

Database of Steel and Alloy (Marochnik)

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Characteristics for grade MNZHMts30-1-1 (МНЖМц30-1-1).

Grade :	MNZHMts30-1-1 (МНЖМц30-1-1)
Classification :	Copper-nickel alloys
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Chemical composition in % for grade MNZHMts30-1-1 (МНЖМц30-1-1)

Ni+Co	Fe	C	Si	Mn	S	P	Cu	Pb	Zn	Impurity
29 - 33	0.5 - 1	max 0.05	max 0.15	0.5 - 1	max 0.01	max 0.01	64.4 - 70	max 0.05	max 0.5	all 0.6

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

Mechanical properties under T=20°C for grade MNZHMts30-1-1 (МНЖМц30-1-1)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Pipe, GOST 10092-2006			350		35			
soft			350-450		40-50			
hard			550-650		3-5			

Brinell hardness for MNZHMts30-1-1 (МНЖМц30-1-1), soft	HB 10 ⁻¹ = 58.8 - 68.9 MPa
Brinell hardness for MNZHMts30-1-1 (МНЖМц30-1-1), hard	HB 10 ⁻¹ = 98 MPa

Technological properties of the material MNZHMts30-1-1 (МНЖМц30-1-1).

Melting temperature :	1230 °C
Forging temperature :	860 - 950 °C
Annealing temperature :	750 - 810 °C

Physical properties for grade MNZHMts30-1-1 (МНЖМц30-1-1)

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	1.45		37	8900		420
100		16				

Equivalent steels for grade MNZHMts30-1-1 (MHЖMц30-1-1)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan
-	DIN,WNr	JIS
C71500	2.0882 CuNi30Mn1Fe	C7150

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

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