

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](#) -> [Latten \(copper-zinc alloy\)](#)

Characteristics for grade LA85-0.5 (ЛA85-0.5).

Grade :	LA85-0.5 (ЛA85-0.5)
Classification :	Copper-zinc alloys pressure treated
Equivalent grades:	Is absent

Chemical composition in % for grade LA85-0.5 (ЛA85-0.5)

Fe	Al	Cu	Pb	Zn	Sb	Bi	Impurity
max 0.01	0.4 - 0.7	84 - 85.6	max 0.03	14 - 15	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 LA85-0.5 (ЛA85-0.5)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
soft			295-390		60	50		
hard			490-690		3-10			

Brinell hardness for LA85-0.5 (ЛA85-0.5) , hard	HB 10 ⁻¹ = 147 MPa
Brinell hardness for LA85-0.5 (ЛA85-0.5) , casted	HB 10 ⁻¹ = 53 MPa

Technological properties of the material LA85-0.5 (ЛA85-0.5).

Melting temperature :	1020 °C
Forging temperature :	800 - 850 °C
Annealing temperature :	650 - 700 °C

Physical properties for grade LA85-0.5 (ЛA85-0.5)

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		18.6	108.8	8600	376.8	

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

