

Database of Steel and Alloy (Marochnik)

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Characteristics for grade SCH20 (C420).

Grade :	SCH20 (C420)
Classification :	Grey cast iron
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Chemical composition in % for grade SCH20 (C420)

C	Si	Mn	S	P
3.3 - 3.5	1.4 - 2.4	0.7 - 1	max 0.15	max 0.2

Mechanical properties under T=20°C for grade SCH20 (C420)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Casting, GOST 1412-85			200					

Brinell hardness for SCH20 (C420) , GOST 1412-85

HB 10 ¹ = 143 - 255 MPa

Technological properties of the material SCH20 (C420) .

Linear shrinkage :	1.2 %
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Physical properties for grade SCH20 (C420)

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		54	7100		
100		9.5			480	

Equivalent steels for grade SCH20 (C420)

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	Luxem
-	DIN, WNr	JIS	AFNOR	BS	EN	UNI	NBN	UNE	GB	SS	BDS	MSZ	PN	STAS	CSN	ONORM	AS	ISO	IS	NEN	-	-
A48-30B Class 30B No.30	GG20	FC20	FGL200 Ft20 Ft20D	200 220	EN-GJL-200 EN-JL1030 FG20	G20	FGG20	FG20	HT200	0120-00 O120	Vch20	OV20	Z120 Zl200	FC200	422420	GG20 GG200	T220	200	FG200	GG20	FC200	FGC

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, carbene steel, structural steel, tool steel, cast iron, aluminum alloy, titanium alloy, copper alloy, nickel alloy, magnesium alloy and others).
 Helpful for specialists in grade technology, structural engineer, mechanical engineer, metallurgy and metal trader

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