

Database of Steel and Alloy (Marochnik)

splat.kharkov.com/en

[Home](#) [European steel grades](#) [Steel and Alloy](#) [Search](#) [Equivalent grades](#) [Grading](#) [GOST Standard](#) [Contacts](#)

YOU HERE: [Steel and Alloy](#) -> [Precision alloy](#)

Characteristics for grade KH23YU5T (X23Ю5Т).

Grade :	KH23YU5T (X23Ю5Т)
Classification :	Precision alloy with higt electric resistance
Equivalent grades:	Is absent

Chemical composition in % for grade KH23YU5T (X23Ю5Т)

C	Si	Mn	Ni	S	P	Cr	Ce	Ti	Al	Ca	-
max 0.05	max 0.5	max 0.3	max 0.6	max 0.015	max 0.03	22 - 24	max 0.1	0.2 - 0.5	5 - 5.8	max 0.1	Ca, Ce расчет

Mechanical properties under T=20°C for grade KH23YU5T (X23Ю5Т)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Band, GOST 12766.2-90			765		12			

Brinell hardness for KH23YU5T (X23Ю5Т) , Bar GOST 12766.1-90	HB 10 ⁻¹ = 200 - 250 MPa
--	-------------------------------------

Technological properties of the material KH23YU5T (X23Ю5Т) .

Melting temperature :	1500 °C
-----------------------	---------

Physical properties for grade KH23YU5T (X23Ю5Т)

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				7210		1390
100		15			480	

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, carbon 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

[Top](#)

© 2003 - 2013 All rights reserved. [About program.](#)

The entire risk as to use of the Database of Steel and Alloy (Marochnik) content is assumed by you the user

