

Database of Steel and Alloy (Marochnik)

splav.kharkov.com/en

[Home](#) [European steel grades](#) [Steel and Alloy](#) [Search](#) [Equivalent grades](#) [Grading](#) [GOST Standard](#) [Contacts](#)

YOU HERE: [Steel and Alloy](#) -> [Structural steel](#)

Characteristics for grade 15G2SFD (15Г2СФД).

Grade :	15G2SFD (15Г2СФД)
Classification :	Low alloy structural steel for welding construct
Equivalent grades:	Is absent

Chemical composition in % for grade 15G2SFD (15Г2СФД)

C	Si	Mn	Ni	S	P	Cr	V	N	Cu	As
0.12 - 0.18	0.4 - 0.7	1.3 - 1.7	max 0.3	max 0.04	max 0.035	max 0.3	0.05 - 0.1	max 0.008	0.15 - 0.3	max 0.08

Temperature of critical points for grade 15G2SFD (15Г2СФД).

$Ac_1 = 720$, $Ac_3(Ac_m) = 850$, $Mn = 420$

Mechanical properties under T=20°C for grade 15G2SFD (15Г2СФД)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Sheet, GOST 19282-73	5 - 9		560	400	18			
Rolled stock	10 - 32		560		18			

Technological properties for grade 15G2SFD (15Г2СФД)

Weldability:	without limitations.
---------------------	----------------------

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 is 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

[Top](#)

© 2003 - 2013 All rights reserved. [About program.](#)

The entire risk as to use of the Database of Steel and Alloy (Marochnik) content is assumed by you the user

