

Database of Steel and Alloy (Marochnik)

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Characteristics for grade KCH33-8 (K433-8).

Grade :	KCH33-8 (K433-8)
Classification :	Malleable cast iron
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Chemical composition in % for grade KCH33-8 (K433-8)

C	Si	Mn	S	P	Cr	-
2.5 - 2.9	1 - 1.6	0.4 - 0.6	max 0.2	max 0.18	max 0.08	C+Si = 3.7 - 4.2

Mechanical properties under T=20°C for grade KCH33-8 (K433-8)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Casting, GOST 1215-79			323		8			

Brinell hardness for KCH33-8 (K433-8) , GOST 1215-79

HB 10⁻¹ = 100 - 163 MPa

Physical properties for grade KCH33-8 (K433-8)

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	1.6					

Equivalent steels for grade KCH33-8 (K433-8)

Warning! Indicated both exact and nearest equivalents.

Japan	France	England	Italy	Sweden	Poland	Czechia
JIS	AFNOR	BS	UNI	SS	PN	CSN
FCMB310	MN32-8	B310/10	B32-12	0815-00	Zcc32000	422532

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

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