

Database of Steel and Alloy (Marochnik)

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Characteristics for grade 5KHNv (5XHB).

Grade :	5KHNv (5XHB)
Classification :	Alloy tool steel
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Chemical composition in % for grade 5KHNv (5XHB)

C	Si	Mn	Ni	S	P	Cr	W	Cu
0.5 - 0.6	0.1 - 0.4	0.5 - 0.8	1.4 - 1.8	max 0.03	max 0.03	0.5 - 0.8	0.4 - 0.7	max 0.3

Temperature of critical points for grade 5KHNv (5XHB).

$A_{c1} = 730$, $A_{c3}(A_{cm}) = 780$, $M_n = 205$

Mechanical properties under T=20°C for grade 5KHNv (5XHB)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
			1280	1050	11	45	400	

Brinell hardness for 5KHNv (5XHB) (annealing), GOST 5950-2000

HB 10 ⁻¹ = 255 MPa

Equivalent steels for grade 5KHNv (5XHB)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan	France	England	European	Italy	Poland	Czechia	Austria
-	DIN,WNr	JIS	AFNOR	BS	EN	UNI	PN	CSN	ONORM
L6	1.2714 55NiCrMoV6 56NiCrMoV7	SKT4	55NCDV7	BH224/5	1.2714 55NiCrMoV7	56NiCrMoV7KU	WNLV	19663	W501

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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