

Database of Steel and Alloy (Marochnik)

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

YOU HERE: [Steel and Alloy](#) -> [Tool steel](#)

Characteristics for grade 75KHSMF (75XCMΦ).

Grade :	75KHSMF (75XCMΦ)
Substitute:	9X1
Classification :	Tool steel for roller
Equivalent grades:	Is absent

Chemical composition in % for grade 75KHSMF (75XCMΦ)

C	Si	Mn	Ni	S	P	Cr	Mo	V
0.72 - 0.8	0.8 - 1.2	max 0.3	max 0.5	max 0.03	max 0.03	1.2 - 1.5	0.2 - 0.3	0.1 - 0.2

Temperature of critical points for grade 75KHSMF (75XCMΦ).

$Ac_1 = 775$, $Ac_3(Ac_m) = 815$, $Ar_3(Arc_m) = 745$, $Ar_1 = 717$, $Mn = 300$

Mechanical properties under T=20°C for grade 75KHSMF (75XCMΦ)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Forging	max thickness 235		750	420	24	45	570	Annealing 850°C, 15h, Drawing 740°C, 10h,

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

[Top](#)

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