

Database of Steel and Alloy (Marochnik)

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Characteristics for grade VCH50 (B450).

Grade :	VCH50 (B450)
Classification :	Cast iron with spheroidal graphite
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Chemical composition in % for grade VCH50 (B450)

C	Si	Mn	S	P	Cr
2.7 - 3.7	0.8 - 2.9	0.3 - 0.7	max 0.02	max 0.1	max 0.15

Mechanical properties under T=20°C for grade VCH50 (B450)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Casting, GOST 7293-85			500	320	7			

Brinell hardness for VCH50 (B450) , GOST 7293-85

HB 10 ¹ = 153 - 245 MPa

Equivalent steels for grade VCH50 (B450)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan	France	England	European	Italy	Belgium	Spain	China	Sweden	Bulgaria	Hungary	Poland	Czechia	Finland	Austria	Australia	Inter	India	Holland	Luxembc
-	DIN, VNr	JIS	AFNOR	BS	EN	UNI	NBN	UNE	GB	SS	BDS	MSZ	PN	CSN	SFS	ONORM	AS	ISO	IS	NEN	-
65-45-12-70-50-05	GGG50	FCD500	FGS500-7	500/7	EN-GJS-500-7 EN-JS1050 GJS500-7	GS500-7	FNG50-7	FGE50-7	QT500-7	0727-02	500-2	GoV50	ZS5002 Zs5007	422305	GRP500	GGG500 SG50	500-7	500-7	SG500/7	GN50	FNG50

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]

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

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