

Database of Steel and Alloy (Marochnik)

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Characteristics for grade LO90-1 (ЛО90-1).

Grade :	LO90-1 (ЛО90-1)
Classification :	Copper-zinc alloys pressure treated
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Chemical composition in % for grade LO90-1 (ЛО90-1)

Fe	P	Cu	Pb	Zn	Sb	Bi	Sn	Impurity
max 0.1	max 0.01	88 - 91	max 0.03	8 - 11.7	max 0.005	max 0.002	0.2 - 0.7	all 0.2

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

Mechanical properties under T=20°C for grade LO90-1 (ЛО90-1)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Sheet, GOST 2208-2007			390		2			
Sheet, GOST 2208-2007			260-370		35			

Brinell hardness for LO90-1 (ЛО90-1) , Sheet GOST 2208-2007	HB 10 ⁻¹ = 65 MPa
Brinell hardness for LO90-1 (ЛО90-1) , Sheet GOST 2208-2007	HB 10 ⁻¹ = 120 MPa

Friction coefficient of the material LO90-1 (ЛО90-1) .

Friction coefficient with oil :	0.013
Friction coefficient without oil :	0.45

Technological properties of the material LO90-1 (ЛО90-1) .

Melting temperature :	1015 °C
Forging temperature :	700 - 800 °C
Annealing temperature :	550 - 650 °C

Physical properties for grade LO90-1 (ЛО90-1)

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	1.05		125.6	8750		54

100

18.4

Equivalent steels for grade LO90-1 (ЛО90-1)

Warning! Indicated both exact and nearest equivalents.

USA
-
C41000

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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