless B
7131 Peerless C
7132 Peerless D
4550 Peerless Cold Header Die
3956 Peerless Extra
9662 Peerless LLCT
9641 Peerless LCT No. 2
11135 Plastic CSM No. 2
7605 Pyro Die
4488 Regular Tool
954 Rex A
2501 Rex AA
2502 Rex AAA
2489 Rex No. 95
11035 Rex 1059
11036 Rex 1092
11037 Rexalloy
270 Rex *Champion*
12209 Rexite CR-6
12404 Rexite CR-7
12405 Rexite CR-8
12407 Rexite UC-14
12406 Rexite UC-16
2803 Rex MM
11790 Rex MMM
7133 Rex Supervan
7782 Rex T-Mo
11043 Rex VM
11044 Rex VM Dreadnaught
1595 Rezistal No. 2C
1272 Rezistal No. 3
6484 Rezistal No. 3C
1596 Rezistal No. 4
1597 Rezistal No. 7
7010 Rezistal CW
6929 Rezistal FM 18-8
7134 Rezistal KA-2
1593 Rezistal KA-2H
1594 Rezistal KA-2M
1274 Rezistal KA-2Mo
7011 Rezistal KA-2Mo-T
1592 Rezistal KA-2S
6934 Rezistal KA-2S-Mo
7012 Rezistal KA-2S-Mo-T
12186 Rezistal KA-2SCb
5138 Rezistal KA-2-ST
6935 Rezistal KA-2ST (Special 19-9)
6933 Rezistal KA-2S-2010
7014 Rezistal KA-2T
5169 Rezistal NCR 238
11046 Rezistal No. 329
11461 Rezistal No. 405
1273 Rezistal No. 2600
5139 Rezistal No. 2600-S
6936 Rezistal Stainless B-100
4300 Rezistal Stainless F.M.-2
2512 Rezistal Stainless Iron 12
6937 Rezistal Stainless Iron 17
6938 Rezistal Stainless Iron 20
6939 Rezistal Stainless Iron 27
3562 Rezistal Stainless Steel Grade A
3563 Rezistal Stainless Steel Grade B
7135 *Rezistal Stainless* Steel Grade BM
12188 Rezistal Stainless Steel Grade B-80
7136 Rezistal Stainless Steel Grade B-100
12187 Rezistal Stainless Steel 122
12189 Rezistal Stainless Steel 162
12190 Rezistal Turbine
10967 S & J Special
7137 Sanderson Double Special
7138 Sanderson Extra
7139 Sanderson Extra 3½
7140 Sanderson Extra 4½
7141 Sanderson Special
7142 Sanderson Tool
10978 Saranac
7660 Silico Manganese Spring Wire
1365 Simplex "CH"
1007 Simplex Forging
4144 Special Tool
12215 Special Vanadium
7661 SS Tool
7143 Standard Tool
12191 Superior Tool
4043 Tack Die
4045 Thermo
11559 Thermo Die
4063 Triple Alloy Punch
7662 Tungsten Magnet M-5

7663 Tungsten Magnet M-6
11360 Victor Drill
4096 Wortle Die
7664 Wortle Die No. 1
7665 Wortle Die No. 4
7666 Wortle Die No. 5

M-154 Curtis Bay Copper & Iron Works, Baltimore, Maryland—(Out of business)

M-155 Cuyahoga Steel & Wire Co., Cleveland, Ohio

368 Cuyo

M-764 Damascus Steel Casting Co., New Brighton, Pennsylvania

9052 Damascus

M-609 Dannemora Iron & Steel Works (See Gimo-Osterby Bruks, A.B.)

M-40 Darwin & Milner, Inc., Cleveland, Ohio
(Division of Darwins Ltd., Fitzwilliam Works, Sheffield, England)

3332 A.B.C.
245 Cannon
7147 Cannon Special
7148 Cannon Vanadium
313 Cobaltcrom
8923 Cobaltcrom KXK Stainless
8924 Cobaltcrom PRK HT
314 Cobaltcrom PRK-33
1431 Cobaltcrom Stainless
9127 D & M -LT
9128 D & M -U2
9123 D & M 7-0
9124 D & M 7-6
9125 D & M 92
9126 D & M 305
5914 Darwin
9058 Darwin ACD
7151 Darwin CC
9061 Darwin CL No. 1
7152 Darwin CV
9062 Darwin EE
7153 Darwin I.W.I.
1918 Darwin Alni
9060 Darwin Brand L-35
374 Darwin Cobalt Magnet
4881 Darwin N-32
7149 Darwin No. 1 Air-hardening
7150 Darwin No. 505 Special
9063 Darwin PRK-33 Uncoated
9056 Darwin 19
9057 Darwin 93
373 Darwin 505
1352 Darwin 1366
7571 Darwins' BKM
5915 Darwins' Cobalt Fast Work
7574 Darwins' DCI
7573 Darwins' D-93
7578 Darwins' OHT
7579 Darwins' TTS
7154 Darwins' W Brand
7572 Darwins' Best Warranted
7575 Darwins' Durex
5916 Darwins' Duror
5917 Darwins' Extra
7576 Darwins' Extra Quality
7577 Darwins' Extra Special
5918 Darwins' Triple Life
5919 Darwins' Vanadia
7580 Darwins' Warranted
7610 Dural A
7611 Dural B
7612 Dural C
470 Firex
9492 Firex Special
3867 H.
7155 Hobalite
586 Ideor
9749 L-35
788 Neor
7156 Nimo
885 Patent Cobalt-Chrome Steel
7008 Pireks CC
7009 Pireks RCC
5140 Pireks-Reactal
11120 R-P
10759 S1 W1
10802 Special Carbon SSC
11223 Triple Life D-C
11543 3581 Chisel

M-487 Darwins, Ltd., Sheffield, England
(American Division—Darwin & Milner, Inc. q.v.)

9609 N.W.S.
12385 Morex

M-985 Darwins-Toledo, Ltd., Sheffield, England

9040 Morex

M-584 Degefors Iron & Steel Works, Degefors, Sweden
(American Agent—Ekstrand & Tholand, Inc., New York, N. Y.)

3893 JC/C

M-432 Delaware Tool Steel Corp., Wilmington, Delaware

5039 C-4
5038 Cartun
5043 Delaware Extra
5044 Delaware Standard
5042 Delsteel Alloy
5045 Drillalloy

5040	HC-HC	5036	National	5041	Pennant
10273	Molel Alloy	5037	P-D Tungsten		

M-756 Delloy Metals Company, Philadelphia, Pennsylvania

12408	Delloy G-P	9070	Delloy No. 4	9073	Delloy No. 9
12409	Delloy DC-7	9071	Delloy No. 6	9074	Delloyd
12410	Delloy DC-8	9072	Delloy No. 7		

M-41 Deloro Smelting & Refining Co., Ltd. (of Canada), Toronto, Canada

1050	Stellite				

M-156 Delta Metal Co., Ltd., London, England
(American Licensee—M-450 The Phosphor Bronze Smelting Co., Philadelphia, Pennsylvania)

5398	Delta Antifriction Metal	4781	Delta Bronze V	6606	Delta Bronze IXa
		6602	Delta Bronze VI	6607	Delta Propeller Bronze
384	Delta Bronze I	6603	Delta Bronze VII		
1347	Delta Bronze II	6604	Delta Bronze VIII	4150	Deltoid
1348	Delta Bronze III	6605	Delta Bronze IX	4149	Dixtrudo
4141	Delta Bronze IV				

M-755 Denman and Davis, North Bergen, New Jersey

9064	D & D Special O H	9078	Denavis	10645	Monaco
9077	Denavis	9168	Dukane		

M-157 Detroit Alloy Steel Co., Detroit, Michigan

247	Carbomang	9702	Flamaloy	719	Martin
265	Castaloy	5758	Krokoloy		

M-459 Deutsche Edelstahlwerke, A. G., Krefeld, Germany
(American Representative—Alex Benecke, New York, New York)

7996	BKS	7999	CWH	7950	D N 15
7994	BKS Extra	7998	CWM; S431	7951	D N 25
7995	BKS Spezial	7921	Cardinal Rapid	7954	D N 33
7993	BMS	8033	D C N A	7953	D N 36
7992	BMS Extra	8036	D C N O	7952	D N 42
7991	BMS Spezial	7902	DCNR	7990	DZ
8028	BSF; DMOC	8023	D C N Extra	8031	D 22 S
8029	B S H	8024	D C N Spezial	7871	Diamant Extra
8025	B S O	8019	D C N 2w	7872	Diamant 3
8027	BSW; DMOCn	8020	D C N 3w	7875	Diamant 5
8030	B S Z	8021	D C N 3	7886	Durax H
7968	BS 1	8022	D C N 4	7887	Durax W 2
7969	BS 4	7956	DCN 60	7888	Durax W 3
7893	Best	7955	DCN 80	7889	Durax Spezial
7877	Bora	8034	D C R	8010	EMOC
7894	C N K 2	8035	D C R V	8011	EMOC h
7900	CNS 2 h	8014	D M H	8009	EMOCw
8005	C N W 3	7906	D M N	7868	ES Extra
8006	C N W 4	7901	D M S	7997	EW
8008	C N W Z	7907	D M W	8012	E 21S
7880	C R M	8026	DMOC weich	8013	E 22S
7896	C R S	8032	D M Z	7903	E 612
7910	C R W	8015	D N 1	8007	E 724 Z
7876	C R Z	8016	D N 2	7904	E 975
7885	C S	8017	D N 3	7979	FC Spezial
7982	CVFS	8018	D N 5	7978	FCF Spezial

7977 FCW Spezial
7981 F Extra
7980 F Spezial
7949 G S
7948 GSC
7947 G S E
7874 Goliath
7873 Goliath Spezial
7905 Goliath Spezial M
7989 HM
8042 H M S Steels
7869 HS Prima
7881 K S
7890 K S N
7912 Kobalt I
7913 Kobalt II
7914 Kobalt III
7959 Kobalt 125
7960 Kobalt 160
7961 Kobalt 200
7962 Kobalt 300
7911 Kobalt Spezial
7966 L S
8038 M C 30
8039 M C 40
8040 M C 70
8041 M C 100
7957 Magnet C
7958 Magnet W
8004 M O W
7891 N P U
8000 NW 1
8001 NW 2
8002 NW 3
8003 NW 5
7963 Oerstit 500
7964 Oerstit 700
7965 Pantanax
7895 P S P
7970 RS 1 Spezial
7971 RS 2 Spezial
7972 RS 3
7973 RS 4
7920 Rapid Spezial
7940 Remanit 0327
7922 Remanit 1510
7924 Remanit 1520
7925 Remanit 1530
7926 Remanit 1530 F
7928 Remanit 1540
7923 Remanit 1610
7927 Remanit 1620
7929 Remanit 1710
7930 Remanit 1710 A
7931 Remanit 1710 S
7932 Remanit 1740
7933 Remanit 1790
7934 Remanit 1790 C
7935 Remanit 1800 M
7936 Remanit 1880
7937 Remanit 1880 S
7938 Remanit 1880 SS
7939 Remanit 2810
7967 S A
7984 SA/o
7985 SA/w
7917 SA 200
7916 SA 300
7915 SA 500
7909 S K
7908 S K L
7988 SSB
7882 S S C
7986 SSF
7987 SSM
7862 SS 1 Extra Extra
7863 SS 2 Extra Extra
7864 SS 3 Extra Extra
7897 SS 3V
7865 SS 4 Extra Extra
7866 SS 5 Extra Extra
7867 SS 6 Extra Extra
7899 Spezial W
7975 Spezial No. 5
7892 T O S
7974 TP
7946 Thermax 8
7945 Thermax 9
7944 Thermax 9 S
7943 Thermax 10
7942 Thermax 11
7941 Thermax 12
742 Titanit
7976 VS Spezial Extra
7878 Veresta
7879 Veresta Spezial
7898 W C 2
7883 W S P
7884 W S P S
7870 Wolframant
8037 ZOVM
7919 000 Extra
7918 000 Spezial 31

M-625 Deutsche Röhrenwerke A.G., Düsseldorf, Germany
(See also parent company, Vereinigte Stahlwerke A.G.)
3730 TH-30
3731 TH-31
7851 TH-60B
7852 TH-61B
7853 TH-62B

M-895 Deutsche Industrie Nemen, Germany
10842 ST 48

M-819 Die Casting Appliances Corporation, Ltd., London, England
9796 Glixey No. 1
9797 Glixey No. 2
9798 Glixey No. 2A
9799 Glixey No. 3

M-760 Die Castings, Ltd., Birmingham, England
9099 Dical

M-822 Diehl Steel Company, Cincinnati, Ohio
9817 Grade A
11329 Utex
11353 Veribest Drill Rod

M-505 Dinorm, Berlin, Germany
6152 D.I.N. Alloys (German Engineering Standards Alloys)

M-594 Dirigold Corporation, Kokomo, Indiana

6745 Alco
2361 Dirigold

M-357 Disston, Henry, & Sons, Inc., Philadelphia, Pennsylvania

4507 Alloy Trimmer
4499 Best
12386 Celero
12391 Chipper Knife
12397 Clicker Die
12400 Clicking Die
12388 Clicking Die
7157 Croloy Die Steel
9044 D-1 Disston Carbon
12402 D-2 Disston
9046 D2 S.A. Tool
9047 D 6 Co
12398 D 9 Mo
9048 D 9 VA
7158 D-29 Chisel Steel
12392 D-29 Knife
9104 Di-Mol
12382 Dissteel 812
9112 Disston No. 819
9113 Disston No. 825
9114 Disston No. 827
9115 Disston No. 841
9116 Disston No. 842
9117 Disston No. 5170
9118 Disston No. 5190
9119 Disston No. 5390
9120 Disston No. 51110
12395 Disston Stainless D
9108 Disston 6-N-6
9109 Disston 66
6893 Disston Stainless Iron
6894 Disston Stainless Type A
6895 Disston Stainless Type B
12384 Elkro
4504 Eltun Die Steel
4500 Extra
4503 Fast Finishing
12383 Flexible Hack Band
4505 H R W Die Steel
3897 Keystone
9582 Keystone Alloy Chisel
3903 Kutkwik
12389 Lawn Mower
3921 Mansil
10436 Nicroman
12381 Nivan
12395 No. 98 Stainless
4506 No. 712 Die Steel
10484 No. 812
3940 No. 821
3941 No. 826
10636 Plastaloy
12394 Plastiron
12396 Pneu-Die
10593 Polaris
3978 Sa-best
12390 Segment Steel
12387 Semi-High
4502 Special Alloy
4501 Standard
12401 Tack Die
11272 Tungsten Hack Saw
11349 Vatool
12399 Wood Saw

M-762 Dodge Steel Company, Tacony, Philadelphia, Pennsylvania

9129 Dodge Alloy D-1

M-158 Doehler Die Casting Co., Toledo, Ohio

4861 Alculoy
8312 Alculoy No. 12
8313 Alculoy No. 75
48 Alniloy
8396 Alsiloy No. 1
8397 Alsiloy No. 3
7473 Alsiloy S-1
7474 Alsiloy S-5
214 Brastil
7159 Do-Di
9131 Doler-Alumin No. 99
9132 Doler-Alumin No. 133
9133 Doler-Alumin No. 308
7160 Doler-Brass
9134 Doler-Brass No. 1
9135 Doler-Brass No. 4
9136 Doler Brass No. 5
9137 Doler-Mag
9138 Doler-Mag No. 2
9139 Doler-Mag No. 6
9140 Doler-Mag No. 10
9141 Doler No. 112
390 Doler-Zink
9142 Doler-Zink No. 2
9143 Doler Zink No. 3
9144 Doler Zink No. 5

M-855 Doelger & Kirsten, Inc., Milwaukee, Wisconsin

10246 Millaloy

M-763 Dominion Wheel & Foundry Co., Toronto, Canada

9146 Domite

M-470 Dorman, Long & Co., Ltd., Middlesborough, England

6071 Chromador Steel

M-614 Dörrenberg Söhne, Ründeroth, Rheinland, Germany

7406 Visto
7407 Hidalgo

M-222 Dortmund-Hoerder Hüttenverein A.G., Dortmund, Germany
(See also parent company, Vereinigte Stahlwerke A.G.)

3733 Union Larssen Steel
Resista
3734a V.T. E. Steel
3734b V.T. Steel

M-43 Dow Chemical Co., Midland, Michigan

698 Dowmetal A
5454 Dowmetal B
9155 Dowmetal C
9156 Dowmetal EX
701 Dowmetal F
9157 Dowmetal FS
10259 Dowmetal FS-1
868 Dowmetal G
5924 Dowmetal H
5925 Dowmetal J
7161 Dowmetal K
9158 Dowmetal L
702 Dowmetal M
9159 Dowmetal O
9160 Dowmetal P
9161 Dowmetal R
9162 Dowmetal X

M-924 Dravo-Doyle Company, Pittsburgh, Pennsylvania

11219 Tri-Lok

M-61 Driver, Wilbur B., Co., Newark, New Jersey

12411 Alchrome 6
9943 Balco
4309 Ballast Nickel
12412 Beralloy 'A'
12413 Beralloy 'B'
12414 Beralloy 'C'
8635 Beralloy No. 25
6999 Cobanic
285 Cromin D
366 Cupron
5946 Fecraloy
7000 Hilo, Modified
714 Manganin
12416 Mangrid 'D'
12417 Mangrid 'E'
5975 Molymet
12422 Nilstain X
10440 Nilstain 302
12423 Nilstain 304
12424 Nilstain 308
12425 Nilstain 309
12426 Nilstain 309 Cb
12427 Nilstain 310
12428 Nilstain 316
12429 Nilstain 317
12430 Nilstain 321
12431 Nilstain 325
12432 Nilstain 330
12433 Nilstain 347
12434 Nilstain 430
12435 Nilstain 446
3468 Radio Alloy No. 30
3469 Radio Alloy No. 60
3470 Radio Alloy No. 90
3471 Radio Alloy No. 180
12418 Silicon Nickel
12419 Sironze
10794 Sparkaloy
7001 Stainless Steel
12420 Sylvaloy
12421 Tensite
1100 Tophet A
7002 Tophet B
1101 Tophet C
6022 Tophet D

M-44 Driver-Harris Co., Harrison, New Jersey

12 Advance
276 Chromax
288 Cimet
3391 Cimet Cast
8913 Climax
332 Comet
4919 D-H Alloy No. 42
4920 D-H Alloy No. 52
4921 D-H Alloy No. R-63
4918 D-H Alloy No. 525
9084 D-H Nickel A
9085 D-H Nickel D
9086 D-H Nickel E
9087 D-H Nickel Z
4922 D-H Nirosta
9088 D-H 11 Alloy
9089 D-H 30 OHM Alloy
9090 D-H 90 OHM Alloy
9488 Filnic "F"
12038 Filnic "H"
12039 Filnic "L"
12040 Filnic "J"
12041 Filnic "K"
12043 Filnic "M"
12042 Filnic "T"
9840 Gridnic A
9841 Gridnic B
9842 Gridnic C
9843 Gridnic D
9844 Gridnic E
9845 Gridnic F
10244 Gridnic T
4925 Hytemco
4926 Lohm
655 Lucero
3679 Magno
12415 Manganin
4924 Midohm
4210 Nichrome, Cast
11806 Nichrome II
6465 Nichrome III
10426 Nichrome Type A
10427 Nichrome Type B
5141 Nichrome S
4418 Nichrome V
4209 Nichrome, Wrought
4923 Nilvar
10443 Nirex
4916 Ohmax
4917 Radiohm
10917 Super Nilvar
6030 Veriloy

M-358 Duke Steel Co., Inc., New York, N. Y.

1759 Andard
3583 Dualoy
3586 Dukex
4512 Duke-Kidd
3588 Durabil
3590 Duranmium
9211 Dutray
3594 Duvan
3857 Gralur
3923 Master

M-522 DuPont, E. I. de Nemours & Co., Niagara Falls, N. Y.

441 Duozinc
10641 Hydrone

M-308 Dupont Everdur Co., Wilmington, Delaware
(Note: Everdur Patents now owned by American Brass Co., q.v.)

M-993 Duquesne Smelting Corp., Pittsburgh, Pennsylvania
2802 War Babbitt

M-159 Duquesne Steel Foundry Co., Coraopolis, Pennsylvania
(See Continental Roll & Steel Foundry Co., Successor)

M-45 Duraloy Co., Pittsburgh, Pennsylvania

399	Duraloy A	1531	Duraloy N	9177	Duraloy 18-8SM
400	Duraloy B	9175	Duraloy NSMO	1532	Duraloy 15-35
1533	Duraloy C	401	Duraloy 18-8	9178	Duraloy 25-20-Mo
1534	Duraloy H	9176	Duraloy 18-8S		

M-457 Dürener Metallwerk, Düren, Germany

9180	Duralumin 681 A	9183	Duralumin 681 K	9190	Duranalium 3.5
9181	Duralumin 681 B	5383	Duranalium	9191	Duranalium 7

M-46 Duriron Co., Dayton, Ohio

32	Alcumite	6898	Durco D-18	6896	Durco 181
9197	Durco D-6	5142	Durco KA-2	4434	Durichlor
9198	Durco D-7	5143	Durco KA-2 Mo	412	Duriron
9199	Durco D-10	1252	Durco KA-2S	9200	Durimet
6897	Durco D-12	5364	Durco KA-2S Mo	9201	Durimet T

M-160 Dursar Corp., Newark, New Jersey
891 Perlit

M-948 Dusenberry & Stracken, Inc., New York, New York
11499 Yorcalbro 11500 Yorcalvic

M-757 Duval et Poulain, France
9081 Depol

M-773 Dymonhard Corp. of America, 30 Rockefeller Plaza, New York, N. Y.

9215	Dymonhard No. 90	9218	Dymonhard No. 93	9221	Dymonhard No. 96
9216	Dymonhard No. 91	9219	Dymonhard No. 94		
9217	Dymonhard No. 92	9220	Dymonhard No. 95		

M-775 Eastern Malleable Iron Co., Cleveland, Ohio

9233	Eastern G 35 Alloy	9238	Eastern Hy-Tenso	9243	Eastern N-4 Alloy
9234	Eastern G 40 Alloy	9239	Eastern N Alloy	9244	Eastern N-5 Alloy
9235	Eastern H- 55 Alloy	9240	Eastern N-1 Alloy	9245	Eastern N-6 Alloy
9236	Eastern H- 60 Alloy	9241	Eastern N-2 Alloy	9246	Eastern A Metal
9237	Eastern H- 65 Alloy	9242	Eastern N-3 Alloy		

M-776 Eclipse-Pioneer, Division of Bendix Aviation Corp., Teterboro, New Jersey

11857	Eclipsaloy No. 1	11862	Eclipsaloy No. 12	11868	Eclipsaloy No. 57
11858	Eclipsaloy No. 2	11863	Eclipsaloy No. 13	11869	Eclipsaloy No. 68
11859	Eclipsaloy No. 4	11864	Eclipsaloy No. 15	11870	Eclipsaloy No. 320
11860	Eclipsaloy No. 5	11865	Eclipsaloy No. 38	11871	Eclipsaloy No. 322
11861	Eclipsaloy No. 6	11867	Eclipsaloy No. 56	11872	Eclipsaloy No. 323

M-617 Edelstahlwerk Röchling A.G., Völklingen, Saar, Germany
7412 Gigant 7413 Robust

M-210 Edgar Allen & Co., Sheffield, England
(See Allen, Edgar & Co.)

M-433 Edgcomb Steel Co., Philadelphia, Pennsylvania

5046 Beacon
3960 Planet Special
5047 Pyramid Special

M-999 Edgcomb Steel Corp., Hillside, New Jersey
(See alloys listed under Allegheny-Ludlum Steel Co., and Forging & Casting Co.)

M-161 Egal Metal Products Co., Baltimore, Md.

5741 Egalite

M-549 Egge, E. N., Co., Los Angeles, California

6556 Aloy-num

M-557 Eisenwerk Neubrandenburg G.m.b.H., Berlin, Germany

6536 Enebra Bronze
7833 Enebra Edelbronze NI
7832 Enebra Edelbronze TO
7830 Enebra Edelbronze TU-I
7831 Enebra Edelbronze TU-II
7841 Enebra Lagerbronze Bz-20
7840 Enebra Lagerbronze Bz-25
7839 Enebra Lagerbronze B-33
7838 Enebra Lagerbronze PN
7842 Enebra Sondermessinge S-IM
7843 Enebra Sondermessinge S-IIM
7835 Enebra Spezialbronze EH-I
7836 Enebra Spezialbronze EH-II
7837 Enebra Spezialbronze EH-III
7834 Original Monel Metal

M-796 Eisler Electric Co., Union City, New Jersey

9614 Kulgrid C
11159 Teco Alloys

M-359 Ekstrand & Tholand, New York, N. Y. (Agent for Degefors Iron & Steel Works, also Höganäs Billesholms A.B. of Sweden)

3893 J.C.C.
4927 Sponge Iron

M-488 Electric Steel Foundry Co., Portland, Oregon

6977 Esco No. 33
6978 Esco No. 34
6979 Esco No. 35
7475 Esco No. 36
5145 Esco No. 40
7476 Esco No. 43
5146 Esco No. 45
7477 Esco No. 46

M-47 Electro-Alloys Co., Elyria, Ohio

1075 Thermalloy A
1076 Thermalloy B
1077 Thermalloy C
1620 Thermalloy D
6048 Thermalloy E
6964 Thermalloy No. 18-8
6049 Thermalloy No. 50
6050 Thermalloy No. 72
11184 Thermalloy No. 72 M

M-778 Electroloy Co., Inc., Bridgeport, Connecticut

9287 Electroloy Grade A
9288 Electroloy Grade B
9289 Electroloy Grade BX
9290 Electroloy Grade C
9292 Electroloy Grade XX
9280 Electroloy

M-48 Electro-Metallurgical Company, New York, N. Y. (Subsidiary Union Carbide & Carbon Corp.)

428 Electromet
7163 Electromet Calcium-Aluminum-Silicon
7164 Electromet Calcium-Manganese-Silicon
7162 Electromet Calcium-Silicon
7165 Electromet Chromium
7166 Electromet Chromium-Copper
7167 Electromet Ferro-Boron
7169 Electromet Ferrochrome (High Carbon)
7170 Electromet Ferrochrome (High Nitrogen)
7168 Electromet Ferrochrome (Low Carbon)
7171 Electromet Ferrochrome (Special Foundry Grade)
7172 Electromet Ferro-Columbium
7174 Electromet Ferromanganese (Low Carbon)
7177 Electromet Ferromanganese (Low Iron)
7176 Electromet Ferromanganese (Low Phosphorus)
7175 Electromet Ferromanganese (Medium Carbon)

7173 Electromet Ferromanganese (Standard)
7178 Electromet Ferromanganese-Silicon
7179 Electromet Ferrosilicon (15%)
7180 Electromet Ferrosilicon (50%)
7181 Electromet Ferrosilicon (75%)
7182 Electromet Ferrosilicon (80-90%)
7183 Electromet Ferrosilicon (90-95%)
7184 Electromet Ferro-Tungsten
7185 Electromet Ferro-Vanadium
7186 Electromet Manganese
7187 Electromet Manganese-Boron
7188 Electromet Manganese-Copper
7189 Electromet Nickel-Zirconium
7191 Electromet Refined Silicon
7190 Electromet Silico-Manganese
7192 Electromet Silico Spiegel
7193 Electromet Spiegeleisen
7194 Electromet Zirconium (12-15%)
7195 Electromet Zirconium (35-40%)
11643 Silvay 3 Alloy
10731 Silvaz
10779 S M Z

M-777 Electro-Refractories & Alloys Co., Buffalo, New York

9291 Electroloy D
9293 Electroloy Match Plate Aluminum
9281 Electroloy No. 11
9282 Electroloy No. 14
9283 Electroloy No. 15
9284 Electroloy No. 26
9285 Electroloy No. 55
9286 Electroloy No. 154
9244 Electroloy Pattern Aluminum

M-779 Elesco Superheated Co., East Chicago, Illinois

9310 Elesco No. 600
9311 Elesco No. 600 HT

M-219 Elkon Co., Indianapolis, Indiana
(See parent company—P. R. Mallory & Co.)

M-49 Empire Metal Co., Syracuse, New York

436 Emetco No. 1 (Silver Bronze)
437 Emetco No. 2 (Emco)
438 Emetco No. 3 (Premier)
439 Emetco No. 4 (Genuine)
440 Emetco No. 5 (Hard Genuine)
1536 Emetco No. 6 (Imperial)
1537 Emetco No. 7 (Copper Hardened)
1538 Emetco No. 8 (Extra)
1539 Emetco No. 9 (Triumph)
1540 Emetco No. 10 (Electric)
1541 Emetco No. 11 (Rock Crusher)
1542 Emetco No. 12 (Matchless)
1543 Emetco No. 13 (Rolling Metal)
1544 Emetco No. 14 (Car Box)
1545 Emetco No. 15 (Standard)
1546 Emetco No. 16 (Special)
1547 Emetco No. 17 (Alaska White Brass)

M-691 Empire Sheet & Tin Plate Company, Mansfield, Ohio

8540 Armelec
8672 Black Beauty
9229 Dynelec
10159 Manelec
10290 Motelec
10492 P&A Enameling
10859 Stanelec
11211 Tranelec A
11212 Tranelec B
11213 Tranelec C
11410 Wabik Metal

M-162 Empire Steel Casting Company, Inc., Reading, Pennsylvania

12366 EM 3
12367 EM 3A
12368 EM 4
12369 EM 4A
12370 EM 4B
12371 EM 5
12372 EM 5A
12373 EM 5B
12374 EM 6
12375 EM 7
12376 EM 7A
12377 EM 8
12379 EM 9
12380 EM 9A
12378 EM 85
9325 Empire No. 1
9326 Empire No. 2
9327 Empire No. 3
9328 Empire No. 4
9329 Empire No. 6
9330 Empire No. 7

9331 Empire No. 8
9332 Empire No. 9
9333 Empire No. 10
9334 Empire No. 11
9335 Empire No. 13
9336 Empire No. 14
9337 Empire No. 15
9338 Empire No. 16
9339 Empire No. 16A
9340 Empire No. 16B
9341 Empire No. 17
9342 Empire No. 17A
6961 Empire No. 18-8 Mo Se
6962 Empire No. 18-8 Se
9343 Empire No. 19
9344 Empire No. 20
9345 Empire No. 21
9346 Empire No. 22
9347 Empire No. 23
6898 Empire No. 75-20

M-387a *Engelsted, K., New York, N. Y.*
(See Soderfors Steel Works)

M-50 English Steel Corp., Ltd., Sheffield, England
(Affiliated company, Firth-Vickers Stainless Steels, Ltd.; subsidiary companies include Industrial Steels, Ltd., Vickers-Armstrong, Ltd., q.v.)

1157 B.C.T.
2437 E.S.C. "A"
2438 E.S.C. "A-31"
2410 E.S.C. "B.C.T.B."
2448 E.S.C. "C.H.M.S."
2444 E.S.C. "C.H.N.C."
2442 E.S.C. "C.H.N.M."
2446 E.S.C. "C.H. 3N"
2445 E.S.C. "C.H. 5N"
2422 E.S.C. "C.O.M.O."
2440 E.S.C. "H.T.C."
2439 E.S.C. "H.T.C.N."
2418 E.S.C. "N.C."
2413 E.S.C. "S.H.N.C."
2415 E.S.C. "V.A. 65"
2421 E.S.C. "V.C.M."
2436 E.S.C. "V.H.R.D."
2417 E.S.C. "V.N.C.A."
2414 E.S.C. "V.N.C.G."
5762 N.C.M.
917 P.M.G.
2424 E.S.C. Immaculate No. 1
2425 E.S.C. Immaculate No. 2
2426 E.S.C. Immaculate No. 3
2427 E.S.C. Immaculate No. 4
6288 E.S.C. Immaculate No. 4W
2428 E.S.C. Immaculate No. 5
2429 E.S.C. Immaculate No. 6
2430 E.S.C. Immaculate No. 7
2431 E.S.C. Immaculate No. 9
2441 E.S.C. Medium C
2409 E.S.C. Nilex
2419 E.S.C. No. 3½ N.S.
2420 E.S.C. No. 3 N.S.
2423 E.S.C. "Si-Cr"
2408 E.S.C. "Si-Mn"
2443 E.S.C. Super C.H.N.M.
2412 E.S.C. Super S.H.N.C.
2416 E.S.C. Super V.N.C.A.
2432 E.S.C. Supertough A
2433 E.S.C. Supertough B
2434 E.S.C. Supertough C
2435 E.S.C. Supertough C-20
5959 Indus
827 NM Steel
1155 Vibrac V-30
1156 Vibrac V-45
1159 Vikro
1699 Pyrista

M-61 Erie Malleable Iron Co., Erie, Pennsylvania

448 Ermal
449 Ermalite

M-717 Eutectic Welding Alloys, Inc., New York, New York

8699 Bronzochrom No. 185
8700 Bronzochrom No. 186
8701 Bronzochrom No. 187
8799 Castolin
8800 Castolin No. 14
8801 Castolin No. 15
8802 Castolin No. 16
8803 Castolin No. 17
8804 Castolin No. 18
8805 Castolin No. 19
8806 Castolin No. 20
8807 Castolin No. 21
8808 Castolin No. 24
8809 Castolin No. 140
8810 Castolin No. 145
8811 Castolin No. 180
8812 Castolin No. 181
8813 Castolin No. 185
8814 Castolin No. 189
8815 Castolin No. 189
8816 Castolin No. 190
8817 Castolin No. 195
8818 Castolin No. 200
8819 Castolin No. 210
8820 Castolin No. 211
8821 Castolin No. 212
8822 Castolin No. 213
8823 Castolin No. 1600
8824 Castolin No. 1601
8825 Castolin No. 1800
8826 Castolin No. 1900
11593 Durface

M-259 Evans Steel, H. D., Co., Boston, Massachusetts

1248 C.S.M. Steel
9364 Evans Peerless
9851 Halcomb
11464 White End

M-589 Everard Tap and Die Corp., New York, N. Y.

6754 Everard

M-965 Excelite Co., Woodbridge, New Jersey

11599 Excelite

M-724 F.A.C.A., France

8748 C 501 8746 C 502 8747 C 503

M-52 Fagersta Bruks Aktiebolag, Fagersta, Sweden (Subsidiary of Brukskoncernen A.B., q.v.)

3599 Fagersta Alloy Chisel
7229 Fagersta Alloy Shoe Die
7230 Fagersta Broach
3600 Fagersta Carbon
3601 Fagersta Circular Plates
3602 Fagersta Cold Header
3603 Fagersta Cutlery Steel
3604 Fagersta Drawing Die Steel
7231 Fagersta Engravers Plate
3605 Fagersta Fast Finishing
3606 Fagersta Hack Saw
3607 Fagersta High Production
3608 Fagersta Hollow Drill
3609 Fagersta Hot Die
3610 Fagersta Oil Hardening
3611 Fagersta Overcoat Axe
3612 Fagersta Pavement Breaker
3613 Fagersta Polhem Wire
3614 Fagersta Shoe Die
3615 Fagersta Solid Drill
3616 Fagersta Twisted Auger
11025 Rema
7232 Rema Hobbing Die

M-491 Fairley & Sons, James, Ltd., Shadwell St., Birmingham, England

5945 Fairleys

M-627 Faitoute Iron & Steel Co., Newark, New Jersey

9677 Fisco Airdie
9678 Fisco Airquench
9679 Fisco Carbon
9681 Fisco Chromdie
9680 Fisco Cobalt
9682 Fisco Duplex
9683 Fisco Excell
9684 Fisco High Speed
9685 Fisco Hot Work
9686 Fisco Moly
7481 Fisco Mo No. 1
7482 Fisco Mo No. 3
9693 Fisco No. 1
7480 Fisco No. 2
9694 Fisco No. 3
7592 Fisco No. 4
9695 Fisco Oildie
9687 Fisco Oilhard
9688 Fisco Pneumatic
9689 Fisco Precision
9696 Fisco Seven
9690 Fisco Special
9691 Fisco Star Tung
9699 Fisco Superior
9697 Fisco Tiger
9692 Fisco Vanadium
9698 Fisco 66

M-862 Falk Corp., Milwaukee, Wisconsin

11173 Telastic Moly

M-752 Fallsain Metals, Ltd., Wycliffe Foundry, Lutterworth, England

9033 C.Y. 9366 E.V.H.I.

M-53 Fansteel Metallurgical Corp., North Chicago, Illinois (See also subsidiary—Vascoloy-Ramet Corp.)

7567 Columbium
9433 Fanite
7568 Fasaloy
11603 Fasaloy No. 3
11604 Fasaloy No. 4
11605 Fasaloy No. 5
11403 Fasaloy No. 6
11606 Fasaloy No. 7
11609 Fasaloy No. 12
11610 Fasaloy No. 14
11611 Fasaloy No. 24
11612 Fasaloy No. 106
11613 Fasaloy No. 136
11614 Fasaloy No. 138
11615 Fasaloy No. 139
11616 Fastell No. 31
11602 Fastell No. 35
11601 Fastell No. 41
11617 Fastell No. 42
11607 Fastell No. 51
11608 Fastell No. 72
11619 Fastell No. 130
11618 Fastell No. 142
11620 Fastell E
11623 Fastell NL
11621 Fastell UM
11622 Fastell UP
755 Molybdenum
11146 Tantaloy
1068 Tantalum
7570 Tantalum-Nickel
7569 Tantalum-Tungsten
11147 Tantung
11148 Tantung G
12295 Tantung G 2
1108 Tungsten

M-163 Farrell-Birmingham Co., Ansonia, Connecticut

732 Meehanite

M-220 Farrell-Cheek Steel Foundry Co., Sandusky, Ohio

9427 Farrell's Hard Edge 466 Farrell's 85 Alloy

M-709 Federal Mogul Corp., Detroit, Michigan

8637	Bermax	9454	Federal Mogul F5	9464	Federal Mogul F22
9438	Federal Mogul B-100	9455	Federal Mogul F6	9465	Federal Mogul F23
9439	Federal Mogul B-101	9456	Federal Mogul F8	9466	Federal Mogul F26
9440	Federal Mogul B-103	9475	Federal Special B	9467	Federal Mogul F27
9441	Federal Mogul B-104	11695	Mogul Babbitt	9468	Federal Mogul F28
9442	Federal Mogul B-109	9457	Federal Mogul F11	9469	Federal Mogul F32
9449	Federal Mogul CS 50	9459	Federal Mogul F15	9470	Federal Mogul F33
9450	Federal Mogul Duro	9460	Federal Mogul F16	9471	Federal Mogul F34
9451	Federal Mogul F1	9461	Federal Mogul F18	9472	Federal Mogul L100
9452	Federal Mogul F2	9462	Federal Mogul F19	9473	Federal No. 407
9453	Federal Mogul F3	9463	Federal Mogul F20	9474	Federal No. 408

M-815 Federated Metals Division, American Smelting & Refining Co., Perth Amboy, New Jersey.

9768	"G" Babbitt	10837	ST-15 Solder	10840	ST-20C Solder
11642	"S" Babbitt	10838	ST-20A Solder	10841	ST-30 Solder
10836	ST-10 Solder	10839	ST-20B Solder		

M-104a Ferner, R. Y., Co., Washington, D.C.
(Sales representative for Soc. Anon. De Commentry Fourchambault et Decazeville, q.v.)

M-54 Ferranti, Ltd., Lancashire, England

831 Nomag

M-660 Ferrous Metals Corp., 444 Madison Ave., New York, New York
(Affiliate Corp.—Allied Process Corp.)

8236 Aeterna

M-425 Field, B. A., Newark, New Jersey

4485 Rennite

M-718 Fillmore Foundry, Inc., Buffalo, New York

8704 Bryiron 8769 Cariron

M-55 Finkl, A., & Sons Co., Chicago, Illinois

6140	Cold-Hot	9490	Finkl Type R	6147	Molybdie Grade FX
8939	Colt Hot	6143	Mo-Cro-Ni	6148	Molybdie Ni-Mo
9028	Cu-Pro-Die	756	Molybdie	10278	Molybdie Type "C"
414	Durodi	6144	Molybdie Grade FG	10279	Molybdie Type "R"
6141	Fi-Carbo	6145	Molybdie Grade FM		
6142	Finkl Grade F	6146	Molybdie Grade FS		

M-587 Finn Metal Works, John, San Francisco, California

6751 Aidion

M-56 Firth, Thos., & John Brown, Ltd., Sheffield, England
(Affiliated subsidiary—Firth-Vickers Stainless Steel, Ltd., q.v.)

471	Firth A.H.G. Steel	5249	Firth-Brown B-20	5257	Firth-Brown B-28
2574	Firth AW	5250	Firth-Brown B-21		(Firth Roll Steel;
473	Firth Best Cast Steel	5251	Firth-Brown B-22		Atlas Die Ring
5242	Firth-Brown A-1	5252	Firth-Brown B-23		Steel)
5243	Firth-Brown A-2	5253	Firth-Brown B-24	5258	Firth-Brown B-29
5244	Firth-Brown A-3	5254	Firth-Brown B-25		(Shoe and Die
5245	Firth-Brown A-4		(Atlas S.P. Steel)		Steel)
5246	Firth-Brown A-5	5255	Firth-Brown B-26	5259	Firth-Brown B-30
5247	Firth-Brown A-6	5256	Firth-Brown B-27		(Firth S.H.B.; At-
5248	Firth-Brown A-7				las Ball Race Steel)

5260 Firth-Brown C-40 (Atlas A.T.C. 20)
5261 Firth-Brown C-42 (Atlas A.T.C. 40)
5262 Firth-Brown C-44 (Firth F.T. 50; Atlas A.T.C. 55)
5263 Firth-Brown C-45 (Atlas A.T.C. 75)
5264 Firth-Brown D-60 (Atlas A.T.M.N.)
5265 Firth-Brown D-62 (Firth F.N. 3.5; Atlas A.T.N.X.)
5266 Firth-Brown D-63 (Firth F.N.5)
5267 Firth-Brown D-65 (Atlas A.T.C.V.)
5268 Firth-Brown E-80 (Duratlas)
5269 Firth-Brown E-82 (Firth Bolt Steel)
5270 Firth-Brown E-83 (Atlas N.C. 100)
5271 Firth-Brown F-103 (Atlas N.C.C.H.)
5272 Firth-Brown G-120 (Nitralloy Grade 1)
5273 Firth-Brown G-121 (Nitralloy Grade 3)
5274 Firth-Brown G-122 (Nitralloy Grade 5)
5275 Firth-Brown G-123 (Nitralloy Grade 7)
5276 Firth-Brown H-140
5277 Firth-Brown H-141
5278 Firth-Brown H-142
5279 Firth-Brown H-143
5280 Firth-Brown H-144
5281 Firth-Brown H-145
5296 Firth-Brown L-223 (Firth "T" Brand)
5297 Firth-Brown L-224 (Firth "U" Brand)
5298 Firth-Brown L-225 (Firth Textile Spindle)
5299 Firth-Brown M-241 (Firth T.M.S.)
5300 Firth-Brown M-242 (Firth M.C.T.)
5301 Firth-Brown M-243 (Trutap)
5302 Firth-Brown M-244 (Atlas Self-Hardening Chisel)
5303 Firth-Brown M-245 (Firth Extra W.C.S.)
5304 Firth-Brown M-246 (Firth Extra W.C.S.)
5305 Firth-Brown M-247 (Firth T.C.C.; Brown's Special X Punch)
5306 Firth-Brown M-248 (Firth Hacksaw Steel)
5307 Firth-Brown M-249 (Firth Extra Superior)
5308 Firth-Brown M-250 (Wolfram C.S.)
5309 Firth-Brown M-251 (Lascut)
5310 Firth-Brown M-252 (Firth 5 C.S)
5311 Firth-Brown M-253 (Firth C.Y.W)
5312 Firth-Brown M-255 (Firth Extra Hard Sheet)
5313 Firth-Brown M-256 (Firth C.C.W)
5314 Firth-Brown M-258 (Stanslog)
5315 Firth-Brown M-259 (Firth B.R.B.)
5316 Firth-Brown M-260
5317 Firth-Brown M-262 (Dylasta)
5318 Firth-Brown O-275 (Firth N.M.C)
5319 Firth-Brown P-280 (Foundry Aa)
5320 Firth-Brown P-281 (Tungsten Magnet)
5321 Firth-Brown P-282 (Tungsten-Chromium Magnet)
5322 Firth-Brown P-283 (Tungsten Cobalt Magnet)
5323 Firth-Brown Q-300
5324 Firth-Brown Q-301
5325 Firth-Brown Q-302
5326 Firth-Brown Q-303
5327 Firth-Brown Q-304
5328 Firth-Brown Q-305
5329 Firth-Brown Q-306
5330 Firth-Brown Q-307
5332 Firth-Brown R-320
5333 Firth-Brown R-321
5334 Firth-Brown R-322
5335 Firth-Brown R-323
5336 Firth-Brown SO340 (Foundry "A")
5337 Firth-Brown S-341 (Foundry "B Mild")
5338 Firth-Brown S-342 (Foundry "B")
5339 Firth-Brown S-343 (Foundry "C")
5340 Firth-Brown S-344 (Foundry "D")
5341 Firth-Brown S-345 (Foundry "E")
5342 Firth-Brown T-360 (Foundry "A.Mn")
5343 Firth-Brown T-361 (Foundry "C.Mn")
5344 Firth-Brown T-362 (Foundry "N.C.")
5345 Firth-Brown T-363 (Foundry "N.C.Mo")
5346 Firth-Brown T-364 (Foundry "C.Cr")
5347 Firth-Brown T-365 (Foundry "A.Mo")
5348 Firth-Brown T-366 (Foundry "B.Mo")
5349 Firth-Brown T-367 (Fonndry "A.Mn.Mo")
5350 Firth-Brown T-368 (Adamant T.M.)
5351 Firth-Brown T-369 (Adamant A)
5352 Firth-Brown T-370 (Adamant G.R.)
5353 Firth-Brown T-371 (Adamant H.P.)

5354 Firth-Brown T-372 (Adamant Extra)
5355 Firth-Brown T-373 (Foundry "Pilger Roll")
5356 Firth-Brown T-374 (Foundry "Mn 12")
474 Firth Cast Steel
475 Firth Diehard Steel
476 Firth Extra Cast Steel
477 Firth F. 65
478 Firth FCN-3
479 Firth FCN-5
480 Firth FCNC
481 Firth FN-3
482 Firth FNC
483 Firth FT-30
484 Firth FT-40
485 Firthite
486 Firth Non-Var
487 Firth Pnusnap
488 Firth RBD
2575 Firth RT
4379 Firth Sixleda
733 Mesmeric
894 Permant Steel
1034 Speedicut Leda
1035 Speedicut Maximum 22
1635 Speedicut 14
1634 Speedicut Maximum 18
1038 Staybrite Steel

M-57 Firth-Sterling Steel Co., McKeesport, Pennsylvania

8549 A.S.V.
4540 A.W. Special
7233 B.C. Hotwork
5049 Best
198 Blue Chip
4537 C.Y.W. Choice
6351 Chimo
289 Circle C
9009 Cromoco
359 Cromovan
9049 D 29
7234 Demmler "D"
7235 Diamond "M"
4539 Double Special
4535 Extra
472 Firthaloy
9493 Firth Best Tool
485 Firthite
6350 Firthite Grade AAV
6344 Firthite Grade H
9494 Firthite Grade HA
9495 Firthite Grade HB
9496 Firthite Grade HC
9497 Firthite Grade HD
9498 Firthite Grade HD3
9499 Firthite Grade HE
9500 Firthite Grade HF
6346 Firthite Grade H-13
6349 Firthite Grade ND
9671 Firthite Grade ND 20
9672 Firthite Grade TA
9673 Firthite Grade TO 4
6347 Firthite Grade T-41
9674 Firthite Grade T 89
9675 Firthite Grade T 89 M
9676 Firthite Grade T 90
6348 Firthite Grade XDL
6345 Firthite Grade XS
489 Firth-Sterling JS Steel
2202 Firth-Sterling Nirosta KA-2
3720 Firth-Sterling Stainless A
3721 Firth-Sterling Stainless B
3722 Firth-Sterling Stainless T
6365 F-S Nirosta FC
6352 F-S Nirosta KA-2S
6353 F-S Nirosta 19-9
6354 F-S Stainless TX
5148 F-S Stainless Type BHH
5149 F-S Stainless Type M
7236 Globe Drill Rod
10025 H.M. Blue Chip
10098 H.V. Blue Chip
10099 H.W.D.
4541 Invaro
5051 L.T. Steel
6343 Meteor
10268 Mo Chip
10269 Mo Chip Superior
7237 N.D. Forging Steel
7238 Red Seal Die Steel
4538 R.T. Steel
5050 Silver Star
4534 Special
5048 Special A.S.V.
7240 Special XX
7239 Special Piston Steel
10864 Star Mo
4536 Sterling
7241 Sterling "M" Drill
10870 Sterling TX
7242 Sterling V (Punch)
7243 Sterling V (Shearknife)
7244 Sterling V (Tap)
7245 Sterling XX
1415 Sterling Nitrard No. 1
3724 Sterling Stainless Type BH
4394 Sterling Stainless Type FC
3725 Sterling Stainless Type H
3726 Sterling Stainless Type M
3727 Sterling Stainless Type MG
10914 Super Mo-Chip High Speed
11651 Super Star Mo
4542 Triple Die
7246 Tungsten Tap Steel
6355 X.D.H.
7247 X.D.L.
5052 X.D.M.

M-521 Firth-Vickers Stainless Steels, Ltd., Sheffield, England (Parent companies—English Steel Corp., Ltd.; Thos. Firth & John Brown, Ltd.)

5290 Firth-Vickers FAS
5291 Firth-Vickers SLV
5294 Firth-Vickers HR Crown Max
6287 Firth-Vickers HR-2610
6288 Firth-Vickers Immaculate No. 4W
2428 Firth-Vickers Immaculate No. 5
2429 Firth-Vickers Immaculate No. 6

2431 Firth-Vickers Immaculate No. 9
1699 Firth-Vickers Pyrista
5282 Firth-Vickers Stainless Iron
5283 Firth-Vickers Stainless Steel Type FG
5284 Firth-Vickers Stainless Steel Type FH
5287 Firth-Vickers Staybrite DDQ
5289 Firth-Vickers Staybrite FDP
5288 Firth-Vickers Staybrite FMB
5286 Firth-Vickers Staybrite F&T
6284 Firth-Vickers S.80
5292 Firth-Vickers Vesuvius
1159 Firth-Vickers Vikro

M-378 Fisher Scientific Co., Pittsburgh, Pennsylvania
3544 Castaloy

M-894 Fitzsimons Company, Youngstown, Ohio
10817 Speed Case X 1515
10820 Speed Treat X 1545

M-806 Follansbee Bros. Co., Follansbee, West Virginia
11924 Armature Electric
11930 Extra Special Power Trausformer 52-58
9720 Follansbee Radio C No. 9
9721 Follansbee Radio D No. 8
9722 Follansbee Regular Power Transformer
9723 Follansbee Special Dynamo No. 4
9724 Follansbee Special Motor No. 3
9725 Follansbee Special Power Transformer
11925 Improved Electric
11928 Regular Power Transformer No. 72
11927 Special Dynamo
11929 Special Power Transformer No. 65
11926 Special Motor

M-679 Fonderie de Precision Nanterre, Paris, France
8433 Aluvac
9622 Laitovac

M-804 Foote Bros. Gear & Machine Corp., Chicago, Illinois
9700 Five Point Deep Hard Steel

M-439 Forging & Casting Corp., Ferndale, Michigan
(Parent company—Allegheny Ludlum Steel Co., q.v.)
7277 F.C.C. C.M.S.
7275 F.C.C. Air Hardening Cast-to-Shape
7606 F.C.C. Air-Hardening No. 48M
7276 F.C.C. Carbon Tool Steel Cast-to-Shape
5754 F.C.C. Oil Hardening
7607 F.C.C. Oil Hardening Cast-to-Shape
9437 F.C.C. Nitricastiron
1715 F.C.C. No. 1
7248 F.C.C. No. 2
7249 F.C.C. No. 4
7250 F.C.C. No. 5
7251 F.C.C. No. 6
7252 F.C.C. No. 7
7253 F.C.C. No. 10
7254 F.C.C. No. 11
1717 F.C.C. No. 14
7255 F.C.C. No. 17 Cast-to-Shape
1718 F.C.C. No. 19
7257 F.C.C. No. 20
7258 F.C.C. No. 21
1719 F.C.C. No. 22
7259 F.C.C. No. 23
7260 F.C.C. No. 25
7261 F.C.C. No. 26
7262 F.C.C. No. 27
7263 F.C.C. No. 34M
7264 F.C.C. No. 38M
7265 F.C.C. No. 39
7266 F.C.C. No. 41M
7267 F.C.C. No. 44
7268 F.C.C. No. 46M
7269 F.C.C. No. 47M
7270 F.C.C. No. 49
7271 F.C.C. No. 53
9436 F.C.C. No. 55
7272 F.C.C. No. 66
7273 F.C.C. No. 66 Cast-to-Shape
7279 F.C.C. TMS Cast-to-Shape
9435 F.C.C. No. 5X 1
5150 Fernite No. 1
5151 Fernite No. 2
5152 Fernite No. 3
5153 Fernite No. 4
5154 Fernite No. 5
5155 Fernite No. 6
5156 Fernite No. 7
5157 Fernite No. 8
5158 Fernite No. 9
10638 P. R. K. 33

M-164—Fort Pitt Steel Casting Co., McKeesport, Pennsylvania
1107 Tufaloy Steel

M-430 Fox, Samuel, & Co., Ltd., Sheffield, England
(Parent Company—United Steel Companies, Ltd., q.v.)

