

Database of Steel and Alloy (Marochnik)

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Characteristics for grade V2616 (B2616).

Grade :	V2616 (B2616)
Classification :	Aluminium casting alloys
Equivalent grades:	Is absent

Chemical composition in % for grade V2616 (B2616)

Fe	Si	Ti	Al	Cu	Zr	B	Mg	Cd
max 0.4	6.5 - 8.5	0.1 - 0.3	86.9 - 90.69	2.5 - 3.5	0.025 - 0.05	0.01 - 0.1	0.15 - 0.4	0.05 - 0.3

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

Mechanical properties under T=20°C for grade V2616 (B2616)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
cast in a metal mould			430	370	3			
sand (mould) casting			350	300	2.5			

Brinell hardness for V2616 (B2616) , cast in a metal mould	HB 10⁻¹ = 120 MPa
Brinell hardness for V2616 (B2616) , sand (mould) casting	HB 10⁻¹ = 110 MPa

Technological properties of the material V2616 (B2616).

Linear shrinkage :	1.1 %
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Physical properties for grade V2616 (B2616)

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	0.72			2720		
100		22.4			880	
200		23.4				
T	E 10 ⁻⁵	α 10 ⁶	λ	ρ	C	R 10 ⁹

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

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