

Database of Steel and Alloy (Marochnik)

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Characteristics for grade 25G2S (25Г2С).

Grade :	25G2S (25Г2С)
Classification :	Low alloy structural steel for welding construct
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Chemical composition in % for grade 25G2S (25Г2С)

C	Si	Mn	Ni	S	P	Cr	Cu
0.2 - 0.29	0.6 - 0.9	1.2 - 1.6	max 0.3	max 0.045	max 0.04	max 0.3	max 0.3

Mechanical properties under T=20°C for grade 25G2S (25Г2С)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Rebar, GOST 10884-71	Ø 16 - 32		980	785	7			
Rebar, GOST 5781-82			590	390	14			

Technological properties for grade 25G2S (25Г2С)

Weldability:	without limitations.
Flakes :	not predisposed
Temper brittleness:	not predisposed

Equivalent steels for grade 25G2S (25Г2С)

Warning! Indicated both exact and nearest equivalents.

Germany	Bulgaria	Poland	Romania	Czechia
DIN, WNr	BDS	PN	STAS	CSN
BSt420S	25GS2	25G2S 34GS	PC60 T26VSiMn14	10425

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]

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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