

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](#) -> [Structural steel](#)

Characteristics for grade 47GT (47ГТ).

Grade :	47GT (47ГТ)
Substitute:	40ХГПТ
Classification :	Alloy structural steel
Equivalent grades:	Is absent

Chemical composition in % for grade 47GT (47ГТ)

C	Si	Mn	Ni	S	P	Cr	Ti	Cu
0.44 - 0.52	0.1 - 0.22	0.9 - 1.2	max 0.3	max 0.035	max 0.035	max 0.3	0.06 - 0.12	max 0.3

Mechanical properties under T=20°C for grade 47GT (47ГТ)

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		620	375	15	40		Normalizing 820 - 870°C, air,

Brinell hardness for 47GT (47ГТ) (annealing), GOST 4543-71	HB 10⁻¹ = 255 MPa
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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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