

Database of Steel and Alloy (Marochnik)

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Characteristics for grade 40KHGNM (40XГНМ).

Grade :	40KHGNM (40XГНМ)
Classification :	Alloy structural steel
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Chemical composition in % for grade 40KHGNM (40XГНМ)

C	Si	Mn	Ni	S	P	Cr	Mo	Cu
0.37 - 0.43	0.17 - 0.37	0.5 - 0.8	0.7 - 1.1	max 0.035	max 0.035	0.6 - 0.9	0.15 - 0.25	max 0.3

Mechanical properties under T=20°C for grade 40KHGNM (40XГНМ)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Bar, GOST 4543-71	Ø 25		980	835	12		880	Guenching 840°C, oil, Drawing 560 - 620°C, air,

Equivalent steels for grade 40KHGNM (40XГНМ)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan
-	DIN, WNr	JIS
8640 9840 G86400 G98400	1.6546 40NiCrMo22	SNM240

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]

Database of steels and alloys (Marochnik) contains information about chemical composition and properties more than 2500 steels and alloys (stainless steel, alloy steel, carbene 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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