

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 4KHMFS (4XMΦC).

Grade :	4KHMFS (4XMΦC) (40XCMΦ)
Classification :	Die tool steel
Equivalent grades:	Go here

Chemical composition in % for grade 4KHMFS (4XMΦC)

C	Si	Mn	Ni	S	P	Cr	Mo	V	Cu
0.37 - 0.45	0.5 - 0.8	0.5 - 0.8	max 0.4	max 0.03	max 0.03	1.5 - 1.8	0.9 - 1.2	0.3 - 0.5	max 0.3

Temperature of critical points for grade 4KHMFS (4XMΦC).

$A_{c1} = 760$, $A_{c3}(A_{cm}) = 805$, $A_{r3}(A_{rcm}) = 710$, $A_{r1} = 630$, $Mn = 280$

Mechanical properties under T=20°C for grade 4KHMFS (4XMΦC)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Die	to 500		1450	1280	7	20	200	Guenching 950°C, oil, Drawing 550°C,

Brinell hardness for 4KHMFS (4XMΦC) (heat treatment) , GOST 5950-2000

HB 10⁻¹ = 241 MPa

Equivalent steels for grade 4KHMFS (4XMΦC)

Warning! Indicated both exact and nearest equivalents.

Germany	France	Austria
DIN, WNr	AFNOR	ONORM
48CrMoV6-7	45CrMoV6	BOHLERW326

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, 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

[Top](#)

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