

Database of Steel and Alloy (Marochnik)

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Characteristics for grade 36NKHTYU5M (36HXTIO5M).

Grade :	36NKHTYU5M (36HXTIO5M)
Classification :	Precision alloy for elastic elements
Equivalent grades:	Is absent

Chemical composition in % for grade 36NKHTYU5M (36HXTIO5M)

Fe	C	Si	Mn	Ni	S	P	Cr	Mo	Ti	Al
37.01 - 43.7	max 0.05	0.3 - 0.7	0.8 - 1.2	35 - 37	max 0.02	max 0.02	12.5 - 13.5	4 - 6	2.7 - 3.2	1 - 1.3

Mechanical properties under T=20°C for grade 36NKHTYU5M (36HXTIO5M)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Bar, GOST 14119-85			1030	635	10	20	290	Hardening and ageing
Wire, GOST 10994-74			1375-1765					
Band cold-worked, GOST 14117-85			1100		1			
Band, GOST 14117-85			880-930		15-20			Guenching

Brinell hardness for 36NKHTYU5M (36HXTIO5M) ,	HB 10⁻¹ = 400 - 420 MPa
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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, carbon 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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