6310 B.K.L.
4188 Durehete
4984 Fox No. 001
4985 Fox No. 002 "Mancase"
4986 Fox No. 012
4987 Fox No. 013
4988 Fox No. 015
4973 Fox No. 030 Ni-Cr Case-Hardening
4989 Fox No. 031 Hicore "75"
4990 Fox No. 040 Hicore "90"
4991 Fox No. 120 Tormanc
4992 Fox No. 130 Tormanc Major
4993 Fox No. 140 Oil Hardening Steel
5004 Fox No. 143 DuNic
4994 Fox No. 144 Oil Hardening Steel
4995 Fox No. 145 Oil Hardening Steel
4996 Fox No. 146 Oil Hardening Steel
4997 Fox No. 171 Oil Hardening Steel
4998 Fox No. 172 Oil Hardening Steel
4999 Fox No. 174 Air Hardening Steel
5000 Fox No. 190 Oil Hardening Steel
5001 Fox No. 200 Oil Hardening Steel
5002 Fox No. 211 Oil Hardening Steel
5003 Fox No. 213 Air Hardening Steel
4969 Fox No. 221 Nitralloy Steel
4970 Fox No. 223 Nitralloy Steel
4971 Fox No. 225 Nitralloy Steel
4972 Fox No. 227 Nitralloy Steel
11004 Red Fox 10
11005 Red Fox 11
11006 Red Fox 12
11007 Red Fox 21
11008 Red Fox 31
6305 Rokbore
6312 S.D.S.
4975 Silver Fox 10
4976 Silver Fox 11
4977 Silver Fox 12
4978 Silver Fox 13
6311 Silver Fox 14
4979 Silver Fox 17
4980 Silver Fox 18
4981 Silver Fox 20
6302 Silver Fox 21
4982 Silver Fox 22
4983 Silver Fox 24
6306 Tally-Ho 100
6307 Tally-Ho 200
6308 Tally Ho 300
6309 Tally-Ho 400
5958 Tormol
4974 Valmax ⅓

M-571 Frank Foundries Corp., Moline, Illinois

9731 Frankite E-212
6709 Frankite E-450
9732 Frankite E-604
6710 Frankite E-821
6711 Frankite E-822
9733 Frankite E 830N
6712 Frankite E-831
6713 Frankite E-832
11429 Wearloy

M-58 Frontier Bronze Corp., Niagara Falls, New York

3414 Frontier Alloy No. 3
498 Frontier Alloy No. 5
3415 Frontier Alloy No. 6
3416 Frontier Alloy No. 7
3417 Frontier Alloy No. 8
3418 Frontier Alloy No. 9
3419 Frontier Alloy No. 10
225 Frontier Alloy No. 11
3421 Frontier Alloy No. 14
3422 Frontier Alloy No. 15
3423 Frontier Alloy No. 18
3424 Frontier Alloy No. 20
3425 Frontier Alloy No. 28
3426 Frontier Alloy No. 29
3427 Frontier Alloy No. 30
3428 Frontier Alloy No. 32
9739 Frontier Alloy No. 38
9743 Frontier Alloy No. 88
9741 Frontier Aluminum Alloy No. 40 E

M-808 Fuller & Basch, U.S.A.

9744 Fuller Alloy

M-809 Fulton Iron Works, St. Louis, Missouri

9745 Fultalloy

M-854 G.H.R. Foundry Co., Dayton, Ohio

10234 Miarmi

M-407 Gabriel & Co., A. B. Row, Birmingham, England

4778 Clarus Metal

M-409 Gallimore & Sons, Ltd., Wm., Sheffield, England

4783 Gallimore Metal

M-287 Garford Engineering Co., Garford, Indiana

14 Aero Metal

M-550 Garrett Brass & Aluminum Foundry Co., Garrett, Indiana

6524 Stabrite

M-782 Gautier & Co., D. G., New York, New York

9373 Extra G
10806 Special G
10857 Standard G

M-59 General Alloys Co., Boston, Massachusetts

5159 Economet
1377 Genalloy
6855 Q Alloy A
5759 Q-Alloy A plus
1586 Q Alloy "B"
6975 Q-Alloy "B-Si"
1589 Q-Alloy C-1
1590 Q-Alloy C-2
1591 Q-Alloy C-3
1587 Q-Alloy C-N-1
5761 Q-Alloy CN-1 Mo
1588 Q-Alloy C-N-2
10943 Q Alloy C-N-2-Mo
10440 Q Alloy Chrome C-1
6856 Q-Alloy Chrome C-1A
10941 Q Alloy Chrome C-2
6857 Q-Alloy Chrome C-2A
6858 Q-Alloy Chrome C-2B
6859 Q-Alloy Chrome C-2C
6860 Q-Alloy Chrome C-2D
6861 Q-Alloy Chrome C-2E
10942 Q Alloy Chrome C-3
6862 Q-Alloy Chrome C-3A
6863 Q-Alloy Chrome CN-1A
6864 Q-Alloy Chrome CN-1B
6865 Q-Alloy Chrome CN-1H
6976 Q-Alloy "CN-1H Mo"
6866 Q-Alloy Chrome CN-1S
6867 Q-Alloy Chrome CN-2A
6868 Q-Alloy Chrome J
6869 Q-Alloy Chrome KA-2
6870 Q-Alloy Chrome KA-2H
6871 Q-Alloy Chrome KA-2Mo
6872 Q-Alloy Chrome KA-2S
6873 Q-Alloy Chrome KA-4
6874 Q-Alloy Chrome KNC-3
935 Q-Alloy K-1
5760 Q-Alloy X-7
10656 Sea Steel
11497 X-B
1189 X-Ite

M-60 General Electric Co., Schenectady, New York

12062 Alnico I
12063 Alnico II
12064 Alnico III
12065 Alnico IV
12066 Alnico V
7281 Alnico
12069 Cunico
12070 Cunife
516 Genelite
734 Metite
12067 Silver Magnet Alloy
7283 Trodaloy No. 1
11228 Trodaloy No. 7
1108 Tungsten
11034 Vectalite
12068 426 Alloy

M-831 General Electric, Ltd., Wembley, England

9838 Heavy Alloy

M-165 General Motors Corp., Dayton, Ohio
(Moraine Products Co. is subsidiary)

370 Cylinder Iron
232 Hard Bronze
711 Manganese Casting Brass
944 Red Casting Brass

M-926 General Plate Co., Attleboro, Massachusetts

11235 Truflex A
11236 Truflex A2
11237 Truflex B
11238 Truflex B-2
11239 Truflex B-12½
11240 Truflex B-15

11241 Truflex B-20
11242 Truflex B-25
11243 Truflex B-30
11244 Truflex B-35
11245 Truflex B-40
11246 Truflex B-47
11247 Truflex D
11248 Truflex E
11249 Truflex E-2
11250 Truflex F
11251 Truflex G
11252 Truflex G-2
11253 Truflex H
11254 Truflex J
11255 Truflex K
11256 Truflex L
11257 Truflex M
11258 Truflex N
11259 Truflex O
11260 Truflex Q
11261 Truflex R
11262 Truflex T

M-797 General Tool & Die Co., East Orange, New Jersey

9616 Kut Kost
9617 Kut Kost Grade V
9618 Kut Kost Grade X
9619 Kut Kost Grade XV
9620 Kut Kost Grade XX

M-650 Gibson Electric Co., Pittsburgh, Pennsylvania

9780 Gibsiloy
9781 Gibsiloy Grade A
9782 Gibsiloy Grade C
9784 Gibsiloy Grade M
9785 Gibsiloy Grade NC
9786 Gibsiloy Grade ND
9787 Gibsiloy Grade NM
9788 Gibsiloy Grade NW
9789 Gibsiloy Grade N.W. 54
9790 Gibsiloy Grade N.W. 55
9791 Gibsiloy Grade W

M-817 Gilmore & Co., F. F., Boston, Massachusetts

9794 Gilmore Nickel Alloy

M-609 Gimo-Osterby Bruks, A.B., Gimo, Sweden (Also known as Dannemora Iron & Steel Works, Subsidiary of Brukskoncernen A.B., q.v.)

M-284 Giulini Werke A.-G., Rohrsbach, Germany

56 Aludur
1706 Aludur 533D
1707 Aludur 570D

M-586 Glacier Metal Co., Richmond, Virginia

9779 Genuine Silverine
7682 Genuine Sovereign Babbitt
11313 Union

M-818 Glacier Metal Co., Ltd., The, Alpertone, Middlesex, England

9795 Glacier Precision Finished Lead Bronze

M-528 Goldschmidt, Th., A. G., Abteilung Metalle, Essen, Germany

1079 Thermit
6290 Tego

M-458 Goodlass Wall and Lead Industries, Ltd., London, England

491 Teledium

M-820 Gorham Tool Co., Detroit, Michigan

9812 Gorham Imperial
9813 Gorham Imperial 9
9814 Gorham Molybdenum
9815 Gormet

M-816 Grammar, Dempsey & Hudson, Newark, New Jersey

9772 G.D.H. Blue Label
9773 G.D.H. Bronze Label
9774 G.D.H. Red Label
9775 G.D.H. Silver Label
12119 G.D.H. No. 33 Hot Work
12117 G.D.H. No. 212 Alloy Shock Resisting
12118 G.D.H. No. 280
12116 G.D.H. No. 350 Fast Finishing

M-633 Granite City Steel Co., Granite City, Illinois

9821 Granator
9822 Granature
9823 Granelec
9824 Granformer
9825 Granimo
9826 Gransil
7491 Granite City Hi-Yield No.
7492 Granite City Hi-Yield No. 2

M-806 Grant & West, Ltd., England

9711 Flinso

M-247 Graphite Metallizing Corp., Yonkers, N. Y.

524a Graphalloy
9828 Graphalloy Grade A
9829 Graphalloy Grade N
9830 Graphalloy Grade O
9531 Graphalloy Grade S
524b Graphalloy Copper
524c Graphalloy Silver
524d Graphalloy Cadmium

M-821 Graphitized Alloy Corp., New York, New York

9816 Grac

M-596 Grasselli Chemical Co., Cleveland, Ohio

7039 Sodium-Lead
6725 Sodium-Zinc Alloy

M-766 Great Lakes Steel Co., Division of National Steel Corp., Detroit, Michigan

9167 Ductiloy
10380 N-A-X- High Tensile
11932 N-A-X X9100 Series
11933 Michigan Metal
11931 N-A-X 9100 Series

M-949 Grey Mfg. Co., C. M., East Orange, New Jersey

11503 Z-2
11684 Z-3

M-729 Geyer, A., France

8762 Carbium

M-380 "Griesogen" Griesheimer Autogen Verkaufs G.m.b.H., Griesheim a.M., Germany (Subsidiary of I.G. Farbenindustrie A.G.)

3434 Rauchlos
3482 Sudalon A
3484 Sudalon C
3481 Sudal
3483 Sudalon B
3435 Sini

M-223 Gunite Foundries Corp., Rockford, Illinois

527 Gunite
1212 Z-Metal

M-108a Gutta Percha Co., London, England

(See parent company—Telegraph Construction and Maintenance Co.)

M-825 Hackett Brass Foundry, Detroit, Michigan

9850 Hackett K. Copper

M-62 Hadfields, Ltd., Sheffield, England

7681 "Era A.T.V."
532 Hadfields "Era C.R."
548 Hecla A.T.V.
446 Era Manganese Steel
533 Hadfields "Era G.R."
5950 Galahad
534 Hadfield Silicon Steel

M-260 Halcomb Steel Division, Crucible Steel Co. of America, Syracuse, New York (See Crucible Steel Co. of America also)

4548 Air Hardening
7641 Auto No. 1
1771 Baltoc
7642 C. C. Chisel
7643 Chrome Ball Steel
7644 Chrome Bearing Steel
7645 Chrome Magnet M-31
7646 Chrome Magnet No. 154
7647 Chrome Moly Roll
7648 Chrome Vanadium
7649 Cobalt Magnet Steel 17%
7650 Cobalt Magnet Steel 36%
9012 Croniting
4332 Extra Special
3838 Extra Warranted
3870 Halco
3872 Haldi
7656 Haldi No. 2
4547 Halcomb C.C.S.
7651 Halcomb C.S.M.
9853 Halcomb C.S.M. No. 2
9852 Halcomb Cold Hubbing Steel
2673 Halcomb Double Special
2382 Halcomb Dreadnought
3871 Halcomb Halcut
2672 Halcomb High Speed
7652 Halcomb Hot Work
3915 Halcomb L.C.T.
7653 Halcomb L.C.T. No. 2
3917 Halcomb L.L.C.T.
7654 Halcomb Mix 218
9855 Halcomb Nu Die
3975 Halcomb Pyro
2670 Halcomb S.R.B.
2671 Halcomb Special
5053 Halcomb Standard
4029 Halcomb Super Dreadnought
7655 Halcomb Super Van Dreadnought
4045 Halcomb Thermo Die
5054 Halcomb 999
7657 Hoballoy
2708 Ketos
7658 Krosil
3902 Krovan
3916 Liberty
3922 Marathon
10292 Mo Van
3936 No. 2 B
10393 NCR 238
7659 Needle Wire
4550 Peerless Cold Header Die
7782 Rex T-Mo
1595 Rezistal 2C
7010 Rezistal CW
1596 Rezistal 4
1597 Rezistal 7
6929 Rezistal FM-18-8
5136 Rezistal Lo Cro 46W
7134 Rezistal KA-2
7011 Rezistal KA-2 Mo T
1592 Rezistal KA-2S
7012 Rezistal KA-2S Mo T
6934 Rezistal KA-2S Mo
5169 Rezistal NCR 238

7014 Rezistal Safweld KA-2 T
7013 Rezistal Safweld KA-2S T
6936 Rezistal Stainless B-100
2512 Rezistal Stainless Iron No. 12
6937 Rezistal Stainless Iron No. 17
6938 Rezistal Stainless Iron No. 20
6939 Rezistal Stainless Iron No. 27
4300 Rezistal Stainless Iron FM-2
3562 Rezistal Stainless Steel Grade A
3563 Rezistal Stainless Steel Grade B
7661 SS Tool
7660 Silico Manganese Spring Wire
4006 Special
1186 Thermo
7662 Tungsten Magnet M-5
7663 Tungsten Magnet M-6
7664 Wortle Die No. 1
7665 Wortle Die No. 4
7666 Wortle Die No. 5

M-850 Hamilton Foundry & Machine Co., Hamilton, Ohio

10191 Meehanite B
10192 Meehanite C
10193 Meehanite CB
10194 Meehanite CBB
10195 Meehanite CC
10196 Meehanite D
10197 Meehanite E
10198 Meehanite GA
10199 Meehanite GAH
10200 Meehanite GB
10201 Meehanite GC
10202 Meehanite GD
10203 Meehanite GE
10204 Meehanite GM
10205 Meehanite HA
10206 Meehanite HB
10207 Meehanite HC
10208 Meehanite HD
10209 Meehanite HE
10210 Meehanite HR
10211 Meehanite KC
10212 Meehanite SC
10213 Meehanite WA
10214 Meehanite WAH
10215 Meehanite WB
10216 Meehanite WBC

M-992 Hammond Brass Works, Hammond, Indiana

11951 Hammond Alloy 1
11959 Hammond Alloy 2
11952 Hammond Alloy 3
11953 Hammond Alloy 4
11954 Hammond Alloy 5
11955 Hammond Alloy 6
11956 Hammond Alloy 7
11964 Hammond Alloy 8
11960 Hammond Alloy 9
11965 Hammond Alloy 10
11957 Hammond Alloy 11
11966 Hammond Alloy 12
11958 Hammond Alloy 13
11967 Hammond Alloy 14
11968 Hammond Alloy 15
11969 Hammond Alloy M-16
11970 Hammond Alloy M-17
11971 Hammond Alloy M-18
11972 Hammond Alloy M-19
11973 Hammond Alloy M-20
11974 Hammond Alloy A-21
11975 Hammond Alloy A-22
11976 Hammond Alloy A-23
11977 Hammond Alloy A-24
11978 Hammond Alloy A-25
11979 Hammond Alloy A-26
11980 Hammond Alloy A-27

M-697 Hammond & Irving, Inc., Auburn, New York

8578 Auburn Cast
8579 Auburn Extra
8580 Auburn Hot Die
8581 Auburn Perfection
8582 Auburn Special
8583 Auburn Standard
8584 Auburn Tool Maker

M-361 Hand, Edward L., Philadelphia, Pennsylvania
(Distributor for Wm. Jessop & Sons, Inc., Sheffield, England, q.v.)

M-63 Handy & Harman, New York, N. Y.

6301 Easy Flo
1319 Fine Silver
5745 Handy & Harman Coin Silver
4199 Handy Silver Solder "ATT"
4190 Handy Silver Solder "BT"
4194 Handy Silver Solder "DE"
4195 Handy Silver Solder "DT"
9859 Handy Silver Solder Easy
4193 Handy Silver Solder "ET"
4192 Handy Silver Solder "ETX"
9860 Handy Silver Solder Hard
9861 Handy Silver Solder Hard No. 1
4189 Handy Silver Solder "IT"
9862 Handy Silver Solder Medium
4198 Handy Silver Solder "NE"
4197 Handy Silver Solder "NT"
4191 Handy Silver Solder "RT"
4196 Handy Silver Solder "SS"
4200 Handy Silver Solder "TL"
999 Sil-fos
1053 Sterling Silver

M-827 Hancock Valve Division, Bridgeport, Connecticut
9878 Hancodur

M-316 Hans-Heinrich Hütte, G.m.b.H., Langelsheim a.H., Germany (Metallgesellschaft A.G. affiliate)
1698 Bahn metall (B-Metal)

M-833 Hansell-Elcock Co., Chicago, Illinois
9905 Helco H-40
9907 Helco HD-50
9908 Helco HD-60
9906 Helco H-140

M-580 Hanson-Van Winkle-Munning Co., Matawan, New Jersey
7630 Z.A.
6617 Z.A.M.

M-502 Hardenite Steel Co., Ltd., Sheffield, England
5954 Hardenite
942 Helve
1753 Monarch
1700 Sahib

M-799 Hardy & Co., Charles, New York, New York
10611 Powder-Braze
10754 Sinterloy Steel A
10755 Sinterloy Steel B
10756 Sinterloy Steel C

M-828 Harnischfeger Corp., Milwaukee, Wisconsin
9863 Harchrome
9876 Harmomang
9877 Harmomang B
9878 Harnimoly
8234 P & H Harcote
10493 P & H Smootharc
10765 Smootharc AP
10766 Smootharc DH
10767 Smootharc FR
10768 Smootharc Hardcast
10769 Smootharc Harcote
10770 Smootharc Harmang
10771 Smootharc Harni
10772 Smootharc Har-Ten
10773 Smootharc LG
10774 Smootharc Lite Cote
10775 Smootharc PF
10776 Smootharc WC
10777 Smootharc 110

M-310 Harrison, Fischer & Co., Ltd., Sheffield, England
793 Newloy

M-830 Harvill, H. L., & Co., Los Angeles, California
9880 Harvill No. 1
9881 Harvill No. 2
9882 Harvill No. 3
9883 Harvill No. 4

M-497 Hassall & Sons, Wm., Manchester, England
5955 Has-All

M-897 Hatfield, W. H., Sheffield, England
10865 Stayblade Max

M-362 Hawkridge Bros., Boston, Massachusetts
9154 Double Special
9165 Dreadnought
3874 Hawk Brand
9887 Hawk Cold Header Die
3875 Hawk H
9888 Hawk Impacto
9891 Hawk Prefak
3876 Hawk Special
3877 Hawk Vanadium
9889 Hawk 777
9890 Hawk 977
9850 Ketos
9602 Krosil Chisel Steel
9603 Krovan
9656 Liberty
11047 Rezistal Safweld
10986 Stainless Steel Grade A
10985 Stainless Steel Grade B
10947 Stainless Steel Grade H.C.
10983 Standard
11560 Thermo Die
11380 V M Dreadnought
11491 Wortle No. 4 Drawing Die

M-167 Haynes-Stellite Co., Kokomo, Indiana
8920 Coast Metal
542 Hascrome
543 Hastelloy A
9884 Hastelloy B
545 Hastelloy C
544 Hastelloy D

546 Haystellite
9892 Haynes 93
10490 Haynes Stellite
10862 Star J. Metal
1612 Stellite No. 1
1613 Stellite No. 2
1614 Stellite No. 3
1615 Stellite No. 4
1616 Stellite No. 6
1618 Stellite No. 12
9892 Stellite No. 93 Alloy
10490 Stellite No. 2400
10867 Stellite 98M-2
1408 Stellite J-Metal

M-411 Haywood's NCA Metal, Ltd., London, England

4784 Haywood's High Tensile Bronze Grade 8
4792 Haywood's N.C.A. Alloy

M-841 Hadstrom, Oscar W., Pattern Works, Chicago, Illinois

9953 O H 38 Aluminum Alloy

M-343 Heller Bros. Co., Newark, New Jersey

6342 Blue Label
2215 Brown Label, Hot Die
7040 Die L
3860 Gray Label
9838 Gray Label Stayput
5055 Green Label
2269 Gold Label, Peerless Special
4553 Heller's Hollow Drill
7256 Heller's 70-20M
7393 Heller's 70-20V
3949 Orange Label
9968 Orange Label Special Alloy Tool Steel
4554 Peerless Special
7394 Purple Label
4328 Red Label, Peerless
10732 Silver Label
4165 White Label, Electric Tool
4551 Yellow Label

M-488 Hemmings & Co., Rotherham, England

5984 Park Gate

M-64 Heppenstall Co., Pittsburgh, Pennsylvania

8744 C 55
9256 E.I.S. 14
9257 E.I.S. 15
9258 E.I.S. 41
493 E.I.S.-42, Kleenkut
9259 E.I.S. 43
549 E.I.S. 45
3879 E.I.S. 51
9260 E.I.S. 57
9261 E.I.S. 73
9262 E.I.S. 76
9263 E.I.S. 79
9264 E.I.S. 97
9265 E.I.S. 717
539 Hardtem
740 Heppenstall 2C-30
9915 Heppenstall 2V90
9916 Heppenstall 3N24
9917 Heppenstall Grade 3N25
9918 Heppenstall 3R40
9919 Heppenstall 5H50
550 Heppenstall X-60
3646 Heppenstall Grade "C" Steel
9920 Heppenstall Grade C-45
9921 Heppenstall Grade C-55
10634 Pyrodie
10674 S. H. 50
11221 Trimmax
11521 11A45

M-296 Heraeus-Vacuumschmelze A.-G., Hanau, Germany

8294 Alba
8295 Alba G
8296 Alba K
8297 Alba Lot
8298 Alba O
8299 Alba P
1511 Bertydur
1692 Beryllium Bronze, .1% Be
1693 Beryllium Bronze, 1.5% Be
1694 Beryllium Bronze, 2.0% Be
175 Beryllium Bronze 2.5% Be
1695 Beryllium Manganese Bronze, 1% Be
1696 Beryllium Manganese Bronze, 1.5% Be
1499 Chroman Ao
1500 Chroman B
1501 Chroman Bo
1502 Chroman C
1503 Chroman Co
1504 Chroman D
1505 Chroman E
8951 Contracid
1491 Contracid B-2.5M
1492 Contracid B-4M
1493 Contracid B-6W
1494 Contracid B-7M
1495 Contracid B-10W
1496 Contracid B-W-M-C
10455 Nivarox

M-482 Herbert, Ltd., Alfred, Coventry, England

5831 Ardoloy

M-605 Hevi Duty Electric Co., Milwaukee, Wisconsin

8375 Alloy No. 10
6643 Smith Alloy No. 10

M-959 Hewitt Metals, Detroit, Michigan

11576 Benson
11682 Hewitt Copper-Hard
11683 Hewitt Genuine
9558 Hewitt Mill
9584 Hewmet
11695 Mocar
11710 Prize Ribbon
11711 Radium A
11659 Waraloy 20X Solder
11660 Waraloy 30X Solder

M-344 Hidalgo Steel Co., Inc., New York, N. Y.

2211 B M S
4910 Chrome B
2229 Chrome B-15
8921 Cobalt
2232 Colosso
3579 Dixie No. 3
3880 Hidalgo
9930 Hidalgo No. 48 Alloy
9931 Hidalgo R.L.
3884 Hollo
4912 Janus
9544 Jono
3895 K.D. No. 6
3896 K.D. No. 10
3925 Milo
10463 No. 38 Milo
10979 Sardo
4017 Special
10804 Special D
4064 Triple Express A
4065 Triple Express B
4076 Unico
4911 Uranus Extra
11319 Uso
11320 Uso AD
11321 Uso HE
11322 Uso NS
11323 Uso Special Vanadium
11325 Uso Tungsten
11326 Uso Vanadium
11327 Uso 5 S
11324 Uso 30CF
11553 Visto
4084 Visto Superior
4085 Weldo
4908 W-3 Tungsten
4909 W-9 Tungsten

M-562 Hiertz Metal Co., Theodore, St. Louis, Missouri

834 Non-Pareil

M-426 High Duty Alloys, Ltd., Slough, England
(See also subsidiary—Magnesium Castings & Products, Ltd.)

7285 Hiduminium Du Brand
7284 Hiduminium 72
559 Hiduminium R.R. 50
1749 Hiduminium R.R. 53
9933 Hiduminium RR 53 C
1750 Hiduminium R.R. 56
1751 Hiduminium R.R. 59
7415 Hiduminium R.R. 60
6608 Hiduminium R.R. 66
9934 Hiduminium RR 75
9935 Hiduminium RR 77
9936 Hiduminium RR 82
9937 Hiduminium RR S-12
7416 Hiduminium S.R.
7417 Hiduminium Y-Alloy

M-168 Hills-McCanna Co., Chicago, Illinois

4816 Hills-McCanna Alloy No. 1
4817 Hills-McCanna Alloy No. 2
4818 Hills-McCanna Alloy No. 10
4819 Hills-McCanna Alloy No. 11
4820 Hills-McCanna Alloy No. 20
4821 Hills-McCanna Alloy No. 21
4822 Hills-McCanna Alloy No. 25
4823 Hills-McCanna Alloy No. 30
4824 Hills-McCanna Alloy No. 35
4825 Hills-McCanna Alloy No. 40
4826 Hills-McCanna Alloy No. 41
4827 Hills-McCanna Alloy No. 42
4828 Hills-McCanna Alloy No. 45
4829 Hills-McCanna Alloy No. 46
4830 Hills-McCanna Alloy No. 47
4831 Hills-McCanna Alloy No. 50
4832 Hills-McCanna Alloy No. 50-A
4833 Hills-McCanna Alloy No. 52
4834 Hills-McCanna Alloy No. 53
4835 Hills-McCanna Alloy No. 54
4836 Hills-McCanna Alloy No. 55
10009 Hills-McCanna 20 P
10010 Hills-McCanna 22
10011 Hills-McCanna 30 A
10012 Hills-McCanna 30 B
10013 Hills-McCanna 30 C
10014 Hills-McCanna 39
10015 Hills-McCanna 43
10016 Hills-McCanna 48
10017 Hills-McCanna 49
10018 Hills-McCanna 102
10019 Hills-McCanna 102 P
10020 Hills-McCanna 105
10021 Hills-McCanna 110
10022 Hills-McCanna 111

M-340 Hobson, Houghton & Co., New York, N. Y.

1828 Albion High Speed
1829 Albion Tool
2187 Albion Special

4556	Hobson's Choice Drill Rods	4557	Hobson's Oil Hardening	4003	Soho
4330	Hobson's Choice XX	3882	Hobson's Non-Shrink	3942	No. 999
4558	Hobson's Fast Finishing	4555	Hobson's Special Tap Rods	3883	Warranted Best

M-798 Hoesch-Kohn-Nevessen, Dortmund, Germany

9476	Feran				

M-224 Hofors Steel Works, Hofors, Sweden
(See American Agent—S.K.F. Steels, Inc.)

10032	Hofors 1	10035	Hofors 9	10038	Hofors 46
10033	Hofors 3	10036	Hofors 13	10039	Hofors 100
10034	Hofors 7	10037	Hofors 22	10040	Hofors 711

M-638 Höganäs-Billesholms A.B., Höganäs, Sweden
(American Agent—Ekstrand & Tholand, Inc., New York, N. Y.)

4927	Sponge Iron				

M-844 Hollup Corp., Chicago, Illinois

10042	Hollup Blue Band	10061	Hollup Grade 22	10075	Hollup Grade R.D.S.
10043	Hollup Grade CI-3	10062	Hollup Grade 30	10074	Hollup Phos-copper
10044	Hollup Grade CI-8	10063	Hollup Grade 30A	10076	Hollup Red Band
10045	Hollup Grade CI-9	8319	Hollup Grade 30S	10077	Hollup Yellow Band
10046	Hollup Grade CI-10	81	Hollup Grade 30X	10995	Railwear
10047	Hollup Grade 1	9952	Hollup Grade 55	11039	Rex Cast Aluminum
10048	Hollup Grade 3	10736	Hollup Grade 70	11040	Rex Cast Iron
10049	Hollup Grade 3-R	11011	Hollup Grade 90	10926	Sureweld "A"
10050	Hollup Grade 5	10064	Hollup Grade 170E	10927	Sureweld "B"
10052	Hollup Grade 6	10065	Hollup Grade 250	10928	Sureweld "C"
10053	Hollup Grade 7	10066	Hollup Grade 1217	10929	Sureweld "F"
10054	Hollup Grade 9	10067	Hollup Grade 2320	10930	Sureweld "MLY"
10055	Hollup Grade 10	10068	Hollup Grade 2512	10931	Sureweld "N"
10056	Hollup Grade 10X	10069	Hollup Grade 6723	10932	Sureweld 450
10057	Hollup Grade 11	10070	Hollup Grade H.S.V.	10933	Sureweld 520
10058	Hollup Grade 15	10071	Hollup Grade I.H.S.	10934	Sureweld 550
10059	Hollup Grade 20	10072	Hollup Grade M.C.M.	10935	Sureweld 650
10060	Hollup Grade 20 B	10073	Hollup Grade N.C.	10936	Sureweld "TD"

M-169 Holroyd & Co., Ltd., John, Rochdale, England

5397	Holfos Bronze (Chill Bar Grade)	568	Holfos Bronze (Worm Wheel Grade)	7501	Spuncast Holfos Bronze
				5396	Super Holfos Bronze

M-995 Hopkinsons Ltd., London, England

2928	Platnam				

M-610 Horndal Jernverks A.B., Horndal, Sweden
(Subsidiary of Brukakoncernen A.B., q.v.)

M-65 Hoskins Mfg. Co., Detroit, Michigan

60	Alumel	1842	Chromel No. 502	4928	Spark Plug Electrode Wire Alloy No. 667 Nickel
278	Chromel A	5882	Chromel No. 670		
280	Chromel C	339	Copel		
281	Chromel D	11993	Hoskins No. 10		
282	Chromel P	6233	Hoskins Alloy 651		

M-363 Houghton & Richards, Inc., Boston, Massachusetts
(See also Böhler Bros. & Co.)

3834	Extra M.G.	3836	Extra Quality	3841	First Quality

4559 Gold Label
12175 H&R Carbon
10084 H&R Cobalt High Speed Steel
10085 H&R Gray Label
12174 H&R Heading Die Steel
10086 H&R Hot Work
12166 H&R Hot Work 2
12167 H&R Hot Work 4
12176 H&R Hot Work 5
12177 H&R Hot Work 6
12165 H&R Hot Work 15
10087 H&R K High Carbon High Chrome
10088 H&R K2 High Carbon High Chrome
10089 H&R MY-A
10082 H&R No. 1
10083 H&R No. 2
12173 H&R No. 4
12345 H&R No. 7
12179 H&R No. 19
12164 H&R No. 57
12171 H&R No. 60
10090 H&R No. 80
12170 H&R No. 225
10091 H&R Oil Hardening
12178 H&R Special Carbon
12350 H&R Super Cobalt
12172 H&R Tungsten Oil Hardening
10092 H&R Vanadium
3930 M.Y.
3931 M.Y. Extra
3932 New Rapid
4018 Special K
4022 Special Very Hard
4031 Super Rapid Extra
4561 White Label
4560 W.K.Z. Hot Work

M-908 Hoyland Steel Company, Inc., New York, New York

12233 C.W. Oil Hardening
12231 H.S.C.S.S. Extra Carbon
12237 H.S.C. No. 33
12234 H.S.C. No. 265 Hi Carbon Hi Chrome
12238 H.S.C. No. 280
12236 H.S.C. No. 350
12235 H.S.C. No. 422
12232 S.S. Extra Cold Heading

M-428 Hoyt Metal Co., New York, N. Y.
(Note Hoyt Metal Company of Great Britain)

3194 Standard No. 4 Babbitt
3237 Trojan Babbitt

M-317 Hoyt Metal Co. of Great Britain Ltd., London, England

6648 Hoyt I.C.E.
6649 Hoyt Arrow
6646 Hoyt Marine A
6647 Hoyt Marine B
3648 Hoyt Metal
4785 Hoyt's No. Eleven Bearing Metal
6650 Hoyt No. 1
6772 Hoyt No. 1 Phosphor Bronze
6652 Hoyt No. 3M
6653 Hoyt No. 4A
6773 Hoyt No. 175
6651 Hoyt Star Brand
3194 Standard No. 4 Babbitt Metal

M-225 Hubbard Steel Foundry Co., E. Chicago, Indiana
(See Continental Roll & Steel Foundry Co., Successor)

M-890 Hueck, Edward, Ludenscheid, Germany

10720 Silal V

M-784 Hughes & Company, Ltd., F. A., London, England

12218 Elektron A. 8
12220 Elektron A.M. 503
12223 Elektron A.M. 537
12217 Elektron A.Z. 91
12222 Elektron A.Z. 855
12219 Elektron A.Z.G.
12221 Elektron A.Z.M.

M-664 Hunt-Spiller Manufacturing Corporation, Boston, Massachusetts

8268 Air Furnace Gun Iron

M-892 Hurbenium Company of America, Detroit, Michigan

11676 Hurbenium "B"

M-194 Hybnickel Alloys Co., Wilmington, Delaware

578 Hybnickel A
10102 Hybnickel A-1
579 Hybnickel B
580 Hybnickel C
7006 Hybnickel D
4898 Hybnickel R
581 Hybnickel S

M-905 Hyde Park Foundry and Machine Company, Hyde Park, Pennsylvania

11000 Red Circle

M-42 Hydril Company, Lomita, California

5406 Hydril Bearing Metal

M-856 Hygrade Sylvania Corporation, Boston, Massachusetts

10655 Sealmet

M-847 Hytensil Aluminum Co., Chicago, Illinois

10113 Hytensil Aluminum 375
10114 Hytensilite

M-282 I. C. I. Metals, Ltd., Birmingham, England

59 Alumbro
6072 Kunial Brass
6075 Kunial Bronze
6073 Kunial Copper
6074 Kunial Nickel Silver
789 Nergandin

M-78 I.G. Farbenindustrie A.G., Abteilung Elektronmetall, Frankfurt a.M., Germany (American Licensing Agent—Magnesium Development Corp., Newark, N. J.; British Licensee—Sterling Metals Ltd., Coventry, England)

8208 A9V Alloy
429 Elektron (or, Electron)
1738 Elektron AZF
1739 Elektron AZG
1740 Elektron AZM
6051 Elektron A-8
9298 Elektron A-8HT
11596 Elektron A-9
11597 Elektron A-10
3765 Elektron AM-503
3766 Elektron AZ-31
11598 Elektron AZ-91
6052 Elektron AZ-102
6054 Elektron AZ-855
3768 Elektron CMSi
6053 Elektron M.G. 5
1742 Elektron V-1
3769 Elektron Z-1b
1743 Elektron Z-3
6055 Elektron ZS-32
10105 Hydronalium
8569 Hydronalium Hy-5
5384 Hydronalium Hy-7
8587 Hydronalium Hy-9
8626 Hydronalium Hy-10
10106 Hydronalium 51
10107 Hydronalium 71

M-226 Illinois Zinc Co., Chicago, Illinois

447 Eraydo

M-786 Imperial Brass Mfg. Co., Chicago, Illinois

9508 Imperial-All Metal Solder

M-772 Imphy Works, France

9203 Durinval

M-400 Industrial Furnace Corp., Buffalo, New York (Licensors)

1202 Z-Metal

M-634 Industrial Steel Casting Company, Toledo, Ohio
(See M-634 Unitcast Corporation, Toledo, Ohio, successor)

M-440 Industrial Steels, Inc., Cambridge, Massachusetts

6843 C.E.S. No. 2
5177 Industrial Cro-Tung
5170 Industrial No. 12
6844 Industrial No. 18
5174 Industrial No. 35
5175 Industrial No. 65
5176 Industrial No. 102
5172 Industrial No. 188
6088 Industrial No. 188-M
5173 Industrial No. 188-U
5171 Industrial No. 512 Free Machining
6988 Industrial No. 530
6085 Super-Duct F-3

M-499 Industrial Steels, Ltd., Sheffield, England
(Subsidiary of English Steel Corp., Ltd., q.v.)

8703 B.R.S.
9030 C.V.S.
9031 C.V.S.S.
10093 H.R.S.
10095 H.T.S.
5762 N.C.M.
10392 N.C.O.H.
10471 N.O.H.
10650 S.C.S.S.
10780 S.N.C.G.
11490 W.M.S.
8606 Axlo
9478 "Fermo" Special
9486 Fibro
9513 Indco
5959 Indus
9514 Indus N.C.C.H. No. 1
9518 Indus N.C.C.H. No. 5
9515 Indus N.C.H. No. 2
9516 Indus N.C.H. No. 3
9517 Indus N.C.H. No. 4
9519 Indus Nickel Molybdenum
9520 Indus O.N.C.

A-829 Industries Trading Co., New York, New York

9873 Hardrock 33
11110 Rockaloy Grade A
11111 Rockaloy No. 110
11112 Rockaloy No. 111
11113 Rockaloy No. 112

A-328 Ingersoll Steel & Disc Co., Chicago, Illinois (Division of Borg-Warner Corp.)

2688 Ing-A-Clad
9523 Ingaclad Stainless Steel 309
9522 Ingaclad Type 304 Cladding
9524 Ingaclad Type 316 Cladding
9525 Ingaclad Type 317 Cladding
9526 Ingaclad Type 347 Cladding
9527 Ingersall
9528 Ingersoll
9529 Ingersoll's DBL
10896 Super Alloy
11174 Temcross

A-67 Inland Steel Co., Indiana Harbor, Indiana

1212 Inland Copper Alloy Steel
7420 Inland Hi-Steel
9530 Inland Ledloy
7286 Inland Zinc-Alloy Steel
9644 Ledloy C-1045
9645 Ledloy C-1120

A-2a International Development Corp., New York, N. Y.)
(See M-2, Allgemeines Deutsches Metallwerk)

A-68 International Nickel Co., New York, N. Y.

6955 "A" Nickel
6956 "D" Nickel
2372 Everbrite
10026 H Monel
9950 High Test
9511 Inco B Monel
9512 Inco MM
2488 Inconel
6468 K-Monel
11636 KR Monel
11694 L Nickel
1919 Monel Grade S
758 Monel Metal
7287 Monel Metal, Cast
7288 N C C Pig
11936 NH Pig
6280 Nickel Cast Iron No. 2
6281 Nickel Cast Iron No. 4
7289 Nickel, Grade E
7290 Nickel, Grade F
1238 Ni-Hard
816 Ni-Resist
1239 Ni-Resist, Copper Free
11937 Ni-Resist (Low Expansion)
823 Ni-Tensyliron
10462 No. 35 Monel
11100 R Monel
11511 Z Nickel

A-322 International Silver Co., Meriden, Connecticut

7680 Britannia Metal
4838 Nickel Silver

A-789 Isabellenhuette, Germany

9538 Isabellin

A-471 Isteg Steel Products Co., Westminster, England

5782 Isteg Steel

A-477 Jackman & Co., Ltd., Jos., Sheffield, England

5857 Big J
5960 Jackmanized Steel
5961 Jacksberg
6004 Super Jacksberg

A-508 Janney Cylinder Co., Philadelphia, Pennsylvania

8310 Alcop Bronze
8376 Alloy No. 20
8946 Composition No. 1
9019 Crusher Bearing Bronze
9482 Ferrodur Iron
9543 Janney Alloy No. 20
9547 J.C. Dairy Metal
9940 High Graphite Iron
9947 Hightensile Bronze 1
9948 Hightensile Bronze 2
9949 Hightensile Bronze 3
5929 Nickeldur
10460 No. 2 Bronze
10461 No. 8 Bronze
10626 Pressure-tite Iron
10894 Supard-Chrome
11139 Tail Shaft Bronze

A-170 Jeffrey Mfg. Co., Columbus, Ohio

9548 Jefaloy A
11992 Jefaloy 55M
10561 Perduro
1065 Supermal

A-791 Jelenko, J. F., & Co., New York, New York

9549 Jelenko No. 7

M-231 Jelliff Mfg. Corp., C. O., Southport, Conn.
(American Agent for Kanthal A.B., Sweden)

6557 Jelliff Alloy A
6558 Jelliff Alloy C
6559 Jelliff Alloy D
6560 Jelliff Alloy 45
6561 Jelliff Alloy 70
609 Kanthal A
1754 Kanthal A-1
1755 Kanthal D

M-261 Jessop, Wm., & Sons, Inc., Sheffield, England
(American Agent—Wm. Jessop & Sons, Inc., New York)

2188 Albor Die
4567 Alloy B Finishing
2190 Alloy C
8530 Ark
4572 Ark Supreme
4571 Ark Superlative
4568 B.B. Hot Die
4563 Black Label
4565 Composite Die
9020 C.T.V. Hot Work
9205 Durodie
3861 Green Label Cast (Special)
3869 Hacksaw A
3868 Hacksaw B
9563 J.P.S. Steel
2471 Jessop A-2
2472 Jessop A-4 (S.M.30)
2473 Jessop A-5 (S.M.40)
2474 Jessop B (S.M.50)
2475 Jessop C-1 (S.M.60)
2476 Jessop C-2 (S.M.80)
5178 Jessop Corrosion Resistant "R-1"
5179 Jessop Corrosion Resistant "R-2"
5180 Jessop Corrosion Resistant "R-3"
5181 Jessop Corrosion Resistant "R-4"
2469 Jessop E-1
2466 Jessop G-1
2464 Jessop H-2
2465 Jessop H-3
2693 Jessop J-4 Shock Resisting
2696 Jessop Sheet Spring
2694 Jessop Superior Oil Hardening
2695 Jessop Tool
4578 L.C.H.S. Chisel
4575 Rapid Finishing
4030 Superior Ark
4579 Truform Special
4099 Yellow Label Cast Very Best

M-261a Jessop, Wm., & Sons, Inc., New York, N. Y.
(See Parent Company—Wm. Jessop & Sons, Sheffield, England and associated company J. J. Saville, Ltd., Sheffield, England)

M-69 Jessop Steel Co., Washington, Pennsylvania

5363 C.N.S.
1409 Chippaway
8943 Co Major
9050 Dacar
9098 Dica-B
4573 Domestic
415 Durogloss C-1
1729 Durogloss C-2
1730 Durogloss C-3
1731 Durogloss C-4
6973 Durogloss C-12
6974 Durogloss S
5930 Durogloss Free Machining
9230 E No. 25
9378 Extra Tough No. 4
1251 Heat-resisting Steel No. 4
562 Hi-Gloss C
1752 Hi-Gloss D.D.
5956 Hi-Gloss Free Machining
1395 Jessco
9550 Jessco A
9551 Jessco B
5962 Jessop Alloy 104
1404 Jessop Armat
1405 Jessop Chrome Magnet Steel
1403 Jessop Coal & Mine Bit Steel
1402 Jessop Dril-it Drill Steel
9553 Jessop E-25 C
9554 Jessop E-83
5361 Jessop Heat-resisting Steel No. 5
9559 Jessop Hot Working Die
1398 Jessop JJ Hot Work Steel
1400 Jessop MD Drill Steel
9556 Jessop Non Magnetic Steel
1397 Jessop No. 2B Hot Die Steel
1396 Jessop No. 3C Die Steel
5357 Jessop No. 27-V
5358 Jessop No. 29-V
5359 Jessop No. 96-KC
5360 Jessop No. 139-B
5362 Jessop No. 181 Nickel Steel
9555 Jessop No. 773
1401 Jessop Oil Bit Drill Steel
9557 Jessop RT
3476 Jessop Superior Oil Hardening
1391 Jessop Tool Steel H-4
1392 Jessop Tool Steel H-9
1393 Jessop Tool Steel K-2
1394 Jessop Tool Steel K-6
1382 Jessop Tool Steel No. 5
1383 Jessop Tool Steel No. 7
1384 Jessop Tool Steel No. 8
1385 Jessop Tool Steel No. 9

1386 Jessop Tool Steel No. 10
1387 Jessop Tool Steel No. 11
1388 Jessop Tool Steel No. 12
1389 Jessop Tool Steel No. 14
1390 Jessop Tool Steel No. 18
1406 Jessop Tungsten Magnet Steel
226 Kromal
9669 Lion Extra
1410 Lion Tool Steel
3920 Magic
227 Mogul
1411 Nickahl Steel
10624 Press E-Z
228 Purple Label Extra
1412 Purple Label High Speed Steel
11021 Regular Straight Carbon
7295 Silverbond
4012 Special
1413 Special HM Oil Hardening
1414 Special High Carbon 51V
4162 Special Oil Hardening
10811 Special Processed
1038 Sta-gloss
5994 Sta-gloss B
10909 Superior Ark High Speed
1417 Supremus
1418 Supremus Extra
11151 TCM
11264 TTQ High Speed
1419 Top Notch
1104 Truform
7296 Uniform Oil Hardening
1421 Utilitas
1422 Washington Tool Steel
11486 Wiudsor
1423 Zip Zip
11548 2B (HC)
11549 2B (LC)
11516 2B (MC)
11533 89 (MC)

M-171 Jewell Alloy & Malleable Co., Inc., Buffalo, New York

606 Jewell Alloy
7457 Jewell Alloy 42
7458 Jewell Alloy S
7459 Jewell Alloy V
11934 Jewell Super Strength Malleable
11935 Jewell Steel

M-332 Johnson & Co., Inc., A., New York, N. Y.
(See Avesta Jernverks)

M-172 Johnson Bronze Co., New Castle, Pennsylvania

9562 J.S.B.
7460 Johnson Bronze Babbitt No. 10
7461 Johnson Brouze Babbitt No. 11
7462 Johnson Bronze Babbitt No. 97
7292 Johnson Bronze Graphited Bearings
7293 Johnson No. 9 Babbitt Alloy
9561 Johnson Bronze No. 12
6541 Johnson Bronze No. 19
6542 Johnson Bronze No. 25
6543 Johnson Bronze No. 27
6544 Johnson Bronze No. 29
6545 Johnson Bronze No. 51
6546 Johnson Bronze No. 53
6547 Johnson Bronze No. 55
6548 Johnson Bronze No. 66
6549 Johnson Bronze No. 71
6550 Johnson Bronze No. 72
9560 Johnson Bronze No. LX
9646 Ledaloyl

M-678 Johnson Co., Lloyd S., Chicago, Illinois
(Formerly M-393)

8431 Alumaweld All Metal Solder
8432 Alumaweld Special Solder

M-422 Jones, Rd. Ltd., Garrison Lane, Birmingham, England

4806 Sunray Gold

M-173 Jones & Laughlin Steel Corp., Pittsburgh, Pennsylvania

601 Jalcase No. 1
602 Jalcase No. 2
603 Jalcase No. 3
604 Jalcase No. 4
605 Jalcase No. 5
9541 Jalcold
8059 Jal-Ten
9542 Jalweld
9545 J & L Correct Balance

M-891 Joselin, & Co., C.

10782 Solar Eclipse

M-560 Joslyn Co., New York, New York

343 Copper Steel

M-517 Kahl-Holt Co., Baltimore, Md.
7294 KaHoLoy

M-429 Kahl Iron Foundry, Detroit, Michigan
3452 Nickahl

M-262 Kalif Corp., Emeryville, California
608 Kalif Metal

M-70 Kanthal A.B., Hallstahammar, Sweden
(American Agent—C.O. Jelliff Co.)
609 Kanthal A
1754 Kanthal A-1
1755 Kanthal D

M-572 Kay-Brunner Steel Products Inc., Los Angeles, California.
6714 Kay-Brunner Ni-Resist

M-510 Kayser, Ellison & Co., Ltd., Sheffield, England
6340 K.E. 241
3662 K.E. 965
6339 K.E. 954
6341 K.E. 2258

M-731 Keasby & Matteson Co., Ambler, Pennsylvania
8839 *Celto*

M-792 Kellog, M. W., & Co., Jersey City, New Jersey
9569 Kelcaloy

M-900 Kelly Foundry & Machine Co., Elkins, West Virginia
10901 Superfine IX
10903 Superfine Mold
10905 Superfine XXX
10902 Superfine MM
10904 Superfine MX

M-989 Keystone Carbon Co., St. Marys, Pennsylvania
3312 Selflube Bronze
10097 Selflube Iron
10272 Selflube Iron

M-339 Kidd Drawn Steel Co., Aliquippa, Pennsylvania
2186 Ajax Drill Rod
4021 Special Vanadium
3892 Invincible Drill Rod
4077 Unito Drill Rod

M-174 Kinite Corporation, Toledo, Ohio
611 Kinite
9589 K.O.H.
11498 XX Metal

M-546 Kinney Iron Works, Los Angeles, California
6518 Kinnalloy
7297 Kinnite
732 Meehanite Metal

M-794 Kirk & Sons, P., Los Angeles, California
(Subsidiary of National Lead Co.)
9583 Kirksite

K-335 Kloster Steel Company, Chicago, Illinois
(Representing Brukskoncernen A. B., Fagersta, Sweden)
8319 Kloster CNM
3970 Pure-Ore Cold Heading Die Steel
7512 Pure-Ore EN-97 Alloy
3899 Kloster Hollow Drill
7508 Kloster Hot Work
12197 Pure-Ore DC-33
7513 Pure-Ore Extra
7519 Kloster Solid Drill
7510 Pure-Ore D-52 Extrusion Die Steel
12199 Pure-Ore Finishing
7509 Pure-Ore AD-95
3972 Pure-Ore High Speed
12195 Pure-Ore Air-Chrome
12198 Pure-Ore DC-66
2228 Chiz Alloy
7511 Pure-Ore Die Casting Steel
12200 Pure-Ore Hi-Run
12196 Pure-Ore Clipper
12201 Pure-Ore Kapo
3969 Pure-Ore Cobalt High Speed
3971 Pure-Ore Drill Rod
12202 Pure-Ore Moly 6-6

7514 Pure-Ore No. 10 Alloy Steel
12203 Pure-Ore No. 14
3974 Pure-Ore No. 25 Special Alloy
12204 Pure-Ore Prior
4581 Pure-Ore Prior Extra High Speed
5056 Pure-Ore Production Hi-Cr Hi-C
7521 Pure-Ore Quarry Tool Steel
12205 Pure-Ore Ralmo
12206 Pure-Ore Solid Drill
3973 Pure-Ore Special
7515 Pure-Ore Standard
7516 Pure-Ore Super Alloy
7517 Pure-Ore V-995 Alloy
7518 Pure-Ore Z-457 Die Cast Steel
7520 Ram Brand Swedish Iron
4040 Swed-Oil Non-Shrinking

M-611 Klosters A.B., Langshyttan, Sweden
(See Agents—Achorn Steel Co., Kloster Steel Co.)

