

Database of Steel and Alloy (Marochnik)

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Characteristics for grade 70G (70Г).

Grade :	70G (70Г)
Classification :	Spring structural steel
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Chemical composition in % for grade 70G (70Г)

C	Si	Mn	Ni	S	P	Cr	Cu
0.67 - 0.75	0.17 - 0.37	0.9 - 1.2	max 0.25	max 0.035	max 0.035	max 0.25	max 0.2

Mechanical properties under T=20°C for grade 70G (70Г)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Bar, GOST 14959-79	to Ø 80		1030	834	7	25		Guenching 830°C, oil, Drawing 470°C,
Sheet trick, GOST 1577-93			780		10			
Band annealed , GOST 2283-79			640-740		10-15			
Band cold-worked , GOST 2283-79			740-1180					

Brinell hardness for 70G (70Г) (without heat treatment), Rolled stock GOST 14959-79	HB 10⁻¹= 285 MPa
Brinell hardness for 70G (70Г) (without heat treatment), Rolled stock GOST 14959-79	HB 10⁻¹= 241 MPa
Brinell hardness for 70G (70Г) (annealing), Sheet trick GOST 1577-93	HB 10⁻¹= 229 MPa

Equivalent steels for grade 70G (70Г)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Poland	Czechia
-	DIN, WNr	PN	CSN
1572 G15720	80Mn4	65G	13180

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 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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