

Database of Steel and Alloy (Marochnik)

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Characteristics for grade SCH10 (C410).

Grade :	SCH10 (C410)
Classification :	Grey cast iron
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Chemical composition in % for grade SCH10 (C410)

C	Si	Mn	S	P
3.5 - 3.7	2.2 - 2.6	0.5 - 0.8	max 0.15	max 0.3

Mechanical properties under T=20°C for grade SCH10 (C410)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ/m ²	-
Casting, GOST 1412-85			100					

Brinell hardness for SCH10 (C410) , GOST 1412-85

HB 10⁻¹ = 120 - 205 MPa

Technological properties of the material SCH10 (C410) .

Linear shrinkage :	1 %
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Physical properties for grade SCH10 (C410)

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	0.9		60	6800		
100		8			460	

Equivalent steels for grade SCH10 (C410)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan	France	England	Italy	Belgium	Spain	China	Sweden	Poland	Czechia	Austria	Inter	Taiwan	COPANT
-	DIN, WNr	JIS	AFNOR	BS	UNI	NBN	UNE	GB	SS	PN	CSN	ONORM	ISO	-	COPANT
A48-20B	GG10	FC10	Ft10	100	G10	FGG10	FG10	HT100	0110-00	Z100	422410	GG100	100	FC100	FG100
Class20B No.20		FC100	Ft10D						O110						

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]

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/m ³]
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

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