M-346 Kramer, H. & Co., Chicago, Illinois

5829 Anti-Acid Metal
5750 Improvite
3500 Kramer Alloy No. 22
3488 Kramer Alloy No. 33
3501 Kramer Alloy No. 44
3502 Kramer Alloy No. 66
3503 Kramer Alloy No. 77
3504 Kramer Alloy No. 88
12151 Kramer Aluminum Bronze Grade I
12152 Kramer Aluminum Bronze Grade L
12153 Kramer Aluminum Bronze Grade M
12154 Kramer Aluminum Bronze Grade N
12155 Kramer Aluminum Bronze Grade O
3496 Kramer Grade A Manganese Bronze
9595 Kramer Grade AX Manganese Bronze
3497 Kramer Grade S Manganese Bronze
3498 Kramer Grade X Manganese Bronze
3499 Kramer Grade XX Manganese Bronze
3505 Kramer Nickel Silver 12%
3506 Kramer Nickel Silver 20%

M-324 Kreidler's Metall- und Drahtwerke, G.m.b.H., Zuffenhausen-Stuttgart, Germany

3329 Kreidler's Brass Ms 58
3330 Kreidler's Brass Ms 63

M-71a Kries, Henry A. & Sons Co., Baltimore, Maryland
(Distributor for Sumet Corporation and Buffalo Foundry & Machine Co., q.v.)

M-72 Krupp Steel Works, Fried., Essen, Germany
(American Agents, Thos. Prosser & Sons)

6600 Hyperm 4
6597 Hyperm 6
6599 Hyperm 36
6598 Hyperm 50Y
596 Izett Steel No. 1
597 Izett Steel No. 2
598 Izett Steel No. 3
599 Izett Steel No. 4
5062 Krupp Carbon
2371 Krupp Delta
1522 Krupp Ferrotherm F.F. Alloys
5707 Krupp Ferrotherm FF-6
5708 Krupp Ferrotherm FF-18
5709 Krupp Ferrotherm FF-30
5710 Krupp Ferrotherm FF-112
5711 Krupp Ferrotherm FF-118
5712 Krupp Ferrotherm FF-128
5713 Krupp Ferrotherm FF-228
5064 Krupp High Speed
2712 Kruppin
3442 Krupp KA-2
1521 Krupp Nichrotherm NCT Alloys
5597 Krupp Nichrotherm NCT-1
5598 Krupp Nichrotherm NCT-3
5599 Krupp Nichrotherm NCT-6
5600 Krupp Nichrotherm NCT-6A
5706 Krupp Nichrotherm NCT-8
1996 Krupp Nickel Brass
9604 Krupp Niroplat
7298 Krupp Nirostaguss 1
7299 Krupp Nirostaguss 2
7300 Krupp Nirostaguss 3
5065 Krupp Non-deforming
5063 Krupp Special
1078 Krupp Thermisilid
1524 Krupp Thermisilid Extra
1656 Krupp VM
1512 Krupp V-1M
2709 Krupp V-2A
5714 Krupp V-2A Extra
4362 Krupp V-2A Nirosta

7301	Krupp V-2A Spezial	1658	Krupp V-6A	1174	Widia
7302	Krupp V-2A Supra	7305	Krupp V12A Supra	6126	Widia H
4215	Krupp V-3M	7306	Krupp V13F	6128	Widia M-68
9605	Krupp V-3M Extra	7307	Krupp V14A Supra	6125	Widia N
1657	Krupp V-4A	7308	Krupp V16A Supra	6127	Widia S
7303	Krupp V4A Extra	9606	Krupp V 16 Supra	6129	Widia X
7304	Krupp V4A Supra	7309	Krupp V17F	6130	Widia XX
1497	Krupp V-5M	915	Plykrome		

M-175 Krupp-Nirosta Co., Inc., New York, N. Y.
(Licensing Corporation—See Fried. Krupp Listing)

M-263 LaBour Co., Elkhart, Indiana

1732	Elcomet F	1733	Elcomet L	2755	LaBour R-55
421	Elcomet K	1233	LaBour R-50	1315	LaBour G-60

M-552 Laclede Brass Works, Inc., St. Louis, Missouri

6527 Muraloy

M-888 Lake City Malleable Co., Cleveland, Ohio

10705 Shock Proof

M-857 Lake & Elliot, Ltd., Braintree, England

10248 Millenite

M-800 Lake Erie Engineering Corp., Buffalo, New York

9487 Fifty-Five

M-801 Lanvin & Sons, R., Chicago, Illinois

9630	Lanvin No. 230	9634	Lanvin No. 384	9638	Lanvin No. 597
9631	Lanvin No. 300	9635	Lanvin No. 420	9639	Lanvin No. 685
9632	Lanvin No. 310	9636	Lanvin No. 483		
9633	Lanvin No. 320	9637	Lanvin No. 598		

M-527 Lanz, Heinrich A. G., Mannheim, Germany

616	Lanz Guss	891	Perlit Guss

M-669 La Salle Steel Company, Chicago, Illinois

8374	Alloy Broachrite	10474	Non Warp Steel	11225	Tritex
9809	Gold Tip	10468	No. 1015-65	11226	Tritex Broachrite
9627	La Salle 1020-90	10675	Shaperite	11436	Tritex No. 1
10162	Manganese Carbon Alloy	10733	Silver Tip	12168	Tritex No. 2
		10884	Stress Proof	11227	Tritex Plus
10164	Manganese Screw Stock	10885	Stress Proof No. 1	11268	Tuftork
		10886	Stress Proof No. 2		
10473	Manganese Stretch Steel	10887	Stress Proof No. 3		
		11431	Sturdy Forty		

M-73 Latrobe Electric Steel Co., Latrobe, Pennsylvania

4187	Aldivan	9053	Damascus	9273	Electrite Double 6
4585	C. F. S. Die Steel	11852	Dycast	9274	Electrite HV-6
8897	C.H.W.	9212	Dycast No. 1	9275	Electrite Lacomo
8917	C.L.W.	9253	E.H.W. No. 1	425	Electrite No. 1
11788	CO-6	3823	E.S.A.	9271	Electrite No. 19
8766	Carbon Cold Header	1735	Electrite Cobalt	9278	Electrite T.N.W.
8922	Cobalt Chrome	3763	Electrite Cobalt Super	9279	Electrite U.B.
4587	Crown	3764	Electrite Cobalt Ultra	424	Electrite Uranium

3595 Electrite Vanadium
9370 Extra Carbon
3864 G.S.N.
3865 G.S.N. Special
9810 Gordon
11848 HV-6
582 Hy-glo
9626 Lanark
1778 Latrobe Special
1779 Latrobe Standard
11849 L.C.
11846 L.C.X.
9747 L.P.D.
636 Lesco L
639 Lesco L.S.
5963 Lesco Reg. Stainless
645 Lesco 18-8
674 Lumdie
675 Lusterite
11845 M.G.R.
715 Mangano
10165 Mangano Special
10183 M-Chrome
11841 N.D.S.
12346 Red Arrow 101
2490 Renown
11847 S.N.C.
4583 Select
10663 Select B
11844 Select M
10800 Special Carbon
10854 Staminal
11854 Standard Carbon
4589 Superb
11843 T.N.W.
7783 Tatmo
4095 Wolva
11842 W.T.
11493 W-T Drill Rod
11495 XL Chisel
4186 Z.T. Die
11850 Z.T.M.
11853 37% Cobalt Magnet

M-624 Lavorazione Leghe Leggere, Milano, Italy

1298 Aluman
1289 Anticorodal
1300 Avional
7456 Chitonal
5432 Peraluman
7861 Peraluman 7

M-74 Lebanon Steel Foundry, Lebanon, Pennsylvania

6364 Circle L-A
11657 Circle L-B
8568 Circle L-C
8567 Circle L-D
290 Circle L No. 1
291 Circle L No. 2
292 Circle L No. 3
293 Circle L No. 4
294 Circle L No. 5
1428 Circle L No. 6
3549 Circle L No. 7
1429 Circle L No. 8
12226 Circle L No. 9
1430 Circle L No. 10
295 Circle L No. 11
7421 Circle L No. 11 (.75C)
296 Circle L No. 12
7422 Circle L No. 12M
297 Circle L No. 13
298 Circle L No. 14
299 Circle L No. 15
300 Circle L No. 16
7423 Circle L No. 18
8959 Circle L No. 19
4913 Circle L No. 21
301 Circle L No. 22
8899 Circle L No. 22Ag
8900 Circle L No. 22Ag XM
7424 Circle L No. 22M
302 Circle L No. 23
303 Circle L No. 24
4914 Circle L No. 25
7428 Circle L No. 25M
4915 Circle L No. 30
7429 Circle L No. 30XM
304 Circle L No. 31
305 Circle L No. 32
12241 Circle L No. 33
7430 Circle L No. 34
7431 Circle L No. 40
7432 Circle L No. 41
7433 Circle L No. 42
7434 Circle L No. 43
7435 Circle L No. 44
7436 Circle L No. 45
7437 Circle L No. 46
7438 Circle L No. 47
7439 Circle L No. 48
12224 Circle L No. 106
12227 Circle L No. 119
9111 Circle L No. 205-A
9110 Circle L No. 205-B
11688 Circle L No. 205-C
11534 Circle L No. 205-D
12225 Circle L No. 206
12228 Circle L No. 219
7425 Circle L No. 22XM
7427 Circle L No. 23XM
7426 Circle L No. 23M
12239 Circle L No. 430
12240 Circle L No. 431
12230 Circle L No. 446

M-300 Lehigh Babbitt Co., Allentown, Pennsylvania

3643 Grapho Babbitt

M-688 Lehigh Steel Company, New York, New York

8504 Apex
8948 Conqueror
8949 Conqueror Hollow Drill
9479 Ferno
9480 Ferno Extra
9642 Leco
9643 Leco Extra
9647 Lehigh Conqueror
9648 Lehigh Croma Alloy
9652 Lehigh Special No. 3
9653 Lehigh Special No. 5
9654 Lehigh SS
9655 Lehigh XXX High Speed
10103 Hyco
11205 Torpedo
11330 Utility

M-227 Levett, Walker M., New York, N. Y.

686 Magnalite

M-540 Lewin Metals Corp., E. St. Louis, Illinois

6509 Marine Nickel

M-75 Lightalloys, Ltd., London, England

5816 Alpax
5817 Alpax Alpha
5818 Alpax Beta
5819 Alpax Gamma

M-951 Light Metal Works, Tokyo, Japan

11523 21VFS

M-578 Lincoln Electric Co., Cleveland, Ohio

6592 Abrasoweld
7626 Aerisweld
6749 Aluminweld
8497 Anodie
8674 Blackor
8893 Chromeweld 4-6
9390 Faceweld No. 1
9391 Faceweld No. 12
6619 Fleetweld
9703 Fleetweld No. 5
9704 Fleetweld No. 7
9705 Fleetweld No. 8
9706 Fleetweld No. 9
9707 Fleetweld No. 9 HT
9708 Fleetweld No. 10
9709 Fleetweld No. 11
6804 Hardweld
9874 Hardweld 50
9875 Hardweld 100
7627 Kathode
7628 Lightweld
10166 Manganweld A
10167 Manganweld B
10414 New Kathode
10430 Nickelchromeweld
10584 Planeweld No. 1
10585 Planeweld No. 2
10998 Ready Weld
10704 Shield Arc 10
10703 Shield Arc 85
10781 Softweld
7629 Stable Arc
6805 Stainweld A
10848 Stainweld A5
10849 Stainweld A7
10850 Stainweld B
10851 Stainweld C
10852 Stainweld D
10937 Surfaceweld
10939 Swiftweld
6806 Toolweld
11202 Toolweld 55
11203 Toolweld 60
11214 Transweld
6807 Wearweld

M-843 Linde Air Products Co., New York, New York

9991 Oxweld No. 1
9992 Oxweld No. 2
9993 Oxweld No. 7
9994 Oxweld No. 9
9995 Oxweld No. 19 Cupro
9996 Oxweld No. 21 HS
9997 Oxweld No. 23
9998 Oxweld No. 25 M Bronze
9999 Oxweld No. 26
10000 Oxweld No. 28
10001 Oxweld No. 31 T
10002 Oxweld No. 32 C.M.S.
10003 Oxweld No. 38

M-228 Link-Belt Co., Indianapolis, Indiana

925 Promal

M-573 Locomotive Finished Material Co., Atchison, Kansas

6715 L.F.M. Co. 4-6 Chrome-Molybdenum

M-802 Logan Iron & Steel Co., Philadelphia, Pennsylvania

9657 Lico
9661 Lisco
9668 Logan
10762 S.L.B.

M-803 Lowmoor Best Yorkshire Iron, Lowmoor, Bradford, England

9670 Lowmoor Iron

M-176 Lukens Steel Co., Coatesville, Pennsylvania

356 Cromansil
8058 Lukens Carbon Molybdenum Steel
8053 Lukens Chrome Nickel Steel
8056 Lukens Cromansil Grade A
8057 Lukens Cromansil Grade B
8055 Lukens Inconel-clad Steel
8054 Lukens Manganese Vanadium Steel
1237 Lukens Nickel-clad Steel
8052 Lukens Nickel Steel

M-77 Lumen Bearing Co., Buffalo, New York

350 Cosmos
651 Lotus
656 Lumen Alloy 00-A
657 Lumen Alloy 00-C
658 Lumen Alloy No. 1
659 Lumen Alloy No. 2
660 Lumen Alloy No. 3
661 Lumen Alloy No. 4
662 Lumen Alloy No. 4A
663 Lumen Alloy No. 5
664 Lumen Alloy No. 6
665 Lumen Alloy No. 7
666 Lumen Alloy No. 9
667 Lumen Alloy No. 11-C
668 Lumen Alloy No. 14
669 Lumen Alloy No. 15
4844 Lumen Alloy No. 15-A
670 Lumen Alloy No. 20
671 Lumen Alloy No. 27
4845 Lumen Alloy No. 31
4846 Lumen Alloy No. 33
5385 Lumen Alloy No. 42
9760 Lumen Alloy No. 43
673 Lumen Alloy No. 54
9761 Lumen Alloy No. 96
1361 Lumen Bronze
683 Machine Bronze
4847 Old Genuine Babbitt
1046 Stannum Metal

M-264 Lunkenheimer Co., Cincinnati, Ohio

5982 NS-5

M-534 Lunn & Co., E., Glasgow, Scotland

6491 Lunz Iron

M-523 Lynchburg Foundry Co., Lynchburg, Virginia

3433 Lyncast

M-456 Lyon, Conklin & Co., Inc., Baltimore, Maryland

680 Lyonore

M-177 Mackenzie, Duncan Sons Co., Inc., Trenton, New Jersey

8408 Aluminum Bronze 135
8409 Aluminum Bronze 136
685 Mackenite Metal

M-229 Mackintosh-Hemphill Co., Pittsburgh, Pennsylvania

10232 M-H. Composite
10233 M-H. Special Alloy Steel
10289 MO-Technichill
10424 Nichillite
10425 Nichillite No. 2
10444 Nironite A
10445 Nironite C
10446 Nironite D
11152 Technalloy
11153 Technalloy AX
11154 Technalloy B
11155 Technalloy C
11156 Technalloy D
11157 Technalloy E
11158 Technalloy Standard

M-556 Magnesium Castings & Products Ltd., Slough, England (Subsidiary of High Duty Alloys, Ltd.)

10136 Magnuminium 133
7311 Magnuminium 166
6538 Magnuminium 177
7418 Magnuminium 199
7312 Magnuminium 220
7419 Magnuminium 266
10137 Magnuminium 299

M-78a Magnesium Development Corp., Newark, New Jersey (Licensing Agent for I.G. Farbenindustrie A.G., Elektron Alloys)

M-645 Magnesium Fabricators, Adrian, Michigan

10119 Magalloy PX-4
10120 Magalloy RX-3
10121 Magalloy RX-9
10122 Magalloy X-5
10123 Magalloy X-6
10124 Magalloy X-7
10125 Magalloy X-8
10126 Magalloy X-10
10127 Magalloy X-11
10128 Magalloy X-104
10129 Magalloy Z-107
10130 Magalloy Z-110

M-436 Magnolia Antifriction Metal Co. of Great Britain, Ltd., The, London, England

10134 Magnolia Cadmium Nickel

M-178 Magnolia Metal Co., Elizabeth, New Jersey

6721 Adamant Super-Genuine Babbitt
9066 Defender
7479 Magnolia Anti-friction Metal
705 Magnolia Bearing Bronze
10135 Magnolia Isotropic Bronze
10612 Powder Nickel Genuine Babbitt
10613 Power
10631 Pyramid

M-958 Magnus Metal Corp., Chicago, Illinois

11681 Satco

M-859 Major Engineering Corp., Chicago, Illinois

10261 M-K-9
10262 M-K-9 AS

M-265 Mallory, P. R., Co., Inc., Indianapolis, Indiana
(See also subsidiary—Elkon Co.)

6738 Elkaloy A
9312 Elkaloy D
12015 Elkonite G-12
7316 Elkonite G-13
12016 Elkonite G-14
7317 Elkonite G-17
12019 Elkonite G-18
6731 Elkonite Grade 0-W-3
6733 Elkonite Grade 1-W
6740 Elkonite Grade 1-W-3
6734 Elkonite Grade 5-W-3
12020 Elkonite Grade 5-W-53
433 Elkonite Grade 10-W-3
12021 Elkonite Grade 10-W-53
6735 Elkonite Grade 20-S
6736 Elkonite Grade 20-W-3
6732 Elkonite Grade 30-W-3
12023 Elkonite TC-5
12024 Elkonite TC-10
12025 Elkonite TC-20
12026 Elkonite TC-53
12017 Elkonite 35S
12018 Elkonite 50S
12022 Elkonite 100M
6737 Elkonite 100-W
7318 Elkonium No. 1
7319 Elkonium No. 13
12027 Elkonium No. 17
12028 Elkonium No. 23
9314 Elkonium No. 25
12033 Elkonium No. 33
12034 Elkonium No. 37
12031 Elkonium No. 40
12032 Elkonium No. 45
12035 Elkonium No. 70
12036 Elkonium No. 71
12029 Elkonium No. 117
12030 Elkonium No. 217
12037 Elkonium No. 301
10139 Mal-Arc
12014 Mallory D-50
12013 Mallory D-52
12012 Mallory D-53
12011 Mallory D-54
7320 Mallory HA Metal
7321 Mallory HB Metal
10156 Mallory K Metal
10157 Mallory MK Metal
6739 Mallory No. 3
10149 Mallory 53
10150 Mallory 53B
10151 Mallory 73
10153 Mallory 100
10155 Mallory 1000
10784 Soldaloy 1
10785 Soldaloy 8
11519 8 CC Metal

M-179 Manganese Bronze & Brass Co., Ltd., London, England

5430 Architectural Bronze C. 94
5424 Croterite IV
5425 Croterite V
5429 Damaxine Bronze
9324 Embee Bush Metal
588 Immadium I
589 Immadium II
5426 Immadium III
7844 Immadium IV
590 Immadium V
2086 Immadium VI
882 Parson's Manganese Bronze
4795 Parson's Mota Metal
5428 Parson's Silver Bronze
7826 Parson's Star
7845 Parsons 2 SA
1111 Turbadium Bronze

M-180 Manganese Steel Forge Co., Philadelphia, Pennsylvania

961 Rol-Man

M-230 Manning, Maxwell & Moore, Inc., New York, N. Y.
(See Subsidiary—Consolidated Ashcroft Hancock Co., Inc.)

M-893 Manos, Switzerland

10789 Sona Metall

M-753 Marsh Brothers & Co., Ltd., Sheffield, England

9034 C.Y.C. 10172 Marsh 11119 Roxo

M-348 Martinel Steel Co., Ltd., London, England

720 Martinel

M-323 Maschinenbau A.G., Golzern-Grimma, Grimma (Saxony), Germany

1525 Acidur

M-467 Massillon Steel Casting Co., Massillon, Ohio

10175 Massalloy 10176 Massillon 6086 Tigerloy

M-454 Mather & Platt, Ltd., Manchester, England

5451 No. 7 Alloy

M-315 Maywood Chemical Works, Maywood, New Jersey (Agent for Metallhüttenwerke Schaefer und Schael, A.G. and Metallgesellschaft A.G.)

1698 B-Metal (Bahnmetall)
7313 Lithium-Calcium
7314 Lithium Conductivity Bronze
7315 Lithium-Copper
10990 Silumin

M-212 McCallum-Hatch Bronze Co., Inc., Buffalo, New York

528 Gun Metal
5411 M-H Alloy No. 1
5412 M-H Alloy No. 4
5413 M-H Alloy No. 5
233 M-H Alloy No. 6
5414 M-H Alloy No. 9
5415 M-H Alloy No. 11
5416 M-H Alloy No. 14
5417 M-H Alloy No. 15
5418 M-H Alloy No. 20
5419 M-H Alloy No. 25-B
5420 M-H Alloy No. 48
5410 M-H Alloy No. 00-L
529 Modified Gun Metal M-H Alloy No. 2

M-80 McDonald, P. F., & Co., Boston, Massachusetts

6722 A.B.C.
3848 Foolproof
3885 Hollow Bar
4851 Macco Alloy Belt Knife Steel
4850 Macco Alloy Razor Blade Steel
4594 Macco Brand Swedish
3919 Macco Certified
4596 Macco Chrome Tungsten
4852 Macco Enormous
12089 Macco Fool-Proof Non-Tempering Chisel Steel
4593 Macco Hollow Drill
681 Macco Kromax
12088 Macco Kromax Special
10116 Maccomax
10117 Macco Radio
682 Macco Royal Crown
12087 Macco Special
12086 Macco Superior High Speed
4595 Macco Superior Swedish
4849 Macco Swedish Magnetic Iron
4034 Swedish Vanadium
11222 Trimmer Die

M-710 McGean Chemical Company, Cleveland, Ohio

8645 Besplate

M-181 McGill Manufacturing Company, Valparaiso, Indiana

10184 McGill Brass Pressure Casting Alloy
730 McGill Metal
11689 McGill Metal No. 1
9621 McGill Metal No. 2
11690 McGill Metal No. 3
12216 McGill Metal No. 4

M-81 McInnes Steel Co., Corry, Pennsylvania

2341 Cello Vanadium
2231 Cobalt High Speed
2588 Folder Die
7463 McInnes HC-HC
2785 McInnes Record A
2786 McInnes Special Cr-Ni Steel
2787 McInnes Special Tool
2790 McInnes Vanadium Crucible
1154 McInnes "V" High Speed

2814 Misco A Tool Steel
2815 Misco B Tool Steel
4042 "S" No. 4
3210 Superior Tool Steel
11851 "V" Moly High Speed

M-849 McKay Co., Pittsburgh, Pennsylvania

10185 McK No. 15
10186 McK No. 16
10187 McK No. 17
10188 McK No. 18

M-914 McKechie Brothers, Ltd., Birmingham, England

11145 Tank Brand
11353 Velveto Antifriction Metal

M-793 McKenna Metals Co., Latrobe, Pennsylvania

9570 Kennametal
9571 Kennametal Grade KH
9572 Kennametal Grade K3H
9573 Kennametal Grade K4
9574 Kennametal Grade K4H
9575 Kennametal Grade KM
9576 Kennametal Grade KS
9577 Kennametal Grade KWH
10189 McKenna K4

M-182 McPhail, Wm., & Sons, Glasgow, Scotland

803 Nickeloid

M-82 Meehanite Metal Corp., New Rochelle, New York

10193 Meehanite CB
10194 Meehanite CBS
10195 Meehanite CC
10198 Meehanite GA
10199 Meehanite GAH
10200 Meehanite GB
10201 Meehanite GC
10202 Meehanite GD
10203 Meehanite GE
10204 Meehanite GM
10205 Meehanite HA
10206 Meehanite HB
10207 Meehanite HC
10208 Meehanite HD
10209 Meehanite HE
10210 Meehanite HR
10211 Meehanite KC
10212 Meehanite SC
10213 Meehanite WA
10214 Meehanite WAH
10215 Meehanite WB
10216 Meehanite WBC
732 Meehanite Metal
10897 Super A Meehanite
10920 Super W H Meehanite

M-519 Merco Nordstrom Valve Co., Pittsburgh, Pennsylvania

4848 Mercoloy

M-852 Mesta Machine Co., Pittsburgh, Pennsylvania

10220 Mesta Special

M-913 Metal Carbides Corp., Youngstown, Ohio

11137 Talide

M-968 Metal Castings, Ltd., Worcester, England

2049a Piston Alloy
2049b Piston Alloy
2049c Piston Alloy

M-320 Metallbank, A. G., Heddernheim, Germany
(See M-116, Vereinigte Leichtmetall Werke, G.m.b.H.)

8235 Aeron

M-299 Metallgesellschaft, A.-G., Frankfurt, Germany
(American Agents, American Lurgi Corp., New York, N. Y., and Maywood Chemical Works, Maywood, N. J. Note also Metallbank A.G. and Vereinigte Leichtmetallwerke G.m.b.H.)

8235 Aeron
8849 Cetal
9971 Ossilumin
1002 Silumin
5433 Silumin—(Copper-Manganese) (Kupfer-Silumin)
5434a Silumin-Beta
5434b Silumin-Gamma

M-402 Metallhüttenwerke Schaefer und Schael A.-G., Breslau, Germany (American Agent, Maywood Chemical Works, Maywood, N. J.)

1698 B-Metal (Bahn-metall)

M-853 Metallizing Engineering Co., Inc., New York, New York

10223 Metco Aluminum
10224 Metco Copper
10225 Metco Electrolytic Zinc
10226 Metco Lead A
10227 Metcoloy
10228 Metcoloy No. 2
10229 Metco Monel Metal
10230 Metco Nickel
10823 Sprababbitt A
10824 Sprabrass Y
10825 Sprabronze C
10826 Sprabronze M
10827 Sprabronze P
10828 Sprabronze T
10829 Sprairon A
10830 Sprasteel 10
10831 Sprasteel 25
10832 Sprasteel 40
10833 Sprasteel 80
10834 Sprasteel 120

M-381 Metallo-Chemische Fabrik, Dr. Leopold Rostosky, Berlin, Germany

3409 Firinit Alloys

M-813 Metalloy Co., Los Angeles, California

9766 Galvalloy

M-971 Metallwerke A.G., Austria

10666 Semperal

M-851 Metal Reduction Corp., North Bergen, New Jersey

10218 Meritingtos

M-183 Metal Sales Corp., Jersey City, New Jersey

352 Crilley Metals

M-83 Metropolitan-Vickers Electrical Co., Ltd., Manchester, England

731 M. V. "C."

M-529 Metal & Thermit Corp., New York, New York

10296 Murex Alternex
7671 Murex Carbon-Moly
7673 Murex Chrome Copper
7674 Murex Chrome Moly
10297 Murex Cresta Electrode
7675 Murex Cromansil
10298 Murex Tillex
10299 Murex Genex Electrode
7676 Murex Manganese Steel
10300 Murex Molex
6335 Murex Nickel Steel
10306 Murex No. 5 Chrome Electrode
10307 Murex No. 14 Chrome Electrode
10301 Murex Rolex
7677 Murex Special "A"
7678 Murex Stainless No. 7
7679 Murex Stainless No. 15
10302 Murex Stainless Steel Electrodes
10303 Murex Surfacing Electrode
10304 Murex Type F
10305 Murex Vertex Electrode
7672 Murex 4-6 Chrome

M-184 Michiana Products Corp., Michigan City, Indiana

469 Firearmor "A"
1748 Firearmor "B"
1305 Michiana No. 48
5966 Michiana No. 49
2804 Michiana No. 55
2805 Michiana No. 63
1306 Michiana No. 100
6982 Michiana No. 100S
5967 Michiana No. 111
12163 Michiana No. 119
6337 Michiana No. 122
12162 Michiana No. 233
12161 Michiana No. 241
819 Nirosta 18-8
820 Nirosta 19-9-4
821 Nirosta 25-20
10924 Super Zorite
1204 Zorite

M-545 Michigan Smelting & Refining Co., Detroit, Michigan (Subsidiary of Bohn Aluminum and Brass Corp., q.v.)

12540 Michigan No. 90
12544 Michigan No. 90H
12543 Michigan No. 90M

12542 Michigan No. 90S
12545 Michigan No. 90V
12541 Michigan Apex
12535 Michigan Grade A
12536 Michigan Grade AX
12534 Michigan Grade C
12537 Michigan Grade X
12538 Michigan Grade XX
12539 Michigan Grade XXX

M-84 Michigan Steel Casting Co., Detroit, Michigan

4890 Misco B
4891 Misco B-1
6366 Misco C
4892 Misco C-1
10253 Misco Grade A
2510 Misco HN
10254 Misco HN-1
4894 Misco HN-2
10255 Misco Metal
4893 Misco N
4895 Misco N-5
6774 Misco 16
4889 Misco 18-8
10256 Misco 18-8 Mo
6775 Misco 28
5974 Misco 30-30
4886 Miscrome CR
6992 Miscrome KR
4885 Miscrome 1
4887 Miscrome 2
4888 Miscrome 3
10257 Miscrome 4
6993 Niresult
1267 Standard Misco

M-751 Michigan Tool Co., Detroit, Michigan

8990 Crobalt

M-312 Michigan Valve & Foundry Co., Detroit, Michigan

732 Meehanite

M-185 Midland Motor Cylinder Co., Birmingham, England

284 Chromidium
3327 Midcyl I

M-85 Midvale Co., Philadelphia, Pa.

8388 Alpha No. 2
4600 Bit and Jar Steel
4601 Carbon Tool Double Extra
4602 Carbon Vanadium
8771 Caroph Carbon
8887 Chrome Roll
2244 Constant
2516 Cromaloy
2380 Diamond
9095 Diamond A
4607 Die Blanking
4597 Die Block A
5498 Die Block B
4608 Die Block C
4609 Die Block E
9150 Double Extra
3591 Duredge Chisel
9374 Extra Grade Carbon
9489 Finishing Special
9701 Five Star
9729 Four Star
9924 Herculite
4611 High Speed Extra Drill
4612 High Speed Mo Extra
7323 Midvale N.D.
6150 Midvaloy A
1566 Midvaloy Aero-Valve
1568 Midvaloy AMF
735 Midvaloy ATV-1
736 Midvaloy ATV-3
6151 Midvaloy B
737 Midvaloy BTG
2806 Midvaloy Extra High Speed
2607 Midvaloy Extra Tool
6965 Midvaloy FC Stainless
2808 Midvaloy Finishing
1337 Midvaloy HC
10244 Midvaloy HR-1
1565 Midvaloy HY-X
1569 Midvaloy KA2
1571 Midvaloy KA2Mo
1570 Midvaloy KA2S
1567 Midvaloy N
739 Midvaloy V-2A
2807 Midvaloy Nut Piercer
2809 Midvaloy Special Finishing
2196 Midvaloy Stainless Iron
1333 Midvaloy Stainless Iron C-1
1334 Midvaloy Stainless Iron C-2
1335 Midvaloy Stainless Iron C-3
1336 Midvaloy Stainless Iron C-4
1331 Midvaloy Stainless Steel A
1332 Midvaloy Stainless Steel B
2478 Midvaloy Stainless Steel 7
2913 Midvaloy 11
12244 Midvaloy 11Mo
10239 Midvaloy 13
2914 Midvaloy 26
3924 Midvaloy 77F
6966 Midvaloy 334
5190 Midvaloy 976
10238 Midvaloy 0500
1215 Midvaloy 1225
1214 Midvaloy 1300
7322 Midvaloy 1300A
6967 Midvaloy 1700
6968 Midvaloy 1735
10243 Midvaloy 1808
738 Midvaloy 1808C
10240 Midvaloy 1808M

6969 Midvaloy 1808Se
6970 Midvaloy 2060
6971 Midvaloy 2100
6972 Midvaloy 2100Cu
10241 Midvaloy 2512-7
1216 Midvaloy 2512-10
10242 Midvaloy 2512-16
1564 Midvaloy 2512B
1217 Midvaloy 2520
1218 Midvaloy 2602
743 Midvaloy 2700
10245 Midvaloy 2802
1219 Midvaloy 3030
10295 Mn Hole Punch
5060 Multole
3947 One Star
2947 Regular Bolt Die
11020 Regular Carbon
2946 Regular Tool
5061 Salvo
7324 Smoothole
10778 Smoothole Granite Drill
4014 Special Bolt Die
10801 Special Carbon
4019 Special Punch
4143 Special Tool
4610 Jap Steel Special
4046 Three Star
4068 Two Star
11274 Two Star Special

M-186 Millbury Steel Foundry Co., Millbury, Massachusetts

832 Noncorrodite

M-743 Miller Steel Co., Newark, New Jersey

8919 C.M.S.

M-187 Mills, Wm., & Co., Birmingham, England

8230 Aeral
6674 Alakron
1177 Wilmil

M-365 Milne, A., & Co., New York, N. Y.

8501 A 020 Chisel & Punch
4615 AMC
4617 AMCOH Extra Special
8440 AMCOH Hollow Die Steel
8441 AMCOH Oil Hardening
1758 AMCOH Special
8797 Cast Composite
8862 Chrome Hot Work
9121 Dixie Brand
9151 Double Seven
9153 Double Six Alloy
9434 Fast Finishing
4616 Fer
3842 F.J.A.B. Extra
3843 F.J.A.B. Hollow Drill
3844 F.J.A.B. Regular
3845 F.J.A.B. Rolled Auger
3846 F.J.A.B. Solid Drill
3847 F.J.A.B. Special
9730 F.P.C. Non-Tempering Chisel
11564 Green Label
9942 High Production
10104 Hyco
9509 Imperial Major
9586 K-9 Special Oil Hardening
10639 Maxtack
10237 Milco 9
10249 Milne Hollow Die Steel
10250 Milvan
10251 Minerva Chisel
10262 M-M-1
10276 Molybdenum Chisel
10293 MSM Alloy
3967 Prince
11009 Red Label
10803 Special Chrome Vanadium
10814 Special Vanadium
11265 Tube Mandrel
11568 Tungsten Hot Work
11550 3074 Hot Work

M-475 Milwaukee Steel Foundry Co., Milwaukee, Wisconsin

12279 Milwaloy 1¼ Mn
5968 Milwaloy 7
5969 Milwaloy 13
5970 Milwaloy 18
12270 Milwaloy 18-8
5971 Milwaloy 26
12271 Milwaloy 29-9
12273 Milwaloy 35-15
5972 Milwaloy 38
5973 Milwaloy 50
12268 Milwaloy C.C.
12276 Milwaloy Commercial
12269 Milwaloy Cr Ni
12274 Milwaloy Cr Ni Mo
12278 Milwaloy Dynamo
12277 Milwaloy Hi Carbon
12272 Milwaloy KA2SMo
12266 Milwaloy MnBo
12267 Milwaloy MnMoBo
12275 Milwaloy Nit

M-858 Minimax Company, Chicago, Illinois

10252 Minimax Alloy 178

M-733 Mining and Chemical Products, Ltd., London, England

8848 Cerro Alloys

M-415 Miralite, Ltd., Mortlake, London, England

4790 Miralite

M-988 Mir-O-Col Alloy Company, Los Angeles, California

8885 Mir-o-col

M-536 Mitchell, Robt., Co., Ltd., Montreal, Canada

7325 Mitchalloy A
7326 Mitchalloy B
7327 Mitchalloy C
6493 Mitchalloy D

M-860 Moltrop Steel Products Company, Beaver Falls, Pennsylvania

10275 Moltrop

M-640 Molybdenum Corp. of America, Pittsburgh, Pennsylvania

8111 Ferro Molybdenum (Low Carbon)
8110 Ferro Molybdenum (Standard)
8112 Ferro Tungsten (A.S.T.M.)
8114 Ferro Tungsten (Low Melting)
8113 Ferro Tungsten (Standard)

M-837 Molybdenum, N. O., Co., Reutte, Tyrol, Austria

9961 Onmet A. Alloy
9962 Onmet Iron
9963 Onmet Sivar 48
9964 Onmet Sivar 60
9965 Onmet Sivar 90

M-863 Monarch Alloys Company, Ravenna, Ohio

10284 Monarch Metal

M-495 Monarch Steel Corp., Indianapolis, Indiana.

7328 Speed Case X-1525
10819 Speed Treat X-1535
10821 Speed Treat X-1545

M-86 Mond Nickel Co., Ltd., London, England

2822 Mond "70"
798 Nickel
757 Mond Nickel

M-839 Moraine Products Company, Division General Motors Corp., Dayton, Ohio

411 Durex
11538 Durex Bronze
11813 Durex Bronze
10271 Durex Iron
10603 Porex
10288 Moraine

M-539a More-Jones Brass & Metal Co.
(Parent Company—National Bearing Metals Corp., q.v.)

M-601 Motor Castings Co., Milwaukee, Wisconsin

10264 Mocasco
10265 Mocasco 30
11839 Mocasco 40
10266 Mocasco 50
10267 Mocasco 60
6742 Moheco

M-934 Mt. Vernon Furnace & Mfg. Co., Mt. Vernon, Illinois

11354 Vernalloy

M-266 Mueller Brass Co., Port Huron, Michigan

1316 Mueller 600 Metal
11024 Relleum
1234 Tuf-stuff

M-188 Muntz's Metal Co., Birmingham, England (Subsidiary of I.C.I. Metals Ltd.)

59 Alumbro
765 Muntz
789 Nergandin

M-526 Murex Ltd., Rainham, England

1904 Eel Brand Antifriction
10621 Premag Welding Rod

M-952 Napraloy Co., Jersey City, New Jersey

11678 Napraloy

M-548 Nassau Smelting & Refining Co., New York, N. Y.

6521 Argus
10369 Nada "C"
11873 Nada NT
11874 Nada NT-2
11875 Nada NT-3

M-414 National Alloys, Ltd., London, England (American Affiliate—New Jersey Zinc Co.)

4772 Mazak

M-189 National Alloy Steel Co., Blawnox, Pennsylvania

767 NA
5191 NA-1
5005 NA-2
5006 NA-4
5192 NA-4-M
11915 NA-6
5977 NA-18
5007 NA-19
11916 NA-34
5008 NA-65

M-539 National Bearing Metals Corp., St. Louis, Missouri

6508 Alpha
8387 Alpha Crusher
9051 Damascus
9581 Keystone
7335 More-Jones "A" Grade
7336 More-Jones Aluminum Babbitt
7337 More-Jones Arctic Bronze
7338 More-Jones Armature Babbitt
7339 More-Jones Beta Crusher Babbitt
7340 More-Jones Crescent Babbitt
7341 More-Jones Extra Copper-Hardened Babbitt
7343 More-Jones Genuine Babbitt (Original)
7342 More-Jones Genuine Babbitt (Special)
7344 More-Jones Hoo Hoo
7345 More-Jones Improved Babbitt
7346 More-Jones Nickel Babbitt
7330 More-Jones No. 1 Standard Babbitt
7331 More-Jones No. 2 Standard
7332 More-Jones No. 3 Standard
7333 More-Jones No. 4 Standard
7334 More-Jones No. 36 Bronze
7347 More-Jones Phosphor Bronze Babbitt
7348 More-Jones Regent Babbitt
7349 More-Jones Rex Babbitt
7350 More-Jones Special Motor Babbitt
7351 More-Jones Special No. 1 Babbitt
7352 More-Jones Tiger Bronze
7353 More-Jones Universal Babbitt
10371 National No. 2
10372 National No. 3
10373 National No. 4
10374 National No. 5
10375 National No. 6
10376 National No. 7
10377 National No. 9A
10378 National No. 9B
10379 National No. 9C
10380 National No. 9D
10381 National No. 9E
10382 National No. 9F
10383 National No. 9G
10384 National No. 9H
10385 National No. 10A
10386 National No. 10B
10387 National No. 11
10388 National No. 12
10389 National No. 13

M-864 National Broach & Machine Co., Detroit, Michigan

10370 Naloy

M-190 National Bronze and Aluminum Foundry Co., Cleveland, Ohio

11136 T-1 Alloy
11177 Tenual No. 50
1073 Tenual No. 226
11178 Tenual I
11179 Tenual "T" Titanite
11181 Tenual T
11561 Titanite

M-910 National Cable & Metal Co., Glendale, California

11049 Richloy Hi-Tensile Solder No. 3
11050 Richloy Hi-Tensile Solder No. 4
11051 Richloy Hi-Tensile Solder No. 5
11052 Richloy Hi-Tensile No. 6
11053 Richloy Hi-Tensile No. 7

M-232 National Erie Corp., Erie, Pennsylvania

10396 Neloy Molybdenum
10397 Neloy Molybdenum 2A
10398 Neloy Molybdenum 3A

10399 Neloy Molybdenum 5A
10400 Neloy Molybdenum 6A
786 Neloy
10401 Neloy No. 1
10402 Neloy No. 2
10403 Neloy No. 3
10404 Neloy No. 4
10405 Neloy No. 5
10406 Neloy No. 6

M-483 National Forge & Ordnance Co., Irvine, Pennsylvania
5978 Nationalloy 1
5979 Nationalloy 2
5980 Nationalloy 3

M-602a National Harris Wire Co., Newark, New Jersey
(See Prentiss, Geo. W. & Co.)

M-88 National Lead Co., New York, N. Y.
125 Antimonial Lead
273 Chemical Lead
12003 Coating Metal 560
9210 Dutch Boy
12001 Fluxrite
4247 Heavy Pressure
10080 Hoyt
12004 Hoyt 11
9583 Kirksite A
623 Lead
12002 Milrite
6511 Nickeline
10562 Perfection Antifriction
10648 Phoenix
1507 Satco
7329 Tellurium Lead
1074 Terne Metal

M-89 National Malleable & Steel Castings Co., Cleveland, Ohio
688 Magnel
7593 Magno
10146 Mallix
768 Naco Steel
9600 National Graphitic Steel
11700 Nurex
10637 Promal

M-311 National Physical Laboratory, Teddington, England
1801 A-Alloy
2562 E-Alloy
5409 F-Alloy
513 G-Alloy
836 Y-Alloy

M-906 National Smelting Company, Cleveland, Ohio
11945 Red-X-5
11171 Red-X-6
11013 Red-X-8
11014 Red-X-8-5
11015 Red-X-10
11016 Red-X-13

M-836 National Steel Corporation, Chicago, Illinois
9946 High Tensile Alloy
10390 N-A-X High Tensile

M-90 National Tube Co., Pittsburgh, Pennsylvania
8085 Bain Alloy
7720 Carbon-Mo
7721 Carbon-Mo
8132 Copper Bearing Steel
8129 U.S.S. Cor-Ten
8130 U.S.S. Man-Ten
8131 U.S.S. Sil-Ten
8123 U.S.S. 12
12302 U.S.S. 12 Cr-Al
1134 U.S.S. 17
8083 U.S.S. 18-8 S
8084 U.S.S. 18-8 Stabilized
1137 U.S.S. 27
8087 2½ Nickel Steel
8124 4/6 Cr Steel
8125 4/6 Cr Steel
8126 4/6 Cr-Mo Steel
8127 4/6 Cr-Mo Steel
8128 4/6 Cr-Mo-Ti Steel

M-865 Nesaloy Products, Inc., New York, New York
10411 Nesaloy

M-824 Neveroil Bearing Co., Wakefield, Massachusetts.
9832 Graphex

M-973 New England Collapsible Tube Co., New London, Connecticut
10679 Sheffalloy

M-442 New England High Carbon Wire Co., Millbury, Massachusetts
(No longer manufacture alloys under proprietary names)

M-191 Newport Rolling Mill Co., Newport, Kentucky
521 Gohi Iron
9578 Kentucky
10415 Newport Armature
10416 Newport Electrical "A"
10417 Newport Electrical "B"
10418 Newport Electrical "C"
10419 Newport Transformer
10420 Newport Transformer Special
10421 Newport Transformer Extra Special

M-91 New Jersey Zinc Co., Palmerton, Pennsylvania

4772 Mazak
1193 Zamak No. 2
1194 Zamak No. 3
1195 Zamak No. 5
1196 Zamak No. 6
1197 Zilloy

M-349 Ney, J. M., Co., Hartford, Connecticut

2369 Djaloy
4929 Neydium No. 8
4930 Neydium No. 9
2398 Ney Oro A
2400 Ney Oro AW
2399 Ney Oro A-1
2407 Ney Oro B
2405 Ney Oro BW
2406 Ney Oro B-2
2402 Ney Oro E
2396 Ney Oro Elastic No. 1
2395 Ney Oro Elastic No. 2
2394 Ney Oro Elastic No. 3
2393 Ney Oro Elastic No. 4
2404 Ney Oro G
2401 Ney Oro GW
2403 Ney Oro G-3
10422 Ney's No. 125 Alloy
11701 Paliney No. 6
11702 Paliney No. 7
2397 Tech-Aloy

M-92 Niagara Falls Smelting & Refining Corp., Buffalo, New York

6497 Aluminum Alloy No. 12
266 Cataract Metal
9420 Falls No. 11 Alloy
9421 Falls No. 14 Alloy
9422 Falls No. 15 Alloy
9423 Falls No. 21 Alloy
9424 Falls No. 26 Alloy
9425 Falls No. 55 Alloy
4395 Lynite Piston Alloy
4392 Lynite 43
678 Lynite 109
4391 Lynite 112
679 Lynite 122
1373 Lynite 145
1374 Lynite 146
1380 L-8
1375 Macadamite
10423 Niagara
11121 Ruinella

M-716 Nihon Jyokiko Seikosho Goshi, Koisha, Japan

8691 Bristahl
8950 Constahl
10442 Nippon Evershiuing Steel

M-386 Nitralloy Corp., New York, N. Y. (Licensor)

1582 Nitralloy No. 125
1583 Nitralloy No. 135
1584 Nitralloy No. 225
7464 Nitralloy No. 230
4433 Nitralloy No. 630
7465 Nitralloy No. 640
3933 Nitricastiron

M-427 Non-Corrodal Alloys, Ltd., London, England

4156 *Solderal*
4805 *Solusal*

M-576 Non-Ferrous Castings Co., Ltd., Smethwick, England

6676 Lily Phosphor Bronze

M-683 Northeast Metals Co., Philadelphia, Pennsylvania

8510 Arc-Wel

M-542 Northfield Iron Co., Northfield, Minnesota

8678 Blue Diamond
6512 Nico

M-532 Norton Co., Worcester, Massachusetts

6489 Norbide (Norton Boron Carbide)

M-643 Northern Aluminum Co., Ltd., Birmingham, England

8303 Alclad NA 24S
8302 Alclad NA 22S
8304 Alclad NA 26ST
8301 Alclad NA 17S
10308 NA 2S
10309 NA 3S
10310 NA 4S
10311 NA 10S
10312 NA 11S
10313 NA 13S
10314 NA 15S
10315 NA 17S
10316 NA 22S
10317 NA 24S
10318 NA 25S
10319 NA 26S
10320 NA 33S
10321 NA 35S
10322 NA 38S
10323 NA 50S
10324 NA 51S
10325 NA 55S
10326 NA 57S
10327 NA 80S
10328 NA 111
10329 NA 115
10330 NA 123
10331 NA 124
10332 NA 125
10333 NA 126

10334 NA 127
10335 NA 135
10336 NA 140
10337 NA 150
10338 NA 155
10339 NA 156
10340 NA 160
10341 NA 162
10342 NA 165
10343 NA 172
10344 NA 211
10345 NA 218
10346 NA 222
10347 NA 224
10348 NA 225
10349 NA 226
10350 NA 232
10351 NA 234
10352 NA 235
10353 NA 236
10354 NA 238
10355 NA 240
10356 NA 242
10357 NA 244
10358 NA 250
10359 NA 260
10360 NA 305
10361 NA 307
10362 NA 320
10363 NA 322
10364 NA 330
10365 NA 350
10366 NA 450
10367 NA 465
10368 NA 510

M-868 Novo Engine Company, Lansing, Michigan

10479 Novite

M-94 Ohio Brass Co., Mansfield, Ohio

494 Flecto Iron
838 O.B. Alloy No. 1-A
839 O.B. Alloy No. 3
840 O.B. Alloy No. 4-B
1356 O.B. Alloy No. 11
843 O.B. Alloy No. 16
845 O.B. Alloy No. 25
12110 O.B. Alloy No. 26
4897 O.B. Alloy No. U-5

M-398 Ohio Ferro Alloys Corp., Canton, Ohio

7789 Philo Brand Ferro-Chrome
7790 Philo Brand Ferro-Manganese
7785 Philo Brand Ferro-Silicon 50% Grade
7786 Philo Brand Ferro-Silicon 75% Grade
7787 Philo Brand Ferro-Silicon 85% Grade
7788 Philo Brand Ferro-Silicon 90% Grade
11644 Siminal

M-95 Ohio Steel Foundry Co., Springfield, Ohio

9411 Fahrite C-8
9412 Fahrite C-8A
9414 Fahrite C-12
12077 Fahrite C-28
12078 Fahrite HC-28
464 Fahrite N-1
1745 Fahrite N-3
12073 Fahrite N-31
12072 Fahrite N-51
9417 Fahrite N-61
12074 Fahrite N-63
12071 Fahrite N-71
12075 Fahrite N-73
12076 Ohio O-1
12079 Ohio O-2
12080 Ohio O-4
12081 Ohio O-5
12082 Ohio O-6
12083 Ohio O-11
12084 Ohio O-12
12085 Ohio O-15

M-788 Oil Well Supply Company, Houston, Texas

9534 I.R. Metal
9819 Grade S

M-927 Oklahoma Steel Casting Company, Oklahoma

11269 Tufwear No. 2
11270 Tufwear No. 3

M-866 Oldham & Company, F. B., Buffalo, New York

10412 Neutralloy

M-366 Onondaga Steel Co., Inc., Syracuse, New York

4618 On
3948 Onplus
4619 Ontop

M-233 Osborn & Co., Ltd., Samuel, Sheffield, England

9365 Evershyne
8073 Mushet Self Hardening
1019 S.O.B.V.
7791 Titanic Carbon Steel
7790 Titan Manganese Steel
7792 Tropic Hot Die Steel

M-462 Osnabrück Kupfer & Drahtwerke, Osnabrück, Germany

9970 Oswagal
6070 Volvit

M-301 Osram G.m.b.H., Kommandit-Ges., Berlin, Germany
(See Fried. Krupp, Widia Alloys)

M-330 Ostermann & Co., Metallwerke, Köln, Germany

7668 Diamantbronze
7669 Elektrobronze
7670 Omanitbronze
1686 Ostermann Cast Bronze No. 10
1690 Ostermann Cast Bronze No. 14
1689 Ostermann Cast Bronze No. 20
1681 Ostermann Lead Bronze No. 10
1682 Ostermann Lead-Tin Bronze No. 8
1680 Ostermann Red Brass No. 4
1685 Ostermann Red Brass No. 5
1684 Ostermann Red Brass No. 8
1683 Ostermann Red Brass No. 9
1688 Ostermann Red Brass No. 10
1687 Ostermann Wrought Bronze No. 6

M-331 Otis Elevator Co., Buffalo, New York

2892 Otisel 1
5194 Otisel 2
5195 Otisel 3
5196 Otisel 4
5197 Otisel 5
9973 Otisel K2
9974 Otisel K3
6951 Otisel K-4 Molybdenum
6952 Otisel K-5 Tungsten
9975 Otisel K-7
9976 Otisel K-8
9977 Otisel K-9
9987 Otisel O-D
9988 Otisel O-H
9989 Otisel O-M
9990 Otisel O-S
9978 Otisel O-2
9979 Otisel O-3
9980 Otisel O-4
9981 Otisel O-5
9982 Otisel O-6
9983 Otisel O-7
9984 Otisel O-8
9985 Otisel O-9
9986 Otisel O-10
10004 Otisel O-12
10005 Otisel O-16
10006 Otisel O-18
10007 Otisel O-24
10008 Otisel O-30

M-840 Otis Steel Co., Cleveland, Ohio

9972 Otiscoloy

M-484 Oxley & Co., Wm., Rotherham, England

5983 Olympic Tool Steel

M-192 Pacific Foundry Co., San Francisco, California

348 Corrosiron
9485 Ferroweld
496 Flintcast
929 Pyrocast

M-553 Pacific Metal Co., Portland, Oregon

6529 Nickeloid

M-872 Page Steel and Wire Division, Monessen, Pennsylvania

10519 Page-Allegheny AMO
10520 Page-Allegheny ATi
10521 Page-Allegheny B Special
10522 Page-Allegheny Metal A
10523 Page-Allegheny Metal B
10524 Page-Allegheny Metal C
10525 Page-Allegheny Metal CB
10526 Page-Allegheny Metal FM
10527 Page-Allegheny Ohmally
10506 Page-Allegheny 4-6 Cr
10507 Page-Allegheny 12 Cr
10494 Page-Allegheny 15-35
10508 Page-Allegheny 16 Cr
10495 Page-Allegheny 17-7
10509 Page-Allegheny 18 Cr
10496 Page-Allegheny 18-8
10497 Page-Allegheny 19-9
10511 Page-Allegheny 22 Cr
10498 Page-Allegheny 22 Special
10510 Page-Allegheny 23 Cr
10499 Page-Allegheny 25-12
10500 Page-Allegheny 25-20
10512 Page-Allegheny 33 Grade A
10513 Page-Allegheny 33 Grade C-1
10501 Page-Allegheny 33 N.H.
10502 Page-Allegheny 33 T.Q.
10514 Page-Allegheny 34
10515 Page-Allegheny 44
10503 Page-Allegheny 46

10516 Page-Allegheny 55
10517 Page-Allegheny 66 Grade B
10518 Page-Allegheny 66 Grade C-2
10504 Page-Allegheny 66 W
10505 Page-Allegheny 67
10528 Page Armco
10529 Page Auto
10530 Page B
10531 Page CE
10532 Page E
10533 Page Hard Facing
10534 Page HC
10539 Page HT
10535 Page Hi-Tensile C
10536 Page Hi-Tensile F
10537 Page Hi-Tensile G
10538 Page Hi-Tensile "Shielded Arc"
10540 Page MC

M-367 Paragon Steel & Tool Co., Inc., Rutherford, New Jersey
4035 Swedesteel A
4036 Swedesteel B
4037 Swedesteel C
4038 Swedesteel D
4039 Swedesteel E
10550 Parasteel

M-879 Paraloy Company, Chicago, Illinois
10567 Permium No. 205

M-234 Parker Appliance Co., Cleveland, Ohio
1139 Valve Copper

M-874 Parker-Kalon Corp., New York, New York
10551 Parkaloy

M-944 Park Sales Co., New York, New York
11439 Weldoloy No. 685
11440 Weldoloy No. 690

M-368 Patriarche & Bell, New York, N. Y.
1139 Valve Copper

M-832 Paulson & Sons, Inc., Thomas, Brooklyn, New York
9899 Hecla Bronze

M-876 Peckovers, Ltd., Toronto, Canada
10566 Pechrite

M-39 Peninsular Steel Company, Cleveland, Ohio
(Agent for Bethlehem Steel Co., Uddeholm Co., and Soderfors Co., q.v.)

