

Database of Steel and Alloy (Marochnik)

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Characteristics for grade KCH35-10 (K435-10).

Grade :	KCH35-10 (K435-10)
Classification :	Malleable cast iron
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Chemical composition in % for grade KCH35-10 (K435-10)

C	Si	Mn	S	P	Cr	-
2.5 - 2.8	1.1 - 1.3	0.3 - 0.6	max 0.2	max 0.12	max 0.06	C+Si = 3.6 - 4

Mechanical properties under T=20°C for grade KCH35-10 (K435-10)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Casting, GOST 1215-79			333		10			

Brinell hardness for KCH35-10 (K435-10) , GOST 1215-79

HB 10⁻¹ = 100 - 163 MPa

Physical properties for grade KCH35-10 (K435-10)

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	1.66					

Equivalent steels for grade KCH35-10 (K435-10)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan	France	England	Italy	Sweden	Poland	Czechia	Austria
-	DIN, WNr	JIS	AFNOR	BS	UNI	SS	PN	CSN	ONORM
32510	GTS35-10	FCMB35	MM35-10	B35-12	B35-10	0815-00	Zcc35010	422533	GTS-350

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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