

Database of Steel and Alloy (Marochnik)

splat.kharkov.com/en

[Home](#) [European steel grades](#) [Steel and Alloy](#) [Search](#) [Equivalent grades](#) [Grading](#) [GOST Standard](#) [Contacts](#)

YOU HERE: [Steel and Alloy](#) -> [Copper](#)

Characteristics for grade MN95-5 (MH95-5).

Grade :	MN95-5 (MH95-5)
Classification :	Copper-nickel alloys
Equivalent grades:	Is absent

Chemical composition in % for grade MN95-5 (MH95-5)

Ni+Co	Fe	C	S	P	Cu	As	Pb	O	Sb	Bi	Impurity
4.4 - 5	max 0.2	max 0.03	max 0.01	max 0.02	94.5 - 95.6	max 0.01	max 0.01	max 0.1	max 0.005	max 0.002	all 0.5

Comment: **Cu** is a basis; the percentage of **Cu** is given approximately.

Mechanical properties under T=20°C for grade MN95-5 (MH95-5)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
soft			245-294	196	30-50	70		
hard			441-490	343-392	2-6			

Brinell hardness for MN95-5 (MH95-5) , soft	HB 10 ⁻¹ = 87 MPa
---	------------------------------

Technological properties of the material MN95-5 (MH95-5).

Melting temperature :	1120 °C
Forging temperature :	950 - 100 °C
Annealing temperature :	650 °C

Physical properties for grade MN95-5 (MH95-5)

T	E 10 ⁻⁵	α 10 ⁶	λ	ρ	C	R 10 ⁹
Grade	MPa	1/Grade	Watt/(m·Grade)	kg/m ³	J/(kg·Grade)	Ohm·m
20		16.4	100.5	8700	377	80

Specification :

Mechanical properties :

σ_B - Tensile strength , [MPa]
 σ_T - Yield stress, [MPa]

- δ_5 - Specific elongation at fracture , [%]
 ψ - Reduction of area , [%]
KCU - Impact strength , [kJ / m²]
HB - Brinell hardness , [MPa]

Physical properties :

- T** - Test temperature , [Grade]
E - Young modulus , [MPa]
 α - Coefficient of linear expansion (range 20° - T) , [1/Grade]
 λ - Thermal (heat) condition coefficient , [Watt/(m·Grade)]
 ρ - Density , [kg/m³]
C - Specific heat (range 20° - T) , [J/(kg·Grade)]
R - Electrical resistance , [Ohm·m]

Database of steels and alloys (Marochnik) contains information about chemical composition and properties more then 2500 steels and alloys (stainless steel, alloy steel, carbone steel, structural steel, tool steel, cast iron, aluminum alloy, titanium alloy, copper alloy, nickel alloy, magnesium alloy and others).
 Helpfull for specialists in grade technology, structural engineer, mechanical engineer, metallurgy and metal trader

[Top](#)

© 2003 - 2013 All rights reserved. [About program.](#)

The entire risk as to use of the Database of Steel and Alloy (Marochnik) content is assumed by you the user