M-341 Peninsular Steel Co., Detroit, Michigan
(Agent for Bethlehem Steel Co., Uddeholm Co., and Soderfors Co., q.v.)
4097 Arrow No. 16
333 Bethlehem Comokut
4459 Bethlehem Extra Special High Speed Steel
5988 Bethlehem Penco No. 20
2207 Black Label No. 14
2210 Blue Label No. 5
4622 Drill Rod
11563 Green Label
4112 Hi-Van No. 28
4623 Hollobar
5989 Hot Work No. 2
6958 Hot Work No. 23
11938 Penco
6960 Penco No. 3
3955 Penco No. 4
4374 Pen-Van No. 12
7354 Rim-Roll
10798 Special
4023 Special No. 18
5987 Tri-Mo No. 19
4072 UHB Header

M-466 Pennsylvania Electric Steel Castings Co., Hamburg, Pennsylvania
10558 Pennaloy Heat Resistant 5
10559 Pennaloy Heat Resistant 7

M-881 Permold Co., Cleveland, Ohio
10569 Permold

M-880 Permo Products Corp., Chicago, Illinois
10568 Permo
10570 Permometal

M-878 Perry Barr Metal Company, Ltd., Birmingham, England
10564 Permal

M-728 Perry Equipment & Supply Co., Philadelphia, Pennsylvania (Agent for Samesrenther & Co., Butzback, Germany)

8759 Canzler Brass Welding Wire
8760 Canzler No. 1
8761 Canzler No. 4

M-319 Phelps-Dodge Copper Products Corp., New York, N. Y.

10554 PDCP
917 P.M.G.
10587 P.M.G. No. 3
10588 P.M.G. No. 10
10589 P.M.G. No. 95
10590 P.M.G. No. 96

M-685 Phillips & Co., C. E., Chicago, Illinois

8508 Arcast
8972 Copper Arc
10646 Nico

M-450 Phosphor Bronze Smelting Co., Philadelphia, Pennsylvania (See Delta Metal Co., Ltd., Licensor)

5398 Delta Antifriction Metal
384 Delta Bronze I
1347 Delta Bronze II
1348 Delta Bronze III
4141 Delta Bronze IV
4781 Delta Bronze V
6602 Delta Bronze VI
6603 Delta Bronze VII
6604 Delta Bronze VIII
6605 Delta Bronze IX
6606 Delta Bronze IXa
385 Delta Metals
6607 Delta Propeller Bronze
4150 Deltoid
4149 Dixtrudo
9308 Elephant Brand Alloy No. 113
6609 Elephant Brand Hardening No. 1
6610 Elephant Brand Hardening No. 2
9309 Elephant Brand No. 13D Alloy
9306 Elephant Brand No. 28 Metal
2068 Elephant Brand Phosphor Bronze
6583 Elephant Brand Phosphor Bronze, Grade A
6584 Elephant Brand Phosphor Bronze, Grade B
7502 Elephant Brand Phosphor Bronze, Grade B-I
6585 Elephant Brand Phosphor Bronze, Grade C
6586 Elephant Brand Phosphor Bronze, Grade D
6587 Elephant Brand Phosphor Bronze, Grade E
6588 Elephant Brand Phosphor Bronze, Grade F 2
6589 Elephant Brand Phosphor Bronze, Grade G
7503 Elephant Brand Phosphor Bronze, Grade H
6590 Elephant Brand Phosphor Bronze, Grade S
7504 Elephant Brand Phosphor Bronze, Grade V
9307 Elephant Brand Phosphor Bronze No. 28 Grade D
6611 Elephant Brand Phosphor Copper
6612 Elephant Brand Phosphorized Antifriction Metal
10578 Phosphor Bronze No. 130
11210 Tranze Phosphor Bronze

M-326 Pioneer Alloy Products Co., Cleveland, Ohio

2910 Pioneer Acid Resisting Metal
4904 Pioneer Heat Resisting Metal
10580 Pioneer Metal

M-543 Pittsburgh Brass Mfg. Co., Pittsburgh, Pennsylvania

6513 Alunyte
9750 Lubrik

M-235 Pittsburgh Crucible Steel Company, Midland, Pennsylvania (Division of Crucible Steel Co. of America)

723 Maxel
11794 Maxel No. 3
11795 Maxel No. 2
763 M.P.M.-3C Steel

M-626 Pittsburgh Metallurgical Co., Inc., Niagara Falls, New York

7466 Niagara Brand Ferro-Chrome
7468 Niagara Brand Silico-Manganese
7467 Niagara Brand Ferro-Silicon

M-369 Pittsburgh Rolls Corp., Pittsburgh, Pennsylvania

10571 Phoenix A
10572 Phoenix A Special
10573 Phoenix K
10574 Phoenix Molybdenum Chill
10575 Phoenix Nickel Chill
10576 Phoenix Piroco
4246 Phoenixloy

M-883 Pittsburgh Steel Co., Pittsburgh, Pennsylvania

10582 Pittsburgh

M-236 Pittsburgh Steel Foundry Corp., Glassport, Pennsylvania

904 Pitaloy No. 90
905 Pitaloy No. 100

M-370 Pittsburgh Tool Steel Wire Co., Monaca, Pennsylvania

3820 Dukane Cold Drawn
3821 Dukane Drill Rod
4631 High Speed Drill Rod
3929 Monaca Cold Drawn
3928 Monaca Drill Rod
4627 Monaca Special Cold Drawn
2491 Reliance Drill Rod
4630 Special Tungsten Alloy Drill Rod
11417 Warplis

M-193 P. L. & M. Co., Los Angeles, California

916 Plymite

M-547 Plouff Metallographic Institute, Boston, Massachusetts

6520 Argent
7355 Argentan

M-318 Plykrome Corp., New York, N. Y.

915 Plykrome

M-96 Poldi Steel Works, Prague, Czecho-Slovakia (American Agent—Ajax Tool Steel Sales, New York, N. Y.)

4636 C R-4 Regular
4638 C V Special
4633 F.S. Extra Best
10081 H.P.S.
4632 No. 5 Best
4639 "O" Special
4254 Poldi
5201 Poldi AK H
5198 Poldi AK 1
5199 Poldi AK 2
5200 Poldi AK 5
3961 Poldi Brand No. 4
3962 Poldi Brand No. 2002 ES
3963 Poldi CR
918 Poldi E.Z.H.
2479 Poldi MK
2483 Poldimaximum
2482 Poldimaximum Special
2481 Poldimaximum Special No. 30
2480 Poldimaximum Special No. 55
3964 Poldi HPS
3965 Poldi No. 212
919 Poldi No. 2002
2484 Poldi "000" Extra
10594 Poldi Radeco D
3966 Poldi S.S.T.
920 Poldi Stabil
4637 S P Special
4635 S P S Special
4634 S R-4 Regular
921 Teenax N
11172 Teenax NB
11540 2002 Special

M-886 Pomona Pump Co., Pomona, California

10600 Pomoloy C-2
10601 Pomoloy C-3

M-525 Poro Metals, Ltd., London, England

2111 Poro Bronze

M-307 Potts Co., Horace T., Philadelphia, Pennsylvania

8043 Elastuf Chro-Moly
9266 Elastuf Chro-Moly-(Modified)
8046 Elastuf JJ
2180 Elastuf Media
2181 Elastuf Media Precision Finish
2182 Elastuf Penn
8045 Elastuf S.A.E. 2335
8044 Elastuf S.A.E. 3140
9267 Elastuf Type A Heat Treated
420 Elastuf Type A No. 9
8062 Elastuf Type A No. 14
9268 Elastuf Type C.H.
9269 Elastuf 44
4644 Potts Special Drill Rod
11647 Strainfree Elastuf Penn
8047 Thredwel
4640 Trojan No. 8
8061 Trojan No. 9½
8048 Weartuf Steel



M-885 Powder Metals, Inc., Long Island City, New York

10596 Pomet 111
10597 Pomet 300
10598 Pomet 389
10599 Pomet 560

M-940 Pratt, J. M., Co. (Promoted by Byrne-Van Pelt Assoc.), Cincinnati, Ohio

11413 Walde-Loy No. 100 Metal

M-838 Precious Metals Research Works, Inc., New York, New York

11224 Tripli-Cost

M-887 Precision Castings Company, Syracuse, New York

10615 Precision A-12
10616 Precision A-50
10617 Precision A-54
11891 Precision A-94
11896 Precision A-218
11897 Precision A-360
11893 Precision BR-1
11894 Precision BR-2
11895 Precision BR-3
11892 Precision M-13
10618 Precision ZN-5
10619 Precision ZN-6
10620 Precision ZN-7

M-506 Prescott Co., Menominee, Michigan

1712 Sigeron Metal

M-583 Pressed Steel Car Co., Pittsburgh, Pennsylvania

6636 Prescoloy

M-371 Prosser & Sons, Thos., New York, N. Y.
(See Fried. Krupp)

M-561 Puget Sound Metal Works, Tacoma, Washington

1357 British Navy Anti-friction metal
775 Navy Antifriction metal Grade 1
776 Navy Antifriction metal Grade 2
777 Navy Antifriction metal Grade 3
778 Navy Antifriction metal Grade 4
779 Navy Antifriction metal Grade 5
780 Navy Antifriction metal Grade 6
781 Navy Antifriction metal Grade 7

M-372 Purdy Co., Inc., A. R., New York, N. Y.

4653 Planet Choice
3957 Planet Cold Rolled
3958 Planet Chisel
4654 Planet Extra
3959 Planet High Speed
4657 Planet Sheffoil Oil Hardening
4655 Planet Regular
3960 Planet Special
4656 Purco Chisel

M-630 Q & C Co., New York, N. Y.

7486 Nogroth

M-812 Ratcliff Metals, Ltd., J. F., Birmingham, England

9763 Luster

M-291 Reading Iron Co., Reading, Pennsylvania

10475 Nordic
1318 Wrought Iron

M-986 Reid-Avery Co., Baltimore, Maryland

9601 Raco HD 5
11653 Raco HD 6
11658 Raco HD 8
11645 Raco HD 11
9552 Raco HD 30
8696 Raco HD 64
9301 Raco HD 82
11691 Raco Type D

M-907 Reliance Steel Casting Co., Pittsburgh, Pennsylvania

11022 Reliance

M-420 Rely Metal Works, Cape Town, South Africa

4798 Rely C.M.1
4799 Rely C.M.2
4800 Rely C.M.3
4801 Rely C.M.4
4802 Rely C.M.5
4803 Rely C.M.6
5756 Rely Y.Z.

M-790 Rennie Tool Co. (The), Manchester, England

9546 J.B.R. Alloy
11027 Renalloy
11028 Rennite
11267 Tuffaloy

M-97 Republic Steel Corp., Cleveland, Ohio
(See Upson Nut Division, and Union Drawn Steel Division, subsidiaries)

12148 Central Pure Iron
1554 Enduro AA
8066 Enduro AA High Carbon
1561 Enduro FC
1555 Enduro HC
1556 Enduro HCN
4738 Enduro KA-2 FM
4735 Enduro KA-2 Mo
4741 Enduro KA-2 Ti
4734 Enduro KA-28
4385 Enduro NC-3
445 Enduro S
4733 Enduro S-1
11812 Enduro S-15
8070 Enduro S High Carbon
8069 Enduro S Turbine
4384 Enduro 4-6 Cr
4731 Enduro 4-6 Cr-Mo
4732 Enduro 4-6 Cr-W
4388 Enduro 18-8
4389 Enduro 18-8 B
9355 Enduro 18-8 Cb
4737 Enduro 18-8 FM
9354 Enduro 18-8 FS
4390 Enduro 18-8 Mo
4393 Enduro 18-8 S
4387 Enduro 18-8 S-Mo
4386 Enduro 18-8 S-Ti
4739 Enduro 18-8 Ti
8067 Enduro 19-9
6943 Enduro 19-9S
6944 Enduro 19-9S Ti
5931 Enduro 20-10
5932 Enduro 20-10S
6076 Enduro 20-23
8068 Enduro 20-25
8063 Nitralloy G
8064 Nitralloy H
4170 Nitralloy Hi-Carbon
4171 Nitralloy I
8065 Nitralloy Special Sulfur
12192 No-Co-Ro
691 Republic Double Strength Grade 1
692 Republic Double Strength Grade 1A
12142 Republic Silicon Armature Grade
12131 Republic Silicon Electric Grade
12245 Republic Silicon Field Grade
12246 Republic Silicon Special Dynamo Grade
12247 Republic Silicon Special Motor Grade
12248 Republic Silicon Transformer Grade
1098 Toncan Iron
11656 U-Loy

M-507 Resistoloy Co., Grand Rapids, Michigan

9539 Isorod
5934 Resistoloy

M-238 Revere Copper & Brass Co., New York, N. Y.

551 Herculoy
9925 Herculoy 418
9926 Herculoy 419
9927 Herculoy 420
9928 Herculoy 421
11032 Revalon
11033 Revere
11692 Revere Magnesium FS-1
9944 Revere Magnesium J-1
9955 Revere Magnesium M
11109 Rocan
2116 Roman Bronze
11115 Roncan
11437 Weld-Fast

M-909 Reynolds Corporation, New York, New York

11045 Reynolds Metal

M-671 Reynolds Metals Company, Louisville, Kentucky

8389 Alplate
12160 Clad R-303
4471 R-301
12159 R-303

M-990 Rhoades Metaline Company, R. W., Long Island City, New York

10644 Metaline

M-419 Rieter & Co., J. J.

2959 Reactal

M-98 Riverside Metal Co., Riverside, New Jersey

11804 Nickel Silver Grade B
4432 Omega Brand Beryllium Copper Alloy No. 32
854 Omega Brand Nickel Silver Alloy No. 3
956 Omega Brand Nickel Silver Alloy No. 6
855 Omega Brand Nickel Silver Alloy No. 7
856 Omega Brand Phosphor Bronze Alloy No. 30
1603 Omega Brand Phosphor Bronze Alloy No. 41
857 Omega Brand Phosphor Bronze Alloy No. 47
858 Omega Brand Phosphor Bronze Alloy No. 209
11057 Rivaloy No. 24
11058 Riverside Alloy No. 1
11059 Riverside Alloy No. 2
11060 Riverside Alloy No. 3
11061 Riverside Alloy No. 4
11062 Riverside Alloy No. 5
11063 Riverside Alloy No. 6
11064 Riverside Alloy No. 7
11065 Riverside Alloy No. 8
11066 Riverside Alloy No. 9
11067 Riverside Alloy No. 10
11068 Riverside Alloy No. 11
11069 Riverside Alloy No. 12
11070 Riverside Alloy No. 13
11071 Riverside Alloy No. 14
11072 Riverside Alloy No. 15
11073 Riverside Alloy No. 16
11074 Riverside Alloy No. 17
11075 Riverside Alloy No. 18
11076 Riverside Alloy No. 20
11077 Riverside Alloy No. 21
11078 Riverside Alloy No. 23
11079 Riverside Alloy No. 30 Grade A
11080 Riverside Alloy No. 31
12135 Riverside Alloy No. 32
11081 Riverside Alloy No. 33
11082 Riverside Alloy No. 47 Grade C
11083 Riverside Alloy No. 80
11084 Riverside Alloy No. 101
11086 Riverside Alloy No. 105
11087 Riverside Alloy No. 205
11088 Riverside Alloy No. 209
11089 Riverside Alloy No. 209 Grade D
11090 Riverside Alloy No. 330
12294 Riverside Alloy No. 400
8593 Riverside Alloy No. 401
11091 Riverside Alloy No. 402
11092 Riverside Alloy No. 403
11093 Riverside Alloy No. 404
11094 Riverside Alloy No. 405
8758 Riverside Beryllium Copper
11095 Riverside 72-28
11096 Riverside 74-26
11097 Riverside 78-22
11098 Riverside 80-20
11099 Riverside 80-20 Hard

M-195 Robbins & Meyers, Inc., Springfield, Ohio

130 Aremite

M-460 Robins Conveyors, Inc., Passaic, New Jersey

5757 Ni-Hard
11102 Robins C.I. 25
11103 Robins C.I. 35-G
11104 Robins C.I. 35-SG
11105 Robins C.I. 50
11106 Robins Copper Free Ni-Resist
11912 Robins E-2
11107 Robins High Crome Ni-Resist
11911 Robins Ni-Hard
11108 Robins Standard Ni-Resist

M-501 Röchling-Buderus A. G., Wetzlar, Germany

6109 Furodit No. 8
6110 Furodit S
6111 Furodit SS
6112 Furodit Z
6113 Furodit Z Special

M-912 Röchlingstahl, G.m.b.H., Volklngen, Saar, Germany

11116 Roneusil

M-239 Rolls-Royce Mfg. Co., Derby, England
(See High Duty Alloys, Ltd.)

M-82a Ross-Meehan Foundries, Chattanooga, Tennessee

732 Meehanite
11118 Ross-Meehan

M-713 Rossell Company, Ltd., Henry, Sheffield, England

8680 Blue Riband Victory No. 7

M-100 Rustless Iron & Steel Corp., Baltimore, Maryland

380 Defiheat
377 Defirust
9067 Defirust N
4883 Defirust, Machining
5920 Defirust, Turbine
9068 Defirust No. 410
9069 Defirust No. 416
379 Defistain
5921 Defistain, Machining
5922 Defistain, Special
7370 Rustless RR-11
12338 Rustless 5
12325 Rustless 8-20
12329 Rustless 12
12328 Rustless 12 Al
12331 Rustless 12 FM
12327 Rustless 12 T
12330 Rustless 12-2
12332 Rustless 13C35
11122 Rustless 13HC
11123 Rustless 13 HC-35
7369 Rustless 15
12333 Rustless 16-2
11124 Rustless 16-6
11125 Rustless 17
12334 Rustless 17 C 60
12335 Rustless 17 C 80
12336 Rustless 17 C 100
11126 Rustless 17 FM
11127 Rustless 17 HC-60
11128 Rustless 17 HC-90
11129 Rustless 17-7
12318 Rustless 18-8
12326 Rustless 18-8 Cb
12320 Rustless 18-8 FM (Selenium)
12319 Rustless 18-8 FM (Sulphur)
12324 Rustless 18-8 Ti
12322 Rustless 18-12-3 Mo
12323 Rustless 18-12-4 Mo
11130 Rustless 20-10
4884 Rustless 21
5986 Rustless 25-12
12321 Rustless 25-20
12337 Rustless 27
11132 Rustless 29-9
378 Special Defirust

M-434 Ryer Incorporated, Ltd., Los Angeles, California

9054 Dannemora A.D. 95
5066 MiRyCal Chisel

M-240 Ryerson & Son, Inc., Jos. T., Chicago, Illinois
(Distributor for Allegheny-Ludlum Steel Co., and Inland Steel Co., q.v.)

5748 Allegheny 22
1708 Allegheny 33
1709 Allegheny 44
4431 Allegheny 46
1710 Allegheny 55
38 Allegheny 66
2633 Glyco
10094 H.T.M. Steel
9804 Heavy Pressure Mill Glyco
6255 Lewis Iron
6256 Lewis Special Iron
9802 Marine Glyco
12000 NCM
814 Nikrome
11999 RDX
11998 Ryalloy
971 Ryarm
972 Ryax
741 Rycase
973 Ryco
11134 Rycrome
11135 Ryerson BFD
275 Rytense AA
9803 Standard Glyco
9805 Transmission Glyco
9801 Turbo-Glyco
4079 V.D.

M-966 Saginaw Bearing Co., Saginaw, Michigan

980 Sabeco Metal
1291 Sabeco No. 5
1292 Sabeco No. 29
1293 Sabeco No. 11
1294 Sabeco No. 11 HG
11641 Sabeco No. 16

M-690 Saginaw Malleable Iron Division, General Motors Corp., Saginaw, Michigan

8531 Ar Ma Steel

M-618 Sanderson Bros. & Newbould Ltd., Sheffield, England

7667 Celfor
7441 Kerus
10583 Pitho
7442 Sa'ms
7443 Wundus

M-903 Sanderson Steel Division, Crucible Steel Co of America, Syracuse, New York

10966 Sanderson XX

M-295 Sandusky Foundry & Machine Co., Sandusky, Ohio

1256 Sandusky 1-N
10968 Sandusky No. 2
10969 Sandusky No. 3
10970 Sandusky No. 4
11777 Sandusky No. 5
10971 Sandusky No. 6
10972 Sandusky No. 8
10973 Sandusky No. 9
10974 Sandusky No. 10

M-101 Sandvikens Jernverks Aktiebolag, Sandviken, Sweden
(American Agent—Sandvik Steel Inc., N. Y.)

1785 Sandvik No. 2C 27
1786 Sandvik No. 2C 34
1787 Sandvik No. 2C 40

1788 Sandvik No. 2 N-3 C-1
1789 Sandvik No. 2 N5
1792 Sandvik No. 2 R1
1790 Sandvik No. 2 R2
1791 Sandvik No. 2 R3
1794 Sandvik No. 3 N-3
1795 Sandvik No. 3 N-4C-2
1796 Sandvik No. 3 N-5
1793 Sandvik No. 3 S
1797 Sandvik No. 4 C-48
1798 Sandvik No. 4 N-3C-2
1799 Sandvik No. 6 N-3C-2
1800 Sandvik No. 6 N-4C-2
2160 Sandvik No. 7
2161 Sandvik No. 7 N-3C-3
5765 Sandvik No. 8
2162 Sandvik No. 8M-C-27
2163 Sandvik No. 8 N
2164 Sandvik No. 8 N-1 C-2
2165 Sandvik No. 8 N-3
983 Sandvik 2 MF
1610 Sandvik 2MFX
984 Sandvik 12 W12 C-1
985 Sandvik 13 W12C
986 Sandvik 16 C 6
10975 Sandvik 20W IV

M-101a Sandvik Steel Inc., New York, N. Y.
(See Sandvikens Jernverks, A. B.)

M-241 Sargent & Co., New Haven, Connecticut
418 Eclipse Bronze

M-486 Saville, J. J., & Co., Ltd., Sheffield, England
(American Affiliate—Wm. Jessop & Sons, Inc., New York, N. Y.)
5990 Saville Permabrite
5991 Saville Rustless Iron
5992 Saville Stainless Steel

M-196 Schmidt, Karl, Co., Neckarsulm, Germany
7850 B.S. Seewasser
2505 K.S. Alusil
2504 K.S. No. 245
2506 K.S. No. 280
991 K.S. Seewasser
2508 K.S. Special Piston Alloy
2509 K.S. "Y" Alloy
2507 Nelson-Bohnalite
7847 T.S.S. 3 Alloy
7848 T.S.S. 5 Alloy
7849 T.S.S. 8 Alloy

M-615 Schmidt, Rudolf Stahlwerke, Vienna, Austria
7408 Fortissimus
7409 Panzer

M-533 Schneider et Cie, Paris VIII, France
6490 Virgo

M-616 Schöller-Bleckman Steel Corp., Vienna, Austria (American Agent—Fred Baker Inc., Larchmont, N. Y.)
7410 Phönix Hansa
7411 Pluto

M-481 Scientific Alloys, Inc., Los Angeles, California
8827 Cataloy
8828 Cataloy No. 1
8829 Cataloy No. 2
8830 Cataloy No. 3
8831 Cataloy No. 4
8832 Cataloy No. 5
8833 Cataloy No. 6
8834 Cataloy No. 7
8835 Cataloy No. 8 S
8836 Cataloy No. 9 N
5908 Cu-Lead-Ite No. 1
5909 Cu-Lead-Ite No. 2
5910 Cu-Lead-Ite No. 3
5911 Cu-Lead-Ite No. 4
5912 Cu-Lead-Ite No. 5
5913 Cu-Lead-Ite No. 6
5951 Gasid No. 12
5952 Gasid No. 15
5965 Marine Bronze No. 8
5993 Sil-O-Acid No. 7

M-408 Scott, A. C., & Co., Ltd., Manchester 15, England
5404 Cromaloy
4779 Cromaloy IV

M-102 Scovill Mfg. Co., Waterbury, Connecticut
11 Adnic (Scovill #206 Alloy)
12317 Aluminum Brass
12304 Cartridge Brass
12306 Commercial Bronze
12310 Engraver's Brass
12308 Forging Brass
12309 Free Cutting Brass
12307 Gilding Metal
12303 High Brass
12311 Lancashire Brass
12305 Low Brass
12315 Phosphor Bronze Grade A
12316 Phosphor Bronze Grade C
12312 Phosphorized Admiralty Metal

12314 Plater's Metal
989 Scovill's Hardware Bronze (#197 Alloy)
5186 Scovill Leaded 12% Nickel Silver (#118 Alloy)
1364 Scovill Naval Brass
5185 Scovill 10% Nickel Silver (#105 Alloy)
5184 Scovill 18% Nickel Silver (#100 Alloy)
12313 Scovill Oreide

M-969 Seaboard Steel Co. of America, New York, New York

10657 Secobalt
10658 Secodie
10659 Secoloy
10660 Secovan
10661 Seco XXX

M-590 Seitzingers, T. F., and Sons, Atlanta, Georgia

6755 AAAA
9122 Dixoilbronz

M-28a Seligman, Arthur, & Co., Inc., New York, N. Y.
(See British Aluminium Co., Ltd.)

M-972 Seneca Wire Mfg., Fostoria, Ohio

10668 Seneca

M-970 Sessions Foundry Co., Bristol, Connecticut

10662 Sefco No. 2

M-103 Seymour Mfg. Co., Seymour, Connecticut

10669 Seycast
10670 Seymourco
995 Seymourite
10671 Seymour Nickel Silver Grade A
10672 Seymour Phosphor Bronze Grade A
10673 Seymour Phosphor Bronze Grade C

M-453 Shanks & Co., Ltd., Barrhead, Scotland

5450 Aeonite

M-600 Sharon Steel Hoop Co., Sharon, Pennsylvania

6851 Sharon Stainless RA
6846 Sharon Stainless 12
6847 Sharon Stainless 17
10676 Sharon Stainless 17-7
6848 Sharon Stainless 18-8
6849 Sharon Stainless 18-8S
6850 Sharon Stainless 21
6998 Sharon Stainless 27

M-417 Shaw, J., Son, & Greenhalgh, Ltd., Albert Works, Lockwood, Huddersfield, England

4794 N.K.L. Metal

M-443 Shawinigan Chemicals, Ltd., Montreal, Canada

11906 Shawinigan CA
11907 Shawinigan HC
11908 Shawinigan HH
11910 Shawinigan HL
11909 Shawinigan HT
6273 Shawinigan Nirosta KA-2
5202 Shawinigan Nirosta KA-2Mo
6092 Shawinigan SSS

M-494 Sheepbridge Stokes Centrifugal Castings Co., Ltd., Chesterfield, England

5877 Centrard
12111 Enduron
5957 Hypocrode
12112 Loded Centricast
9666 Loded Iron
12113 Nicrosilal
12114 Ni-Hard
12115 Ni-Resist
10447 Ni-Tensyl
10667 Sheepbridge Stokes Mark III
5386 Silal
118 Slocrode

M-974 Shenango-Penn Mold Company, Dover, Ohio

10680 Shenango Penn No. 1
10681 Shenango Penn No. 2
10682 Shenango Penn No. 3
10683 Shenango Penn No. 4
10684 Shenango Penn No. 5
12249 Shenango Penn No. 8
10685 Shenango Penn No. 9
12250 Shenango Penn No. 10
10686 Shenango Penn No. 11
12251 Shenango Penn No. 12
10687 Shenango Penn No. 13
12258 Shenango Penn No. 13A
12259 Shenango Penn No. 13B
12252 Shenango Penn No. 14A
12253 Shenango Penn No. 14B
12254 Shenango Penn No. 14C
10688 Shenango Penn No. 15
12256 Shenango Penn No. 15 HT
12255 Shenango Penn No. 15 S
12257 Shenango Penn No. 16 B
10689 Shenango Penn No. 17
10690 Shenango Penn No. 18
10691 Shenango Penn No. 19
12260 Shenango Penn No. 20
10692 Shenango Penn No. 21
10693 Shenango Penn No. 22
10694 Shenango Penn No. 23
10695 Shenango Penn No. 24
10696 Shenango Penn No. 25
10697 Shenango Penn No. 26
10698 Shenango Penn No. 27
10699 Shenango Penn No. 28
10700 Shenango Penn No. 29
10701 Shenango Penn No. 30
10702 Shenango Penn No. 31

M-198 Siemens & Halske, A.-G., Berlin, Germany (British Agent—Siemens-Schuckert, Ltd., London, England

174 Beryllium
1692 Beryllium Bronze, 1.0% Be
1695 Beryllium Bronze, 1% Be, 10% Mn
1693 Beryllium Bronze, 1.5% Be
1696 Beryllium Bronze, 1.5% Be, 3% Mn
1694 Beryllium Bronze, 2.0% Be
175 Beryllium Bronze, 2.5% Be
3148 Siemens-Halske

M-199 Siemens-Schuckert, Ltd., London, England
(See Siemens & Halske, A.-G.)

M-461 Silicum Pistons, Ltd., London, England

6067 Nickel-Silic-On

M-373 Simonds Saw & Steel Co., Lockport, New York

8210 Alnico
8679 Blue Label Extra
8863 Chrome Magnet
8925 Cobalt Magnet
4660 Die Steel
9102 Die Steel No. 13200
11562 Green Label
4661 Hacksaw
10023 Hi-Nickel Alloy
9663 Lockport Special
11010 Red Label
10737 Simonds Blue Label
10738 Simonds Blue Streak
4658 Simonds Carbon Steels
10739 Simonds Chromium Magnet Steel
10740 Simonds Chromium Magnet Steel
10741 Simonds Chromium Molybdenum Magnet Steel
3987 Simonds Diamond S
3988 Simonds Frontier
3989 Simonds Frontier Special
10742 Simonds Green Streak
4662 Simonds High Speed
10743 Simonds Molva
3990 Simonds Non-Shrinking
10734 Simonds No. 47
10735 Simonds No. 12150
10744 Simonds O.H.D.
10745 Simonds Red Streak
10746 Simonds S.T.M.
4659 Simonds Special Alloys
10747 Simonds Super Cobalt
10748 Simonds Teenax-46
10749 Simonds Tunco
10750 Simonds Tungsten Magnet Steel
10751 Simonds 17% Cobalt Magnet Steel
10752 Simonds 35% Cobalt Magnet Steel
10753 Simonds 40% Cobalt Magnet Steel
11157 Teenax

M-875 Simpson Bros., Portsmouth, Ohio

10553 Paulite
11567 Tufaloy

M-288 Sivyer Steel Casting Co., Milwaukee, Wisconsin

5203 Diamond S-1
5204 Diamond T
749 Miraculoy

10481 Nuloy
2350 Sivyer Dynamo
1010 Sivyer Chrome-Nickel Electric
1009 Sivyer Chromium Electric
1008 Sivyer High Carbon Steel
3135 Sivyer High Silicon
1011 Sivyer Manganese-Carbon Electric
2547 Sivyer Nitro
2053 Sivyer Nuloy
1275 Sivyer No. 60
1276 Sivyer No. 62
2960 Sivyer No. 64
1277 Sivyer No. 66
1278 Sivyer No. 67
1279 Sivyer No. 70
2333 Sivyer Pole
10758 Sivyer 5% Cr
1012 Sivyer Vanadium Electric

M-267 S.K.F. Steels, Inc., New York, New York

4669 SKF Drill
8206 SKF No. 48
10761 SKF No. 85
3993 SKF No. 100
1244 SKF Steel No. 1
3999 SKF Steel No. 2
1245 SKF Steel No. 3
3994 SKF Steel No. 3 Tubing
3995 SKF Steel No. 6
3996 SKF Steel No. 7
3997 SKF Steel No. 9
3998 SKF Steel No. 13
1246 SKF Steel No. 22
1247 SKF Steel No. 36
7371 SKF Steel No. 46
1241 SKF Steel No. 711

M-651 Skoda Works, Czecho-Slovakia

9477 Ferchromit
10410 Neochrom
10892 Styrian Blue Label

M-244 S-M Metal Works, London, England

5753 S-M Alloy

M-579 Smith, A. O., Co., Milwaukee, Wisconsin
(See Hevi-Duty Electric Co.)

M-200 Smith, Geo. H., Steel Casting Co., Milwaukee, Wisconsin

310 C.N.M.
1016 Dynamo
1017 High Chrome-Nickel
1018 Low Chrome-Nickel

M-870 Snowbar, John L., New York, New York

10132 Mag Metal
10786 Solder HC

M-672 Societe Alsia, France

8375 Alsia

M-606 Soc. Anon. Ansaldo, Rome, Italy.

1711 Ansaldo

M-104 Soc. Anon. De Commentry Fourchambault et Decazeville, Paris, France (American Licensee—The Midvale Co., Philadelphia, Pa.; American Agent—The R. Y. Ferner Co., Washington, D. C.)

5738 A.D.R.
116 A.M.F. Alloy
1477 A.R.C.
1443 Anibal
737 B.T.G.
1454 Baros
1479 C.C.R.
1476 C.V.C.
1480 Cromimphy No. 1
2192 Cromimphy No. 2
6784 Cromimphy No. 4
6785 Cromimphy No. 6
388 Dilver
395 Dumet
432 Elinvar
1478 Etiral
6299 Feralloy
1442 Fixinvar
1438 Helbimphy
1437 Helbimphy Special
6783 Imphy ARC-1047
6782 Imphy ARC-2266
6779 Imphy ARC-2702A
6780 Imphy ARC-2702B
6781 Imphy ARC-2702S
1459 Imphy A.T.E.
1455 Imphy A.T.G.
1453 Imphy A.T.V.
1460 Imphy B.T.E.
1452 Imphy B.Y.
6778 Imphy BY-2
1461 Imphy C.T.E.
1487 Imphy "D"
1488 Imphy "DD"
1489 Imphy "DDD"
1485 Imphy "DT"
6797 Imphy ERA-HR 1
6798 Imphy ERA-HR 2
1490 Imphy "FF"
1486 Imphy "MD"
6790 Imphy M.C.T.-1
6791 Imphy M.C.T.-2

6792 Imphy M.C.T.-3
1484 Imphy "MT"
6800 Imphy M.W.S.
1448 Imphy N.A.
6787 Imphy NB
1444 Imphy N.C.M.
1450 Imphy NC-3H-1
6789 Imphy NC-3H-2
1462 Imphy NC-4
1449 Imphy N.D.
1445 Imphy N.F.
1447 Imphy N.F.C.-1
3656 Imphy NFC-2
3657 Imphy NFC-3
6788 Imphy NY
6786 Imphy N5CM
1446 Imphy N-7 CM
6801 Imphy R.E.S.
6802 Imphy R.W.S.
1481 Imphy "T"
1482 Imphy "TT"
1483 Imphy "TTT"
6803 Imphy 1640
6799 Imphy 1691
1440 Imphysta
593 Invar
1473 M.G.N.
1472 M.O.S.
2981 Moulimphy
1441 Nicral
6794 Nicral B
6795 Nicral D
6796 Nicral E
1474 N.M.H.G.
1456 Neo-Baros
6635 Permax
911 Platinite
1457 Pyros
1475 R.N.C.
6776 R.N.C.-2
6777 R.N.C.-3
11101 R.N.C.-44
6793 Thermimphy

M-700 Societe De Produits Metallurgique, Paris, France

8603 A.V.S. Metal
9726 Fonte R.A.
10628 Prometal
10629 Prometal Chrome Inoxydable R.F.
10630 Prometal Inoxydable R.F.3
10899 Superbasique
10916 Superneutral

M-767 Societe du Duralumin, Paris, France

9171 Duralinox
9172 Duralinox P
9173 Duralinox 5
9180 Duralumin 681A
9183 Duralumin 681K

M-673 Societe Electro-Cables, France

8399 Alucable

M-768 Societe Metallurgica, Italy

9180 Duralumin 681A
9181 Duralumin 681B
9182 Duralumin 681H
9183 Duralumin 681K
9184 Duralumin 681ZB
9185 Duralumin DM 31

M-387 Söderfors Steel Works, Söderfors, Sweden (American Agents—K. Engelsted, New York, N. Y.; Boyd-Wagner Co.; also Peninsular Steel Co.)

4469 Söderfors Anvil
2245 Söderfors Crane
4466 Söderfors Double Crane
4465 Söderfors Drill
4932 Söderfors No. 1
4933 Söderfors No. 2
4934 Söderfors No. 3
4935 Söderfors No. 3½
4936 Söderfors No. 4
4937 Söderfors No. 5
4938 Söderfors No. 6
4939 Söderfors No. 7
4940 Söderfors No. 8
4941 Söderfors No. 9
4942 Söderfors No. 9A
4943 Söderfors No. 9B
4944 Söderfors No. 10
4945 Söderfors No. 11
4946 Söderfors No. 12
4947 Söderfors No. 13
4948 Söderfors No. 14
4949 Söderfors No. 16
4950 Söderfors No. 17
4951 Söderfors No. 18
4952 Söderfors No. 19
4953 Söderfors No. 20
4954 Söderfors No. 21
4955 Söderfors No. 22
4956 Söderfors No. 23
4957 Söderfors No. 25
4958 Söderfors No. 26
4959 Söderfors No. 27
4960 Söderfors No. 28
4961 Söderfors No. 41
4962 Söderfors No. 42
4963 Söderfors No. 43
4964 Söderfors No. 61
4965 Söderfors No. 62
4966 Söderfors No. 85

M-960 Somers Brass Co., Waterbury, Connecticut

11577 Beryllium Copper Alloy No. 175

M-268 Southern Malleable Iron Co., East St. Louis, Illinois

410 D.M.

M-665 Southern Metals Co., St. Louis, Missouri

8271 Airplane Babbitt
9945 High Speed Babbitt

M-479 Sowers Mfg. Co., Buffalo, New York

5923 Dopploy

M-735 Spang Chalfant, Pittsburgh, Pennsylvania

8859 4-6 Chrome
10790 Spang Chalfant 1
10791 Spang Chalfant 2
10792 Spang Chalfant 3

M-889 Spuck Iron & Foundry Co., St. Louis, Missouri

10716 Sifcoloy

M-613 Stahlwerk Becker A.G., Krefeld, Rheinland, Germany

7404 Iridium Extra Special
7405 Modern

M-105 Standard Alloy Co., Inc., Cleveland, Ohio

818 Nirosta KA-4
1043 Standard Alloys
5009 Standard Alloy AR-1
1626 Standard Alloy HR-1
1627 Standard Alloy HR-2
1628 Standard Alloy HR-3
1629 Standard Alloy HR-4
1630 Standard Alloy HR-5
1250 Standard Alloy HR-5M
1631 Standard Alloy HR-6
1632 Standard Alloy HR-7
1633 Standard Alloy HR-8
5205 Standard Alloy HR-9
6983 Standard Alloy HR-10
6984 Standard Alloy HR-11
1624 Standard Alloy KA-4
1625 Standard Alloy Special

M-896 Standard Brake Shoe & Foundry Co., Pine Bluff, Arkansas

10860 Stanfire

M-269 Standard Telephones & Cables, Ltd., England

895 Perminvar

M-574 Stanley Works, New Britain, Connecticut

6716 Stanley Grade A
6717 Stanley Grade B
6718 Stanley Grade C
6719 Stanley Grade D

M-675 Stedes Laminoirs et Trefileries du Havre, France

8403 Alumag, Grade 1
8404 Alumag, Grade 2

M-518 Stedman's Foundry & Machine Works, Aurora, Indiana

2219 Stedmetal

M-742 Steel Co., Ltd., Motherwell, England

8918 Clyde Alloy

M-826 Steel Co. of Scotland, Glasgow, Scotland

9856 Hallside

M-607 Steel Sales Corp., Chicago, Illinois

8211 AC-Amsco No. 217 Hard Surfacing
8212 AC-Amsco No. 459 Hard Surfacing
8214 AC-Coated 18-8
8222 AC-Weld
7400 Dieweld
9537 Ironweld
7401 Superweld No. 55
7402 Superweld No. 66
7403 Superweld No. 77

M-395 Steel & Tubes, Inc., Cleveland, Ohio (Subsidiary of Republic Steel Corp.)

4436 Electrunite Boiler Tubing
9304 Electrunite Enduro
9305 Electrunite Steel Tubes

M-448a Steel, Peech & Tozer, Sheffield, England
(Parent Company—United Steel Companies, Ltd., q.v.)

M-270 Steinvertriebs A.-G., Berlin, Germany
1176 Wig Metal

M-106 Sterling Metals, Ltd., Coventry, England
(Agents for Electron Alloys. M-78)
9298 Elektron A8HT
9302 Electron AZ91
9302 Elektron AZ91HT

M-201 Sterlite Foundry & Mfg. Co., Auburn, Indiana
1054 Sterlite

M-514 Stewart Die Casting Corp., Chicago, Illinois
12339 Stewart Aluminum 10
12340 Stewart Aluminum 10-R
6242 Stewart Aluminum 12
6243 Stewart Aluminum 13
6244 Stewart Aluminum 35
12344 Stewart Magnesium R
7640 Stewart White Brass No. 5
7373 Stewart White Brass No. 19
12343 Stewart Zinc No. 2
12341 Stewart Zinc No. 3
12342 Stewart Zinc No. 5

M-452 Stone, J., & Co., Ltd., London, England
8844 Ceralium
8845 Ceralium B
5878 Ceralumin C
8846 Ceralium D
8847 Ceralium F
3164 Silverine
3806 Stone Bronze
1056 Stone's Gear Bronze
5449 Stone's "Z" Metal
5448 Stone's 608 Superheat Bronze
6668 Superston L.189

M-202 Stoody Company, Whittier, California
1225 Borium
1226 Borod
1000 Silfram
10873 Stoodex
1057 Stoodite
10878 Stoodite AC
10877 Stoodite K
10874 Stoodite 45
10875 Stoodite 54
10876 Stoodite 63
1058 Stoody Self-Hardening Welding Rod
8209 Stoody 1
11782 Stoody 6

M-283 Strasser, E., Rohrschach, Switzerland
47 Alneon
787 Neonalium

M-899 Stroh Process Steel Co., Pittsburgh, Pennsylvania
10888 Stroh

M-208 Studebaker Chemical Co., Elyria, Ohio
162 Bearingoy

M-374 Stulz Sickles Co., Newark, New Jersey
6083 Manganal
4663 Seaco
10651 Seaco Blue Diamond
4665 Seaco Chrome Vanadium
3984 Seaco Extra
3980 Seaco High Speed
4664 Seaco Hot Die
10652 Seaco No-Label
4666 Seaco Non-Shrinkable
3981 Seaco O.H. No. 4
10653 Seaco Red Diamond
3982 Seaco Standard
10654 Seaco Yellow Diamond
3983 Seaco 70-20

M-928 Stupakoff Ceramic & Manufacturing Company, Latrobe, Pennsylvania
5947 Fernico
7282 Fernichrome

M-795 Stupakoff Laboratories, Pittsburgh, Pennsylvania
9591 Koval
9593 Kovar

M-243 Suffolk Iron Foundry, Stowmarket, England

9483 Ferro-Silicon Cast Iron Rod No. 8
10710 Sifbrass Brazing Strip No. 6
997 Sifbronze
10711 Sifbronze No. 1
10712 Sifbronze No. 2
10713 Sifbronze No. 3
10714 Sifbronze No. 4
10715 Sifbronze No. 5
10717 Sifonil No. 10
10718 Sifsilcopper No. 7
10919 Super Silicon Cast Iron Rods No. 9

M-71 Sumet Corp., Buffalo, New York (Henry A. Kries, Baltimore, Md., Agent)

1060 Sumet Bronze SM-2
6260 Sumet Bronze SM-4
6261 Sumet Bronze SM-8
6263 Sumet Bronze SM-12
6264 Sumet Bronze SM-14
6265 Sumet Bronze SM-16
6266 Sumet Bronze SM-18
11648 Sumet SM-22

M-967 Superior Metal Co., Chicago, Illinois

11649 Superior Copper Steel

M-635 Superior Sheet Steel Co., Canton, Ohio (Subsidiary of Continental Steel Corp., q.v.)

7638 Supermetal

M-901 Superior Steel Corp., Pittsburgh, Pennsylvania

10907 Superior

M-945 Superior Tube Co., Norristown, Pennsylvania

11441 Weldrawn 18-8

M-916 Super Tool Co., Detroit, Michigan

11160 Teco Grade 23
11161 Teco Grade 68
11162 Teco Grade 607
11163 Teco Grade 610
11164 Teco Grade 625
11165 Teco Grade 946
11166 Teco Grade 946-X
11167 Teco Grade 964
11168 Teco Grade K-65
11169 Teco Grade KT-13
11170 Teco Grade T-13

M-406 Supersteels, Inc., Cleveland, Ohio

4546 Supercase

M-107 Sutcliffe, Speakman & Co., Leigh, Lancashire, England

1257 E.C.N.
5743 Emperor Chrome Nickel Alloy

M-333 Swedish American Steel Corp., Brooklyn, New York

2214 Borite
3591 Duredge
10476 Normanna
3945 North Star
10482 Non-Pa-Reil
10947 SA Brilliant
10948 SA C-N
10951 SA Grey Label
10952 SA Hy-Pro
10953 SA Hy-Prodie Steel
10954 SA Lily Brand
10964 SA N-65
10965 SA N-88
10977 SA Non-Pa-Reil
10976 SA N-N
10980 SA White Label
10981 SA Yellow Label

M-375 Swedish Iron & Steel Corp., New York, N. Y.

3816 Acorn
4527 Sisco Extra No. 2
4528 Sisco Standard No. 3
4533 Federal High Speed
3840 Fedol
3992 Sisco
4530 Sisco C. N.
4529 Sisco C. V. S.
4531 Sisco C. V. R.
4532 Sisco V. A. S.
10757 Sisco Oil Hardening Chisel

M-385a Swedish Steels Mills, New York, N. Y. (Agents for Brukskoncernen A.B., Sweden, q.v.)

9392 Fagersta AD 95 Coining Die

M-418 Sybry, Searls & Co., Ltd., Cannon Steel Works, Sheffield, England

4796 Pireks Metal

M-500 Symington-Gould Co., Rochester, New York

6056 Genesee KA-2
11855 Genesee Nickel Ni-Resist
6057 Genesee Ni-hard
6058 Genesee Ni-Resist
11919 Genesee 110
11920 Genesee 130
11917 Genesee 190
11918 Genesee 191
6059 Genesee 212
6060 Genesee 255
6061 Genesee 280
6062 Genesee 303
9777 Genesee 304
9778 Genesee 305
6063 Genesee 315
6064 Genesee 405
6065 Genesee 412
6066 Genesee 460
11856 Genesee 500

M-787 T.L.M., France

9532 Inoxalium

M-390 Tacony Steel Co., Philadelphia, Pennsylvania (Liquidated)

M-997 Tata Iron and Steel Company, India

12546 Tiscor

M-915 Taylor Chain Co., S. G., Hammond, Indiana

11150 Taylor Ni-Mo Steel

M-271 Taylor-Wharton Iron & Steel Co., High Bridge, New Jersey

11905 Alni
11904 Copper Alnico
11903 Standard Alnico
1082 Timang
5487 Tisco 1
11899 Tisco 2
11900 Tisco 6
5480 Tisco 17
5481 Tisco 18
5482 Tisco 19
5483 Tisco 20
5484 Tisco 21
5485 Tisco 22
5486 Tisco 23
11901 Tisco 23X
5490 Tisco 41
5495 Tisco 50
5496 Tisco 51
5491 Tisco 53
5488 Tisco 65
5493 Tisco 70
5492 Tisco 71
5494 Tisco 72
11902 Tisco 80
5497 Tisco 81
5498 Tisco 90
6920 Tisco 107
6921 Tisco 108
6922 Tisco 109
6741 Tisco 120
6924 Tisco 130
6925 Tisco 131
6926 Tisco 132
5504 Tisco 150
6927 Tisco 160

M-108 Telegraph Construction & Maintenance Co., Ltd., London, England

764 Mu Metal
931 Pyromic No. 2 (Pyromic)
932 Pyromic No. 3 (Calomic)
939 Radio Metal
4797 Rhometal
5407 Telconstan
11541 2129 Alloy

M-377 Tennessee Coal, Iron & Railroad Co., Birmingham, Alabama (Subsidiary of U. S. Steel Corp.)

