

Database of Steel and Alloy (Marochnik)

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Characteristics for grade 22KH2G2AYU (22X2Г2АЮ).

Grade :	22KH2G2AYU (22X2Г2АЮ)
Classification :	Low alloy structural steel for welding construct
Equivalent grades:	Is absent

Chemical composition in % for grade 22KH2G2AYU (22X2Г2АЮ)

C	Si	Mn	Ni	S	P	Cr	N	Ti	Al	Cu	B
0.19 - 0.26	0.4 - 0.7	1.4 - 1.7	max 0.3	max 0.04	max 0.04	1.5 - 2.1	0.015 - 0.03	0.005 - 0.03	0.02 - 0.07	max 0.3	0.001 - 0.008

Mechanical properties under T=20°C for grade 22KH2G2AYU (22X2Г2АЮ)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Rebar, GOST 5781-82			1030	785	7			
Rebar, GOST 5781-82			1230	980	6			

Technological properties for grade 22KH2G2AYU (22X2Г2АЮ)

Weldability:	without limitations.
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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 / 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 in 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,

22KH2G2AYU (22X2Г2АЮ) - Low alloy structural steel for welding construct. Marochnik
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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