

Database of Steel and Alloy (Marochnik)

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[Home](#) [European steel grades](#) [Steel and Alloy](#) [Search](#) [Equivalent grades](#) [Grading](#) [GOST Standard](#) [Contacts](#)

YOU HERE: [Steel and Alloy](#) -> [Tool steel](#)

Characteristics for grade U8G (Y8Г).

Grade :	U8G (Y8Г)
Classification :	Carbon tool steel
Equivalent grades:	Go here

Chemical composition in % for grade U8G (Y8Г)

C	Si	Mn	Ni	S	P	Cr	Cu
0.8 - 0.9	0.17 - 0.33	0.33 - 0.58	max 0.25	max 0.028	max 0.03	max 0.2	max 0.25

Mechanical properties under T=20°C for grade U8G (Y8Г)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Band annealed	0.08 - 3		750		10			

Brinell hardness for U8G (Y8Г) , Forging GOST 1435-99

HB 10⁻¹ = 187 MPa

Equivalent steels for grade U8G (Y8Г)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan	France	England
-	DIN, WNr	JIS	AFNOR	BS
W1-8	C80W1	SK5	Y1-90	BW1A

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

[Top](#)

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