8856 Channeler
7723 Copper Steel
7724 Copper Steel
7725 Copper Steel
7726 Copper Ingot Iron
8205 Cor-Ten
9166 Drill
7731 Intermediate Manganese Abrasion Steel
7729 Intermediate Manganese Medium Carbon
7730 Intermediate Manganese Rail Steel
8204 Man-Ten
7727 Resulphurized Stock
8086 Sil-Ten
7728 Structural Silicon Steel
4044 Tennessee Special
11201 Tool Steel
7722 U.S.S. Copper Steel

M-444 Texas Electric Steel Casting Co., Houston, Texas (Alloys listed now discontinued)

M-421 Thermit, Ltd., Angel Road, Edmonton, London, England

4804 S.A.B. Alloy

M-445 Thomas Steel Co., Warren, Ohio (Alloys listed now discontinued)

M-513 Thompson Products, Inc., Cleveland, Ohio

6259 Durachrome
11209 T.P.A. (Thompson Products Alloy)

M-702 Timken-Detroit Axle Co., Detroit, Michigan

8605 Axaloy

M-823 Timken Roller Bearing Company, Canton, Ohio

9827 Graph Al
9833 Graph MNS

M-376 Timken Steel & Tube Company, Canton, Ohio

8311 Alcrosil 5
9827 Graph Al
9834 Graph Mo
9833 Graph MNS
9835 Graph Sil
9836 Graph Tung
9939 High Dynamic
10706 Sicromo 1
10707 Sicromo 2
12105 Sicromo 2½
10708 Sicromo 3
10709 Sicromo 5
12106 Sicromo 5S
12107 Sicromo 7
12108 Sicromo 9M
10730 Silmo
11654 Timken Alcrosil No. 3
5785 Timken CNM-40
11194 Timken DM
11195 Timken DM 2
12212 Timken DM-2-45
5777 Timken DM-15
5778 Timken DM-45
5779 Timken Finegrained Carbon-Molybdenum
5217 Timken Iron-Chromium
6248 Timken Krupp
5780 Timken MM-9
5781 Timken SAE 4615
4048 Timken Special C bon
12109 Timken TW
11192 Timken 2% Cr, ½% Mo
11193 Timken 2¼% Cr, Mo
6250 Timken 4-6% Cr-
6249 Timken 4-6% Ch mium
5775 Timken 4-6 Chro Molybdenum
5776 Timken 17-22
5216 Timken 18-8
5215 Timken 18-8-S

M-955 Titanite Alloys Corporation, Cleveland, Ohio

11561 Titanite

M-109 Titanium Alloy Mfg. Co., Niagara Falls, New York

5393 TAM Cupro-Titanium
4906 TAM Foundry Ferro-Titanium
11140 TAM High Aluminum Ferro-Carbon Titanium
4907 TAM Low Carbon Ferro-Titanium 25% Grade
7470 TAM Low Carbon Ferro-Titanium 40% Grade
11141 TAM Manganese Titanium Grade No. 1
11142 TAM Manganese Titanium Grade No. 2
7469 TAM Medium Carbon Ferro-Carbon Titanium
7471 TAM Metallic Titanium
11143 TAM Molybdenu Titanium
11144 TAM Nickel Tita
4310 TAM Original F Carbon-Titaniu
6093 Webbite

M-122 Titan Metal Manufacturing Co., Bellefonte, Pennsylvania

316 Cold Heading Rod
547 Hecla Free Cut Bronze
566 Hitensiloy Bronze
649 Logan Forging Brass
5012 Manganese Bronze Welding Rod
5010 Naval Brass Rod
5013 Naval Bronze Welding Rod
10454 Nittany
826 Nittany Free Cutting Brass Rod
5014 Penn Bronze Welding Rod
922 Pressure Die Castings
11797 Titan Bronze
5011 Titan Bronze Welding Rod
1090 Titan Manganese Bronze
1091 Titan Muntz
8121 Titan Resistaloy Bronze
1084 Tinicosil No. 10
1085 Tinicosil No. 15

M-294 Titusville Forge Co., Titusville, Pennsylvania

1258 Ticrank
3221 Tibon
3224 Tifco
3225 Tiloy
3231 Titam
3232 Tivan

M-352 Toledo Andrews, Ltd.
(See Andrews, Toledo)

M-834 Transleteur & Co., Berlin, Germany

6760 Helumin

M-770 Trefileries et Laminoirs, de Havre, France

9196 Durcilium

M-535 Trenite Corp., Trenton, New Jersey

11215 Trenite
6492 Trenite H
7375 Trenite P
7376 Trenite WX

M-923 Tri-Lok Co., Pittsburgh, Pennsylvania

11218 Tri-lok

M-954 Trimout Mfg. Co., Roxbury, Boston, Massachusetts

11556 Trimo

M-925 True Alloys, Inc., Detroit, Michigan

11230 Trualoy Aluminum
11231 Trualoy Aluminum Bronze
11232 Trualoy Bearing Bronze
11233 Trualoy Copper

M-957 Tube Reducing Corp., Wallington, New Jersey

11680 Rockrite

M-737 Tullis, Ltd., D. & J., England

8898 Cindal

M-987 Tungsten Alloy Mfg. Co., Newark, New Jersey

1736 Speedaloy

M-598 Tungsten Widia Tool Corp., New York, N. Y.

6750 Anchor-Tite

M-110 Tungum Alloy Co., Ltd., London, England
(American Agent—Wonham, Inc., New York, N. Y.)

1110 Tungum Alloy

M-929 Tyler Co., W. S., Cleveland, Ohio

11275 Tylerite

M-111 Uddeholms, A. B., Uddeholm, Sweden
(American Agent—Uddeholm Co. of America, Inc.—M-111a)

M-111a Uddeholm Co. of America, Inc., New York, N. Y.
(Agent for M-111, Uddeholm, A.B., Uddeholm, Sweden)

8228 AEB Stainless
8915 Clomo
11019 Regin 711
4060 Triangle "X"
11216 Triangle X-Extra
11217 Triangle X-Special
4061 Tri-Mo
4696 U.B. Double Bolt
11278 UCA 2-2
752 UHB Carbon Tool Steel
11279 UHB Cold Header Die
4069 UHB Crown
7377 UHB Fingal
11280 UHB Forma
4070 UHB No. 46 Crown
7378 UHB Regin
5218 UHB Stainless 1
6837 UHB Stainless 1H
5219 UHB Stainless 2
5220 UHB Stainless 3
6838 UHB Stainless 3H
6839 UHB Stainless 3M
5221 UHB Stainless 4
6840 UHB Stainless 4H
6841 UHB Stainless 4M
5222 UHB Stainless 5
5223 UHB Stainless 6
6842 UHB Stainless 6H
5224 UHB Stainless 7
11281 UHB Standard
7379 UHB Valand
11282 UHB Valand 2
11575 UHB 46

M-272 Ultralumin Leichtmetall, A.-G., Germany (out of business)

M-930 Una Welding, Inc., Cleveland, Ohio

11285 Una
11286 Una High Speed Rod No. 44
11287 Una High Speed Rod No. 45
11288 Una High Tensile Rod No. 65
11289 Una Rod No. 76
11290 Una Rod No. 156
11291 Una Rod No. 158
11292 Una Rod No. 160
11293 Una Rod No. 200
11294 Una Rod No. 300
11295 Una Rod No. 325
11296 Una Rod No. 350
11297 Una Rod No. 425
11298 Una Rod No. 470
11299 Una Rod No. 560
11300 Una Rod No. 601
11301 Una Rod No. 712
11302 Una Rod No. 911
11303 Una Rod No. 912
11304 Una Rod No. 914
11305 Una Rod No. 916
11306 Una Rod No. 917
11307 Una Rod No. 918
11308 Una Rod No. 1500
11309 Una Rod No. 2150
11310 Una Rod No. 3175
11311 Una Rod No. 3200

M-745 Unexcelled Manufacturing Company, New York, New York

11131 Feralsi

M-391 Unimetal Co., Franklin, Pennsylvania

4401 Unimetal

M-588 Union Bronze Co., Reading, Pennsylvania

6753 Velvet

M-280 Union Carbide & Carbon Corp., Inc., Niagara Falls, New York
(See also Haynes-Stellite Company and Electrometallurgical Sales Corp.)

11807 Corsonite B
11808 Corsonite C
11809 Corsonite D
11810 Corsonite E
11811 Corsonite F

M-397 Union Drawn Steel Division, Republic Steel Corporation, Massillon, Ohio

4308 No. 1020-90 Steel
6078 Union Free-Cut Bessemer
4814 Union Hymo
5786 Union Hymo 30-40 Carbon
11314 Union Maxcut
11316 Union Multicut
5783 Union Special Carhurizing Steel
6079 Union Super-Cut

M-931 Union Metals Manufacturing Company, Canton, Ohio

11315 Union Metal

M-112 Union Steel Casting Co., Pittsburgh, Pennsylvania

1131 Unionaloy
1132 Univan

M-634 Unitcast Corporation, Toledo, Ohio
(Successor to Industrial Steel Casting Company)

7621 Toledo Alloy 3
7622 Toledo Alloy 4
7623 Toledo Alloy 6
7624 Toledo Alloy 7
7625 Toledo Alloy 8

M-565 United American Metals Corp., Brooklyn, New York

6748 Aluminum Genuine Babbitt
7380 American Marine Genuine
8594 Autocrat
7381 Autocrat Bushing Bronze
7382 Beaver Babbitt
2388 Dippit
7383 Manganese Antifriction
7384 Master Metal
7385 Stonewall Babbitt
7386 Syracuse Government Genuine Babbitt

M-273 United Lead Co., New York, N. Y.
(See National Lead Co., Successor)

M-245 United States Graphite Co., Saginaw, Michigan

523 Gramix

M-558 United States Metals Refining Co., Carteret, New Jersey

341 Copper
2630 Gold
623 Lead
5391 OFHC Copper
873 Palladium
914 Platinum
1005 Silver

M-203 United States Pipe & Fdy. Co., Burlington, New Jersey

381 Super deLavaud Metal

M-585 United States Reduction Company, Chicago, Illinois

6729 Advance Babbitt Metal
11318 USCO

— United States Steel Corp., New York, N. Y.

(See alloys listed under subsidiary companies as follows:
M-12 American Steel & Wire Co., New York, N. Y.
M-90 National Tube Co., Pittsburgh, Pa.
M-377 Tennessee Coal, Iron, & Railroad Co., Birmingham, Alabama
M-604 Carnegie-Illinois Steel Corp.; Pittsburgh, Pa.)

M-964 United States Steel Supply Company, Chicago, Illinois

11591 Corosoloy
11832 Mangaloy
11712 Ranalloy Type "A"
11713 Ranalloy Type "B"
11714 Ranalloy Type "C"
11652 Supraloy

M-327 United Steel Division, Republic Steel Corporation, Canton, Ohio

(See alloys listed under Republic Steel Corporation)

M-448 United Steel Companies, Ltd., Sheffield, England

(See alloys listed under subsidiary companies as follows:
M-430 Samuel Fox & Co., Ltd., Sheffield, England
M-448a Steel, Peech & Tozer, Ltd., Sheffield, England
M-448b Appleby-Frodingham Steel Co., Ltd., Sheffield, England
M-448c Workington Iron & Steel Co., Ltd., Workington, England)

6304 Chrome Kuplus
6068 Kuplus
6303 Kuplus High Tensile
3757 Phoenix Rapid Machining Steel

M-932 Universal Alloys, Inc., Newark, New Jersey

11317 Universal Alloy No. 10

M-811 Universal Power Corporation, Cleveland, Ohio

9762 Luminarc

M-114 Universal-Cyclops Steel Company, Titusville, Pennsylvania

571 Ajax Hot-Die Chrome
572 Ajax Hot-Die Tungsten
8289 Ajax No. 1
8291 Ajax No. 2
8305 Alco
1760 Apollo
8507 Ara
2189 Atco
9032 CW Chisel
9035 Cyclo
4569 Cyclops B-4
94 Cyclops B-6
95 Cyclops B-7
92 Cyclops B-8
93 Cyclops KR
9039 Cyclops No. 9
369 Cyclops No. 17
96 Cyclops No. 17A
97 Cyclops No. 17B
11528 Cyclops No. 27
9042 Cyclops RBC
9043 Cyclops Special Carbon
4255 Cyclops Stainless A
4256 Cyclops Stainless B
4496 Cyclops Standard
3582 Draco
3826 Extra
9369 Extra Carbon
9372 Extra Draco
9923 Hercules
10108 Hypar
9585 KL
9586 KM
9607 KS
10219 Mercury
10277 Molybdenum Self-Hardening
762 Mo-Tung
3950 Orion
877 Para Steel
10996 Rajah
987 Saturn
10795 Sparta
4010 Special
10805 Special Draco
10855 Standard

10856 Standard Draco
10871 Steropes
10915 Super Motung
11188 Thermold A
11189 Thermold B
11199 Tiona
4050 Titus
1120 Ultradie No. 1
7146 Ultradie No. 2
1127 Uniloy No. 1
1128 Uniloy No. 2
1644 Uniloy No. 1409
1645 Uniloy No. 1409-M
1646 Uniloy No. 1435 (Cyclops Grade A Stainless)
1129 Uniloy No. 1809
6026 Uniloy 1860
11312 Uniloy No. 25-12
1130 Uniloy No. 2825
1642 Uniloy Special No. 1 (Uniloy 18-8)
1643 Uniloy Special No. 2 (Uniloy 21-12)
1649 Uniloy Special No. 12-12
1648 Uniloy Special No. 18-8-S
4140 Uniloy Special No. 24-11
6025 Uniloy 4-6 Chrome
11352 Venango
11414 Wando No. 1
11415 Wando No. 2
1168 Wando Steel

M-379 Upson Nut Division, Tool Steel Dept., Republic Steel Corp., Cleveland, Ohio (Bourne-Fuller Co., Successor)

4174 Bourne-Fuller Acme
4185 Bourne-Fuller Air-hardening
4181 Bourne-Fuller Arrestite
4183 Bourne-Fuller Dumost
4177 Bourne-Fuller Extra
4178 Bourne-Fuller Extra Special
4968 Bourne-Fuller "H-C"
4967 Bourne-Fuller High Speed
4179 Bourne-Fuller Special Auto Steel
4175 Bourne-Fuller Tool
4180 Bourne-Fuller Unique
4184 Bourne-Fuller Velvet
4182 Bourne-Fuller XX Superior

M-116 V.L.W., Germany

11367 V.L.W. 1
11368 V.L.W. 2
11369 V.L.W. 3
11554 V.L.W. 6
11370 V.L.W. 14
11371 V.L.W. 17
11372 V.L.W. 19
11373 V.L.W. 23
11374 V.L.W. 31
11375 V.L.W. 41
11376 V.L.W. 61
11377 V.L.W. 63
11378 V.L.W. 99

M-115 Vanadium-Alloys Steel Co., Latrobe, Pennsylvania (Affiliated Companies: Colonial Steel Co. and Anchor Drawn Steel Co.)

8269 Air Hard
2209 Blue Anchor Drill Rod
6632 C.M. Tap Steel
12102 Carbon-Vanadium Drill Rod
274 Choice No. 1
12090 Choice No. 2
317 Colhed
4482 Colonial No. 4
1425 Colonial No. 6
319 Colonial No. 7
6621 Colonial No. 14
354 Crocar
6633 Croman
6623 Elvandi
6631 E.V.M.
9375 Extra "L"
4905 Extrude Die
3855 Gold Anchor Drill Rod
3859 Gray Cut Cobalt
4078 Hotform No. 1
12091 Hotform No. 2
12092 Hotform No. 3
6622 Ideal
721 Marvel
12093 Mosil
10394 Neatro
10438 Nikro M
1582 Nitralloy No. 125
1583 Nitralloy No. 135
1584 Nitralloy No. 225
4145 Non-Shrinkable
12103 Non-Shrinkable Drill Rod
847 Ohio Die
878 Par-Exc
2499 Red Anchor Drill Rod
945 Red Cut Cobalt
9913 Red Cut Cobalt B
946 Red Cut Superior
3791 Red Cut Superior Temper "J"
3792 Red Cut Superior Temper "M"
3793 Red Cut Superior Temper "O"
3794 Red Cut Superior Temper "P"
2964 Red Star Tool
949 Red Star Tungsten
12104 Red Star Tungsten Drill Rod
6624 Red Star Vanadium
3159 Silman
12100 Stainless 302
12096 Stainless 410
12097 Stainless 416
12094 Stainless 420
12098 Stainless 430
12095 Stainless 440
12099 Stainless 441
12101 Vanadium 6-6-2
1147 Vanadium BB
1148 Vanadium D
1149 Vanadium G
1150 Vanadium H
1151 Vanadium K
1152 Vanadium N
11340 Van-Lom
11600 Victory Cobalt

M-394 Vanadium Corp. of America, Bridgeville, Pennsylvania

5018 Alsifer
5029 Aluminum-Chromium
5020 Aluminum-Vanadium
5023 Copper-Aluminum-Vanadium
5024 Copper-Manganese-*Vanadium*
5022 Copper-Nickel-Vanadium
5017 Ferro Chromium High Carbon
5016 Ferro-Silicon
7690 Ferro-Titanium Low Carbon Grade
7689 Ferro-Titanium Regular Grade
5015 Ferro-Vanadium
12357 Ferro-Vanadium Crucible Gr. B
12356 Ferro-Vanadium Open Hearth Gr. A
12358 Ferro-Vanadium Primos Gr. C
12359 Ferro-Vanadium Special High Vanadium
12363 Graphidox No. 4
3667 Manganese
5025 Manganese-Vanadium
7687 Molybdenum Metal
5026 Nickel-Vanadium
7685 Silico-Manganese
5028 Silicon-Aluminum-Vanadium
5027 Silicon-Vanadium
5019 Titanium 75% Grade
7688 Tungsten Metal
12364 V-5 Alloy
12365 V-7 Alloy
4400 Vancoram Brand Alloys
286 Vancoram High Carbon Chromium Metal
7689 Vancoram High Carbon *Ferro-Titanium*
7690 Vancoram Low Carbon Ferro-Titanium
12360 Vanadium Grainal No. 1
12361 Vanadium Grainal No. 6
12362 Vanadium Grainal No. 79
7686 Vanadium Metal

M-329 Vascoloy-Ramet Corp. of America, N. Chicago, Illinois (Subsidiary of Fansteel Metallurgical Corp.)

1509 Vascoloy
7363 Vascoloy-Ramet Grade A
7364 Vascoloy-Ramet Grade AA
7631 Vascoloy-Ramet Grade AAA
11341 Vascoloy-Ramet Grade AM
11342 Vascoloy-Ramet Grade AR
7632 Vascoloy-Ramet Grade AT
7633 Vascoloy-Ramet Grade AW
7365 Vascoloy-Ramet Grade B
7366 Vascoloy-Ramet Grade C
7634 Vascoloy-Ramet Grade CC
7367 Vascoloy-Ramet Grade D
7635 Vascoloy-Ramet Grade DD
11343 Vascoloy-Ramet Grade DT
11344 Vascoloy-Ramet Grade DW
11345 Vascoloy-Ramet Grade E
11346 Vascoloy-Ramet Grade EE
11347 Vascoloy-Ramet Grade EM
940 Vascoloy-Ramet Grade M
7636 Vascoloy-Ramet Grade S
11348 Vascoloy-Ramet Grade SS
7368 Vascoloy-Ramet Grade X
7637 Vascoloy-Ramet Grade XX
11981 Vascoloy-Ramet Grade 2A3
11197 Vascoloy-Ramet Grade 2A5
11196 Vascoloy-Ramet Grade 2A7
11537 Vascoloy-Ramet Grade 2A9
9277 Vascoloy-Ramet Grade 2A68
12169 Vascoloy-Ramet Grade 3150

M-935 Vereinigte Aluminiumwerke, Germany

11355 Viag

M-133 Vereinigte Chemische Fabriken zu Leopoldshall, Leopoldshall, Germany (Gerhard Wagner, 25 Broadway, New York, N. Y., Agent)

98 Gallium
2976 Rhenium

M-297 Vereinigte Deutsche Metallwerke, A.-G., Altena (Westf.,) Germany

3387 Chromnickel
3547 Chromnickel I
3548 Chromnickel II
4202 Copper-Nickel 10%
4203 Copper-Nickel 15%
4204 Copper-Nickel 20%

4205 Copper-Nickel 25%
4206 Copper-Nickel 30%
4207 Copper-Nickel 40%
4208 Copper-Nickel 67%
2707 Konstantan
4221 Mangannickel
1527 Nickelin
2859 Nickelin (German Silver)
2860 Nickelin (Resistance)
4166 Nickelin I
4167 Nickelin II
4168 Nickelin III
4228 Neusilber, Enamel Quality
4229 Neusilber, Excelsior Quality
4230 Neusilber, Nickelin Quality
4231 Neusilber, Prima-Prima Quality
4232 Neusilber, Prima Quality
4235 Neusilber, Quarta Quality
4233 Neusilber, Sekunda Quality
4234 Neusilber, Tertia Quality
4236 Neusilber, Tubes
1467 Reinnickel (Pure Nickel)

M-303 Vereinigte Deutsche Nickelwerke, A.-G., Schwerte (Ruhr), Germany

3389 Chronin 85
3390 Chronin 100
3567 Crucin
3412 Frigidal
2684 Ia-Ia
3439 Invarstahl
3445 Markana Metal
3781 Neusilber
4237 Neusilber IIa
3695 Nickel C
4419 Nickelin Ia
4420 Nickelin IIa
4421 Nickelin IIIa
4169 Nickelin IV
4422 Nickelin V
1466 Nicorros
1467 Rein-Nickel
1529 Silverin (Blancadur)

M-116 Vereinigte Leichtmetall Werke, G.m.b.H., Hannover-Linden, Germany

1470 Albondur
1469 Allautal
1471 Bondur
6664 Bondurplat
2503 B.S.Seewasser
991 K.S. Seewasser
622 Lautal
5596 L-IV
6656 Mangal
1465 Pantal
1464 Reinalumin (pure aluminum)
3331 Scleron
5378 Silumin
1468 V.L.W. Light Metals

M-204 Vereinigte Silberhammerwerke Hetzel, Nuremburg, Germany

9023 Cupal
1400 Zinnal

M-383 Vereinigte Stahlwerke, Düsseldorf, Germany. (Subsidiary companies listed include: Fried. Wilhelms Hütte, Deutsche Röhrenwerke A.G., and Dortmund-Hoerder Hüttenverein A.G., q.v.)

4416 Migraeisen No. 1
5594 Migraeisen No. 2
5595 Migraeisen No. 3
7854 Patina Stahl Beizerei
7855 Patina Stahl Rauchgas
3698 Patina Stahl (Steel)
3733 Resista
3709 Sicromal No. 8
3710 Sicromal No. 9
3711 Sicromal No. 10
3712 Sicromal No. 12
3713 Silbereisen No. 1
3714 Silbereisen No. 2
3715 Silbereisen No. 3
3716 Silbereisen No. 4
3717 Silbereisen No. 5
5592 Silbereisen No. 5
5593 Silbereisen No. 7
3730 Th-30
3731 Th-31
7851 TH-60B
7852 TH-61B
7853 TH-62B
3734a V-TE Stahl
3734b V-T Stahl

M-274 Verilite Metals Co.

1153 Verilite

M-117 Vickers-Armstrong Co., Ltd., London, England

11356 Vibrac Steel

M-423 Victor Manufacturing Company, Bloomsbury WCI, London, England

4808 Y-Phosphor Bronze No. 270A

M-998 Volco Brass & Copper Company, Kenilworth, New Jersey

9041 Volco No. 5
12547 Volco No. 8
9036 Volco No. 10
12548 Volco No. 11
12549 Volco No. 12
12550 Volco No. 14
9037 Volco No. 30
10900 Volco No. 65
10872 Volco No. 68
1647 Volco No. 80
9038 Volco No. 95

M-275 Vulcan Crucible Steel Co., Aliquippa, Pennsylvania

8753 Callo-Ferro (45)
8889 Chrome Vanadium Die Casting
3833 Extra Chrome
1164 Extra Drill
9728 Fort Pitt Vanadium
9900 Hecla Special
4699 Non-hardening
10810 Special Oil Hardening
10813 Special Van
10910 Super Chrome
1167 Superior
3209 Super Steel
10283 TCM
1162 Vulcan
11555 Vulcan Auto
11346 Vulcan A-41
11387 Vulcan A-42
11388 Vulcan Alidie
11389 Vulcan Blue Edge
2223 Vulcan Calo-Ferro
11390 Vulcan Carbon Vanadium
11391 Vulcan C.K.
11392 Vulcan C.W.D.
11393 Vulcan Drawing Die
1163 Vulcan Extra
11394 Vulcan Extra Vanadium
1165 Vulcan Fort Pitt
3269 Vulcan Hardrite
11395 Vulcan Heavy Duty
3270 Vulcan Hecla
3271 Vulcan Hi-Pro
3272 Vulcan K.R.
3274 Vulcan Non-Shrinkable
11396 Vulcan No. 14
11397 Vulcan No. 50
11398 Vulcan No. 212
11399 Vulcan No. 2300
11400 Vulcan No. 4870
11401 Vulcan Q.A.
3815 Vulcan Regal No. 2
11402 Vulcan Self Hardening
11404 Vulcan Silico Manganese
1166 Vulcan Special
5227 Vulcan Stainless Type A
5228 Vulcan Stainless Iron C-2
3275 Vulcan Special Vanadium
8512 Vulcan TM-5
11405 Vulcan Vairloy
11406 Vulcan Wolfram Cobalt
11384 Vulcan 4-H-W
11385 Vulcan 6-H-W
7692 Vul-Mo
1186 Wolfram

M-922 Vulcan Iron Works, Wilkes-Barre, Pennsylvania

11207 Toughite No. 5

M-938 Vulcan Mold & Iron Company, Latrobe, Pennsylvania

11407 Vulc-Iron

M-133a Wagner, Gerhard, New York, N. Y.
(See Vereinigte Chemische Fabriken zu Leopoldshall)

M-963 Wall-Colmonoy Corporation, Detroit, Michigan

8122 Colmonoy
8928 Colmonoy No. 1
8931 Colmonoy No. 4
8932 Colmonoy No. 5
8933 Colmonoy No. 6
11585 Colmonoy No. 9
8936 Colmonoy No. 20
8927 Colmonoy Overlay
11586 Colmonoy WCR-100
11587 Colmonoy WCR-200
11588 Colmonoy WCR-300
11589 Colmonoy WCR-400
10938 Colmonoy Sweat On Paste

M-942 Waltham Watch & Clock Company, Waltham, Massachusetts

11418 Watch Nickel

M-389 Ward's, Edgar T., Sons Co., Newark, New Jersey

9145 Domestic
9659 Lion
9938 High Carbon Alloy
10643 Hot Stamping Alloy Die
10991 Special
10799 Special Alloy
10809 Special Oil Hardening
10988 Shock Resisting
11566 Truform Special
11517 3C Die

M-397 Wardlow, S. and C., Nutley, New Jersey

4709 Wardlow's
4710 Wardlow's Tough

M-277 Warman Steel Casting Co., Huntington Park, California

8750 Calmar 18-8 Cb
11941 Calmar 19-9
11943 Calmar 19-9 M
11942 Calmar 19-9 S
8754 Caloxo 25-12
11940 Caloxo 28
11944 Caloxo 35-15
1220 Warman Calduro 13-2
6034 Warman Caloxo 8-18
6035 Warman Caloxo 15-25
6036 Warman Caloxo 15-25 M
6037 Warman Caloxo 15-35
1232 Warman Caloxo 18
6038 Warman Caloxo 18-2
1222 Warman Caloxo 25-20
6040 Warman Caloxo 25-20 M
6041 Warman Caloxo 26
6042 Warman Caloxo 26-4
6043 Warman Caloxo 28-10
6044 Warman Caloxo 28-10 M
1221 Warman Calmar 18-8
6033 Warman Calmar 18-8 M
6949 Warman 5
6950 Warman 5M
1249 Warman 6
6031 Warman 6M
6032 Warman 13
11939 Warman 13 M

M-774 Washburn Wire Company, Phillipsdale, Rhode Island

9231 Eagle Music Wire

M-246 Washington Iron Works, Seattle, Washington

7522 Superloy K2 Mo
10913 Superloy Manganese Steel
5452 Superloy No. 4
5453 Superloy No. 7
10912 Superloy No. 10
1171 Washconite

M-941 Waukesha Foundry Company, Waukesha, Wisconsin

11416 Waukesha Metal

M-278 Weatherly Foundry & Mfg. Co., Weatherly, Pennsylvania

1224 Diamite
10280 Moly Iron

M-446 Webb Wire Works, New Brunswick, New Jersey

5231 Ship Brand Orange Label
5230 Ship Brand Red Label

M-599 Wehr Steel Company, Milwaukee, Wisconsin

6808 Wehralloy No. 1
6809 Wehralloy No. 2
6810 Wehralloy No. 3
6811 Wehralloy No. 4
6812 Wehralloy No. 5
6813 Wehralloy No. 6
6814 Wehralloy No. 7
6815 Wehralloy No. 8
6816 Wehralloy No. 9
6817 Wehralloy No. 10
6818 Wehralloy No. 12
6819 Wehralloy No. 13
6820 Wehralloy No. 14
6821 Wehralloy No. 16
6822 Wehralloy No. 17
6823 Wehralloy No. 18
6824 Wehralloy No. 19
6825 Wehralloy No. 21
6826 Wehralloy No. 22
6827 Wehralloy No. 23
6828 Wehralloy No. 24
6829 Wehralloy No. 26
6830 Wehralloy No. 27
6831 Wehralloy No. 28
6832 Wehralloy No. 29
6833 Wehralloy No. 31
6834 Wehralloy No. 43
6835 Wehralloy Stainless 18-8
6836 Wehralloy Stainless 18-8 Special

M-628 Weirton Steel Co., Weirton, W. Va.

11987 Weiralead
11435 Weircoloy
7484 Weirite
11986 Weirzin

M-939 Welding Alloy Manufacturing Company, New York, New York

11779 W-Al-Co Type 1
11778 W-Al-Co Type 2
11411 W-Al-Co Type E-1
11412 W-Al-Co Type G-2

M-765 Welding Equipment & Supply Company, Detroit, Michigan

9164 Drawalloy 240
11946 Drawalloy 340
11948 Eureka High Speed Steel
11527 No. 50 Bronze
11949 Suttonite High Speed Steel Welding Rod
11530 No. 70W Non-Shrink Tool Steel
11531 No. 71M Non-Shrink Tool Steel
11532 No. 72 Hot Work Tool Steel (Standard)
11947 No. 73 Hot Work Tool Steel (Superior)
11950 No. 75X Water Hardening Tool Steel
11535 No. 332 Heat Resisting Alloy
11536 No. 400 P
11539 No. 1215 Air-Hardening Tool Steel
11544 No. 5545 Copper Nickel Alloy
11545 No. 8510 Water Hardening Tool Steel

M-943 Welding Material Company, New Orleans, Louisiana

11438 Weldmaco

M-946 Welland Electric Steel Company, Welland, Ontario

11456 Welmet No. 1

M-933 Wellman Company, S. K., Cleveland, Ohio

11351 Velvetouch

M-681 Wellman Bronze & Aluminum Company, Cleveland, Ohio

8446 Ampco
8496 Anfriloy
9501 Idealoy
11561 Titanite
11442 Wellcast No. 3S
11443 Wellcast No. 4A
11444 Wellcast No. 5S
11445 Wellcast No. 13A
11446 Wellcast No. 16S
11447 Wellcast No. 17S
11448 Wellcast No. 65
11449 Wellcast No. 73
11450 Wellcast No. 78
11451 Wellcast No. 80
11452 Wellcast No. 85
11453 Wellcast No. 88
11454 Wellcast No. 99C
11455 Wellcast No. 116

M-465 West Steel Casting Co., Cleveland, Ohio

6080 Duralloy
105 West No. 1
106 West No. 2
107 West No. 3
108 West No. 3A
109 West No. 4
110 West No. 4A
111 West No. 5
156 West No. 6
337 West No. 6A (Hy-cast)
2495 West No. 7 (Duracast)
4015 West No. 7A (Duracast)
4327 West No. 8 (Duracast)
6291 West No. 9 (Duracast)
6292 West No. 9A (Cumloy)
6293 West No. 10 (Cumloy)
6294 West No. 11 (Cumloy)
6295 West No. 12 (Cumloy)
6296 West No. 13 (Cumloy)
6297 West No. 14 (Cumloy)
6298 West No. 14A (Cumloy)
11457 West 60 Stancast
11458 West 75 Hy-Cast
11459 West 90 Duracast
11460 West 110 Supercast

M-279 Western Cartridge Co., E. Alton, Illinois

12439 Cupro Nickel
12436 Electronic Bronze
652 Lubaloy
12440 Lubaloy X
12441 Super-X Leaded Nickel Silver
10921 Super-X Nickel Silver 12%
12442 Super-X Nickel Silver 18% Gr. A
12443 Super-X Nickel Silver 18% Gr. B
12444 Super-X Nickel Silver 18% Gr. C
10922 Super-X Phosphor Bronze Gr. A
12445 Super-X Phosphor Bronze Gr. C
12446 Super-X Phosphor Bronze Gr. D
12447 Super-X Phosphor Bronze Gr. E
12438 Western Bearing Bronze
12437 Western Bronze 222

M-468 Western Crucible Steel Casting Co., Minneapolis, Minnesota

6087 Westeeco No. 5
5392 Westeeco No. 35-15

M-205 Western Electric Co., Chicago, Illinois

1067 Chromium Permalloy
1141 Molybdenum Permalloy
12297 2-81 Molybdenum Permalloy
7683 45 Permalloy
7684 78.5 Permalloy
7506 Vanadium Permendur
11515 1.7 V-Permendur
7507 7.5-70 Perminvar
895 25-45 Perminvar
7505 50-50 Permendur

M-384 Westinghouse Air Brake Co., Wilmerding, Pennsylvania

3735 WAB Alloys
3736 Wabcoloy

M-118 Westinghouse Electric & Mfg. Co., E. Pittsburgh, Pennsylvania

8407 Aluminark
8695 Bronzark
8798 Castingweld
9016 Crucible Weld AP
9017 Crucible Weld DH
9018 Crucible Weld FP
9021 Cuferco
5774 Cupaloy
9710 Flexarc Grade 18
9738 Freemachineweld
9865 Harden Touch No. 1
9866 Harden Touch No. 2
9867 Harden Touch No. 4
9868 Harden Touch No. 5
9869 Harden Touch No. 6
565 Hipernik
10024 Hypersil
9564 K-42-B
613 Konel
3658 Kovar
10429 Nickelchromeight
10431 Nickelchromtwelve
10433 Nickelmang
7478 Phos-Copper
10678 Sheetweld
10906 Super-Invar

M-510a Wetherell Bros. Co., Cambridge, Massachusetts
(See Kayser, Ellison & Co., Ltd.)

M-207 Wheeling Mold & Foundry Co., Wheeling, West Virginia
(See Continental Roll & Steel Fdy. Co.—M-451)

358 Cro-Mol
9011 Cro-Mol C-10

M-206 Wheeling Steel Corporation, Wheeling, West Virginia

10604 WE III
10605 WE IV
10606 WE V
10607 WE VI
10608 WE VII
10609 WE VIII
10610 WE IX
10287 WE X

M-119 Wheelock, Lovejoy & Company, Cambridge, Massachusetts

419 Economo No. 20
1783 Economo No. 50
1548 Hy-Ten A No. 1
7392 Hy-Ten A No. 1X
6119 Hy-Ten A No. 15
10111 Hy-Ten Alloy Chisel Steel
1549 Hy-Ten B No. 2
584 Hy-Ten B No. 3
1781 Hy-Ten B No. 3X
1550 Hy-Ten B No. 4
1551 Hy-Ten B No. 5
10112 Hy-Ten B No. 43
1552 Hy-Ten M
4711 Whelco Alloy Tap
4087 Whelco Finishing
5068 Whelco High Speed
4088 Whelco Hot Work
4089 Whelco Oil-hardening
4091 Whelco Standard
4092 Whelco Superior

M-652 Whipple & Choate Company, Bridgeport, Connecticut

11038 Rex Bronze
11042 Rex Composition

M-659 White Metal Rolling & Stamping Corporation, Brooklyn, New York

13332 Magnesium FS
11333 Magnesium M
H334 Magnesium O

M-120 Wickwire Spencer Steel Co., New York, N. Y.

1178 Wissco No. 1
5388 Wissco 1M
1179 Wissco No. 2
1180 Wissco No. 3
1181 Wissco No. 4
5389 Wissco 4M
1183 Wissco No. 4S
7395 Wissco 5A
1184 Wissco No. 5C
1185 Wissco No. 5 CN

M-764 Wiehandwerke, Ulm, Germany

9147 Donal
11489 WJ-301

M-121 Wiggin, Henry & Co., Ltd., Birmingham, England

8300 Albanoid
217 Brightray
5447 Copper-Nickel 4%
4202 Copper-Nickel 10%
4203 Copper-Nickel 15%
4204 Copper-Nickel 20%
346 Corronil
394 Dullray (formerly Ferrozoid)
468 Ferry
520 Glowray
713 Mangonic
758 Monel Metal
798 Nickel
1006 Silveroid
10822 Spinzwel
1203 Zodiac

M-947 Wilcox Rich Division, Detroit, Michigan

11478 Wilrich 300
11479 Wilrich 301
11480 Wilrich 350
11481 Wilrich 600
11482 Wilrich 625
11494 Xaloy

M-403 Wilhelms, Fried., Hütte, Mulheim, Ruhr, Germany (Parent Company—Vereinigte Stahlwerke, q.v.)

4416 Migraeisen No. 1
5594 Migraeisen No. 2
5595 Migraeisen No. 3
3713 Silbereisen No. 1
3714 Silbereisen No. 2
3715 Silbereisen No. 3
3716 Silbereisen No. 4
3717 Silbereisen No. 5
5592 Silbereisen No. 6
5593 Silbereisen No. 7

M-919 Wilkinson, William, Shustoke, Warwickshire, England

11187 Thermoflex

M-976 Willey's Carbide Tool Company, Detroit, Michigan

11686 Willeys E-5
12527 Willeys E-6
12528 Willeys E-8
12529 Willeys E-12
12531 Willeys 509
12530 Willeys 710

M-741 Williams & Sons, E. A., Jersey City, New Jersey

8916 Cloverleaf
9097 Diamond G Bronze
10247 Mill Brass Mix

M-20a Williams, William E., New York, N. Y. (See Barronia Metals, Ltd.)

M-781 Williamson Bros., Inc., Bridgeport, Connecticut

9359 Epco-Oil Hard
9360 Epco-Water Hard

M-918 Willworthy Piston Ring, Ltd., England

11185 Thermocrom

M-237 Wilson Co., H. A., Newark, New Jersey

6551 Aeralloy
1931 Belais White Gold
10236 Midflex
11470 Wilco Alloy No. 6
7533 Wilcoloy
11471 Silver Solder No. 2
11472 Silver Solder No. 18
11473 Silver Solder No. 25
11474 Silver Solder No. 27
7524 Wilco Thermometal Amplex
11475 Wilco Thermometal Cirflex
7525 Wilco Thermometal Highflex
7526 Wilco Thermometal Highflex 45
7527 Wilco Thermometal Highheat
7528 Wilco Thermometal Highheat 47
7529 Wilco Thermometal H.T. Constant
7530 Wilco Thermometal H.T. Special
11476 Wilco Thermometal Midflex 46

11477 Wilco Thermometal Ruflex
7531 Wilco Thermometal Scoflex
7532 Wilco Thermometal Standard
7523 Wilco No. 50 Alloy
11485 Wilson No. 520

M-662 Wilson Welder & Metals Co., New York, New York
8243 Airco
11484 Wilson

M-554 Wing & Co., J. T., Detroit, Michigan
6531 Nic-Motal

M-848 Winn, W. Martin, Ltd., Staffordshire, England
10173 Marwin
10174 Marwin Supastuff

M-869 Wintershall, A. C., Heringer, Germany
10133 Magnenin

M-110a Wonham, Inc., New York, N. Y.
(See Tungum Alloy Co., Ltd.)

M-537 Wood Steel Co., Alan, Conshohocken, Pennsylvania
6499 A.W. 70-90 Type A
7068 A.W. 70-90 Type B
9228 Dyn-el

M-842 Woodworkers Tool Works, Chicago, Illinois
9959 Oman

M-448c Workington Iron & Steel Co., Workington, England
(See Parent Company—United Steel Companies, Ltd.)

M-463 Worthington Pump & Machinery Corp., Harrison, New Jersey
5767 Wompco
8071 Worthite

M-498 Worthington Steel & Annealing Co., Sheffield, England
5985 Rotas
6047 Wizard

M-730 Wrought Bearing Metals, Inc., New York, New York
8770 Carobronze

M-629 Wyckoff Drawn Steel Co., Pittsburgh, Pennsylvania
7485 Wyco Cold Finished Steel

M-286 Yorkshire Copper Works, Ltd., Leeds, England
4809 Yorcalbro

M-977 Youngstown Alloy Castings Co., Youngstown, Ohio
9106 Gyrocast
11687 Trantinyl

M-873 Youngstown Foundry & Machine Co., Youngstown, Ohio
10548 Paralloy
10549 Paraloy No. 2

M-531 Youngstown Sheet & Tube Co., Youngstown, Ohio
6469 Yoloy
7397 Youngstown Copperoid Steel
8706 Youngstown Pliaduc Tin Plate

M-950 Zelnicker Co., W. A., St. Louis, Missouri
11505 Zelnicker Babbitts

M-289 Ziv Steel & Wire Co., Chicago, Illinois
8694 BRM High Speed
7398 Do-It
12243 Dumore
3830 Extra
541 Hargus
10028 Hob-A-Die
10029 Hob-A-Lite
3918 Lophos
9669 Lotung

10177 Maximold
10222 Metamold
788 Neor
3944 Normar
7399 Plancher
4339 P.R.K.
2494 Red Shadow
4713 Rolled Auger
3985 Section A Auger
3986 Section B Auger
4007 Special
1059 Strauss Metal
11276 Typlex
4093 Wizard
1143 Vandiecar
4100 Zip
4101 Zivco
4102 Ziv's Block-tested
4103 Ziv's Cobalt
4712 Ziv's Hollow Drill
4714 Ziv's Regular
4104 Ziv's Solid Drill
4105 Ziv's Super

M-290 Zurbach Steel Co., Cambridge, Massachusetts

1208 Zurco "A"
1209 Zurco "AAA"
1210 Zurco "B"
1211 Zurco "C"
11512 Zurco Galvacote
1207 Zurco Rustless Iron
1782 Zurco Rustless Steel
11513 Zurco Silvatex
1205 Zurco No. 18
1206 Zurco No. 25

SECTION V

KEY INDEX TO MANUFACTURERS

In this section is found Part A, the serial listing, and Part B, the alphabetical listing of all the manufacturers and their "agents" who are listed alphabetically in Section IV. The reader's attention is invited to the explanatory remarks introducing that section, especially those pertaining to company affiliations and "agents".

SECTION V. KEY INDEX TO MANUFACTURERS

Part A

Serial Listing of Manufacturers

M-1 Allegheny-Ludlum Steel Co., Brackenridge, Pennsylvania.
M-2 Allgemeines Deutsches Metallwerk, G.m.b.H., Berlin, Germany.
M-2a International Development Corp., New York, N. Y.
M-3 Alloy Cast Steel Co., Marion, Ohio.
M-4 Aluminum Co. of America, Pittsburgh, Pennsylvania.
M-5 International Alloys, Ltd., Slough, England.
M-6 Aluminum Industries, Inc., Cincinnati, Ohio.
M-7 American Boron Products Co., Buffalo, New York.
M-8 American Brass Co., Waterbury, Connecticut.
M-9 American Manganese Steel Div., American Brake Shoe Co., Chicago, Illinois.
M-10 American Rolling Mill Co., Middletown, Ohio.
M-11 American Sheet and Tin Plate Co., Pittsburgh, Pennsylvania.
(Now Carnegie-Illinois Steel Corp.)
M-12 American Steel & Wire Co., Cleveland, Ohio.
(Subsidiary of United States Steel Corp.)
M-13 Ampco Metal, Inc., Milwaukee, Wisconsin.
M-14 Arcade Malleable Iron Co., Worcester, Massachusetts.
M-15 Associated Alloy Steel Co., Inc., Cleveland, Ohio. (Dissolved)
M-16 Avesta Jernverks, Avesta, Sweden.
M-16a A. Johnson & Co., Inc., New York, N. Y. (Agent for M-16)
M-17 Babcock & Wilcox Tube Co., Beaver Falls, Pennsylvania. (See M-447)
M-18 Baker & Co., Newark, New Jersey.
M-19 Barber Asphalt Co., Philadelphia, Pennsylvania.
M-20 Barronia Metals, Ltd., London, England.
M-20a William E. Williams, New York, N. Y. (Agent for M-20)
M-21 Batterium Metal & Vislok, Ltd., Market Harborough, England.
M-22 Bell Telephone Laboratories, New York, N. Y.
M-23 Bethlehem Foundry & Machine Co., Bethlehem, Pennsylvania.
M-24 Bethlehem Steel Co., Bethlehem, Pennsylvania.
M-25 Binney Castings Co., Toledo, Ohio.
M-26 Blackor Company, Los Angeles, California.
M-27 Bohler Bros. & Co., Vienna, Austria. (American agent is M-363)
M-28 British Aluminium Co., London, England.
M-28a Arthur Seligman & Co., New York, N. Y. (Distributor for M-28)
M-29 Burgess-Parr Co., Freeport, Illinois.
M-30 Calorizing Company, Pittsburgh, Pennsylvania.
M-31 Carboloy Co., Inc., Detroit, Michigan.
M-32 Carpenter Steel Co., Reading, Pennsylvania.
M-33 Chase Brass & Copper Co., Inc., Waterbury, Connecticut.
M-34 Colonial Steel Co., Monaca, Pennsylvania.
M-35 Columbia Tool Steel Co., Chicago Heights, Illinois.
M-36 Cooper Alloy Foundry Co., Elizabeth, New Jersey.
M-37 Cronite Foundry Co., Tottenham, London, England.
M-38 Crucible Steel Co. of America, New York, N. Y.
M-39 Peninsular Steel Co., Cleveland, Ohio.
M-40 Darwin & Milner, Inc., Cleveland, Ohio.
M-41 Deloro Smelting & Refining Co., Ltd., (Of Canada), Toronto, Canada
M-42 Hydril Co., Lomita, California.
M-43 Dow Chemical Co., Midland, Michigan.
M-44 Driver-Harris Co., Harrison, New Jersey.

M-45 Duraloy Co., Pittsburgh, Pennsylvania.
M-46 Durlron Co., Inc., Dayton, Ohio.
M-47 Electro-Alloys Co., Elyria, Ohio.
M-48 Electro-Metallurgical Co., New York, N. Y.
M-49 Empire Metal Co., Syracuse, N. Y.
M-50 English Steel Corp., Ltd., Sheffield, England.
M-51 Erie Malleable Iron Co., Erie, Pennsylvania.
M-52 Fagersta Bruks Aktiebolag, Fagersta, Sweden. (Subsidiary of M-385) (American Agent is M-385a)
M-53 Fansteel Metallurgical Corp., Inc., North Chicago, Illinois.
M-54 Ferranti, Ltd., Lancashire, England.
M-55 A. Finkl & Sons, Chicago, Illinois.
M-56 Thos. Firth & John Brown, Ltd., Sheffield, England.
M-57 Firth-Sterling Steel Co., McKeesport, Pennsylvania.
M-58 Frontier Bronze Co., Niagara Falls, New York.
M-59 General Alloys Co., Boston, Massachusetts.
M-60 General Electric Co., Schenectady, New York.
M-61 Wilbur B. Driver Co., Newark, New Jersey.
M-62 Hadfields, Ltd., Sheffield, England. (American Agent is M-85)
M-63 Handy & Harman, New York, N. Y.
M-64 Heppenstall Co., Pittsburgh, Pennsylvania.
M-65 Hoskins Mfg. Co., Detroit, Michigan.
M-66 Illinois Steel Co., Chicago, Illinois. (See successor, M-604)
M-67 Inland Steel Co., Indiana Harbor, Indiana.
M-68 International Nickel Co., Inc., New York, N. Y.
M-69 Jessop Steel Co., Washington, Pennsylvania.
M-70 Kanthal, A.B., Hallstahammar, Sweden. (American Agent is M-231)
M-71 Sumet Corp., Buffalo, N. Y.
M-71a Henry A. Kries & Sons Co., Baltimore, Maryland. (Agent for M-71)
M-72 Fried Krupp, Steel Works, Essen, Germany. (American Agent is M-371)
M-73 Latrobe Electric Steel Co., New York, N. Y.
M-74 Lebanon Steel Foundry, Lebanon, Pennsylvania.
M-75 Lightalloys, Ltd., London, England.
M-76 Ludlum Steel Co., Watervliet, New York. (Now M-1)
M-77 Lumen Bearing Co., Buffalo, New York.
M-78 I. G. Farbenindustrie Aktiengesellschaft, Abteilung Elektronmetall, Frankfurt a.M., Germany.
M-78a Magnesium Development Corp., Newark, N. J. (American licensing Agent for M-78.)
M-79 Malleable Iron Fittings Co., Branford, Connecticut.
M-80 P. F. McDonald & Co., Boston, Massachusetts.
M-81 McInnes Co., Corry, Pennsylvania.
M-82 Meehanite Metal Corp., Pittsburgh, Pennsylvania.
M-82a Ross-Meehan Foundry Co., Chattanooga, Tennessee. (M-82 Licensee)
M-83 Metropolitan Vickers Electrical Co., Ltd., Manchester, England.
M-84 Michigan Steel Casting Co., Detroit, Michigan.
M-85 Midvale Co., Philadelphia, Pennsylvania.
M-86 Mond Nickel Co., Ltd., London, England.
M-87 Morris Ashby, Ltd., London, England.
M-88 National Lead Co., New York, N. Y.
M-89 National Malleable & Steel Castings Co., Cleveland, Ohio.
M-90 National Tube Co., Pittsburgh, Pennsylvania. (Subsidiary of United States Steel Corp.)

