

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](#) -> [Cast iron](#)

Characteristics for grade SCH35 (C435).

Grade :	SCH35 (C435)
Classification :	Grey cast iron
Equivalent grades:	Go here

Chemical composition in % for grade SCH35 (C435)

C	Si	Mn	S	P
2.9 - 3	1.2 - 1.5	0.7 - 1.1	max 0.12	max 0.2

Mechanical properties under T=20°C for grade SCH35 (C435)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Casting, GOST 1412-85			350					

Brinell hardness for SCH35 (C435) , GOST 1412-85

HB 10 ¹ = 179 - 290 MPa

Technological properties of the material SCH35 (C435) .

Linear shrinkage :	1.3 %
--------------------	-------

Physical properties for grade SCH35 (C435)

T	E 10 ⁻⁵	α 10 ⁶	λ	ρ	C	R 10 ⁹
Grade	MPa	1/Grade	Watt/(m·Grade)	kg/m ³	J/(kg·Grade)	Ohm·m
20	1.4		42	7400		
100		11			545	

Equivalent steels for grade SCH35 (C435)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan	France	England	European	Italy	Belgium	Spain	China	Sweden	Bulgaria	Hungary	Poland	Romania	Czechia	Austria	Australia	Inter	India	Holland	Luxembourg
-	DIN, WNr	JIS	AFNOR	BS	EN	UNI	NBN	UNE	GB	SS	BDS	MSZ	PN	STAS	CSN	ONORM	AS	ISO	IS	NEN	-
50	GG35	FC35	FGL350	350	EN-GJL-350	FC35	FGG35	FG35	HT350	0135-00	Vch35	OV35	Z135	FC350	422435	GG35	T350	350	FG350	GG35	FGG35
Class50B		FC350	Ft35	350/22	EN-JL1060	G35				O135			Z1350			GG350					

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]

Physical properties :

- T - Test temperature , [Grade]
- E - Young modulus , [MPa]
- α - Coefficient of linear expansion (range 20° - T) , [1/Grade]
- λ - Thermal (heat) condition coefficient , [Watt/(m·Grade)]
- ρ - Density , [kg/m³]
- C - Specific heat (range 20° - T) , [J/(kg·Grade)]
- R - Electrical resistance , [Ohm·m]

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

