

Database of Steel and Alloy (Marochnik)

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Characteristics for grade 18YuA (18ЮА).

Grade :	18YuA (18ЮА)
Classification :	High quality structural carbon steel
Equivalent grades:	Is absent

Chemical composition in % for grade 18YuA (18ЮА)

C	Si	Mn	Ni	S	P	Cr	Al	Cu
0.16 - 0.22	max 0.13	0.2 - 0.4	max 0.25	max 0.025	max 0.025	max 0.15	0.02 - 0.07	max 0.2

Mechanical properties under T=20°C for grade 18YuA (18ЮА)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Band annealed , GOST 2284-79			310-540		18			
Band cold-worked , GOST 2284-79			490-830					

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 than 2500 steels and alloys (stainless steel, alloy steel, carbon 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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