

Database of Steel and Alloy (Marochnik)

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Characteristics for grade A40 (A40).

Grade :	A40 (A40)
Classification :	Steel for shipbuilding
Equivalent grades:	Is absent

Chemical composition in % for grade A40 (A40)

C	Si	Mn	Ni	S	P	Cr	Mo	V	N	Nb	Al	Cu	As
max 0.18	0.15 - 0.5	0.9 - 1.6	max 0.4	max 0.035	max 0.035	max 0.2	max 0.08	0.05 - 0.1	max 0.008	0.02 - 0.05	0.015 - 0.06	max 0.35	max 0.08

Mechanical properties under T=20°C for grade A40 (A40)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Rolled stock, GOST 5521-93			510-650	390	20			
Rolled stock, GOST 52927-2008			510-660	390	20			

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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