

Database of Steel and Alloy (Marochnik)

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

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

Characteristics for grade 1915 (1915).

Grade :	1915 (1915)
Classification :	Aluminium wrought alloys
Equivalent grades:	Go here

Chemical composition in % for grade 1915 (1915)

Fe	Si	Mn	Cr	Ti	Al	Cu	Zr	Mg	Zn	Impurity
max 0.4	max 0.35	0.2 - 0.7	0.06 - 0.2	0.01 - 0.06	91.19 - 94.65	max 0.1	0.08 - 0.2	1 - 1.8	4 - 5	other, each 0.05; all 0.15

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

Mechanical properties under T=20°C for grade 1915 (1915)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Pipe, GOST 18482-79			265-355	155-215	10			
Bar, GOST 21488-97			355-375	245	8			Quenching and artificial aging
Bar, GOST 21488-97			275		12			Annealing
Band annealed , GOST 13726-97			245		10			
Profile, GOST 8617-81	12 - 150		373	245	8			Quenching and artificial aging
Profile annealed , GOST 8617-81			277	176	12			
Plate , GOST 17232-99			275-315	165-195	10			Hardening and ageing

Physical properties for grade 1915 (1915)

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				2770		

Equivalent steels for grade 1915 (1915)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	European	Inter
-	DIN,WNr	EN	ISO
7005	3.4335 AlZnMg1	ENAW-7005 ENAW-AlZn4.5Mg1.5Mn	7005 AlZn4.5Mg1.5Mn

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 / m ²]
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/m ³]
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](#)

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