M-91 New Jersey Zinc Co., Palmerton, Pennsylvania.
M-92 Niagara Falls Smelting & Refining Corp., Buffalo, New York.
M-93 Nicralumin Co., Jackson, Michigan.
M-94 Ohio Brass Co., Mansfield, Ohio.
M-95 Ohio Steel Foundry Co., Springfield, Ohio.
M-96 Poldi Steel Works, Prague, Czecho-Slovakia.
M-96a Ajax Tool Steel Sales, New York, N. Y. (Agent for M-96)
M-97 Republic Steel Corp., Cleveland, Ohio.
M-98 Riverside Metal Co., Riverside, New Jersey.
M-99 Ruselite Corp., Milwaukee, Wisconsin.
M-100 Rustless Iron and Steel Corp., Baltimore, Maryland.
M-101 Sandvikens Jernverks Aktiebolag, Sandviken, Sweden.
M-101a Sandvik Steel, Inc., New York, N. Y. (Agent for M-101)
M-102 Scovill Mfg. Co., Waterbury, Connecticut.
M-103 Seymour Mfg. Co., Seymour, Connecticut.
M-104 Soc. Anon. de Commentry Fourchambault et Decazeville, Paris, France.
M-104a R. Y. Ferner Co., Washington, D. C. (Sales Representative for M-104)
M-105 Standard Alloy Co., Inc., Cleveland, Ohio.
M-106 Sterling Metals, Ltd., Coventry, England.
M-107 Sutcliffe, Speakman & Co., Leigh, Lancashire, England.
M-108 Telegraph Construction & Maintenance Co., Ltd., London, England.
M-109 Titanium Alloy Mfg. Co., Niagara Falls, N. Y.
M-110 Tungum Alloy Co., Ltd., London, England.
M-110a Wonham, Inc., New York, N. Y. (Agent for M-110)
M-111 Uddeholms, A. B., Uddeholm, Sweden.
M-111a Uddeholm Co. of America, Inc., New York, N. Y. (Agent for M-111)
M-112 Union Steel Casting Co., Pittsburgh, Pennsylvania.
—— United States Steel Corp., New York, N. Y.
(Subsidiary companies include M-11, -12, -90, -377, -604)
M-114 Universal-Cyclops Steel Company, Titusville, Pennsylvania.
M-115 Vanadium-Alloys Steel Co., Latrobe, Pennsylvania.
(Affiliated companies—M-34, M-329, M-342)
M-116 Vereinigte Leichtmetall Werke, G.m.b.H., Hannover-Linden, Germany.
M-117 Vickers-Armstrongs, London, England.
M-118 Westinghouse Electric & Mfg. Co., Pittsburgh, Pennsylvania.
M-119 Wheelock, Lovejoy & Co., Cambridge, Massachusetts.
M-120 Wickwire Spencer Steel Co., New York, N. Y.
M-121 Henry Wiggin & Co., Ltd., Birmingham, England.
M-122 Titan Metal Manufacturing Co., Bellefonte, Pennsylvania.
M-123 Ajax Metal Co., Philadelphia, Pennsylvania.
M-124 A. Allan & Son, Harrison, New Jersey.
M-125 Allied Die Casting Corp., New York, N. Y.
M-126 Alloys & Products, Inc., New York, N. Y.
M-127 Ambold Machine Tool Co., New York, N. Y.
M-128 American Injector Co., Detroit, Michigan.
M-129 American Manganese Bronze Co., Philadelphia, Pennsylvania.
M-130 Apex Smelting Co., Chicago, Illinois.
M-131 Apollo Steel Co., Apollo, Pennsylvania.
M-132 Armstrong Bros. Tool Co., Chicago, Illinois.
M-133 Vereinigte Chemische Fabriken, Leopoldshall, Germany.
M-133a Gerhard Wagner, 25 Broadway, New York, N. Y. (Agent for M-133)
M-134 Baker, Perkins & Co., Ltd., Peterborough, England.
M-135 Barker & Allen, Ltd., Birmingham, England.

M-136 Birdsboro Steel Foundry & Machine Co., Birdsboro, Pennsylvania.
M-137 Birmingham Aluminium Casting Co., Ltd., Birmingham, England.
M-138 Bohn Aluminum & Brass Corp., Detroit, Michigan.
M-139 Bonney-Floyd Co., Columbus, Ohio.
M-140 Braeburn Alloy Steel Co., Braeburn, Pennsylvania.
M-141 Bridgeport Brass Co., Bridgeport, Connecticut.
M-142 Buffalo Bronze Die Casting Corp., Buffalo, N. Y.
M-143 Buffalo Foundry & Machine Co., Buffalo, New York.
M-144 Central Alloy Steel Corp., Canton, Ohio. (Now M-97)
M-145 Chapman Valve Mfg. Co., Indian Orchard, Massachusetts.
M-146 Chicago Steel Foundry Co., Chicago, Illinois.
M-147 Chrome Alloys Mfg. Co., Oakland, California.
M-148 Chrome Steel Corp., Carteret, New Jersey.
M-149 Cleveland Automatic Machinery Co., Cleveland, Ohio.
M-150 Chas. Clifford & Son, Ltd., Birmingham, England.
M-151 Climax Molybdenum Co., New York, N. Y.
M-152 Commercial Alloys Co., San Francisco, California.
M-153 Crucible Steel Casting Co., Cleveland, Ohio.
M-154 Curtis Bay Copper & Iron Works, Baltimore, Maryland.
M-155 Cuyahoga Steel & Wire Co., Cleveland, Ohio.
M-156 Delta Metal Co., Ltd., London, England.
(American Agent is M-450)
M-157 Detroit Alloy Steel Co., Detroit, Michigan.
M-158 Doehler Die Casting Co., Toledo, Ohio.
M-159 Duquesne Steel Foundry, Coraopolis, Pennsylvania. (Now M-451)
M-160 Dursar Corp., Newark, New Jersey.
M-161 Egal Metal Products Co., Baltimore, Maryland.
M-162 Empire Steel Castings, Inc., Reading, Pennsylvania.
M-163 Farrell-Birmingham Co., Ansonia, Connecticut.
M-164 Fort Pitt Steel Casting Co., McKeesport, Pennsylvania.
M-165 General Motors Corp., Dayton, Ohio.
M-166 Hardite Metals, Inc., New York, N. Y.
M-167 Haynes-Stellite Co., Kokomo, Indiana.
M-168 Hills-McCanna Co., Chicago, Illinois.
M-169 John Holroyd & Co., Ltd., Rochdale, England.
M-170 Jeffrey Mfg. Co., Columbus, Ohio.
M-171 Jewell Alloy & Malleable Co., Buffalo, New York.
M-172 Johnson Bronze Co., New Castle, Pennsylvania.
M-173 Jones & Laughlin Steel Corp., Pittsburgh, Pennsylvania.
M-174 Kinite Corporation, Toledo, Ohio.
M-175 Krupp Nirosta Co., Inc., New York, N. Y.
M-176 Lukens Steel Co., Coatesville, Pennsylvania.
M-177 Duncan Mackenzie's Sons Co., Inc., Trenton New Jersey.
M-178 Magnolia Metal Co., Elizabeth, New Jersey.
M-179 Manganese Bronze & Brass Co., Ltd., London, England.
M-180 Manganese Steel Forge Co., Philadelphia, Pennsylvania.
M-181 McGill Mfg. Co., Valparaiso, Indiana.
M-182 Wm. McPhail & Sons, Glasgow, Scotland.
M-183 Metal Sales Corp., Jersey City, New Jersey.
M-184 Michiana Products Corp., Michigan City, Indiana.
M-185 Midland Motor Cylinder Co., Birmingham, England.
M-186 Millbury Steel Foundry Co., Millbury, Massachusetts.
M-187 William Mills & Co., Birmingham, England.
M-188 Muntz's Metal Co., Birmingham, England. (Subsidiary of M-282)

M-189 National Alloy Steel Co., Blawnox, Pennsylvania.
M-190 National Bronze & Aluminum Foundry Co., Cleveland, Ohio.
M-191 Newport Rolling Mill Co., Newport, Kentucky.
M-192 Pacific Foundry Co., San Francisco, California.
M-193 P. L. & M. Co., Los Angeles, California.
M-194 Hybnickel Alloys Co., Wilmington, Delaware.
M-195 Robbins & Meyers, Inc., Springfield, Ohio.
M-196 Karl Schmidt Co., Neckarsulin, Germany.
M-197 American Manganese Mfg. Co., Dunbar, Pennsylvania.
M-198 Siemens & Halske, A.G., Berlin, Germany.
M-199 Siemens-Schuckert, Ltd., London, England.
M-200 Geo. H. Smith Steel Casting Co., Milwaukee, Wisconsin.
M-201 Sterlite Foundry & Mfg. Co., Auburn, Indiana.
M-202 Stoody Co., Whittier, California.
M-203 U. S. Pipe and Foundry Co., Burlington, New Jersey.
M-204 Vereinigte Silberhammerwerke Hetzel, Nuremburg, Germany.
M-205 Western Electric Co., Chicago, Illinois.
M-206 Wheeling Steel Corp., Wheeling, West Virginia.
M-207 Wheeling Mold & Foundry Co., Wheeling, West Virginia.
M-208 Studebaker Chemical Co., Elyria, Ohio.
(Formerly Williams Alloy Products Co.)
M-209 Acme Steel & Malleable Iron Works, Buffalo, New York.
M-210 Edgar Allen & Co., Sheffield, England.
M-210a Edgar Allen Steel Co., Inc., New York, N. Y. (Agent for M-210)
M-211 Amplex Division, Chrysler Corporation, Detroit, Michigan.
M-212 McCallum-Hatch Bronze Co., Inc., Buffalo, New York.
M-213 Brown-Wales Co., Boston, Massachusetts.
M-214 Cadman Mfg. Co., A. W., Pittsburgh, Pennsylvania.
M-215 Central Brass & Aluminum Foundry Co., Cincinnati, Ohio.
M-216 Cerro de Pasco Copper Co., New York, N. Y.
M-217 Chemische Fabrik Griesheim Electron Co., Frankfurt, Germany.
(Now division of M-78)
M-218 R. W. Coan, Ltd., London, England.
M-219 Elkon Company, Indianapolis, Indiana. (Subsidiary of M-265)
M-220 Farrell-Cheek Steel Foundry Co., Sandusky, Ohio.
M-221 Brockhouse Castings Company, Wednesfield, England.
M-222 Dortmund-Hoerder Hüttenverein A.G., Dortmund, Germany.
(Subsidiary of M-383)
M-223 Gunite Foundries Corp., Rockford, Illinois.
H-224 Hofors Steel Works, Hofors, Sweden. (See American Agent, M-267)
M-225 Hubbard Steel Foundry Co., E. Chicago, Indiana (Now M-451).
M-226 Illinois Zinc Co., Chicago, Illinois.
M-227 Walker M. Levett, New York, N. Y.
M-228 Link-Belt Co., Indianapolis, Indiana.
M-229 Mackintosh-Hemphill Co., Pittsburgh, Pennsylvania.
M-230 Manning, Maxwell & Moore, New York, N. Y.
M-231 C. O. Jelliff Mfg. Corp., Southport, Connecticut.
M-232 National Erie Corp., Erie, Pennsylvania.
M-233 Samuel Osborn & Co., Ltd., Sheffield, England.
M-234 Parker Appliance Co., Cleveland, Ohio.
M-235 Pittsburgh Crucible Steel Division, Crucible Steel Company of America, Midland, Pennsylvania.
M-236 Pittsburgh Steel Foundry Corp., Glassport, Pennsylvania.
M-237 H. A. Wilson Co., Newark, New Jersey.

M-238 Revere Copper & Brass Co., New York, N. Y.
M-239 Rolls-Royce Mfg. Co., Derby, England.
M-240 Joseph T. Ryerson & Son, Inc., Chicago, Illinois.
M-241 Sargent & Co., New Haven, Connecticut.
M-242 L. B. Allen Co., Chicago, Illinois.
M-243 Suffolk Iron Foundry, Stowmarket, England.
M-244 S-M Metal Works, London, England.
M-245 United States Graphite Co., Saginaw, Michigan.
M-246 Washington Iron Works, Seattle, Washington.
M-247 Graphite Metallizing Corp., Yonkers, N. Y.
M-248 Alloy Metal Wire Co., Moore, Pennsylvania.
M-249 Aluminium Industrie Aktiengesellschaft, Neuhausen, Switzerland.
M-250 American Abrasive Metals Co., Irvington, New Jersey.
M-251 Carobronze, Ltd., London, England.
M-252 Amesbury Brass & Foundry Co., Amesbury, Massachusetts.
M-253 Atlas Steel Corp., Dunkirk, New York (See Successor, M-76).
M-254 Baush Machine Tool Co., Springfield, Massachusetts.
M-255 Beryllium Products Corp., New York, N. Y.
M-256 Buckeye Brass & Mfg. Co., Cleveland, Ohio.
M-257 Chateaugay Ore & Iron Co., Standish, New York.
M-258 Compagnie d' Orleans, France.
M-259 H. D. Evans Steel Co., Boston, Massachusetts.
M-260 Halcomb Steel Division, Crucible Steel Company of America, Syracuse, N. Y.
M-261 Wm. Jessop & Sons, Inc., Sheffield, England.
M-261a Wm. Jessop & Sons, Inc., New York, N. Y.
M-262 Kalif Corp., Emeryville, California.
M-263 LaBour Co., Elkhart, Indiana.
M-264 Lunkenheimer Co., Cincinnati, Ohio.
M-265 P. R. Mallory Co., Inc., Indianapolis, Indiana.
M-266 Mueller Brass Co., Port Huron, Michigan.
M-267 S.K.F. Steels, Inc., New York, N. Y. (Agent for M-224)
M-268 Southern Malleable Iron Co., East St. Louis, Illinois.
M-269 Standard Telephones & Cables, Ltd., England.
M-270 Steinvertriebs Aktiengesellschaft, Berlin, Germany.
M-271 Taylor-Wharton Iron & Steel Co., High Bridge, New Jersey.
M-272 Ultralumin Leichtmetall Aktiengesellschaft, Germany.
M-273 United Lead Co., c/o Lead Industries Association, New York, N. Y. (Succeeded by M-88)
M-274 Verilite Metals Co.
M-275 Vulcan Crucible Steel Co., Aliquippa, Pennsylvania.
M-276 American Cutting Alloys, Inc., New York, N. Y.
M-277 Warman Steel Casting Co., Huntington Park, California.
M-278 Weatherly Foundry & Mfg. Co., Weatherly, Pennsylvania.
M-279 Western Cartridge Co., E. Alton, Illinois.
M-280 Union Carbide & Carbon Company, Niagara Falls, New York.
M-281 Acieral Co. of America.
M-282 Imperial Chemical Industries, Ltd., Birmingham, England.
M-283 E. Strasser, Rohrschach, Switzerland.
M-284 Giulini Werke A.-G., Rohrsbach, Germany.
M-285 American Metal Products Co. (See M-13; Ampco Metal, Inc., Successors)
M-286 Yorkshire Copper Works, Ltd., Leeds, England.
M-286a John Strachan Co., New York, N. Y. (Agent for M-286)
M-287 Garford Engineering Co., Garford, Indiana.
M-288 Sivyer Steel Casting Co., Milwaukee, Wisconsin.

M-289 Ziv Steel & Wire Co., Chicago, Illinois.
M-290 Zurbach Steel Co., Cambridge, Massachusetts.
M-291 Reading Iron Co., Reading, Pennsylvania.
M-292 A. M. Byers Co., Pittsburgh, Pennsylvania.
M-293 American Stainless Steel Co., Pittsburgh, Pennsylvania.
M-294 Titusville Forge Co., Titusville, Pennsylvania.
M-295 Sandusky Foundry & Machine Co., Sandusky, Ohio.
M-296 Heraeus-Vacuumschmelze A.-G., Hanau, Germany.
M-297 Vereinigte Deutsche Metallwerke, A.-G., Altena (Westf.), Germany.
M-298 Cindal Metals, Ltd., Liverpool, England.
M-299 Metallgesellschaft, A.-G., Frankfurt, Germany.
M-299a American Lurgi Corp., New York, N. Y. (Agents for M-299)
M-300 Lehigh Babbitt Co., Allentown, Pennsylvania.
M-301 Osram G.m.b.H., Kommandit-Ges., Berlin, Germany.
M-302 Aluminiumwerke Maulbronn, Maulbronn, Württ, Germany.
M-303 Vereinigte Deutsche Nickelwerke A.-G., Schwerte (Ruhr), Germany.
M-304 Robert Bosch A.-G., Metallwerk, Stuttgart, Germany.
M-305 Sheet Aluminum Corp., Jackson, Michigan (See M-93, Nicralumin Co., Successor).
M-306 British Thomson Houston Co., Ltd., Rugby, Warwickshire, England.
M-307 Potts Co., Horace T., Philadelphia, Pennsylvania.
M-308 DuPont Everdur Co., Wilmington, Delaware.
M-309 Cramp Brass & Iron Foundries, Philadelphia, Pennsylvania.
M-310 Harrison, Fischer & Co., Ltd., Sheffield, England.
M-311 National Physical Laboratory, Teddington, England.
M-312 Michigan Valve & Foundry Co., Detroit, Michigan.
M-313 American Magnesium Corp., Cleveland, Ohio.
M-314 American Smelting & Refining Co., Perth Amboy, New Jersey.
M-315 Maywood Chemical Works, Maywood, New Jersey.
M-316 Hans-Heinrich Hütte, G.m.b.H., Langelsheim a. Harz, Germany.
M-317 Hoyt Metal Co. of Great Britain, Ltd., London, England.
M-318 Plykrome Corp., New York, N. Y.
M-319 Phelps Dodge Copper Products Corp., New York, N. Y.
M-320 Metallbank A.-G. (Heddernheimer Copper Works), Heddernheim, Germany
M-321 Wm. J. Sweet Foundry Co., Inc., Irvington, New Jersey.
M-322 International Silver Co., Meriden, Connecticut.
M-323 Maschinenbau, A.-G., Golzern-Grimma, Germany.
M-324 Kreidler's Metall-und-Drahtwerke G.m.b.H., Stuttgart, Germany.
M-325 Birmabright, Ltd., Birmingham, England (Subsidiary of M-137).
M-326 Pioneer Alloy Products Co., Cleveland, Ohio.
M-327 United Alloy Steel Corp., Canton, Ohio.
(Now United Steel Division of Republic Steel Corp.)
M-328 Ingersoll Steel & Disc Co., Chicago, Illinois.
M-329 Vascoloy-Ramet Corp. of America, N. Chicago, Illinois. (Subsidiary of M-53)
M-330 Ostermann & Co. Metallwerke, Köln, Germany.
M-331 Otis Elevator Co., Buffalo, New York.
M-332 A. Johnson & Co., Inc., New York, N. Y. (Agent for M-16)
M-333 Swedish American Steel Corp., Brooklyn, New York.
M-334 Bissett Steel Co., Cleveland, Ohio.
M-335 Kloster Steel Co., Chicago, Illinois. (Agent for M-611)
M-336 Boyd-Wagner Co., Chicago, Illinois.
M-337 Craine-Schrage Steel Co., Detroit, Michigan.
M-338 Jas. Booth & Co., Ltd., Birmingham, England.
M-339 Kidd Drawn Steel Co., Aliquippa, Pennsylvania.

M-340 Hobson, Houghton & Co., New York, N. Y.
M-341 Peninsular Steel Co., Detroit, Michigan.
M-342 Anchor Drawn Steel Co., Latrobe, Pennsylvania. (Subsidiary of M-115)
M-343 Heller Bros. Co., Newark, New Jersey.
M-344 Hidalgo Steel Co., Inc., New York, N. Y.
M-345 H. Boker & Co., Inc., New York, N. Y.
M-346 H. Kramer & Co., Chicago, Illinois.
M-347 Campbell, Wyant & Cannon Foundry Co., Muskegon, Michigan.
M-348 Martinel Steel Co., Ltd., London, England.
M-349 J. M. Ney Co., Hartford, Connecticut.
M-350 Adams & Osgood Steel Co., Boston, Massachusetts.
M-351 Andrews Steel Co., Newport, Kentucky.
M-352 Andrews, Toledo, Ltd., New York, N. Y., and London, England.
M-353 Atlantic Steel Co., New York, N. Y.
M-354 Cannon-Stein Steel Co., Syracuse, New York.
M-355 John A. Crowley, New York, N. Y.
M-356 Crucible Electric Steel Co., Homestead, Pennsylvania.
M-357 Disston & Sons, Inc., Philadelphia, Pennsylvania.
M-358 Duke Steel Co., Inc., New York, N. Y.
M-359 Ekstrand & Tholand, New York, N. Y.
M-360 Peter A. Frasse, Inc., New York, N. Y.
M-361 Edward A. Hand, Philadelphia, Pennsylvania.
M-362 Hawkridge Bros., Boston, Massachusetts.
M-363 Houghton & Richards, Inc., Boston, Massachusetts.
(Agent for M-27, Böhler Bros. & Co., Vienna, Austria).
M-364 Illingworth Steel Co., Philadelphia, Pennsylvania.
M-365 Milne & Co., New York, N. Y.
M-366 Onondaga Steel Co., Inc., Syracuse, New York.
M-367 Paragon Steel & Tool Co., Inc., Rutherford, New Jersey.
M-368 Patriarche & Bell, New York, N. Y.
M-369 Pittsburgh Rolls Corp., Pittsburgh, Pennsylvania.
M-370 Pittsburgh Tool Steel Wire Co., Monaca, Pennsylvania.
M-371 Thos. Prosser & Son, New York, N. Y. (Agent for M-72)
M-372 Purdy Co., A. R. Inc., New York, N. Y.
M-373 Simonds Saw & Steel Co., Lockport, New York.
M-374 Stulz Sickles Co., Newark, New Jersey.
M-375 Swedish Iron & Steel Corp., New York, N. Y.
M-376 Timken Steel & Tube Co., Canton, Ohio.
M-377 Tennessee Coal, Iron & Railroad Co., Birmingham, Alabama.
(Subsidiary of United States Steel Corp.)
M-378 Fisher Scientific Co., Pittsburgh, Pennsylvania.
M-379 Upson Nut Division, Tool Steel Der... Republic Steel Corp., Cleveland, Ohio.
(Formerly Bourne-Fuller Co.)
M-380 "Griesogen" Griesheimer Autogen Verkaufs G.m.b.H. Griesheim a.M., Germany.
(Subsidiary of M-78)
M-381 Metallo-Chemische Fabrik, Dr. Leopold Rostosky, Berlin, Germany.
M-382 Bleiwerk Goslar, Goslar a.Harz, Germany.
M-383 Vereinigte Stahlwerke, Dusseldorf, Germany.
M-384 Westinghouse Air Brake Co., Wilmerding, Pennsylvania.
M-385 Brukskoncernen A.B., Fagersta, Sweden. (Includes M-52, -609, -610, -611)
M-385a Swedish Steel Mills A. A., New York, N. Y. (Representative of M-385)
M-386 Nitralloy Corp., New York, N. Y.
M-387 Soderfors Steel Works, Soderfors, Sweden.

M-387a K. Engelsted, New York, N. Y. (Agent for M-387)
M-388 Electro-Steel Co., Pittsburgh, Pennsylvania.
M-389 Edgar T. Ward's Sons Co., Newark, New Jersey.
M-390 Tacony Steel Co., Philadelphia, Pennsylvania (Out of business).
M-391 Unimetal Co., Franklin, Pennsylvania.
M-392 S. & C. Wardlow, Nutley, New Jersey.
M-393 Alumaweld Co. of America, Chicago, Illinois.
M-394 Vanadium Corp. of America, Bridgeville, Pennsylvania.
M-395 Steel & Tubes, Inc., Division of Republic Steel Corp., Cleveland, Ohio.
M-396 British Non-Ferrous Metals Research Association, London, England.
M-397 Union Drawn Steel Division, Republic Steel Corporation, Massillon, Ohio.
M-398 Ohio Ferro Alloys Corp., Canton, Ohio.
M-399 American Hammered Piston Ring Co., Baltimore, Maryland.
M-400 Industrial Furnace Corp., Buffalo, New York.
M-401 Bundy Tubing Co., Detroit, Michigan.
M-402 Metallhüttenwerke Schaefer und Schael A.-G., Breslau, Germany. (American Agent is M-315)
M-403 Friedrich Wilhelms-Hütte, Mühlheim, Ruhr, Germany. (Subsidiary of M-383)
M-404 Aktiebolaget Skandinaviska Armaturfabriken, Sweden.
M-405 Chas. Carr, Ltd., Grove Lane Smethwick, Birmingham, England.
M-406 Supersteels Inc., Cleveland, Ohio.
M-407 Gabriel & Co., A. B. Row, Birmingham, England.
M-408 A. C. Scott & Co., Ltd., Manchester, England.
M-409 Wm. Gallimore & Sons, Ltd., Sheffield, England.
M-410 Billington & Newton, Ltd., Longport, Staffs., England.
M-411 Haywoods NCA Metal, Ltd., London, England.
M-412 F. J. Ballard & Co., Ltd., Tividale, Tipton, Staffordshire, England.
M-413 Blackwell's Metallurgical Works, Liverpool, England.
M-414 National Alloys, Ltd., London, England.
M-415 Miralite, Ltd., Mortlake, London, England.
M-416 British Driver-Harris Co., Ltd., Gaythorn Mill, Manchester, England. (Subsidiary of M-44, Driver-Harris Co.)
M-417 J. Shaw Son, & Greenhalgh, Ltd., Albert Works, Huddersfield, England.
M-418 Sybry, Searls & Co., Ltd., Cannon Steel Works, Sheffield, England.
M-419 J. J. Rieter & Co.
M-420 Rely Metal Works, Cape Town, South Africa.
M-421 Thermit, Ltd., Edmonton, London, England.
M-422 Rd. Jones, Ltd., Garrison Lane, Birmingham, England.
M-423 Victor Mfg. Co., London, England.
M-424 Brighton Electric Steel Casting Co., Beaver Falls, Pennsylvania.
M-425 B. A. Field, Newark, New Jersey.
M-426 High Duty Alloys, Ltd., Slough, England.
M-427 Non-Corrodal Alloys, Ltd., London, England.
M-428 Hoyt Metal Co., New York, N. Y.
M-429 Kahl Iron Foundry, Detroit, Michigan.
M-430 Samuel Fox & Co., Ltd., Sheffield, England. (Subsidiary of M-448)
M-431 Bearium Metals Corp., Rochester, New York.
M-431a Universal Bearing Metals Corp., Rochester, New York. (Agent for M-431)
M-432 Delaware Tool Steel Corp., Wilmington, Delaware.
M-433 Edgcomb Steel Co., Philadelphia, Pennsylvania.
M-434 Ryer Inc., Ltd., Los Angeles, California.
M-435 Canadian Atlas Steels, Ltd., Welland, Ontario, Canada.
M-436 Magnolia Antifriction Metal Co. of Great Britain, Ltd., London, S.W.I., England. (American Affiliate is M-178)

M-437 Cincinnati Steel Castings Co., Cincinnati, Ohio.
M-438 Electric Steel Foundry Co., Portland, Oregon.
M-439 The Forging & Casting Corp., Ferndale, Michigan.
M-440 Industrial Steels, Inc., Cambridge, Massachusetts.
M-441 Interstate Foundry & Machine Co., Johnson City, Tennessee.
M-442 New England High Carbon Wire Co., Millbury, Massachusetts.
M-443 Shawinigan Chemicals, Ltd., Montreal, Canada.
M-444 Texas Electric Steel Casting Co., Houston, Texas.
M-445 Thomas Steel Co., Warren, Ohio.
M-446 The Webb Wire Works, New Brunswick, New Jersey.
M-447 Babcock & Wilcox Co., Barberton, Ohio.
M-448 United Steel Companies, Ltd., Sheffield, England.
(Subsidiaries include M-430, M-448a, M-448b, M-448c)
M-448a Steel, Peech, & Tozer, Sheffield, England (Subsidiary of M-448).
M-448b The Appleby-Frodingham Steel Co., Ltd., Sheffield, England.
(Subsidiary of M-448)
M-448c Workington Iron & Steel Co., Workington, England (Subsidiary of M-448).
M-449 M. E. Cunningham Co., Pittsburgh, Pennsylvania.
M-450 Phosphor Bronze Smelting Co., Philadelphia, Pennsylvania.
(Agent for M-156)
M-451 Continental Roll & Steel Fdy. Co., E. Chicago, Indiana (Comprises what were formerly M-207, M-225, and M-159).
M-452 J. Stone & Co., Deptford, London, England.
M-453 Shanks & Co., Ltd., Barrhead, Scotland.
M-454 Mather & Platt, Ltd., Manchester, England.
M-455 Bédel & Cie., Paris, France.
M-456 Lyon, Conklin & Co., Baltimore, Maryland.
M-457 Dürener Metallwerke, Düren, Germany.
M-458 Goodlass Wall and Lead Industries, Ltd., London, England.
M-459 Deutsche Edelstahlwerke, A.-G., Krefeld, Germany.
M-459a Alex Benecke, New York, N. Y. (Agent, M-459)
M-460 Robins Conveyor, Inc., Passaic, New Jersey.
M-461 Silicum Pistons, Ltd., London, England.
M-462 Osnabrück Kupfer Und Drahtwerke, Osnabrück, Germany.
M-463 Worthington Pump & Machinery Corp., Harrison, New Jersey.
M-464 Allyne-Ryan Foundry Co., Cleveland, Ohio.
M-465 West Steel Casting Co., Cleveland, Ohio.
M-466 Pennsylvania Electric Steel Castings Co., Hamburg, Pennsylvania.
M-467 Massillon Steel Casting Co., Massillon, Ohio.
M-468 Western Crucible Steel Casting Co., Minneapolis, Minnesota.
M-469 Ayedeecee Metals Co., Ltd., Merthyr Tydfil, S. Wales, England.
M-470 Dorman, Long, & Co., Ltd., Middlesbrough, England.
M-471 Isteg Steel Products Co., Westminster, England.
M-472 Messrs. Brown, Bayley's Steel Works, Ltd., Sheffield, England.
M-473 American Steel Foundries, Chicago, Illinois.
M-474 Chambersburg Engineering Co., Chambersburg, Pennsylvania.
M-475 Milwaukee Steel Foundry Co., Milwaukee, Wisconsin.
M-476 David Brown & Sons Ltd., Huddersfield, England.
M-477 Jos. Jackman & Co., Ltd., Sheffield, England.
M-478 British Rolling Mills, Ltd., Tipton, Staffordshire, England.
M-479 Sowers Mfg. Co., Buffalo, New York.
M-480 Cleveland Brass Mfg. Co., Acimet Division, Cleveland, Ohio.
M-481 Scientific Alloys, Inc., Los Angeles, California.
M-482 Alfred Herbert, Ltd., Coventry, England.

M-483 National Forge & Ordnance Co., Irvine, Pennsylvania.
M-484 Wm. Oxley & Co., Rotherham, England.
M-485 Apex Steel Co., Ltd., Sheffield, England.
M-486 J. J. Saville & Co., Ltd., Sheffield, England.
M-487 Darwin's Ltd., Sheffield, England.
(American Agent is M-40)
M-488 Hemmings & Co., Rotherham, England.
M-489 Andrews, Ltd., Sheffield, England.
M-490 L. Cameron & Son, Sheffield, England.
M-491 Fairley and Sons, Ltd., James, Birmingham, England.
M-492 Atkinson, E. Frank & Co., Sheffield, England.
M-493 Aluminum Walzwerke Singen, Singen-Hohentwiel, Germany.
M-494 Sheepbridge Stokes Centrifugal Castings Co., Ltd., Chesterfield, England.
M-495 Monarch Steel Corp., Indianapolis, Indiana.
M-496 Samuel Taylor, Ltd., Birmingham, England.
M-497 Wm. Hassall & Sons, Manchester, England.
M-498 Worthington Steel & Annealing Co., Sheffield, England.
M-499 Industrial Steels, Ltd., Sheffield, England.
M-500 Symington-Gould Corporation, Rochester, New York.
M-501 Röchling-Buderus A.-G., Wetzlar, Germany.
M-502 Hardenite Steel Co., Ltd., Sheffield, England.
M-503 Cochrane Corporation, Philadelphia, Pennsylvania.
M-504 British Standards Institution, London, England.
M-505 Dinorm, Berlin, Germany.
M-506 Prescott Co., Menominee, Michigan.
M-507 Resistoloy Co., Grand Rapids, Michigan.
M-508 Janney Cylinder Co., Philadelphia, Pennsylvania.
M-509 Bridgeport Deoxidized Bronze and Metal Co., Bridgeport, Connecticut.
M-510 Kayser, Ellison & Co., Ltd., Sheffield, England.
M-510a Wetherell Bros. Co., Cambridge, Massachusetts. (Agent for M-510)
M-511 Calloy, Ltd., Avonmouth, England.
M-512 Albertson & Co., Sioux City, Iowa.
M-513 Thompson Products, Inc., Cleveland, Ohio.
M-514 Stewart Die Casting Corp., Chicago, Illinois.
M-515 Central Institute of Metals, Leningrad, Russia.
M-516 Bliss & Laughlin, Inc., Harvey, Illinois.
M-517 Kahl-Holt Co., Baltimore, Maryland.
M-518 Stedman's Foundry & Machine Works, Aurora, Indiana.
M-519 Merco Nordstrom Valve Co., Pittsburgh, Pennsylvania.
M-520 John Chatillon & Sons, New York, N. Y.
M-521 Firth-Vickers Stainless Steels, Ltd., Sheffield, England. (Subsidiary of M-56 and M-50)
M-522 E. I. DuPont de Nemours & Co., Niagara Falls, New York.
M-523 Lynchburg Foundry Co., Lynchburg, Virginia.
M-524 American Machine & Foundry Co., Brooklyn, New York.
M-525 Poro Metals, Ltd., London, England.
M-526 Murex Ltd., Rainham, England.
M-527 Heinrich Lanz, A.-G., Mannheim, Germany.
M-528 Th. Goldschmidt, A.-G., Abteilung Metalle, Essen, Germany.
M-529 Metal & Thermit Corp., New York, N. Y.
M-530 Colvilles, Ltd., Glasgow, Scotland.
M-531 Youngstown Sheet & Tube Co., Youngstown, Ohio.
M-532 Norton Co., Worcester, Massachusetts.
M-533 Schneider & Cie, Paris, France.

M-534 E. Lunn & Co., Glasgow, Scotland.
M-535 Trenite Corp., Trenton, New Jersey.
M-536 Robt. Mitchell Co., Ltd., Montreal, Canada.
M-537 Alan Wood Steel Co., Conshohocken, Pennsylvania.
M-538 American Nickeloid Co., Peru, Illinois.
M-539 National Bearing Metals Corp., St. Louis, Missouri.
M-539a More-Jones Brass and Metal Co., St. Louis, Missouri. (Subsidiary of M-539)
M-540 Lewin Metals Corp., E. St. Louis, Illinois.
M-541 Alluminio S. A., Milano, Italy.
M-542 Northfield Iron Co., Northfield, Minnesota.
M-543 Pittsburgh Brass Mfg. Co., Pittsburgh, Pennsylvania.
M-544 Beckett Bronze Co., Muncie, Indiana.
M-545 Michigan Smelting & Refining Co., Detroit, Michigan.
M-546 Kinney Iron Works, Los Angeles, California.
M-547 Plouff Metallographic Institute, Boston, Massachusetts.
M-548 Nassau Smelting & Refining Co., New York, N. Y.
M-549 E. N. Egge Co., Los Angeles, California.
M-550 Garrett Brass & Aluminum Foundry Co., Garret, Indiana.
M-551 American Steel Co., Pittsburgh, Pennsylvania.
M-552 Laclede Brass Works, Inc., St. Louis, Missouri.
M-553 Pacific Metal Co., Portland, Oregon.
M-554 J. T. Wing & Co., Detroit, Michigan.
M-555 Aluminiumwerke Nürnberg G.m.b.H., Nürnberg, Germany.
M-556 Magnesium Castings & Products, Ltd., Slough, England. (Subsidiary of M-426)
M-557 Eisenwerk Neubrandenburg G.m.b.H., Berlin NO 20, Germany.
M-558 United States Metals Refining Co., Carteret, New Jersey.
M-558a The American Metal Co., Ltd., New York, New York. (Metal Sales Agent for M-558)
M-559 Alamo Iron Works, San Antonio, Texas.
M-560 Joslyn Co., New York, N. Y.
M-561 Puget Sound Metal Works, Tacoma, Washington.
M-562 Theodore Hiertz Metal Co., St. Louis, Missouri.
M-563 Ariston Metal Co., New York, N. Y.
M-564 Apex Bronze Foundry Co., Oakland, California.
M-565 United American Metals Corp., Brooklyn, New York.
M-566 Chain Belt Co., Milwaukee, Wisconsin.
M-567 Atkinson Co., Rochester, New York.
M-568 Acme Steel Co., Chicago, Illinois.
M-569 Atlantic Steel Castings Co., Chester, Pennsylvania.
M-570 Canada Electric Steel Castings, Ltd., Orillia, Ontario, Canada.
M-571 Frank Foundries Corp., Moline, Illinois.
M-572 Kay-Brunner Steel Products, Inc., Los Angeles, California.
M-573 The Locomotive Finished Materials Co., Atchison, Kansas.
M-574 The Stanley Works, New Britain, Connecticut.
M-575 Thos. Bolton & Sons, Widnes, England.
M-576 Non-Ferrous Castings Co., Ltd., Smethwick, England.
M-577 T. M. Birkett & Sons, Ltd., Hanley, England.
M-578 Lincoln Electric Co., Cleveland, Ohio.
M-579 A. O. Smith Co., Milwaukee, Wisconsin.
M-580 Hanson-Van Winkle-Munning Co., Matawan, New Jersey.
M-581 Ardal Ltd., Worle, Weston-Super-Mare, England.
M-582 W. M. Chace Co., Detroit, Michigan.
M-583 Pressed Steel Car Co., Pittsburgh, Pennsylvania.

M-584 Degefors Iron & Steel Works, Degefors, Sweden. (American Agent is M-359)
M-585 United States Reduction Co., E. Chicago, Illinois.
M-586 Glacier Metal Co., Richmond, Virginia.
M-587 John Finn Metal Works, San Francisco, California.
M-588 Union Bronze Co., Reading, Pennsylvania.
M-589 Everard Tap & Die Corp., New York, N. Y.
M-590 T. F. Seitzingers and Sons, Atlanta, Georgia.
M-591 Atlantic Zinc Works, New York, N. Y.
M-592 Central Foundry Co., Joplin, Missouri.
M-593 Bronze Die Casting Co., Pittsburgh, Pennsylvania.
M-594 Dirigold Corp., Kokomo, Indiana.
M-595 Alemite Die Casting & Manufacturing Co., Woodstock, Illinois.
M-596 Grasselli Chemical Co., Cleveland, Ohio.
M-597 Braun-Steeples Co., Ltd., San Francisco, California.
M-598 Tungsten Widia Tool Corp., New York, N. Y.
M-599 Wehr Steel Co., Milwaukee, Wisconsin.
M-600 Sharon Steel Hoop Co., Sharon, Pennsylvania.
M-601 Motor Castings Co., Milwaukee, Wisconsin.
M-602 Geo. W. Prentiss & Co., Holyoke, Massachusetts.
M-603 Aurora Metal Co., Inc., Aurora, Illinois.
M-604 Carnegie-Illinois Steel Corp., Pittsburgh, Pennsylvania. (Subsidiary of United States Steel Corp.)
M-605 Hevi Duty Electric Co., Milwaukee, Wisconsin.
M-606 Societa Anonmia Ansaldo, Rome, Italy.
M-607 Steel Sales Corp., Chicago, Illinois.
M-608 Achorn Steel Co., Boston, Massachusetts. (Agent for M-52,-609,-610)
M-609 Gimo-Osterby Bruks A.B., Gimo, Sweden. (American Agent—M-608) (Subsidiary of M-385.)
M-610 Horndal Jernverks A.B., Horndal, Sweden. (American Agent—M-608) (Subsidiary of M-385.)
M-611 Klosters A.B., Langshyttan, Sweden. (American Agents—M-335, M-608) (Subsidiary of M-385.)
M-612 Cleveland Twist Drill Co., Cleveland, Ohio.
M-613 Stahlwerk Becker A.G., Krefeld (Rheinland) Germany.
M-614 Ed. Dörrenberg Söhne, Ründeroth (Rheinland) Germany.
M-615 Rudolf Schmidt Stahlwerke, Vienna, Austria.
M-616 Schöller-Bleckman Steel Corp., Vienna, Austria.
M-616a Fred Baker, Inc., Larchmont, New York. (Agent for M-616)
M-617 Edelstahlwerk Röchling A.G., Völkingen (Saar) Germany.
M-618 Sanderson Bros. & Newbould, Ltd., Sheffield, England.
M-619 Barrow Haematite Steel Co., Ltd., Barrow-in-Furness, Lancashire, England.
M-620 Alais, Forges et Camargue, Paris, France.
M-621 Allgemeine Elektrizitäts Gesellschaft, Berlin, Germany.
M-622 Aluminium Belge S.A., Lüttich, Belgium.
M-623 Comp. des Alliages Speciaux d' Aluminium Asnieres, France.
M-624 Lavorazione Leghe Leggere, Milano, Italy.
M-625 Deutsche Röhrenwerke A.G., Düsseldorf, Germany. (Subsidiary of M-383)
M-626 Pittsburgh Metallurgical Co., Inc., Niagara Falls, New York.
M-627 Faitoute Iron & Steel Co., Newark, New Jersey.
M-628 Weirton Steel Co., Weirton, West Virginia.
M-629 Wyckoff Drawn Steel Co., Pittsburgh, Pennsylvania.
M-630 Q. & C. Co., New York, N. Y.
M-631 Continental Steel Corp., Kokomo, Indiana.
M-632 Bound Brook Oil-less Bearing Co., Bound Brook, New Jersey.

M-633 Granite City Steel Co., Granite City, Illinois.
M-634 Unitcast Corporation, Toledo, Ohio.
M-635 Superior Sheet Steel Co., Canton, Ohio. (Subsidiary of M-631)
M-636 Consolidated Ashcroft Hancock Co., Inc., Bridgeport, Connecticut. (Subsidiary of M-230)
M-637 Athens Foundry Co., Athens, Pennsylvania.
M-638 Höganäs-Billesholm Aktiebolaget, Höganäs, Sweden. (American Agent is M-359)
M-639 Antaciron, Inc., Wellsville, New York.
M-640 Molybdenum Corp. of America, Pittsburgh, Pa.
M-641 Andrews & Co., Ltd., Thomas, Royds Works, Sheffield, England.
M-642 Allis-Chalmers Mfg. Co., Milwaukee, Wisconsin.
M-643 Northern Aluminum Co., Ltd., Birmingham, England.
M-644 Aluminium Union, Ltd.
M-645 Magnesium Fabricators (Div. Bohn Aluminum and Brass Corp.), Adrian, Mich.
M-646 Beryllium Corp. of Pennsylvania, Reading, Pa.
M-647 Societe des Sondures, Castolin, South America.
M-648 Castolin Welding Alloys, Inc., New York, New York.
M-649 Centre Iron & Steel Co., Harrisburg, Pa.
M-650 Gibson Electric Company, Pittsburgh, Pennsylvania.
M-651 Skoda Works, Czecho-Slovakia.
M-652 Whipple & Choate Company, Bridgeport, Connecticut.
M-653 American Chain & Cable Company, Bridgeport, Connecticut.
M-654 Acme Foundry & Machine Company, Blackwell, Oklahoma.
M-655 Adirondack Steel Foundries Corp., Watervliet, New York.
M-656 J. D. Adams & Co., Indianapolis, Indiana.
M-657 Cohn, A., Ltd., London, England.
M-658 Alfa Romeo, Italy.
M-659 White Metal Rolling & Stamping Corp., Brooklyn, New York.
M-660 Ferrous Metals Corp., New York, New York.
M-661 American Agile Corporation, Cleveland, Ohio.
M-662 Wilson Welder and Metals Company, New York, N. Y.
M-663 Air Reduction Sales Company, New York, N. Y.
M-664 Hunt-Spiller Mfg. Corporation, Boston, Massachusetts.
M-665 Southern Metals Company, St. Louis, Missouri.
M-666 Aladdin Rod & Flux Mfg. Co., Grand Rapids, Michigan.
M-667 British Oxygen Company, Ltd., London, England.
M-668 Allen Mfg. Company, Hartford, Connecticut.
M-669 LaSalle Steel Company, Chicago, Illinois.
M-670 Arnold Engineering Company, Chicago, Illinois.
M-671 Reynolds Metals Company, Louisville, Kentucky.
M-672 Societe Alsia, France.
M-673 Societe Electro-Cables, France.
M-674 Ateliers de la Gironde, France.
M-675 Stedes Laminoirs et Trefileries du Havre, Paris, France.
M-676 Continental Industries Corporation.
M-677 Arcos Corporation, Philadelphia, Pennsylvania.
M-678 Lloyd S. Johnson Company, Chicago, Illinois.
M-679 Fonderie de Precision Nanterre, Paris, France.
M-680 Chrysler Corporation, Detroit, Michigan.
M-681 Wellman Bronze & Aluminum Company, Cleveland, Ohio.
M-682 Copperweld Steel Company, Warren, Ohio.
M-683 Northeast Metals Company, Philadelphia, Pennsylvania.
M-684 American Radiator Company, New York, N. Y.

M-685 Phillips, C. E. & Co., Chicago, Illinois.
M-686 American Platinum Works, Newark, New Jersey.
M-687 Apollo Metal Works, Chicago, Illinois.
M-688 Lehigh Steel Company, New York, N. Y.
M-689 A.J.A.G., Switzerland.
M-690 Saginaw Malleable Iron Div., General Motors Corp., Saginaw, Michigan.
M-691 Empire Sheet & Tin Plate Company, Mansfield, Ohio.
M-692 Alloy Rods Company, York, Pennsylvania.
M-693 Copper Development Association, London, England.
M-694 Ackerlind Steel Company, New York, N. Y.
M-695 Atlantic Casting & Engineering Co., Clifton, New Jersey.
M-696 Atlas Pattern & Model Works, Brooklyn, New York.
M-697 Hammond & Irving, Inc., Auburn, New York.
M-698 Bidault, France.
M-699 British Metal Corp., Ltd., London, England.
M-700 Ste de Produits Metallurgique, Paris, France.
M-701 A.W.A.G., Singer, Germany.
M-702 Timken Detroit Axle Company, Detroit, Michigan.
M-703 Axelson Mfg. Co., Los Angeles, California.
M-704 Bachite Development Corporation.
M-705 Barium Steel Corporation, Canton, Ohio.
M-706 Becker Brothers Carbon Company, Cicero, Illinois.
M-707 Belle City Malleable Cast Iron Co., Racine, Wisconsin.
M-708 Bergman Electrizitätswerke, Berlin, Germany.
M-709 Federal Mogul Corporation, Detroit, Michigan.
M-710 McGean Chemical Company, Cleveland, Ohio.
M-711 British Insulated Cables, Ltd., England.
M-712 Champion Rivet Company, Cleveland, Ohio.
M-713 Rossell, Henry & Co., Sheffield, England.
M-714 Oman Non-Friction Metal Co., El Paso, Texas.
M-715 British Piston Ring Company, Coventry, England.
M-716 Nihon Jyokiko Seikosho Goshi Koisha, Japan.
M-717 Eutectic Welding Alloys, Inc., New York, N. Y.
M-718 Fillmore Foundry, Inc., Buffalo, New York.
M-719 Bulls Metal & Melloid Co., Ltd., Glasgow, Scotland.
M-720 Bunting Brass & Bronze Co., Toledo, Ohio.
M-721 Burden Iron Company, Troy, New York.
M-722 Burndy Engineering, Inc., New York, N. Y.
M-723 Byrwill Co., Cincinnati, Ohio.
M-724 F.A.C.A., France.
M-725 Callite Tungsten Corporation, Union City, New Jersey.
M-726 Calorlz Corp. of Great Britain, Ltd., London, England.
M-727 Cambridge Wire Cloth Co., Cambridge, Maryland.
M-728 Perry Equipment & Supply Co., Philadelphia, Pennsylvania.
M-729 A. Gayer, France.
M-730 Wrought Bearing Metals, Inc., New York, N. Y.
M-731 Keasby & Matteson Co., Ambler, Pennsylvania.
M-732 A.F.C., France.
M-733 Mining & Chemical Products, Ltd., London, England.
M-734 Compressed Industrial Gases Co., Chicago, Illinois.
M-735 Spang Chalfant Co., Pittsburgh, Pennsylvania.
M-736 Central Engineering & Supply Co., Passaic, New Jersey.
M-737 Tullis, D. & J., Ltd., England.

M-738 Cleveland Tungsten, Inc., Cleveland, Ohio.
M-739 Cleveland Graphite Bronze Company, Cleveland, Ohio.
M-740 Cold Metal Products Company, Youngstown, Ohio.
M-741 Williams, E. A. & Sons, Jersey City, New Jersey.
M-742 Steel Co., Ltd., Motherwell, England.
M-743 Miller Steel Company, Newark, New Jersey.
M-744 Colonial Alloys Co., Philadelphia, Pennsylvania.
M-745 Unexcelled Mfg. Co., New York, N. Y.
M-746 Constrictor, England.
M-747 Ford Motor Company, Detroit, Michigan.
M-748 Crane Company, Chicago, Illinois.
M-749 Crescent Tool Co., Jamestown, New York.
M-750 Amalgamated Steel Co., Cleveland, Ohio.
M-751 Michigan Tool Co., Detroit, Michigan.
M-752 Fallsain Metals, Ltd., Lutterworth, England.
M-753 Marsh Brothers & Co., Ltd., Sheffield, England.
M-754 Damascus Steel Casting Co., New Brighton, Pennsylvania.
M-755 Denman & Davis, North Bergen, New Jersey.
M-756 Delloy Metals, Philadelphia, Pennsylvania.
M-757 Duval et Poulain, France.
M-758 Bartlett Hayward Division, Koppers Co., Baltimore, Maryland.
M-759 Brown Alloy Works, Detroit, Michigan.
M-760 Die Castings, Ltd., Birmingham, England.
M-761 American Art Metals, Inc.
M-762 Dodge Steel Co., Philadelphia, Pennsylvania.
M-763 Dominion Wheel & Foundry Co., Toronto, Canada.
M-764 Wiehandwerke, Ulm, Germany.
M-765 Welding Equipment & Supply Co., Detroit, Michigan.
M-766 Great Lakes Steel Co., Detroit, Michigan.
M-767 Societe du Duralumin, Paris, France.
M-768 Societe Metallurgica, Italy.
M-769 Duraweld Metal Products Corp., Long Island City, New York.
M-770 Trefileries et Laminoirs, de Havre, France.
M-771 Acieres de Imphy, France.
M-772 Imphy Works, France.
M-773 Dymonhard Corp. of America, New York, N. Y.
M-774 Washburn Wire Company, Phillipsdale, Rhode Island.
M-775 Eastern Malleable Iron Company, Cleveland, Ohio.
M-776 Eclipse-Pioneer Foundries, Teterboro, New Jersey.
M-777 Electro Refractories & Alloys Company, Buffalo, New York.
M-778 Electroloy Company, Inc., Bridgeport, Connecticut.
M-779 Elesco Superheated Company, East Chicago, Illinois.
M-780 Compound Electro Metals, Ltd., London, England.
M-781 Williamson Bros., Inc., Bridgeport, Connecticut.
M-782 Gautier, D. G. & Company, New York, N. Y.
M-783 Agawam Tool Company, Springfield, Massachusetts.
M-784 Hughes, F. A. & Company, Ltd., London, England.
M-785 Swedish Steel Mills, New York, N. Y.
M-786 Imperial Brass Manufacturing Company, Chicago, Illinois.
M-787 T.L.M., France.
M-788 Oil Well Supply Company, Houston, Texas.
M-789 Isabellenhuette, Germany.
M-790 Rennie Tool Company, Ltd., Manchester, England.

