

Database of Steel and Alloy (Marochnik)

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Characteristics for grade 08KH15N25M3TYUB (08X15H25M3TЮБ).

Grade :	08KH15N25M3TYUB (08X15H25M3TЮБ)
Classification :	High alloy high-temperature steel
Equivalent grades:	Is absent

Chemical composition in % for grade 08KH15N25M3TYUB (08X15H25M3TЮБ)

Fe	C	Si	Mn	Ni	S	P	Cr	Mo	Ti	Al	B
47.25 - 56.5	max 0.1	max 0.5	1 - 2	24 - 28	max 0.02	max 0.02	14 - 16	2.8 - 3.5	0.9 - 1.3	0.8 - 1.3	max 0.01

Mechanical properties under T=20°C for grade 08KH15N25M3TYUB (08X15H25M3TЮБ)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Disk	Ø 400	tangent	840	440	18	38	500	
Strip	45 - 75	longitudinal	910	430	34	49	1800	

Brinell hardness for 08KH15N25M3TYUB (08X15H25M3TЮБ) ,

HB 10⁻¹ = 207 MPa

Physical properties for grade 08KH15N25M3TYUB (08X15H25M3TЮБ)

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	2.02			8160		
100	1.99	14.1				
200	1.94	15.7				
300	1.9	16.1				
400	1.83	16.3				
500	1.77	16.8				
600	1.69	17.3				
700	1.61	17.4				
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 / 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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