

Database of Steel and Alloy (Marochnik)

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Characteristics for grade LAMsh77-2-0.05 (ЛАМш77-2-0.05).

Grade :	LAMsh77-2-0.05 (ЛАМш77-2-0.05)
Classification :	Copper-zinc alloys pressure treated
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Chemical composition in % for grade LAMsh77-2-0.05 (ЛАМш77-2-0.05)

Fe	P	Al	Cu	As	Pb	Zn	Sb	Bi	Impurity
max 0.1	max 0.01	1.7 - 2.5	76 - 79	0.02 - 0.06	max 0.07	18.14 - 22.25	max 0.005	max 0.002	all 0.3

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

Mechanical properties under T=20°C for grade LAMsh77-2-0.05 (ЛАМш77-2-0.05)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Pipe, GOST 21646-2003			320		42			
Pipe, GOST 21646-2003			370		40			

Brinell hardness for LAMsh77-2-0.05 (ЛАМш77-2-0.05) , soft	HB 10 ⁻¹ = 60 - 70 MPa
Brinell hardness for LAMsh77-2-0.05 (ЛАМш77-2-0.05) , hard	HB 10 ⁻¹ = 160 - 170 MPa

Technological properties of the material LAMsh77-2-0.05 (ЛАМш77-2-0.05).

Melting temperature :	985 °C
Annealing temperature :	600 - 700 °C

Physical properties for grade LAMsh77-2-0.05 (ЛАМш77-2-0.05)

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	1.02		134	8700		68
100		19.2			376.8	

Equivalent steels for grade LAMsh77-2-0.05 (ЛАМш77-2-0.05)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan
-	DIN, WNr	JIS

C68700	2.0460 2.0470 CuZn20Al2	C6870
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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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