M-791 Jelenko, F., & Company, New York, N. Y.
M-792 Kellog, M. W., & Company, Jersey City, New Jersey.
M-793 McKenna Metals Company, Latrobe, Pennsylvania.
M-794 Kirk, P., & Sons, Los Angeles, California.
M-795 Stupakoff Laboratories, Inc., Pittsburgh, Pennsylvania.
M-796 Eisler Electric Company, Union City, New Jersey.
M-797 General Tool & Die Company, East Orange, New Jersey.
M-798 Hoesch-Kohn-Nevessen, Dortmund, Germany.
M-799 Hardy, Charles & Company, New York, N. Y.
M-800 Lake Erie Engineering Corporation, Buffalo, New York.
M-801 Lavin, R. & Sons, Chicago, Illinois.
M-802 Logan Iron & Steel Company, Philadelphia, Pennsylvania.
M-803 Lowmoor Best Yorkshire Iron, Ltd., Lowmoor, England.
M-804 Foote Bros. Gear & Machine Corp., Chicago, Illinois.
M-805 Grant & West, Ltd., England.
M-806 Follansbee Bros. Company, Follansbee, West Virginia.
M-807 Cie Francaise Des Metaux, Paris, France.
M-808 Fuller and Basch, U.S.A.
M-809 Fulton Iron Works, St. Louis, Missouri.
M-810 Chicago Hardware Foundry Company, No. Chicago, Illinois.
M-811 Universal Power Corporation, Cleveland, Ohio.
M-812 Ratcliff, J. F. Metals, Ltd., Birmingham, England.
M-813 Metalloy Company, Los Angeles, California.
M-814 Baldwins, Ltd., London, England.
M-815 Federated Metals Division, American Smelting & Refining Co., Perth Amboy, N. J.
M-816 Grammar, Dempsey & Hudson Company, Newark, New Jersey.
M-817 Gilmore, F. F., and Company, Boston, Massachusetts.
M-818 Glacier Metal Company, Ltd., Alpertone, England.
M-819 Die Casting Appliance Corporation, Ltd., London, England.
M-820 Gorham Tool Company, Detroit, Michigan.
M-821 Graphitized Alloy Corporation, New York, N. Y.
M-822 Diehl Steel Company, Cincinnati, Ohio.
M-823 Timken Roller Bearing Company, Canton, Ohio.
M-824 Neveroil Bearing Company, Wakefield, Massachusetts.
M-825 Hackett Brass Foundry, Detroit, Michigan.
M-826 Steel Company of Scotland, Glasgow, Scotland.
M-827 Hancock Valve Division, Manning-Maxwell and Moore Company, Bridgeport, Connecticut.
M-828 Harnischfeger Corporation, Milwaukee, Wisconsin.
M-829 Industries Trading Company, New York, N. Y.
M-830 Harvill, H. L., and Company, Los Angeles, California.
M-831 General Electric Company, Ltd., Wembley, England.
M-832 Paulson, Thomas and Sons, Brooklyn, New York.
M-833 Hansell-Elcock Company, Chicago, Illinois.
M-834 Translateur & Company, Berlin, Germany.
M-835 Columbus-McKinnon Chain Corporation, Tonawanda, N. Y.
M-836 National Steel Corporation, Chicago, Illinois.
M-837 Molybdenum, N. O., Company, Reutte-Tyrol, Austria.
M-838 Precious Metals Research Works, Inc., New York, N. Y.
M-839 Moraine Products Co., Division General Motors Corp., Dayton, Ohio.
M-840 Otis Steel Company, Cleveland, Ohio.
M-841 Hadstrom, Oscar W., Pattern Works, Chicago, Illinois.
M-842 Woodworkers Tool Works, Chicago, Illinois.

M-843 Linde Air Products Company, New York, N. Y.
M-844 Hollup Corporation, Chicago, Illinois.
M-845 Central Pattern & Foundry Co., Chicago, Illinois.
M-846 Bradley Laboratories, England.
M-847 Hytensil Aluminum Co., Chicago, Illinois.
M-848 Winn, W. Martin, Ltd., S. Staffordshire, England.
M-849 McKay Co., Pittsburgh, Pennsylvania.
M-850 Hamilton Foundry & Machine Co., Hamilton, Ohio.
M-851 Metal Reduction Corp., North Bergen, New Jersey.
M-852 Master Machine Co., Pittsburgh, Pennsylvania.
M-853 Metallizing Engineering Co., Inc., New York, N. Y.
M-854 G. H. R. Foundry Co., Dayton, Ohio.
M-855 Doelger & Kirsten, Inc., Milwaukee, Wisconsin.
M-856 Hygrade Sylvania Corp., Boston, Massachusetts.
M-857 Lake & Elliot, Ltd., Braintree, England.
M-858 Miniwax Co., Chicago, Illinois.
M-859 Major Engineering Corp., Chicago, Illinois.
M-860 Moltrop Steel Products Co., Beaver Falls, Pennsylvania.
M-861 Black Drill Co., Cleveland, Ohio.
M-862 Falk Corp., Milwaukee, Wisconsin.
M-863 Monarch Alloy Co., Ravenna, Ohio.
M-864 National Broach & Machine Co., Detroit, Michigan.
M-865 Nesaloy Products, Inc., New York, N. Y.
M-866 Oldham, F. B. & Co., Buffalo, New York.
M-867 Cinaudagraph Corp., Stamford, Connecticut.
M-868 Novo Engine Company, Lansing, Michigan.
M-869 Wintershall, A.G., Heringer, Germany.
M-870 Snowbar, J. L., New York, N. Y.
M-871 Aluminium Francais, France.
M-872 Page Steel & Wire Division, American Chain & Cable Co., Monessen, Pa.
M-873 Youngstown Foundry & Machine Co., Youngstown, Ohio.
M-874 Parker-Kalon Corp., New York City.
M-875 Simpson Bros., Portsmouth, Ohio.
M-876 Peckovers, Ltd., Toronto, Canada.
M-877 American Bridge Co., Pittsburgh, Pennsylvania.
M-878 Perry Barr Metal Co., Ltd., Birmingham, England.
M-879 Paraloy Co., Chicago, Illinois.
M-880 Permo Products Corp., Chicago, Illinois.
M-881 Permold Co., Cleveland, Ohio.
M-882 Aktiebologet Svenska Metallverken, Sweden.
M-883 Pittsburgh Steel Co., Pittsburgh, Pennsylvania.
M-884 Aciers de Pompey, France.
M-885 Powder Metals, Inc., Long Island City, New York.
M-886 Pomona Pump Company, Pomona, California.
M-887 Precision Castings Co., Syracuse, New York.
M-888 Lake City Malleable Company, Cleveland, Ohio.
M-889 Spuck Iron & Foundry Company, St. Louis, Missouri.
M-890 Hueck, Edward, Ludenscheid, Germany.
M-891 Joselin, C. & Company.
M-892 Hurbenium Co. of America, Detroit, Michigan.
M-893 Manos, Switzerland.
M-894 Fitzsimons Company, Youngstown, Ohio.
M-895 Deutsche Industrie Nemen, Germany.

M-896 Standard Brake Shoe & Foundry Company, Pine Bluff, Arkansas.
M-897 Hatfield, W. H., Sheffield, England.
M-898 Advance Foundry Company, Dayton, Ohio.
M-899 Stroh Process Steel Company, Pittsburgh, Pennsylvania.
M-900 Kelly Foundry & Machine Company, Elkins, West Virginia.
M-901 Superior Steel Corporation, Pittsburgh, Pennsylvania.
M-902 Chicago Malleable Casting Company, Chicago, Illinois.
M-903 Sanderson Steel Division, Crucible Steel Co. of America, Syracuse, New York.
M-904 Castings Corporation, Buffalo, New York.
M-905 Hyde Park Foundry & Machine Company, Hyde Park, Pennsylvania.
M-906 National Smelting Company, Cleveland, Ohio.
M-907 Reliance Steel Casting Company, Pittsburgh, Pennsylvania.
M-908 Hoyland Steel Company, New York, N. Y.
M-909 Reynolds Corporation, New York, N. Y.
M-910 National Cable & Metal Company, Glendale, California.
M-911 Riverside Foundry & Galvanizing Co., Kalamazoo, Michigan.
M-912 Rochlingstahl, G.M.E.H., Volkingen, Germany.
M-913 Metal Carbides Corporation, Youngstown, Ohio.
M-914 McKechie Bros., Ltd., Birmingham, England.
M-915 Taylor, S. G., Chain Company, Hammond, Indiana.
M-916 Super Tool Company, Detroit, Michigan.
M-917 Cornish Wire Company, New York, N. Y.
M-918 Willworthy Piston Ring, Ltd., England.
M-919 Wilkinson, William, Shustoke, England.
M-920 Consolidated Car Heating Co., Albany, New York.
M-921 Compagnie Francaise de L'Etain, Paris, France.
M-922 Vulcan Iron Works, Wilkes-Barre, Pennsylvania.
M-923 Tri-Lok Company, Pittsburgh, Pennsylvania.
M-924 Dravo-Doyle Company, Pittsburgh, Pennsylvania.
M-925 True Alloys, Inc., Detroit, Michigan.
M-926 General Plate Company, Attleboro, Massachusetts.
M-927 Oklahoma Steel Casting Company, Oklahoma.
M-928 Stupakoff Ceramic & Mfg. Co., Latrobe, Pennsylvania.
M-929 Tyler, W. S., Company, Cleveland, Ohio.
M-930 Una Welding, Inc., Cleveland, Ohio.
M-931 Union Metal Mfg. Company, Canton, Ohio.
M-932 Universal Alloys, Inc., Newark, New Jersey.
M-933 Wellman, S. K., Company, Cleveland, Ohio.
M-934 Mt. Vernon Furnace & Mfg. Co., Mt. Vernon, Illinois.
M-935 Vereinigte Aluminiumwerke, Germany.
M-936 Audubon Wire Cloth Corporation, Philadelphia, Pennsylvania.
M-937 Austenal Laboratories, New York, N. Y.
M-938 Vulcan Mold & Iron Company, Latrobe, Pennsylvania.
M-939 Welding Alloy Mfg. Company, New York, N. Y.
M-940 Pratt, J. M., & Company, Cincinnati, Ohio.
M-941 Waukesha Foundry Company, Waukesha, Wisconsin.
M-942 Waltham Watch & Clock Company, Waltham, Massachusetts.
M-943 Welding Material Company, New Orleans, Louisiana.
M-944 Park Sales Company, New York, N. Y.
M-945 Superior Tube Company, Norristown, Pennsylvania.
M-946 Welland Electric Steel Foundry, Welland, Ontario, Canada.
M-947 Wilcox Rich Division, Eaton Mfg. Company, Detroit, Michigan.
M-948 Dusenberry & Stracken, Inc., New York, N. Y.

M-949 Grey, C. M., Mfg. Co., East Orange, New Jersey.
M-950 Zelnicker, W. A., Company, St. Louis, Missouri.
M-951 Light Metal Works, Tokyo, Japan.
M-952 Napraloy Co., Jersey City, New Jersey.
M-953 Allied Process Corporation, New York, N. Y.
M-954 Trimout Mfg. Company, Boston, Massachusetts.
M-955 Titanite Alloys Corporation, Cleveland, Ohio.
M-956 American Crucible Products Co., Lorain, Ohio.
M-957 Tube Reducing Corporation, Wallington, New Jersey.
M-958 Magnus Metal Corporation, Chicago, Illinois.
M-959 Hewitt Metals, Detroit, Michigan.
M-960 Somers Brass Company, Waterbury, Connecticut.
M-961 Brockhouse Casting Company, Wolverhamptone, England.
M-962 Buffalo Wire Works, Buffalo, New York.
M-963 Wall-Colmonoy Corporation, Detroit, Michigan.
M-964 United States Steel Supply Co., Chicago, Illinois.
M-965 Excelite Company, Woodbridge, New Jersey.
M-966 Saginaw Bearing Co., Saginaw, Michigan.
M-967 Superior Metal Co., Chicago, Illinois.
M-968 Metal Castings, Ltd., Worcester, England.
M-969 Seaboard Steel Company of America, New York, N. Y.
M-970 Sessions Foundry Company, Bristol, Connecticut.
M-971 Metallwerke, A. G., Austria.
M-972 Seneca Wire & Mfg. Company, Fostoria, Ohio.
M-973 New England Collapsible Tube Company, New London, Connecticut.
M-974 Shenango-Penn Mold Company, Dover, Ohio.
M-975 Bonny Tool & Forge Co., Allentown, Pennsylvania.
M-976 Willeys Carbide Tool Co., Detroit, Michigan.
M-977 Youngstown Alloy Castings Co., Youngstown, Ohio.
M-978 British General Electric Co., Ltd., England.
M-979 Trefileries due Havre, France.
M-980 Chromium Corp. of America, Waterbury, Connecticut.
M-981 Deutsche Messingwerke, Berlin, Germany.
M-982 Wieland-Werke, Germany.
M-983 Veddernheimer, Kupferwerke, Germany.
M-984 Vapal, France.
M-985 Darwins-Toledo, Ltd., Sheffield, England.
M-986 Reid-Avery Co., Baltimore, Maryland.
M-987 Tungsten Alloy Mfg. Co., Newark, New Jersey.
M-988 Mir-O-Col Alloy Co., Los Angeles, California.
M-989 Keystone Carbon Co., St. Mary's, Pennsylvania.
M-990 Rhoades Metaline Co., R. W., Long Island City, New York.
M-991 American Steel Castings Co., Newark, New Jersey.
M-992 Hammond Brass Works, Hammond, Indiana.
M-993 Duquesne Smelting Corp., Pittsburgh, Pennsylvania.
M-994 Fahralloy Co., Harvey, Illinois.
M-995 Hopkinsons, Ltd., London, England.
M-996 Brookside Metal Co., Ltd., England.
M-997 Tata Iron & Steel Co., India.
M-998 Volco Brass & Copper Co., Kenilworth, New Jersey.
M-999 Edgcomb Steel Corp., Hillside, New Jersey.

Part B

Alphabetical Listing of Manufacturers

Achorn Steel Co., Boston, Massachusetts M-608
Acieral Co. of America M-281
Acieres de Imphy, France M-771
Acieres de Pompey, France M-884
Ackerlind Steel Company, New York, N. Y. M-694
Acme Foundry & Machine Co., Blackwell, Oklahoma M-654
Acme Steel Co., Chicago, Illinois M-568
Acme Steel & Malleable Iron Works,
Division of Buffalo Brake Beam Co., Buffalo, New York M-209
Adams & Osgood Steel Co., Boston, Massachusetts M-350
Adams & Company, J. D., Indianapolis, Indiana M-656
Adirondack Steel Foundries Corp., Watervliet, New York M-655
Advance Foundry Company, Dayton, Ohio M-898
A.F.C., France M-732
Agawam Tool Co., Springfield, Massachusetts M-783
Air Reduction Sales Co., New York, N. Y. M-663
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Vereinigte Deutsche Metallwerke, A. G., Altena (Westf.), Germany....M-297
Vereinigte Deutsche Nickelwerke, A. G., Schwerte (Ruhr), Germany....M-303
Vereinigte Leichtmetall Werke, G.m.b.H., Hannover-Linden, Germany....M-116
Vereinigte Silberhammerwerke Hetzel, Nuremburg, Germany....M-204
Vereinigte Stahlwerke, Düsseldorf, Germany....M-383
Verillite Metals Company....M-274
Vickers-Armstrong Company, Sub. English Steel Company, London, England....M-117
Victor Manufacturing Company, London, England....M-423
Volco Brass & Copper Company, Kenilworth, New Jersey....M-998
Vulcan Crucible Steel Company, Aliquippa, Pennsylvania....M-275
Vulcan Iron Works, Wilkes-Barre, Pennsylvania....M-922
Vulcan Mold & Iron Company, Latrobe, Pennsylvania....M-938

Wagner, Gerhard, 25 Broadway, New York, N. Y....M-133a
Wall-Colmonoy Corporation, Detroit, Michigan....M-963
Waltham Watch & Clock Company, Waltham, Massachusetts....M-942
Wardlow, S. & C., Nutley, New Jersey....M-392
Ward's Sons Company, Edgar T., Newark, New Jersey....M-389
Warman Steel Casting Company, Huntington Park, California....M-277
Washburn Wire Co., Phillipsdale, Rhode Island....M-774
Washington Iron Works, Seattle, Washington....M-246
Waukesha Foundry Co., Waukesha, Wisconsin....M-941
Weatherly Foundry & Mfg. Co., Weatherly, Pennsylvania....M-278
Webb Wire Works (The), New Brunswick, New Jersey....M-446

Wehr Steel Co., Milwaukee, Wisconsin....M-599
Weirton Steel Co., Weirton, West Virginia....M-628
Welding Alloy Mfg. Company, New York, N. Y....M-939
Welding Equipment & Supply Co., Detroit, Michigan....M-765
Welding Material Company, New Orleans, Louisiana....M-943
Welland Electric Steel Foundry, Welland, Ontario, Canada....M-946
Wellman Bronze & Aluminum Co., Cleveland, Ohio....M-681
Wellman Company, S. K., Cleveland, Ohio....M-933
West Steel Casting Co., Cleveland, Ohio....M-465
Western Cartridge Company, E. Alton, Illinois....M-279
Western Crucible Steel Casting Co., Minneapolis, Minnesota....M-468
Western Electric Company, Chicago, Illinois....M-205
Westinghouse Air Brake Co., Wilmerding, Pennsylvania....M-384
Westinghouse Electric & Mfg. Co., Pittsburgh, Pennsylvania....M-118
Wetherell Bros. Co., Cambridge, Massachusetts....M-510a
Wheeling Mold & Foundry Company, Wheeling, West Virginia....M-207
Wheeling Steel Corp., Wheeling, West Virginia....M-206
Wheelock, Lovejoy & Company, Cambridge, Massachusetts....M-119
Whipple & Choate Company, Bridgeport, Connecticut....M-652
White Metal Rolling & Stamping Corp., Brooklyn, New York....M-659
Wickwire Spencer Steel Company, New York, N. Y....M-120
Wiehandwerke, Ulm, Germany....M-764
Wiggin & Company, Ltd., Henry, Birmingham, England....M-121
Wilcox Rich Division, Eaton Mfg. Company, Detroit, Michigan....M-947
Wilkinson, Wm., Shustoke, England....M-919
Willeys Carbide Tool Co., Detroit, Michigan....M-976
Williams & Sons, E. A., Jersey City, New Jersey....M-741
Williams, Wm. E., New York, N. Y....M-20a
Williamson Bros., Inc., Bridgeport, Connecticut....M-781
Willworthy Piston Ring, Ltd., England....M-918
Wilson Company, H. A., Newark, New Jersey....M-237
Wilson Welder & Metals Co., New York, N. Y....M-662
Wing & Co., J. T., Detroit, Michigan....M-554
Winn, W. Martin, Ltd., S. Staffordshire, England....M-848
Wintershall, A. G., Heringer, Germany....M-869
Wonham, Inc., New York, N. Y....M-110a
Woodworkers Tool Works, Chicago, Illinois....M-842
Workington Iron & Steel Co., Workington, England....M-448c
Worthington Pump & Machinery Corp., Harrison, New Jersey....M-463
Worthington Steel & Annealing Co., Sheffield, England....M-498
Wrought Bearing Metals, Inc., New York, N. Y....M-730
Wyckoff Drawn Steel Co., Pittsburgh, Pennsylvania....M-629

Yorkshire Copper Works, Ltd., Leeds, England....M-286
Youngstown Alloy Castings Co., Youngstown, Ohio....M-977
Youngstown Foundry & Machine Co., Youngstown, Ohio....M-873
Youngstown Sheet & Tube Co., Youngstown, Ohio....M-531

Ziv Steel & Wire Co., Chicago, Illinois....M-289
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SECTION VI

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APPENDIX I

CLASSIFICATION OF CORROSION AND HEAT RESISTANT ALLOYS

This classification covers the alloys listed in the Uses Index under *Stainless Parts*, i. e., ferrous alloys containing sufficient chromium or chromium with nickel, etc., to confer special corrosion or heat resistant characteristics. It also includes other alloys of similar characteristics such as the alloys of high nickel content, alloys high in cobalt, tungsten or tantalum, and the high silicon cast irons.

The composition grouping follows somewhat the general plan of the classification developed by the Robert W. Hunt Company as published in *The Book of Stainless Steels*. Alloys are listed in the group to which their composition most nearly conforms. The alloy name can be ascertained from its serial index number by referring to Section Two of this volume.

The major alloying elements are alphabetically listed in large bold-face type. Each major alloy element is listed in increasing percentages. Minor elements are similarly listed in small bold-face type and appear under the composition range of the alloy element present in larger amount. Indentation is used and ditto marks omitted. No percentage is indicated if the amount of alloy present is less than five percentum.

For example, to locate the alloys containing from four to seven percentum of chromium plus small amounts of molybdenum and tungsten one looks under **CHROMIUM 4-7%** and locates **Molybdenum.** Under **Molybdenum** the indented sub-group **Tungsten** is found. This sub-group is further classified according to carbon content: Carbon .12 maximum and Carbon Variable (to meet customer's requirements). Using the alloy serial numbers, data can be obtained from Section Two.

APPENDIX I

CLASSIFICATION OF CORROSION AND HEAT RESISTANT ALLOYS ACCORDING TO COMPOSITION

CHROMIUM 4-7%

Aluminum: 6109

Carbon; .20 max.: 1249, 4384, 4431, 5079, 5080, 5135, 5855, 5707, 6715, 6249, 6715, 6875, 6949, 6950, 7771, 8094, 8280, 8281, 8282, 8283, 9664, 9665, 12338

.21-.35: 4384, 6025, 6832, 6953

Copper; C .2-.35: 6688

Molybdenum; C .20 max.: 1230, 1430, 3323, 4731, 5137, 5491, 5587, 5775, 5855, 6951, 6953, 7221, 7614, 8118, 8528, 8872, 8996, 8998, 8999, 10700, 11327

Molybdenum; C .21-.35: 3323, 4731, 6031, 6951, 6953, 8081, 8997, 9980, 10758, 12080

Tungsten; C .12 max.: 4384, 4431, 4731, 4732, 6953, 6954

Tungsten; var. C.: 4396, 6027, 6899

Titanium; C .20 max.: 6028, 7741, 8859

Tungsten; C .13-.20: 4732, 4882, 5082, 5136, 5855, 6952, 6954, 7221

Tungsten; C .21-.35: 4582, 4732, 5168, 5177, 6952, 6954

5-7; C .35-.45: 4582, 4591

CHROMIUM 7-12%

Aluminum; C .08 max: 5810

Aluminum; Nickel; C .50 max.: 5190, 7227

Carbon .12 max.: 4931, 5811, 7370, 8524, 8532

Carbon over 1.1: 1268

Molybdenum; C .15 max.: 7615, 9000

Molybdenum; C .30 max.: 12083

Nickel; C .15 max.: 8525, 9067

Nickel; C .21-.35: 928a

Silicon; C .08-.60: 321, 3150a, 3152, 4974, 6940

Tungsten 6-11; C .36-.65: 93

CHROMIUM 12-15%

Aluminum; C .08 max.: 31, 5810, 8324

Aluminum; C .12 max.: 5804, 5946

Aluminum; C .13-.20: 4917

Carbon .08 max.: 151, 415, 4224, 6926

.12 max.: 141, 176, 248, 260, 296, 327, 377, 415, 445, 493, 636, 637, 1133, 1178, 1214, 1277, 1333, 1533, 1558, 1572, 1644, 1708, 1727, 1782, 1785, 2196, 2424, 2512, 3559, 3504, 4026, 4382, 4394, 4733, 4931, 4975, 5083, 5116, 5129, 5163, 5170, 5198, 5218, 5225, 5228, 5232, 5282, 5659, 5766, 5811, 5920, 5930, 5969, 5980, 6000, 6096, 6194, 6197, 6354, 6640, 6697, 6716, 6818, 6846, 6868, 6876, 6877, 6893, 6897, 6926, 6942, 6945, 7019, 7094, 7222, 7360, 7538, 7813, 8069, 8074, 8095, 8278, 8796, 9068, 9069, 12096, 12097

.13-.20: 445b, 499, 1179, 1214, 1331, 1497, 1590, 2425, 4976, 5193, 5194, 5227, 5234, 5283, 5998, 6032, 6059, 6101, 6701, 6819, 6837, 6878, 6877, 6879, 8070, 8322, 8323, 8325, 8326, 9336, 10004, 12122, 12327, 12329

.21-.35: 181, 261, 297, 325, 368, 457, 950, 1038a, 1040, 1214, 1277, 1280, 1366, 1368, 1480, 1574, 1646, 2043, 2160, 2425, 3174, 3720, 3562, 4004, 4225, 4885, 4977, 4978, 5106, 5117, 5127, 5157, 5160, 5174, 5223, 5238, 5284, 5660, 5963, 5998, 6098, 6099, 6104, 6196, 6092, 6095, 6704, 6820, 6858, 6878, 6894, 6977, 7222, 7322, 8070, 8341, 8952, 12094

.36-.50: 297, 457, 491, 1179, 1368, 3562, 4215, 4255, 4343, 5127, 5230, 5238, 5727, 5963, 6098, 6842, 6880, 6977, 7222, 8070, 11122, 11123, 12332

.51-.80: 549, 2044, 3725, 4877, 7222

.81-1.10: 1310, 1479, 1534, 4843, 5224, 5710, 7222

over 1.10: 265, 493, 1268, 1534, 4542, 4886, 5040, 7074

Cobalt; C over 1.10: 719, 1431

Cobalt; Nickel; C over 1.10: 314

10-15: 2645

Manganese; C .81-1.10: 542

Molybdenum; C .12 max.: 1561, 1645, 5164, 5171, 5388, 8526, 11939, 12331

Molybdenum; C .21-.35: 1263, 5223

Molybdenum; C over 1.1: 350, 1415, 1431, 4155a, 5154

Molybdenum; Copper: 6695

Molybdenum; Sulfur: 4309, 4394, 7732

Molybdenum; Vanadium: 628, 1415, 3865, 7075

Nickel; C .12 max.: 644, 1261, 3722, 4383, 5083, 5183, 5229, 7537

Nickel; C .13-.20: 444, 1512, 5178, 12330

Nickel; C .21-.35: 322, 1220, 1226, 5170

Nickel; C over 1.10: 314, 3864

Nickel; Sulfur: 1262

12-15; C .1-.3: 928b, 1183, 1649, 1752, 1792, 2594, 5287

12-15; Tungsten: 2431

Silicon; C .12 max.: 5501, 6941
Silicon; C .13-.50: 137, 152, 1897c, 6814, 6941
Copper: 3311
Selenium; C .12 max.: 5388, 7422, 8786
Sulfur; C .12 max.: 180, 264, 324, 638, 639, 1269, 1561, 1573, 2516, 4152, 4300, 4394, 4883, 5171, 5368, 5388, 5800, 6195, 6877, 6965, 6974, 7732
Sulfur; C .13-.50: 457, 6988, 8786
Tungsten; C .12 max.: 5812, 6900

CHROMIUM 16-23%

Aluminum; C .13-.20: 4916
7-11; C .13-.20: 3709-3712, 4916
Carbon .07 max.: 1729, 2357, 3726, 3727, 6925, 7539
.12 max.: 38, 378, 400, 634, 640, 790, 1039, 1129, 1134, 1180, 1205, 1231, 1259, 1307, 1334, 1335, 1367, 1434, 1508, 1554, 1590, 1729, 1730, 1786, 1787, 2280, 2513, 2514, 2892, 3560, 3726, 4464, 4480, 4931, 4979, 5093, 5095, 5103, 5115, 5126, 5165, 5166, 5217, 5219, 5237, 5814, 5841, 6001, 6097, 6103, 6198, 6717, 6784, 6794, 6844, 6847, 6852, 6898, 6925, 6937, 6938, 6942, 6967, 6971, 7369, 7616, 7811, 7813, 8075, 8089
.13-.20: 1207, 1232, 1278, 1332, 1554, 1579, 1724, 1729, 1307, 1500, 3727, 4490, 5114, 5195, 5199, 5205, 5237, 5708, 5842, 6718, 6881, 6978, 8066, 9416
.21-.35: 295, 400, 490, 832, 1280, 1307, 1500, 2517, 3727, 4884, 4885, 4887, 4899, 5094, 5203, 5814, 5846, 5977, 6718, 6821, 6850, 6883, 6978, 9337
.36-.50: 1038, 1590, 6978, 10723
.51-.65: 326, 582, 1038b, 1647, 3563, 3721, 4256, 5104, 5128, 5161, 5175, 5193, 5239, 5994, 5999, 6026, 8363, 12095
.66-.80: 582, 791, 938, 1038, 1575, 3721, 4011, 5128, 5175, 5999, 7421, 10722, 11127, 12334
.81-1.10: 323, 675, 1266, 1369, 1414, 1433, 1591, 3517, 3724, 5148, 5157, 5162, 5176, 5711, 5999, 6822, 6896, 6936, 7136, 11128, 12099, 12335, 12336
over 1.10: 1268, 1369, 1897b, 4880, 5157, 5240, 6645, 6991
Cobalt; Mo; C .81 min.: 1431, 5201
Copper; C .21-.50: 262, 298, 2478, 5125, 6884, 6972, 7219
Copper; ± Si; C .12 max.: 792, 1726, 2755, 5588, 5689, 5832, 6851, 7812
Molybdenum; C .36-1.0: 5200, 7135, 8340
Nickel; C .10-.20: 1264, 2430, 4980, 5285, 6107, 12333
Nickel; C .21-.50: 459, 822, 5181, 6038, 6107
Nickel; Sulfur; C .12 max.: 1265
5-7; C over 1.10: 579
5-7; Manganese; C .20 max.: 7802
7-11; Al; C .66-.80: 1350
7-11; C .08 max.: 37, 177, 263, 301, 328, 379, 401, 562, 743, 1048, 1135, 1183, 1236, 1252, 1559, 1577, 1592, 1648, 2518, 2688, 4303, 4900, 4913, 4922, 5110, 5122, 5173, 5207, 5215, 5849, 5922, 5932, 6108, 6184, 6352, 6568, 6781, 6808, 6839, 6849, 6910, 6946, 7536, 7617, 7678, 7706, 7708, 8083, 8247, 8343, 8344, 8345, 8346, 8515, 8517, 8519, 8869, 8890, 9004, 9006, 9176, 9412, 10844, 10846, 11130, 11131, 11431, 11942
7-11; C .12 max.: 37, 154, 178, 263, 328, 379, 562, 739, 817, 1048, 1135, 1181, 1188, 1275, 1308, 1648, 1790, 2426, 2688, 2892, 4227, 4397, 4981, 5111, 5172, 5180, 5193, 5220, 5231, 5714, 5798, 5801, 5807, 5849, 5851, 5853, 5931, 5966, 5971, 6006, 6095, 6185, 6700, 6779, 7020, 7134, 7705, 7707, 7709, 7804, 7806, 7807, 7808, 7809, 8067, 8088, 8096, 8523, 8787, 8789, 9339, 9411, 10006, 12100
7-11; C .13-.20: 37, 177, 302, 329, 370, 401, 443, 562, 645, 619, 955, 1061, 1127, 1135, 1181, 1210, 1281, 1288, 1308, 1436, 1576, 1588, 1593, 1632, 1642, 1658, 1709, 1721, 1725, 1733, 1744, 2202, 2427, 2518, 3442, 3873, 4227, 4362, 4397, 4737, 4889, 4901, 4902, 4914, 5084, 5085, 5111, 5121, 5133, 5142, 5216, 5233, 5286, 5301, 5748, 5781, 5801, 5803, 5806, 5815, 5833, 5834, 5850, 5852, 6022, 5931, 5978, 6185, 6365, 6567, 6639, 6644, 6699, 6779, 6797, 6798, 6904, 6929, 7134, 7476, 7535, 7679, 7804, 7806, 7808, 8067, 8088, 8096, 8098, 8099, 8513, 8516, 8518, 8533, 8648, 8788, 9338, 9412, 11130, 11941, 11943, 12318, 12319
7-11; C .21-.35: 263, 1213, 1221, 1308, 1725, 3690, 4872, 4922, 5006, 5155, 5235, 6567, 6827, 6528, 6870, 6923, 6964, 8115
7-11; C .36-.65: 2709, 5089
7-11; C over .81: 579, 6151, 6707
7-11; Columbium; C .15 max.: 4913, 7021, 7022, 7023, 7024, 7710, 7711, 7712, 7713, 7770, 8328, 8348, 8534, 8654-8657, 8750, 8790, 8953, 9355, 12326

7-11; Mo; C .08 max.: 3881, 4390, 4736, 5087, 5210, 5364, 5799, 5929, 6008, 6029, 6841, 6903, 6916, 6934, 7425, 8079, 8248, 8900, 8982, 9177, 9340, 9413, 10943

7-11; Mo; C .12 max.: 1571, 1594, 1791, 4387, 4983, 5109, 5123, 5202, 5221, 5799, 6989, 8093

7-11; Mo; C .13-.20: 328, 818, 820, 1233b, 1274, 1308, 1571, 1594, 1657, 3881, 4735, 4737, 4738, 4983, 5086, 5105, 5108, 5123, 5130, 5143, 5146, 5102, 5202, 5209, 5211, 6005, 6033, 6088, 6095, 6694, 6782, 6840, 6871, 6914, 6918, 6923, 6929, 7427, 7522

7-11; Mo; C .21-.50: 818, 1624, 5006, 5108, 5192, 6694, 6873, 6885, 6923

7-11; Mo; Cu; C .13-.20: 329

7-11; Mo; Se; C .20 max.: 5815, 6915, 6916, 6917, 6910, 6961

7-11; Mo; Si; C .13-.20: 1595, 5500

7-11; Mo; S; C .08-.20; (See also Nickel 7-11; S): 5815

7-11; Mo; Ti; C .20 max.: 4740, 4741, 5800, 5802, 7011, 7012

7-11; Phosphorus; C .08-.20: 5389, 5815, 7733

7-11; Se; C .12 max.: 1435, 5389, 5956, 6365, 6911, 6962, 6969, 6990, 7223, 7424

7-11; Se; C .13-.20: 4737, 5815, 6007, 6909, 6913, 6962, 7223, 7426, 7428, 7733, 8514, 12320

7-11; Si; Aluminum: 6707

7-11; Si; C .12 max.: 5085, 5112, 5206

7-11; Si; C .18-.20: 1272, 1308, 1595, 1643, 2801, 4389, 4734, 5208, 6845, 6928, 6964, 8649, 8870

7-11; Si; C .21-.50: 6706, 6964

7-11; S; C .12 max.: 4883, 5105, 5389, 5921, 7062

7-11; Ti; C .07 max.: 2511, 4388, 5138, 6780, 7013, 7223, 8084

7-11; Ti; C .08-.20: 3952, 4386, 5800, 5802, 6944, 7014, 7223, 7734, 7735, 8077, 8078, 8092, 8652, 8653, 8791, 8794, 8795, 9005, 12121, 12324

7-11; Tungsten: 738, 1309, 6783

7-11; Tungsten; Si: 532, 533, 7010

7-11; Zirconium: 7223

12-15; C .13-.20: 646, 1128, 1276, 1309, 1531, 1556, 1587, 1643, 1709, 4915, 5088, 5196, 5597, 7395, 8076

12-15; C .21-.50: 5154, 6984

12-15; C .51-.80: 578

12-15; Molybdenum; C .15 max.: 7618, 8347, 8349, 8350, 8521, 8522, 8535-8537, 8651, 9002, 12322, 12323

12-15; Silicon; C .21-.35: 1026

16-23; C .10 max.: 5843

16-23; C .51-.80: 578, 4904, 6705

16-23; Copper; C .13-.20: 421

16-23; Cu; Si; C .20 max.: 1732, 1734, 5368

16-23; Silicon; C .21-.35: 1626

Silicon; C .12 max.: 153, 383, 442, 1231, 1579, 4226, 4464, 5502

Silicon; C .13-.20: 400, 1307, 4389, 4884, 6107

Silicon; C .21-.50: 490, 832, 6814

Silicon; C .81-1.1: 1580, 1728, 3517

Tungsten: 3151

Sulfur; C .12 max.: 1260, 7003

Sulfur; C .81-1.10: 5226

Tungsten; C .12 max.: 5813, 6902

CHROMIUM 24-30%

Carbon .12 max.: 1137, 1206, 1336, 1731, 4931, 5503, 6924, 8090

.13-.20: 179, 380, 635, 1137, 1337, 1555, 1589, 1633, 1710, 1707, 5118, 5222, 5293, 5709, 6823, 6890, 6979, 6994, 8080

.21-.35: 299, 380, 399, 1130, 1184, 1311, 1555, 1589, 1710, 2515, 3561, 4888, 5096, 5113, 5156, 5167, 5197, 5241, 5305, 6004, 6785, 6796, 6856, 7620, 8538, 10008, 11940, 12077, 12123, 12337

.36-.50: 299, 399, 488, 1077, 1130, 1137, 1184, 1283, 1311, 1345, 1710, 2520, 4876, 5096, 5113, 5156, 5167, 5197, 5241, 5936, 6041, 6825, 6939, 6979, 6585

.51-.80: 288, 1077, 5007

.81-1.10: 1310, 1345, 1591, 5712, 6710

over 1.10: 1268, 1310, 1534, 5292, 5713, 6102, 6711, 6092, 7220

Cobalt 5-25: 2646

Molybdenum; ± Ta: 6110, 6111, 6113

Nickel; C .21-.35: 1218, 1620, 6042

Nickel; C .36-.50: 459, 460, 1620, 4871, 5072

Nickel; C .51-.80: 1620, 5072, 5073

Nickel; C .81-1.1: 1218

Nickel; C over 1.10: 300, 929, 1699, 5504, 5030

Nickel; Manganese; C .66-.80: 5072

Nickel; Molybdenum; C .20 max.: 7475, 8793, 9008, 9198

5-7; Silicon: 459, 5047

7-11; C .12 max.: 2511, 8885

7-11; C .13-.20: 1216, 1309, 1709, 2900, 4140, 4015, 5088, 5162, 5189, 5927, 5972, 6811, 6865, 8360, 9344, 9400, 11132
7-11; C .21-.35: 304, 767, 1305, 1587, 2900, 4873, 5102, 6043, 6048, 6811, 6920, 8116, 8330, 8359, 8954, 9341, 9343, 9415, 9733, 10940, 12075
7-11; C .36-.50: 1286, 1305, 1314, 1722, 1745, 2523, 3391, 6866, 7431
7-11; C .51-.80: 1216, 3391, 4892
7-11; C .80-1.10: 5078, 5092
7-11; Molybdenum; C .12 max.: 6948
7-11; Molybdenum; C .13-.35: 6044, 6047, 6076, 7429, 9410
7-11; Selenium: 7224
7-11; Silicon; C .13-.35: 752, 1272, 2960, 5499, 5927, 6366, 6983
7-11; Silicon; C over .66: 1216, 5076
7-11; Tungsten; Se: 7225
12-15; C .12 max.: 1136, 6705, 7005
12-15; C .13-.20: 304, 1136, 1272, 1276, 1306, 1314, 1344, 1535, 1556, 1560, 1587, 1631, 1709, 2805, 5074, 5075, 5076, 5077, 5088, 5092, 5144, 5196, 5301, 5760, 5928, 5964, 5986, 6696, 6833, 6834, 6864, 6928, 6995, 7305, 7476, 7810, 8076, 8091, 8097, 8249, 8357, 8520, 8650, 10007, 10633, 11497
12-15; C .21-.35: 304, 2805, 4890, 5075, 6696, 6810, 6982, 8076
12-15; C .36-.50: 1306, 1531, 5075, 6696, 6888
12-15; C .51-1.10: 4891, 5002, 6096
12-15; Molybdenum: 5761, 5967, 9175
12-15; Silicon; C .21-.35: 1631
12-15; Titanium; C .20 max.: 7735
12-15; Tungsten; C .36-.50: 1535, 6889, 7226
16-23; C .20 max.: 647, 1217, 1578, 2803, 5098, 5131, 5147, 5212, 5598, 5808, 5943, 6891, 6907, 6921, 7095, 7477, 7619, 8353, 8867, 9007, 9345, 9346, 12120, 12163
16-23; C .21-.35: 647, 821, 1222, 1229, 1560, 6907
16-23; C .36-.50: 5097, 5153, 7437, 7438, 12074
16-23; Molybdenum; C .21-.35: 1217, 1250, 1314, 6040, 9178
16-23; Silicon; C .13-.35: 821, 1217, 1557, 1578, 1597, 1630, 3441, 4385, 5124, 5377, 6874
24-30; C various: 1219, 2428, 5941, 5942, 5974, 6062, 6966, 12321
Silicon; C .13-.35: 6813, 6824, 6908
Tantalum: 6113

CHROMIUM 31-39%

Aluminum 5-10; Carbon under .10: 6643, 7423, 8375
Carbon; .12 max.: 4931
Carbon; .36-.50: 6981
Carbon; .81-1.10: 6253, 6712
Molybdenum; C over 1.10: 6253
Nickel; C over 1.10: 2804, 5504, 5938
12-15; C .21-.35: 6907, 8394
24-30; C: 201

CHROMIUM 40-66%

Chromium 40-66; Bal. Fe: 1268, 1313, 4931

COBALT 15-30%

Chromium 5-15; Tungsten 5-10: 4857

COBALT 30-45%

Chromium 15-39; C .60-.80: 2595
15-39; Tungsten 12-35: 1822, 3753, 3796

COBALT 45-58%

Chromium 27-39; W 6-11; C over 1.10: 1612, 1618
27-39; W 12-20; C over 1.1: 1612, 2377

COBALT 58-68%

Chromium 10-25; W 15-30; C over 1.10: 1050b, 3645, 3755
25-39; W; C over 1.10; 1050, 1616

COPPER 49-67%

Nickel 20-48; ± other elements: 12, 336, 339, 366, 1553, 1705, 1899, 2372, 2375, 2683, 2684, 2707, 2743, 3303, 3567, 3596, 3655, 4166, 4167, 4168, 4207, 4419, 4831, 6560, 6725, 7060, 7356

COPPER 67-85%

Nickel 10-30: 1939, 2286, 2290, 2681, 3134, 3242, 3506, 3678, 4123, 4203, 4204, 4205, 4206, 4228-4233, 4236, 4420, 4421, 4924, 5760, 5880, 5995

NICKEL 12-15%

Chromium; C over 1.10: 1229
Silicon; C .60: 405
Copper 5-7; Cr; C over 1.10: 6058, 6091, 6700, 6993, 7327
5-7; Cr; Mn; Si; C over 1.10: 1239, 5451, 5905, 6714, 6927, 6960
Manganese: 5970

NICKEL 16-23%

Aluminum 10-15; Cobalt: 7281
Chromium: 1462, 2597
Chromium; Mn; Si; C over 1.10: 816, 1239, 4154, 5923
7-11; C .13-.20: 97, 303, 1282, 5099, 5236, 6034
7-11; C .21-.35: 97, 2519, 7255, 12325
7-11; C .36-.50: 96, 178, 401, 1251, 1746, 4893, 5236, 5979, 6030, 6843, 6853
7-11; C .51-.65: 96
7-11; Copper; C .13-.20: 1273, 3378
7-11; Copper; Silicon; C .13-.50: 144, 1273, 1565, 3378, 5367
7-11; Molybdenum; C .30 max.: 7255
12-15; C .51-.65; W: 1566, 3404
16-23; C .07 max.; Cu; Mo; Si: 5368
16-23; C .10 max.; Mo; Si: 8955, 8956, 9200, 9201
Copper 5-7; Al; W: 996
Copper 5-7; Cr, C 1.10 Min.: 6691

NICKEL 16-30%

Iron balance: 3307
Manganese: 308, 3129a, 3222

NICKEL 24-30%

Aluminum 10-15: 7280, 9751
Chromium: 332, 1462, 1474, 1809, 2712, 3129b, 6559, 6987
Chromium; Mn; Si; C over 1.10: 1239
7-11: 285, 706, 5159
12-15: 928, 1809, 5141, 5204, 5874, 6009, 6035, 6036
12-15; C .36-.50; W; Mn; Si: 736, 1808a, 2420
16-23; C .20 max.: 8354, 8868
16-23; C .21-.35: 578, 928c, 6022, 8068, 12073
16-23; C .36-.50: 1625, 5152, 7007, 7436
16-23; C .50-.80: 580
16-23; Copper; Mo; Si; C .07 max.: 7430
16-23; Molybdenum; C .07 max.: 8071
16-23; Silicon; C .13-.20: 1185, 1596, 2980, 6922, 10632
16-23; Silicon; C .21-.35: 1627, 6815
16-23; Silicon; C .36-.50: 3441, 6815
16-23; Tungsten 16-23; C: 5108, 6690
24-30; C .12 max.: 581, 2876
24-30; C .66-.80: 580
Cobalt under 20: 3658

NICKEL 31-39%

± **Chromium:** 593, 2409, 2596, 3412, 3439, 4797, 4923, 5362, 5586, 5738, 6488, 7109
Chromium 7-11; C various: 1453, 1476, 4898, 5159, 7435
7-11; Cobalt 31-39: 1453
7-11; Manganese; C .21-.25: 736
12-15: 276a, 305, 1510, 1532, 1809, 4918, 5100, 6049, 6854, 8342, 9347, 10924, 11944, 12072
12-15; C .36-.50: 305, 1278, 1312, 1532, 5100, 6092, 6854, 9777
12-15; Silicon; C .50 max.: 404, 537, 5119
12-15; Tungsten: 432, 1477
16-23; C .20 max.: 1189, 1842, 6150
16-23; C .21-.35: 458, 928d, 1204, 1215, 2577, 4874, 5005, 6037, 6068
16-23; C .36-.50: 241, 305, 458, 464, 1189, 1204, 1284, 1312, 1377, 1842, 2521, 5100, 5151, 5935, 5073, 6741, 6968, 6996, 7434
16-23; C .51-.80: 305, 1279, 5070, 5071
16-23; Silicon; C .21-.35: 1628, 3441, 5119, 6829
16-23; Silicon; C .36-.65: 1076, 1842, 2876b, 6049, 6816, 6829, 6880, 6993
16-23; Silicon; C .66-.80: 1267, 5009
24-30: 580, 4904, 5009, 7228, 7439
Cobalt: 613, 6091, 10906, 10917
30-35; Chromium 7-12: 1453

NICKEL 40-48%

Nickel 40-48; Iron bal.: 1443, 1523, 1568, 3689, 3692, 4919, 8331
Chromium 5-7; Aluminum: 1720
7-11; C .12 max.: 705b, 4898
16-23; Mn; Si; C .36-.80: 1076, 11936
Copper: 939

NICKEL 48-57%

Nickel 48-57; Iron bal.: 565, 1351, 2687, 4920
Chromium 11-13; Mn; Si; C: 536
13-24; 1808c, 2510, 5140, 6708
13-24; Cu 5-11; Mo; W; C .21-.35: 587, 1233a, 2784, 5858
24-30: 3745, 4796, 7008, 7009
Cobalt 40-48; C .13-.20: 6999
Molybdenum 7-11: 5975
16-23; Cr 12-15; W; C .36-.50: 545

NICKEL 58-66%

Chromium 7-11; C: 240, 2282, 7003, 8393
7-11; Tungsten; C .20-.35: 737, 1455, 2855
12-15: 243, 280, 796, 932, 1101, 1223, 1285, 1586, 2522, 4209, 4210, 5394, 5599,

5827, 6050, 6087, 6558, 6986, 7433, 8117, 9417
12-23; ±Mn; ±Mo; ±W: 1491, 1492, 1493, 1494, 1495, 1496, 1511, 2050, 4793, 5405, 7361, 7362, 8951, 11184
16-23; C .12 max.: 240a, 280, 1315
16-23; C .13-.80: 462, 469, 1313, 1567, 2510, 4875, 4894, 5008, 5090, 5150, 6892, 6970, 9778
16-23; C .81-1.10: 5091
16-23; Copper 5-11; Mo; W; C: 587, 1315, 9506
16-23; Silicon; C .36-.50: 469, 1629, 6975
16-23; Silicon; Mn: 1075, 5140
16-23; Tungsten 10-20; C: 1909
Copper 20-40: 1919, 1971, 2297, 4836
Copper 20-40; Cr 5-10; Si: 7288
Molybdenum 16-23; Mn; C .13-20: 543

NICKEL 66-75%

Nickel 66-75; Iron bal.: 4925
Chromium 16-23; C various: 795c, 1723, 2850, 3204, 3546, 3548, 5008, 5090, 5759, 6831, 6985, 7002, 7432, 12071
23-35; Gold; Silver: 5723, 5724
Copper 24-34: 758, 1303, 1529, 2732, 2742, 2820, 2822, 3176, 4208, 6561, 7834, 11100

NICKEL 75-85%

Chromium 12-15: 1420, 2488, 3388, 6465, 8865
15-25: 278, 610, 931, 1100, 2714, 2779, 2854, 2903, 2458, 3387, 3390, 3545, 3547, 3659, 4418, 4779, 5706, 6540, 6557, 6957, 6985, 7359, 7360

NICKEL 85-100%

±Chromium; ±Manganese, etc.: 60, 282, 544, 798, 1454, 1456, 1467, 1802, 1840, 1841, 2578, 2642, 3389, 3673, 3679, 3680, 3695, 3754, 4221, 4309, 4921, 4928, 6233, 6955, 6956
Silicon 4-11: 538, 544
Tantalum: 3148

SILICON over 12%

Iron; C over 1.10: 348, 412, 1069, 1078, 1451, 1524, 2326, 4434, 8072

TANTALUM

Tantalum 85-100: 1068, 7569

TUNGSTEN 12-24%

Chromium; C; ± Co; ± Va: See classified under High Speed Steels in Sect. III

TUNGSTEN 24-30%

Chromium 16-23; Ni; C over 1.10: 6689

TUNGSTEN 30-40%

Cobalt 25-35; Cr 10-15; Mo 10-15: 3796

TUNGSTEN over 40%

(See also, Cemented Carbides, Sect. III): 4346

APPENDIX II

DEFINITIONS OF HEAT TREATMENT TERMS[1]

Heat Treatment: An operation or combination of operations involving the heating and cooling of a metal or an alloy in the solid state for the purpose of obtaining certain desirable conditions or properties.

NOTE: Heating and cooling for the sole purpose of mechanical working are excluded from the meaning of this definition.

Quenching: Rapid cooling by immersion.

NOTE: Immersion may be in liquids, gases or solids.

Hardening: Heating and quenching certain iron base alloys from a temperature either within or above the critical temperature range.

Annealing: Annealing is a heating and cooling operation of a material in the solid state. Annealing usually implies a relatively slow cooling.

NOTE: Annealing is a comprehensive term. The purpose of such a heat treatment may be:

(1) To remove stresses.
(2) To induce softness.
(3) To alter ductility, toughness, electrical, magnetic or other physical properties.
(4) To refine the crystalline structure.
(5) To remove gases.
(6) To produce a definite microstructure.

In annealing, the temperature of the operation and the rate of cooling depend upon the material being heat treated and the purpose of the treatment.

Certain specific heat treatments coming under the comprehensive term "annealing" are:

Full Annealing: Heating iron base alloys above the critical temperature range, holding above that range for a proper period of time followed by slow cooling through the range.

NOTE: The annealing temperature is generally about 100 deg. Fahr. above the upper limit of the critical temperature range, and the time of holding is usually not less than 1 hr. for each inch of section of the heaviest objects being treated. The objects being treated are ordinarily allowed to cool slowly in the furnace. They may, however, be removed from the furnace and cooled in some medium that will prolong the time of cooling as compared to unrestricted cooling in the air.

Process Annealing: Heating iron base alloys to a temperature below or close to the lower limit of the critical temperature range, followed by cooling as desired.

NOTE: This heat treatment is commonly applied in the sheet and wire industries and the temperatures generally used are from 1020 to 1200 deg. Fahr.

Normalizing: Heating iron base alloys to above the critical temperature range, followed by cooling fairly rapidly to below that range.

NOTE: Normalizing is rarely practical with hypereutectoid steels because of the coarsening of the grain and the tendency to crystallize cementite at grain *boundaries*

[1]Report of the Iron and Steel Division adopted by the Society of Automotive Engineers. Last revision January 1944.

or in needles. However, it may sometimes be necessary to normalize these steels by heating them above the A_{cm} line of the iron carbon diagram.

Patenting: Heating iron base alloys above the critical temperature range, followed by cooling to below that range in air or in molten lead which is maintained at a temperature of about 700 deg. Fahr.

NOTE: This treatment is usually applied in the wire industry as a finishing treatment or especially in the case of eutectoid steel as a treatment previous to further wire drawing. Its purpose is to produce a sorbitic structure.

Spheroidizing: Prolonged heating of iron base alloys at a temperature in the neighborhood of, but generally slightly below the critical temperature range, usually followed by relatively slow cooling.

