

Database of Steel and Alloy (Marochnik)

splat.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 SCH25 (C425).

Grade :	SCH25 (C425)
Classification :	Grey cast iron
Equivalent grades:	Go here

Chemical composition in % for grade SCH25 (C425)

C	Si	Mn	S	P
3.2 - 3.4	1.4 - 2.2	0.7 - 1	max 0.15	max 0.2

Mechanical properties under T=20°C for grade SCH25 (C425)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Casting, GOST 1412-85			250					

Brinell hardness for SCH25 (C425) , GOST 1412-85

HB 10 ¹ = 156 - 260 MPa

Technological properties of the material SCH25 (C425) .

Linear shrinkage :	1.2 %
--------------------	-------

Physical properties for grade SCH25 (C425)

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		50	7200		
100		10			500	

Equivalent steels for grade SCH25 (C425)

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	Taiwan	Luxemb
-	DIN, WNr	JIS	AFNOR	BS	EN	UNI	NBN	UNE	GB	SS	BDS	MSZ	PN	STAS	CSN	ONORM	AS	ISO	IS	NEN	-	-
A48-40B	GG25	FC25	FGL250	250	EN-GJL-250	G25	FGG25	FG25	HT250	0125-00	Vch25	OV25	Z125	FC250	422425	GG25	T260	250	FG260	GG25	FC250	FGG2
C1.35B No.35		FC250		260	EN-JL1040					O125			Z1250			GG250						

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 than 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

