

Database of Steel and Alloy (Marochnik)

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Characteristics for grade 16k (16K).

Grade :	16k (16K)
Classification :	High quality structural carbon steel
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Chemical composition in % for grade 16k (16K)

C	Si	Mn	Ni	S	P	Cr	Cu	As
0.12 - 0.2	0.17 - 0.37	0.45 - 0.75	max 0.3	max 0.04	max 0.04	max 0.3	max 0.3	max 0.08

Mechanical properties under T=20°C for grade 16k (16K)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Sheet, GOST 5520-79			400-490	235-255	22		690	

Technological properties for grade 16k (16K)

Weldability:	without limitations.
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Equivalent steels for grade 16k (16K)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan	France	England	European	Italy	Belgium	Spain	Sweden	Bulgaria	Hungary	Poland	Romania	Czechia	Austria	South Korea
-	DIN, WNr	JIS	AFNOR	BS	EN	UNI	NBN	UNE	SS	BDS	MSZ	PN	STAS	CSN	ONORM	KS
Gr.A K01701 K02100 K02401 K02402 K02505	1.0425 C22N H2 H11 P269GH	SG295 SG30 SGV410 SGV450 SGV480 SPV235 SPV315 SPV355	A42AP A42CP P265GH	1501Gr.161-400 151-400 154-400 161-400 P269GH	1.0425 P269GH	Fe4101KG Fe4101KT Fe4101KW Fe410KG Fe410KT Fe410KW P269GH	D42-1	A42RCI A42RCII	1430 1431 1432	16K P265GH	KL2 KL2C P265GH	St41K OL44.3	K410 OL44.3	11416	St41KW	SPPV315 SPPV355

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]

Weldability :

without limitations	- welding is done without heating and subsequent heat treating
limited weldability	- welding is possible under heating up to 100-120 grade and subsequent heat treating
hard weldability	- obtaining the quality welding needs the additional operations: heating up to 200-300 grade; the heat treating ia annealing

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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