NOTE a: In the case of small objects of high carbon steels, the spheroidizing result is achieved more rapidly by prolonged heating to temperatures alternately within and slightly below the critical temperature range.

NOTE b: The object of this heat treatment is to produce a globular condition of the carbide.

Tempering (also termed Drawing): Reheating iron base alloys after hardening to some temperature below the critical temperature range, followed by any desired rate of cooling.

NOTE a: Although the terms "tempering" and "drawing" are practically synonymous as used in commercial practice, the term "tempering" is preferred.

NOTE b: Tempering, meaning the operation of hardening followed by reheating, is a usage which is illogical and confusing in the present state of the art of heat treating and should be discouraged.

Malleableizing: Malleableizing is a type of annealing operation with slow cooling whereby combined carbon in white cast iron is transformed to temper carbon and in some cases the carbon is entirely removed from the iron.

NOTE: Temper carbon is free carbon in the form of rounded nodules made up of an aggregate of minute crystals.

Graphitizing: Graphitizing is a type of annealing for gray cast iron whereby some or all of the combined carbon is transformed to free or uncombined carbon.

Carburizing (Cementation): Adding carbon to iron alloys by heating the metal below its melting point in contact with carbonaceous solids, liquids or gases.

NOTE: The term "carbonizing" used in this sense is incorrect and its use should be discouraged.

Case Hardening: Carburizing and subsequent hardening by suitable heat treatment, all or part of the surface portions of a piece of iron base alloy.

Case: That portion of a carburized iron base alloy article in which the carbon content has been substantially increased.

Core: That portion of a carburized iron base alloy article in which the carbon content has not been substantialy increased.

NOTE: The terms "case" and "core" refer to both case hardening and carburizing.

Cyaniding: Surface hardeniug of an iron base alloy article or portion of it by heatiug at a suitable temperature in contact with a cyanide salt, followed by quenching.

Nitriding: Adding nitrogen in iron base alloys by heating the metal in contact with ammonia gas or other suitable nitrogenous material.

NOTE: Nitriding is conducted at a temperature below the iron carbon critical temperature range and produces surface hardening of metal without quenching.

DEFINITIONS
PHYSICAL AND MAGNETIC TESTING

Tensile Strength: The maximum tensile stress which a material is capable of withstanding. It is measured by dividing the maximum load carried during a tension test conducted to rupture under definite prescribed conditions by the original cross-sectional area of the specimen. It is expressed in pounds per square inch. English practice uses tons per square inch and Continental practice uses kilograms per square millimeter.

Yield Point: The stress in a material at which there occurs a marked increase in strain without an increase in stress. For material that has a "sharp-kneed" stress-strain diagram and consequently exhibits at a certain stress the special characteristic of yielding without increase in stress, the yield point may be obtained from the load determined by the "drop" of the testing machine beam, or by use of dividers on the gage length. For material whose stress-strain diagram in the region of yield is a smooth curve of gradual curvature, the "yield strength" as defined below is to be preferred. It is expressed in the same units as is tensile strength.

Yield Strength: The stress at which a material exhibits a specified limiting permanent set or specified elongation under load. For material possessing the special characteristic of yielding without increase in stress the yield strength and yield point are substantially the same. It is expressed in the same units as is tensile strength, but the specified value of "set" used should be stated in parentheses after the term "yield strength."

(NOTE: Compare with Proof Stress.)

Elastic Limit: It is the maximum stress to which a material may be subjected without permanent deformation or set upon complete release of the stress. It is expressed in the same units as is tensile strength.

Proportional Limit (Proportional Elastic Limit): The stress upon a material beyond which the strain ceases to bear a constant direct relation to the stress. It is expressed in the same units as is tensile strength.

Johnson's Elastic Limit: It is the point on the stress-strain diagram at which the rate of deformation is 50% greater than it is at the origin. It is expressed in pounds per square inch.

Compressive Strength: The maximum compressive stress to which a material may be subjected without failure. For materials that do not fail by shattering fracture the value obtained for compressive strength is an arbitrary value dependent upon the degree of distortion regarded as indicating complete failure of the material. In many ductile materials the maximum usable compressive strength is the compressive yield strength. Compressive strength is expressed in pounds per square inch.

Compressive Yield Point: The stress in compression at which a marked deformation continues without increase in load. It is expressed in pounds per square inch.

Compressive Elastic Limit: The elastic limit in compression is the maximum compressive stress to which a material may be subjected without permanent deformation or set upon complete release of the stress. It is expressed in pounds per square inch.

Proof Stress: The proof stress is that load per square inch of original cross section which a material is capable of withstanding without resulting in a permanent elongation of more than 0.0001 inch per inch of gage length, unless otherwise specified, after complete removal of stress.

Torsional Strength: Ultimate shear strength in torsion expressed in pounds per square inch.

Torsional Elastic Limit: The elastic limit in torsion, expressed in pounds per square inch, and analogous to the elastic limit in tension.

Shear Strength: The shear strength is the shearing stress, expressed in pounds per square inch, upon the cross section of the material at which the material ruptures.

Shear Yield Point: The yield point in shear, expressed in pounds per square inch, is the stress at which deformation in shear occurs with little increase in stress. In ductile materials, the yield point in shear is considered the maximum shear strength for practical purposes.

Transverse Strength: The ultimate strength in tension for brittle materials when tested as a beam on simple supports with concentrated central load. In such tests the specimen is tested to the point of rupture.

Transverse Deflection: The specified deflection of a material, tested as in the transverse test, produced by some specified load, dependent upon the size of specimen.

Elongation: The elongation is the difference in the gage length before the tensile test specimen has been subjected to any stress and after rupture, expressed in percentage of the original gage length.

Reduction of Area: The reduction of area is the difference between the original cross-sectional area and the least cross-sectional area after rupture, expressed as a percentage of the original cross-sectional area.

Modulus of Elasticity: The modulus of elasticity (Young's Modulus) is the ratio, within the limits of elasticity, of the stress to the corresponding strain. It is expressed in pounds per square inch, computed by dividing any increment of tensile stress below the elastic limit by the corresponding proportionate deformation.

Modulus of Rupture: The modulus of rupture is the maximum stress, expressed in pounds per square inch, in the extreme fiber tested to rupture, as computed by the empirical application of the flexural formula to stresses above the transverse proportional limit.

Modulus of Elasticity in Shear: The modulus of elasticity in shear is the ratio of stress within the proportional limit to the corresponding angular strain in radians. It is obtained by dividing unit shearing stress by unit shearing deformation.

Endurance Limit: The endurance limit, or fatigue limit, is that unit stress which a metal can withstand for an indefinitely large number of cycles of stress. It is the maximum stress to which material can be subjected an indefinitely large number of times without causing failure, and is expressed in pounds per square inch.

Izod Impact Value: The Izod impact value is the energy in foot-pounds required to break the special notched Izod test specimen in the Izod impact machine.

Charpy Impact Value: It is the energy in foot-pounds required to break the special Charpy notched test specimen in the Charpy impact machine.

Brinell Hardness: It is the number obtained from the ratio of load on a sphere used to indent the material to be tested to the area of the spherical indentation produced. The standard sphere used is a 10 mm. diameter hardened steel ball. The loads used are 3,000 kg. for steel and 500 kg. for softer metals, and the time of application of load is thirty seconds. The Brinell Hardness number is expressed in kgs./mm^2.

Vickers Hardness: It is the number obtained from the ratio of the load in kilograms applied to a square based pyramid-shaped diamond to the area in square millimeters of the resulting indentation.

Rockwell Hardness: It is the number which is derived by subtracting the penetration by a steel ball or diamond cone from an arbitrary constant. Rockwell hardness

numbers are based on the difference between the depths of penetration at major and minor load, the greater this difference, the less the hardness number.

Scleroscope (Shore) Hardness: It is the height of rebound of a diamond-pointed hammer falling on the object from a fixed height through a tube under the acceleration due to its own weight. The hardness is measured on an empirical scale on which the average hardness of martensitic high-carbon steel equals 100.

Mohs' Hardness: The resistance of a smooth plane surface to abrasion is called its mineralogical hardness and is commonly expressed in terms of a scale of ten minerals selected by Mohs. Talc has the value *1* while the diamond has the value *10*; minerals in this scale of higher value will scratch substances of lower hardness value.

Erichsen Value: It is the depth of impression or cup, in millimeters, required to obtain fracture of sheet metal when tested in an Erichsen machine. It is an index of forming qualities of sheet metal.

Contraction: See Reduction of Area.

Ultimate Tensile Strength: See Tensile Strength.

Poisson's Ratio: The ratio of lateral contraction per unit of diameter to longitudinal extension per unit of length of a bar under terminal tension within the elastic limit of the material.

Stress: The intensity (Measured per unit of area) of the internal distributed forces or components of force which resist a change in the form of a body. Stress is measured in force per unit of area (pounds per square inch, kilograms per square millimeter, etc.).

Strain: The change per unit of length in a linear dimension of a body, which change accompanies a stress. Strain is measured in inches per inch of length (millimeters per millimeter).

Coercive Force, H_c: The reversed magnetizing force that is just sufficient to reduce the residual induction in a material to zero. Unit—Oersted.

Magnetic Induction (Flux Density), B: The vector magnetic quantity accompanying and having the same direction at a point in an isotropic medium as the magnetizing force at the point, but having a magnitude which is dependent upon the properties of the medium. Unit—Gauss. Usually expressed in "lines per sq.cm." or "lines per sq.inch."

Magnetizing Force (Magnetic Intensity), H: That vector magnetic quantity arising from magnetized bodies and from known electric currents which is the source of magnetic effects. Unit—Oersted.

Permeability μ: That property of an isotropic medium which determines, under specified conditions, the magnitude relation between magnetic induction and magnetizing force in the medium. Under the specified conditions, permeability is measured as the ratio of the magnetic induction to the corresponding magnetizing force. The permeability of air is taken as unity.

Residual Induction, B_r: The magnetic induction remaining in a symmetrically cyclicly magnetized magnetic material when the effective magnetizing force has been reduced to zero at every point. Unit—Gauss.

Remanence: The magnetic induction remaining in a magnetic circuit after the removal of an applied magnetizing force. Unit—Gauss.

Specific Gravity: The ratio of the weight in air of a given volume of the material at a stated temperature to the weight in air of an equal volume of distilled water at a stated temperature.

Melting Point: The melting point of a substance is the temperature at which change of state from solid to liquid takes place. For pure substances this is a change occurring sharply at a definite temperature; for alloys in general, there is an interval of temperature between the beginning of melting and complete liquefaction and, conversely, a solidification range rather than a sharp freezing point.

Resistivity (Specific Resistance): The specific resistance of any material is the resistance of a conductor of this material, having unit length and unit area of cross-section.

Electrical Resistivity: See Resistivity.

Specific Heat: The specific heat of a substance is the number of units of heat energy required to change the temperature of unit mass of the substance one degree. It may be expressed in units of calories per gram per degree Centigrade, or British Thermal Units per pound per degree Fahrenheit.

Coefficient of Expansion: The linear coefficient of expansion is the fractional change in length of a material per degree temperature change.

Thermal Conductivity: It is heat conducting power of a substance per unit of cross-sectional area and per unit of length or thickness. It is numerically the number of calories of heat that will flow in unit time (the second) through a slab of unit area and unit thickness (i.e., through a centimeter cube) if its two opposite faces differ in temperature by unity (one degree Centigrade).

MICROSTRUCTURAL CONSTITUENTS OF STEEL

Ferrite: Ferrite in iron and steel is not pure iron but rather iron holding in solid solution small amounts of silicon, phosphorus and other impurities. It is soft, ductile and relatively weak. It is highly magnetic, has high electric conductivity, but no hardening power. In slowly cooled iron and steel, ferrite crystallizes in the body-centered cubic lattice.

Cementite: In slowly cooled steels the carbon is always combined with a definite amount of iron to form a "carbide of iron," corresponding to the chemical symbol Fe_3C. This compound consists of 6.67% carbon and 93.33% iron, and is micrographically known as "cementite." It is an extremely hard and brittle substance with a very low tensile strength. The tensile strength of cementite is about 5000 lb. per sq. in.

Pearlite: Pearlite is not a simple substance but consists of two constituents, namely interstratified layers or plates (lamellae) of ferrite and cementite in the proportion represented by the eutectoid point. It is formed on very slow cooling through the critical range and consists of about 87% ferrite and about 13% cementite. The field of a true pearlite area contains about 0.85% carbon. Pearlite has maximum hardening power.

Eutectoid Steels: Steel made up exclusively of pearlite, is called "eutectoid steel." It contains about 0.85% carbon. Steel containing less than about 0.85% carbon, and in which, therefore, some free ferrite is present, is called "hypo-eutectoid"; while steel containing more than 0.85% carbon, that is, more highly carburized than eutectoid steel, is called "hyper-eutectoid." Hyper-eutectoid steels contain free cementite.

Austenite: Austenite is a solid solution of finely dispersed carbon or iron carbide (probably carbon) in gamma iron. It is obtained in carbon steels only by very rapid quenching from temperatures above the critical range, and in special alloys with less drastic quenching. It is non-magnetic. The atoms in gamma iron have the face-centered cubic lattice arrangement. Austenite is relatively soft and ductile as compared to martensite.

Martensite: Martensite is a complex structural condition obtained by quenching carbon steels from temperatures above their highest recalescence point, when the whole of the carbon or carbide is in solid solution. It is considered as a decomposition of austenite along octahedral crystallographic planes when gamma iron changes to alpha iron, that is, from the face-centered cubic lattice to the body-centered cubic lattice. Martensite may be cohsidered as a supersaturated solid solution of alpha iron and iron carbide. It has an interlacing needle-like structure, the acicular markings of which are often disposed in triangular formation. The structure is fine-grained, submicroscopic in particle size. The martensitic structure is the hardest and also the most brittle, exhibiting extremely high tensile strength with little or no ductility. It is magnetic.

Troostite: Troostite is a structural condition consisting of an emulsion of cementite particles in alpha iron. It is fine-grained and is obtained in any steel regardless of carbon content by properly modifying temperature of quenching or rate of cooling. It is also obtained in "tempering," that is, by heating martensitic steels to about 400° C. Troostite is softer and more ductile than martensite of the same carbon content. Troostite may be considered as very fine pearlite.

Sorbite: Sorbite is a form of "pearlite" often called "sorbitic-pearlite" or "tempered martensite." It is a structural condition regarded as the intermediate stage between "troostite" and "pearlite." Sorbite is a mixture of cementite particles in fine alpha iron, the particles being of larger size than in "troostite." Sorbite, although it is slightly less ductile than pearlite for a given carbon content, has such high tenacity and elastic limit that a higher combination of these three properties can be had in sorbitic than in pearlitic steels. Sorbite is often referred to as "granulated pearlite." It can be obtained by modifying the quenching temperature, the rate of cooling, or by reheating (tempering) the quench-hardened steel.

APPENDIX III

TABLE I—INTERNATIONAL ATOMIC WEIGHTS

(1935 Revision)

Name	Symbol	Atomic Weights	Name	Symbol	Atomic Weights
Aluminum	Al	26.97	Mercury	Hg	200.61
Antimony	Sb	121.77	Molybdenum	Mo	96.0
Argon	A	39.94	Neodymium	Nd	144.27
Arsenic	As	74.91	Neon	Ne	20.2
Barium	Ba	137.37	Nickel	Ni	58.69
Beryllium	Be	9.02	Nitrogen	N	14.008
Bismuth	Bi	209.00	Osmium	Os	191.5
Boron	B	10.82	Oxygen	O	16.000
Bromine	Br	79.916	Palladium	Pd	106.7
Cadmium	Cd	112.41	Phosphorus	P	31.027
Calcium	Ca	40.07	Platinum	Pt	195.23
Caesium	Cs	132.91	Potassium	K	39.096
Carbon	C	12.000	Praseodymium	Pr	140.92
Cerium	Ce	140.25	Radium	Ra	225.95
Chlorine	Cl	35.457	Radon	Rn	222.
Chromium	Cr	52.01	Rhodium	Rh	102.91
Cobalt	Co	58.94	Rubidium	Rb	85.44
Columbium	Cb	92.91	Ruthenium	Ru	101.7
Copper	Cu	63.57	Samarium	Sa	150.43
Dysprosium	Dy	162.52	Scandium	Sc	45.10
Erbium	Er	167.7	Selenium	Se	78.96
Europium	Eu	152.0	Silicon	Si	28.06
Fluorine	F	19.00	Silver	Ag	107.880
Gadolinium	Gd	157.26	Sodium	Na	22.997
Gallium	Ga	69.72	Strontium	Sr	87.63
Germanium	Ge	72.60	Sulfur	S	32.064
Gold	Au	197.2	Tantalum	Ta	181.5
Hafnium	Hf	178.6	Tellurium	Te	127.61
Helium	He	4.00	Terbium	Tb	159.2
Holmium	Ho	163.4	Thalium	Tl	204.39
Hydrogen	H	1.008	Thorium	Th	232.15
Indium	In	114.76	Thulium	Tm	169.4
Iodine	I	126.932	Tin	Sn	118.70
Iridium	Ir	193.1	Titanium	Ti	48.1
Iron	Fe	55.84	Tungsten	W	184.0
Krypton	Kr	82.9	Uranium	U	238.17
Lanthanum	La	138.90	Vanadium	V	50.96
Lead	Pb	207.20	Xenon	Xe	130.2
Lithium	Li	6.940	Ytterbium	Yb	173.04
Lutecium	Lu	175.0	Yttrium	Y	88.9
Magnesium	Mg	24.32	Zinc	Zn	65.38
Manganese	Mn	54.93	Zirconium	Zr	91.2

TABLE II—PHYSICAL CONSTANTS OF THE PRINCIPAL ALLOY FORMING ELEMENTS

Element	Symbol	Atomic weight	Melting point, deg. Fahr.	Boiling point, deg. Fahr.	Density, grams per cubic centimeter	Atomic volume	Linear coefficient of thermal expansion per degree, Cent. X 10^{-6}, 0°-100° C.	Sp. ht., calories per gram per degree Centigrade at room temperature	Thermal conductivity, calories per centimeter cube per degree Cent. at room temperature	Electrical resistivity, microhms per centimeter cube	Crystallization shrinkage, per cent	Young's modulus pounds per square inch X 10^6
Aluminum	Al	27.0	1220	3,272	2.70	10.0	23.1 (25-100° C.)	.21	.48	2.83 (20° C.)	6.6	10
Antimony	Sb	120.2	1166	2,624	6.69	18.0	10.5	.05	.043	38.6 (0° C.)	1.4	11
Arsenic	As	74.96	1562	680	5.73	13.1	5.0	.08	.....	35 (0° C.)	..	..
Beryllium	Be	9.1	2336	....	1.85	4.9						
Bismuth	Bi	209.0	519.8	2,606	9.75	21.4	13.2	.03	.019	119 (0° C.)	−3.3	4.6
Cadmium	Cd	112.4	609.6	1,432	8.64	13.0	31.6	.055	.22	7.54 (18° C.)	4.7	10
Calcium	Ca	40.07	1490	....	1.54	26.0	.....	.16	.....	.....	..	..
Carbon	C	12.005	....	6,512	....	....						
Diamond	..	.....	....	....	3.52	3.42	1.18	.11	.....	.....	..	..
Graphite	..	.....	.....	....	2.25	5.35	7.86	.16	.04	.....	..	..
Cerium	Ce	140.25	1184	....	6.79	20.6	.....	.045	.....	.....	..	..
Chromium	Cr	52.0	2939	3,992	6.92	7.5	.....	.105	.....	2.6 (0° C.)	..	..
Cobalt	Co	58.97	2631	....	8.71	6.8	12.36	.10	.....	9.7 (20° C.)	..	..
Copper	Cu	63.57	1981	4,190	8.93	7.15	16.8 (25-100° C.)	.091	.92	1.7241 (20° C.)	4.0	17.8
Gold	Au	197.2	1945	....	19.32	10.2	13.8 (25-100° C.)	.032	.70	2.42 (18° C.)	5.2	11.1
Indium	In	114.8	311	....	7.28	15.8	.....	.057	.....	.....	..	..
Iridium	Ir	193.1	4262	....	22.42	8.6	.....	.030	.14	6.1 (0° C.)	..	..
Iron	Fe	55.84	2786	4,442	7.88	7.1	11.7	.102	.16	10.6 (25° C.)	..	30
Alpha	..	.....	....	....	....	....	.....	...	.....	.....	..	..
Gamma	..	.....	....	....	....	....	.....	...	.....	.....	..	..
Lead	Pb	207.20	621	2,777	11.34	18.3	27.09	.030	.083	2.04 (0° C.)	3.4	..
Lithium	Li	6.94	366.8	2,552	0.534	13.0	.....	.83	.....	.....	..	..
Magnesium	Mg	24.32	1202	2,048	1.74	14.0	25.8	.24	.38 (0-100° C.)	4.35 (0° C.)	4.2	6.25
Manganese	Mn	54.93	2246	3,452	7.42	7.4	.....	.11	.....	5		
Mercury	Hg	200.6	−37.9	675	13.6	14.7	.....	.033	.015 (0° C.)	95.74 (20° C.)	3.75	..
Molybdenum	Mo	96.0	4757	6,512	10.3	9.3	5.32 (20° C.)	.063	.35	5.5 (27° C.)	..	..
Nickel	Ni	58.68	2645.6	....	8.9*	6.7	13.2 (25-100° C.)	.102	.14	6.93 (20° C.)	..	30
Osmium	Os	190.9	4892	....	22.5	8.5	.....	.031	.....	.....	..	..
Palladium	Pd	106.7	2822	....	12.16	8.8	11.76	.055	.17	10.2 (0° C.)	..	..
Phosphorus	P	31.04	111	554	1.83	17.0	125.3 (0-40° C.)	.18				
Platinum	Pt	195.2	3191	7,070	21.37	9.1	8.99	.030	.17	10.96 (0° C.)	..	23.5
Rhodium	Rh	102.9	3542	....	12.44	8.3	.....	.038	.....	.....	..	..
Ruthenium	Ru	101.7	4442	....	12.06	8.4	.....	.061	.....	.....	..	..
Silicon	Si	28.1	2588	....	2.42	11.6	7.63	.17	.....	58	..	..
Silver	Ag	107.88	1761	3,551	10.53	10.2	19.21	.054	1.00	1.63 (18° C.)	5.0	10.3
Tantalum	Ta	181.5	5252	....	16.6	10.9	.....	.035	.13	14.6	..	..
Thorium	Th	232.15	3092	....	12.16	19.1	.....	.028	.....	.....	..	..
Tin	Sn	118.7	449	4,118	7.3	16.3	22.96	.053	.15	13.0 (0° C.)	2.8	5.9
Titanium	Ti	48.1	3272	....	4.5	10.7	.....	.10	.....	3.2	..	..
Tungsten	W	184.0	6152	10,526	19.3	9.5	4.44 (27° C.)	.034	.48	5.6 (20° C.)	..	60
Uranium	U	238.2	3362	....	18.7	12.7	.....	.028	.....	.....	..	..
Vanadium	V	51.0	3128	....	6.0	8.5	.....	.11	.....	.....	..	..
Zinc	Zn	65.37	787	1,706	7.14	9.1	29.76	.088	.26	5.75 (0° C.)	6.5	12.4
Zirconium	Zr	90.6	3090	....	6.4	14.1	.....	.066	.....	.....	..	..

From the "Science of Metals" by Zay Jeffries and R. S. Archer. Published by McGraw-Hill Book Co., Inc., New York City.

TABLE III—WEIGHTS OF ALLOYS AND METALS

Alloys and Metals	Pounds per cu. ft.	Pounds per cu. in.
Aluminum	163	0.0943
Aluminum and Tin:		
Al 91%, Sn 9%	178	0.103
Aluminum, Copper, and Tin:		
Al 85%, Cu 7.5%, Sn 7.5%	188	0.1087
Al 6.25%, Cu 87.5%, Sn 6.25%	459	0.2656
Al 5%, Cu 5%, Sn 90%	425	0.2459
Aluminum and Magnesium:		
Al 70%, Mg 30%	125	0.0723
Aluminum and Zinc:		
Al 91%, Zn 9%	175	0.1012
Antimony	419	0.2424
Babbitt Alloy	454	0.2627
Bismuth	611	0.3535
Bismuth, Lead, and Tin:		
Bi 53%, Pb 40%, Sn 7%	659	0.3813
Wood's Metal:		
Bi 50%, Pb 25%, Cd 12.5%, Sn 12.5%	605	0.3501
Brass:		
Cu 90%, Zn 10%	536	0.3101
Cu 70%, Zn 30%	527	0.3049
Cu 60%, Zn 40%	521	0.3015
Cu 50%, Zn 50%	511	0.2957
Bronze:		
Cu 90%, Sn 10%	548	0.3171
Cu 85%, Sn 15%	555	0.3211
Cu 80%, Sn 20%	545	0.3153
Cu 75%, Sn 25%	551	0.3188
Cu 90%, Al 10%	480	0.2777
Cu 95%, Al 5%	522	0.3020
Cu 97%, Al 3%	542	0.3136
Bronze, Phosphorus, Average	537	0.3107
Bronze, Tobin, Average	503	0.291
Cadmium and Tin:		
Cd 32%, Sn 68%	480	0.2777
Chromium	436	0.2523
Cobalt	533	0.3084
Copper	557	0.3223
Copper and Nickel:		
Cu 60%, Ni 40%	554	0.3206
German Silver:		
Cu 60%, Zn 20%, Ni 20%	530	0.3067
Cu 52%, Zn 26%, Ni 22%	527	0.3049
Cu 59%, Zn 30%, Ni 11%	520	0.3009
Cu 63%, Zn 30%, Ni 7%	518	0.2997
Gold	1208	0.699
Gold and Copper:		
Au 98%, Cu 2%	1176	0.6805
Au 90%, Cu 10%	1071	0.6197
Au 86%, Cu 14%	1027	0.5943
Gun metal, Average	544	0.3148
Iridium	1396	0.8078
Iron, Cast	450	0.2604
Iron, Wrought	480	0.2777
Lead	708	0.4097
Lead and Antimony:		
Pb 30%, Sb 70%	450	0.2604
Pb 37%, Sb 63%	460	0.2662
Pb 44%, Sb 56%	475	0.2748
Pb 63%, Sb 37%	514	0.2974

(Continued on page 791)

TABLE III (Continued)—WEIGHTS OF METALS

Alloys and Metals	Pounds per cu. ft.	Pounds per cu. in.
Lead and Antimony (cont'd):		
Pb 83%, Sb 17%	596	0.3449
Pb 90%, Sb 10%	658	0.3807
Lead and Bismuth:		
Bi 67%, Pb 33%	639	0.3697
Bi 50%, Pb 50%	656	0.3796
Bi 33%, Pb 67%	682	0.3946
Bi 25%, Pb 75%	697	0.4033
Bi 17%, Pb 83%	702	0.4062
Bi 12%, Pb 88%	703	0.4068
Lead and Tin:		
Pb 87.5%, Sn 12.5%	661	0.3825
Pb 84%, Sn 16%	644	0.3726
Pb 63.7%, Sn 36.3%	588	0.3402
Pb 46.7%, Sn 53.3%	545	0.3153
Pb 30.5%, Sn 69.5%	514	0.2974
Magnesium	109	0.063
Manganese	499	0.2887
Manganese, Copper, and Nickel:		
Mn 12%, Cu 84%, Ni 4%	530	0.3067
Mercury	849	0.4913
Nickel	550	0.3182
Osmium	1402	0.8113
Palladium	712	0.412
Platinum	1344	0.7777
Platinum and Iridium:		
Pt 90%, Iridium 10%	1348	0.780
Rhodium	755	0.4369
Ruthenium	765	0.4427
Silver	654	0.3784
Steel, Cast	490	0.2835
Tin	460	0.2662
Tin and Antimony:		
Sn 50%, Sb 50%	424	0.2453
Sn 75%, Sb 25%	442	0.2557
Tin and Bismuth:		
Bi 78%, Sn 22%	587	0.3396
Bi 63%, Sn 37%	570	0.3298
Bi 50%, Sn 50%	546	0.3159
Bi 37%, Sn 63%	530	0.3067
Bi 22%, Sn 78%	504	0.2916
Tin and Lead:		
Sn 97%, Pb 3%	456	0.2638
Sn 89%, Pb 11%	475	0.2748
Sn 80%, Pb 20%	487	0.2818
Sn 67%, Pb 33%	512	0.2962
Sn 50%, Pb 50%	550	0.3182
Titanium	224	0.1296
Tungsten	1078.7	0.6242
Zinc	437	0.2528

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TABLE IV—RELATION BETWEEN HARDNESS AND STRENGTH OF CARBON STEELS

(Equivalents)

Brinell Hardness	Tensile Strength	Yield Point	Brinell Hardness	Tensile Strength	Yield Point
140	68,700	41,100	410	201,500	177,800
150	73,700	44,200	420	206,000	182,800
160	78,800	51,300	430	211,500	187,900
170	83,900	56,300	440	217,000	192,900
180	88,600	61,400	450	221,500	198,000
190	93,400	66,400	460	226,000	203,000
200	90,600	71,500	470	230,000	208,100
210	103,000	76,600	480	236,000	213,200
220	108,000	81,600	490	242,000	218,200
230	113,000	87,800	500	246,000	223,300
240	118,000	91,700	510	252,000	228,400
250	123,000	96,800	520	257,000	233,400
260	127,500	101,900	530	261,000	238,000
270	133,000	106,900	540	266,000	243,500
280	138,000	112,000	550	270,500	248,600
290	143,000	117,000	560	275,000	253,700
300	147,000	122,100	570	280,000	258,700
310	153,000	127,200	580	285,000	263,900
320	157,500	132,200	590	290,000	268,800
330	162,000	137,300	600	295,000	273,900
340	167,500	142,300	610	299,000	279,000
350	172,500	147,400	620	304,000	284,000
360	178,000	152,500	630	311,000	289,000
370	181,000	157,500	640	315,000	294,100
380	186,000	162,600	650	320,000	299,200
390	191,000	167,600	675	331,000	311,900
400	197,000	172,700	700	342,000	324,500
			750	367,000	349,800

Note: The above relations between tensile strength, yield point and Brinell hardness are close approximations for plain carbon steels under all heat treatments. It is to be used especially when the tensile strength and yield point of the outer fibres are desired for a corresponding surface hardness.

This table does not hold for alloy steels.

TABLE V—APPROXIMATE RELATIONS BETWEEN HARDNESS AND TENSILE STRENGTH OF S. A. E. STEELS

Brinell Diam. in Mm. 3000 Kg. Load 10 Mm. Ball	Brinell Hardness Number	Vickers (Firth-Diamond) Hardness Number	Rockwell C Scale, 150 Kg., Load 120 Deg. Diamond Cone	Rockwell B Scale 100 Kg., Load 1/16 In. Diam. Ball	Shore Scleroscope Number	Tensile Strength 1000 Lb. Per Sq. In.
2.20	780	1,150	70	...	106	384
2.25	745	1,050	68	...	100	368
2.30	712	960	66	...	95	352
2.35	682	885	64	...	91	337
2.40	653	820	62	...	87	324
2.45	627	765	60	...	84	311
2.50	601	717	58	...	81	298
2.55	578	675	57	...	78	287
2.60	555	633	55	...	75	276
2.65	534	598	53	...	72	266
2.70	514	567	52	...	70	256
2.75	495	540	50	...	67	247
2.80	477	515	49	...	65	238
2.85	461	494	47	...	63	229
2.90	444	472	46	...	61	220
2.95	429	554	45	...	59	212
3.00	415	437	44	...	57	204
3.05	401	420	42	...	55	196
3.10	388	404	41	...	54	189
3.15	375	389	40	...	52	182
3.20	363	375	38	...	51	176
3.25	352	363	37	...	49	170
3.30	341	350	36	...	48	165
3.35	331	339	35	...	46	160
3.40	321	327	34	...	45	155
3.45	311	316	33	...	44	150
3.50	302	305	32	...	43	146
3.55	293	296	31	...	42	142
3.60	285	287	30	...	40	138
3.65	277	279	29	...	39	134
3.70	269	270	28	...	38	131
3.75	262	263	26	...	37	128
3.80	255	256	25	...	37	125
3.85	248	248	24	...	36	122
3.90	241	241	23	100	35	119
3.95	235	235	22	99	34	116
4.00	229	229	21	98	33	113
4.05	223	223	20	97	32	110
4.10	217	217	...	96	31	107
4.15	212	212	...	96	31	104
4.20	207	207	...	95	30	101
4.25	202	202	...	94	30	99
4.30	197	197	...	93	29	97
4.35	192	192	...	92	28	95
4.40	187	187	...	91	28	93
4.45	183	183	...	90	27	91
4.50	179	179	...	89	27	89
4.55	174	174	...	88	26	87
4.60	170	170	...	87	26	85
4.65	166	166	...	86	25	83
4.70	163	163	...	85	25	82
4.75	159	159	...	84	24	80
4.80	156	156	...	83	24	78
4.85	153	153	...	82	23	76
4.90	149	149	...	81	23	75
4.95	146	146	...	80	22	74
5.00	143	143	...	79	22	72
5.05	140	140	...	78	21	71
5.10	137	137	...	77	21	70
5.15	134	134	...	76	21	68
5.20	131	131	...	74	20	66
5.25	128	128	...	73	20	65
5.30	126	126	...	72	..	64
5.35	124	124	...	71	..	63
5.40	121	121	...	70	..	62
5.45	118	118	...	69	..	61
5.50	116	116	...	68	..	60
5.55	114	114	...	67	..	59
5.60	112	112	...	66	..	58
5.65	109	109	...	65	..	56
5.70	107	107	...	64	..	55
5.75	105	105	...	62	..	54
5.80	103	103	...	61	..	53
5.85	101	101	...	60	..	52
5.90	99	99	...	59	..	51
5.95	97	97	...	57	..	50
6.00	95	95	...	56	..	49

Report of the Iron and Steel Division, adopted by S. A. E. Last revision.

TABLE VI—STRENGTH CONVERSION TABLE

Tons Per Sq. in.	Lbs. Per Sq. in.	Kilos Per Sq. mm.
1	2,240	1.575
25	56,000	39.37
26	58,240	40.95
27	60,480	42.52
28	62,720	44.10
29	64,960	45.67
30	67,200	47.25
31	69,440	48.82
32	71,680	50.40
33	73,920	51.97
34	76,160	53.55
35	78,400	55.12
36	80,640	56.70
37	82,880	58.27
38	85,120	59.85
39	87,360	61.42
40	89,600	63.00
41	91,840	64.57
42	94,080	66.15
43	96,320	67.72
44	98,560	69.30
45	100,800	70.87
46	103,040	72.45
47	105,280	74.02
48	107,520	75.60
49	109,760	77.17
50	112,000	78.75
51	114,240	80.32
52	116,480	81.90
53	118,720	83.47
54	120,960	85.05
55	123,200	86.62
56	125,440	88.20
57	127,680	89.77
58	129,920	91.35
59	132,160	92.92
60	134,400	94.50
61	136,640	96.07
62	138,880	97.65
63	141,120	99.22
64	143,360	100.80
65	145,600	102.37
66	147,840	103.95
67	150,080	105.52
68	152,320	107.10
69	154,560	108.67
70	156,800	110.25
71	159,040	111.82
72	161,280	113.40
73	163,520	114.97
74	165,760	116.55
75	168,000	118.12
76	170,240	119.70
77	172,480	121.27
78	174,720	122.85
79	176,960	124.42
80	179,200	126.00
81	181,440	127.57
82	183,680	129.15
83	185,920	130.72
84	188,160	132.30
85	190,400	133.87
86	192,640	135.45
87	194,880	137.02
88	197,120	138.60
89	199,360	140.17
90	201,600	141.75
91	203,840	143.32
92	206,080	144.90
93	208,320	146.47
94	210,560	148.05
95	212,800	149.62
96	215,040	151.20
97	217,280	152.77
98	219,520	154.35
99	221,760	155.92
100	224,000	157.50
101	226,240	159.07
102	228,480	160.65
103	230,720	162.22
104	232,960	163.80
105	235,200	165.37
106	237,440	166.95
107	239,680	168.52
108	241,920	170.10
109	244,160	171.67
110	246,400	173.25

TABLE VII—STRENGTH - CONVERSION TABLE

Kilograms per square millimeter to pounds per square inch

1 kg. per sq. mm. = 1422.34 lbs. per sq. inch.

	0	1	2	3	4	5	6	7	8	9
0	.....	1422	2845	4267	5689	7112	8534	9956	11379	12801
10	14223	15646	17068	18490	19913	21335	22757	24180	25602	27024
20	28447	29869	31291	32714	34136	35559	36981	38403	39826	41248
30	42670	44093	45515	46937	48360	49782	51204	52627	54049	55471
40	56894	58316	59738	61161	62583	64005	65428	66850	68272	69691
50	71117	72539	73962	75384	76806	78229	79651	81073	82496	39915
60	85340	86763	88185	89607	91030	92452	93874	95297	96719	88148
70	99564	100986	102408	103831	105253	106676	108098	109520	110943	112365
80	113787	115210	116632	118054	119477	120899	122321	123744	125166	126588
90	128011	129433	130855	132278	133700	135122	136545	137967	139389	140812

Thousands of pounds per square inch to kilograms per square millimeter

1000 lbs. per sq. inch = 0.70307 kg. per sq. mm.

	0	1	2	3	4	5	6	7	8	9
0	.....	0.70	1.41	2.11	2.81	3.52	4.22	4.92	5.62	6.35
10	7.03	7.73	8.44	9.14	9.84	10.55	11.25	11.95	12.66	13.36
20	14.06	14.76	15.47	16.17	16.87	17.58	18.28	18.98	19.69	20.39
30	21.09	21.80	22.50	23.20	23.90	24.61	25.31	26.01	26.72	27.42
40	28.12	28.83	29.53	30.23	30.93	31.64	32.34	33.04	33.75	34.45
50	35.15	35.86	36.56	37.26	37.97	38.67	39.37	40.07	40.78	41.48
60	42.18	42.89	43.59	44.29	45.00	45.70	46.40	47.11	47.81	48.51
70	49.21	49.92	50.62	51.32	52.03	52.73	53.43	54.14	54.84	55.54
80	56.25	56.95	57.65	58.35	59.06	59.76	60.46	61.17	61.87	62.57
90	63.28	63.98	64.68	65.39	66.09	66.79	67.49	68.20	68.90	69.60

Kilograms per square millimeter to tons per square inch

1 kg. per sq. mm. = 0.635 ton per sq. inch.

	0	1	2	3	4	5	6	7	8	9
0	.....	0.64	1.27	1.91	2.54	3.18	3.81	4.45	5.08	5.72
10	6.35	6.99	7.62	8.26	8.89	9.53	10.16	10.80	11.43	12.07
20	12.70	13.34	13.97	14.61	15.24	15.88	16.51	17.15	17.78	18.41
30	19.05	19.68	20.32	20.95	21.59	22.22	22.86	23.49	24.13	24.76
40	25.40	26.03	26.67	27.30	27.94	28.57	29.21	29.84	30.48	31.11
50	31.75	32.38	33.02	33.65	34.29	34.92	35.56	36.19	36.83	37.46
60	38.10	38.73	39.37	40.00	40.64	41.27	41.91	42.54	43.18	43.81
70	44.45	45.08	45.72	46.35	46.99	47.62	48.26	48.89	49.53	50.16
80	50.80	51.43	52.07	52.70	53.34	53.97	54.61	55.24	55.88	56.51
90	57.15	57.78	58.42	59.05	59.69	60.32	60.96	61.59	62.23	62.86

Tons per square inch to kilograms per square millimeter

1 ton per sq. inch = 1.57487 kg. per sq. mm.

	0	1	2	3	4	5	6	7	8	9
0	.....	1.57	3.15	4.72	6.30	7.87	9.45	11.02	12.60	14.17
10	15.75	17.32	18.90	20.47	22.05	23.62	25.20	26.77	28.35	29.92
20	31.50	33.07	34.65	36.22	37.80	39.37	40.95	42.52	44.10	45.67
30	47.25	48.82	50.42	51.97	53.54	55.12	56.69	58.27	59.84	61.42
40	62.99	64.57	66.15	67.72	69.29	70.87	72.44	74.02	75.59	77.17
50	78.74	80.32	81.89	83.47	85.04	86.62	88.19	89.77	91.34	92.92
60	94.49	96.07	97.64	99.22	100.79	102.37	103.94	105.52	107.09	108.67
70	110.24	111.82	113.39	114.97	116.54	118.11	119.69	121.26	122.84	124.41
80	125.99	127.56	129.14	130.71	142.29	133.86	133.44	137.01	138.59	140.16
90	141.74	143.31	144.89	146.46	148.04	149.61	151.19	152.76	154.33	155.91

TABLE VIII—CONVERSION DATA
TEMPERATURE CONVERSION TABLE

C°	0	10	20	30	40	50	60	70	80	90
	F	F	F	F	F	F	F	F	F	F
-200	-328	-346	-364	-382	-400	-418	-436	-454		
-100	-148	-166	-184	-202	-220	-238	-256	-274	-292	-310
-0	+32	+14	-4	-22	-40	-58	-76	-94	-112	-130
0	32	50	68	86	104	122	140	158	176	194
100	212	230	248	266	284	302	320	338	356	374
200	392	410	428	446	464	482	500	518	536	554
300	572	590	608	626	644	662	680	689	716	734
400	752	770	788	806	824	842	860	878	896	914
500	932	950	968	986	1004	1022	1040	1058	1076	1094
600	1112	1130	1148	1166	1184	1202	1220	1238	1256	1274
700	1292	1310	1328	1346	1364	1382	1400	1418	1436	1454
800	1472	1490	1508	1526	1544	1562	1580	1598	1616	1634
900	1652	1670	1688	1706	1724	1742	1760	1778	1796	1814
1000	1832	1850	1868	1886	1904	1922	1940	1958	1976	1994
1100	2012	2030	2048	2066	2084	2102	2120	2138	2156	2174
1200	2192	2210	2228	2246	2264	2282	2300	2318	2336	2354
1300	2372	2390	2408	2426	2444	2462	2480	2498	2516	2534
1400	2552	2570	2588	2606	2624	2642	2660	2678	2696	2714
1500	2732	2750	2768	2786	2804	2822	2840	2858	2876	2894
1600	2912	2930	2948	2966	2984	3002	3020	3038	3056	3074
1700	3092	3110	3128	3146	3164	3182	3200	3218	3236	3254
1800	3272	3290	3308	3326	3344	3362	3380	3398	3416	3434
1900	3452	3470	3488	3506	3524	3542	3560	3578	3596	3614
2000	3632	3650	3668	3686	3704	3722	3740	3758	3776	3794
2100	3812	3830	3848	3866	3884	3902	3920	3938	3956	3974
2200	3992	4010	4028	4046	4064	4082	4100	4118	4136	4154
2300	4172	4190	4208	4226	4244	4262	4280	4298	4316	4334
2400	4352	4370	4388	4406	4424	4442	4460	4478	4496	4514
2500	4532	4550	4568	4586	4604	4622	4640	4658	4676	4694
2600	4712	4730	4748	4766	4784	4802	4820	4838	4856	4874
2700	4892	4910	4928	4946	4964	4982	5000	5018	5036	5054
2800	5072	5090	5108	5126	5144	5162	5180	5198	5216	5234
2900	5252	5270	5288	5306	5324	5342	5360	5378	5396	5414
3000	5432	5450	5468	5486	5504	5522	5540	5558	5576	5594
3100	5612	5630	5648	5666	5684	5702	5720	5738	5756	5774
3200	5792	5810	5828	5846	5864	5882	5900	5918	5936	5954
3300	5972	5990	6008	6026	6044	6062	6080	6098	6116	6134
3400	6152	6170	6188	6206	6224	6242	6260	6278	6296	6314
3500	6332	6350	6368	6386	6404	6422	6440	6458	6476	6494
3600	6512	6530	6548	6566	6584	6602	6620	6638	6656	6674
3700	6692	6710	6728	6746	6764	6782	6800	6818	6836	6854
3800	6872	6890	6908	6926	6944	6962	6980	6998	7016	7034
3900	7052	7070	7088	7106	7124	7142	7160	7178	7196	7214
C°	0	10	20	30	40	50	60	70	80	90

Interpolation Columns

C°	F°
1	1.8
2	3.6
3	5.4
4	7.2
5	9.0
6	10.8
7	12.6
8	14.4
9	16.2
10	18.0

F°	C°
1	.56
2	1.11
3	1.67
4	2.22
5	2.78
6	3.33
7	3.89
8	4.44
9	5.00
10	5.56
11	6.11
12	6.67
13	7.22
14	7.78
15	8.33
16	8.89
17	9.44
18	10.00

ASM Metals Handbook.

TABLE IX—TEMPERATURES AND COLORS - THEIR RELATION TO STEEL TREATMENT

	Colors	Fahrenheit	Centigrade	Processes
Heat Colors	White	2500°	1371°	Welding
		2400°	1315°	High Speed Steel Hardening (2250°-2400° F)
	Yellow White	2300°	1259°	
		2200°	1204°	
		2100°	1149°	
	Yellow	2000°	1093°	
		1900°	1036°	Alloy Steel Hardening (1500°-1950°F)
	Orange Red	1800°	981°	
		1700°	926°	
		1600°	871°	
	Light Cherry Red	1500°	915°	Carbon Steel Hardening (1350°-1550° F)
	Cherry Red	1400°	760°	
		1300°	704°	
Heat Colors	Dark Red	1200°	648°	
		1100°	593°	High Speed Steel Tempering (350°-1100°F)
	Very Dark Red	1000°	538°	
		900°	482°	
	Black Red in dull light or darkness	800°	426°	Carbon Steel Tempering (300°-1050°F)
		700°	371°	
Temper Colors	Pale Blue (590°F)	600°	315°	
	Violet (545°F)			
	Purple (525°F)	500°	260°	
	Yellowish Brown (490°F)	400°	204°	
	Dark Straw (465°F)	300°	149°	
	Light Straw (425°F)	200°	93°	
		100°	38°	
		0°	0°	

INCANDESCENT COLORS AND TEMPERATURES
TAYLOR & WHITE'S TABLE

	Degrees F.	Degrees C.
Black Red	990	532
Dark Blood Red	1050	566
Dark Cherry Red	1175	635
Medium Cherry Red	1250	677
Full Cherry Red	1375	746
Light Cherry, Scaling	1550	843
Salmon, Free Scaling	1650	899
Light Salmon	1725	941
Yellow	1825	996
Light Yellow	1975	1079
White	2220	1216

TABLE X

HEAT TREATING BATH MIXTURES

Material		Melting Temp.	Temp. Range	Remarks
67% $NaNO_3$	33% KNO_3	450°F.	500-1000°F.	
50% $NaNO_3$	50% $NaNO_2$	350°F.	355-1000°F.	
100% NaCl	.....	1510°F.	1515-1830°F.	Fumes destructive to Fire Clay.
.....	100% Na_2SO_4	1535°F.	1545-1830°F.	Na_2SO_4 destructive—use metal pots.
77% NaCl	23% Na_2SO_4	1340°F.	1350-1830°F.	Fumes not to come in contact with Fire Clay.
50% NaCl	50% Na_2SO_4	1157°F.	1170-1650°F.	Lowest melting mix.
27% NaCl	73% Na_2SO_4	1365°F.	1375-1740°F.	Not corrosive to metal.
100% KNO_3	.....	650°F.	655-1200°F.	Decomposes before boiling.
.....	100% $NaNO_3$	590°F.	600-1200°F.	Do not overheat.
78% KNO_3	22% $NaNO_3$	490°F.	500-1290°F.	Good Temper bath.
54% KNO_3	46% $NaNO_3$	430°F.	435-1200°F.	Lowest melting mix.
23% KNO_3	77% $NaNO_3$	545°F.	555-1200°F.	Overheating breaks up salt.
100% Sb	.....	1170°F.	1180-1470°F.	Cover metal with charcoal.
.....	100% Pb	620°F.	630-1290°F.	Oxidizes rapidly if overheated.
35% Sb	65% Pb	750°F.	760-1290°F.	Good for normalizing.
13% Sb	87% Pb	475°F.	486-1290°F.	Lowest melting alloy.
55% Sb	45% Pb	930°F.	945-1380°F.	Lighter in weight than lead.

TABLE XI
GALVANIC SERIES OF METALS AND ALLOYS

McKay and Worthington	F. L. La Que
Corroded end (anodic)	Corroded end (anodic)
Magnesium	Magnesium
Aluminum	Magnesium alloys
Duralumin	Zinc
	Aluminum 2S
Zinc	Cadmium
Cadmium	Aluminum 17ST
	Steel or Iron
	Cast Iron
Iron	Chromium-iron (active)
Chromium-iron (active)	Ni-Resist
Chromium-nickel-iron (active)	18-8 Chromium-nickel-iron (active)
	18-8-3 Chromium-nickel-molybdenum-iron (active)
Soft Solder	Lead-tin Solders
Tin	Lead
Lead	Tin
	Nickel (active)
Nickel	Inconel (active)
Brasses	Brasses
Bronzes	Copper
Nickel-copper alloys	Bronzes
Copper	Copper-nickel alloys
	Monel
	Silver solder
Chromium-iron (passive)	Nickel (passive)
Chromium-nickel-iron (passive)	Inconel (passive)
	Chromium-iron (passive)
Silver Solder	18-8 Chromium-nickel-iron (passive)
Silver	18-8-3 Chromium-nickel-molybdenum-iron (passive)
	Silver
Silver	Graphite
Gold	Gold
Platinum	Platinum
Protected end (cathodic)	Protected end (cathodic)

These series are built upon actual experience with corrosion and laboratory measurement. Metals close together have no strong tendency to produce galvanic corrosion on each other; connecting two metals distant on the list from each other tends to corrode the one higher in the list. Voltage figures are not given because these vary with every new corrosive condition. Relative positions of metals change in many cases but it is unusual for changes to occur, across the spaces left blank in the table on the left. The chromium-irons and chromium-nickel-irons change position as indicated depending on oxidizing condition, acidity, and chloride in solution. The series as it stands is correct for many common dilute water solutions such as sea water, weak acids and alkalies.

TABLE XII

COEFFICIENT OF EXPANSION

	°F.	°C.
SAE-51335	0.0000055	0.000010
SAE-51210	0.0000057	0.0000102
Gray Cast Iron	0.0000060	0.000011
Cast Steel	0.0000067	0.000012
Armco Iron	0.0000068	0.0000122
Carbon Steel	0.0000070	0.0000125
Monel Metal	0.0000077	0.0000139
Nickel	0.0000078	0.000014
Stainless 18/8	0.0000090	0.000016
Copper	0.0000095	0.000017
Nickel Bronze, cast	0.0000096	0.0000173
Aluminum Bronze	0.0000098	0.0000176
Phosphor Bronze	0.00001005	0.0000181
Ni-Resist Cast Iron	0.0000105	0.000019
Leaded Bronze	0.0000106	0.0000191
Cast Brass	0.000011	0.0000198
Manganese Bronze, cast	0.000011	0.0000198
Y-Alloy (aluminum)	0.0000122	0.0000216
Aluminum	0.000013	0.000024
Tin	0.000013	0.000024
Duralumin	0.0000131	0.0000238
Magnesium	0.000015	0.000027
Lead	0.000016	0.000028
Dowmetal	0.000016	0.000028
Zinc	0.000017	0.000030

TABLE XIII

RELATIVE DENSITIES

	Specific Gravity	Pounds/cu. in.
Magnesium	1.8	0.065
Aluminum	2.7	0.101
Zinc	7.1	0.256
Cast Iron	7.2	0.260
Tin	7.3	0.264
Aluminum Bronze	7.70	0.278
Steel	7.9	0.285
Stainless Steel (18/8)	7.92	0.286
Brass	8.5	0.307
Inconel	8.55	0.309
K-Monel	8.58	0.310
Bronze	8.8	0.318
Nickel	8.9	0.323
Monel Metal	8.9	0.323
Copper	8.9	0.323
Lead	11.3	0.419