

Database of Steel and Alloy (Marochnik)

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Characteristics for grade 13KH (13X).

Grade :	13KH (13X)
Classification :	Alloy tool steel
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Chemical composition in % for grade 13KH (13X)

C	Si	Mn	Ni	S	P	Cr	Mo	W	V	Ti	Cu
1.25 - 1.4	0.1 - 0.4	0.15 - 0.45	max 0.4	max 0.03	max 0.03	0.4 - 0.7	max 0.2	max 0.2	max 0.15	max 0.03	max 0.3

Temperature of critical points for grade 13KH (13X).

$Ac_1 = 760$, $Ac_3(Ac_m) = 860$, $Ar_1 = 700$, $Mn = 270$

Mechanical properties under T=20°C for grade 13KH (13X)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Band annealed , GOST 2283-79	0.1 - 4		930					

Brinell hardness for 13KH (13X) (annealing) , GOST 5950-2000	HB 10 ⁻¹ = 248 MPa
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Equivalent steels for grade 13KH (13X)

Warning! Indicated both exact and nearest equivalents.

Germany	Japan	France	China	Hungary	Poland	Czechia	Austria
DIN,WNr	JIS	AFNOR	GB	MSZ	PN	CSN	ONORM
1.2008 140Cr2	SKS8	130Cr3 Y2-140C Y2140C	Cr06	K6	NC5	19420	K205

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]

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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