

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](#) -> [Structural steel](#)

Characteristics for grade 30KH3MF (30X3MΦ).

Grade :	30KH3MF (30X3MΦ)
Classification :	Alloy structural steel
Equivalent grades:	Go here

Chemical composition in % for grade 30KH3MF (30X3MΦ)

C	Si	Mn	Ni	S	P	Cr	Mo	V	Cu
0.27 - 0.34	0.17 - 0.37	0.3 - 0.6	max 0.3	max 0.035	max 0.035	2.3 - 2.7	0.2 - 0.3	0.06 - 0.12	max 0.3

Mechanical properties under T=20°C for grade 30KH3MF (30X3MΦ)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Bar, GOST 4543-71	Ø 25		980	835	12	55	980	Guenching 870°C, oil, Drawing 620°C, water,

Brinell hardness for 30KH3MF (30X3MΦ) (annealing), GOST 4543-71	HB 10⁻¹ = 229 MPa
--	-------------------------------------

Technological properties for grade 30KH3MF (30X3MΦ)

Flakes :	predisposed
Temper brittleness:	predisposed

Equivalent steels for grade 30KH3MF (30X3MΦ)

Warning! Indicated both exact and nearest equivalents.

Germany	European	Italy	Bulgaria	Poland	Czechia	Austria
DIN, WNr	EN	UNI	BDS	PN	CSN	ONORM
1.7707 1.8519 30CrMoV9 31CrMoV9 31CrMoV9V	1.7707 30CrMoV9	31CrMoV10	30Ch3MF	30H2MF	15330	BOHLERV350

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 / m ²]
HB	- Brinell hardness , [MPa]

Weldability :

without limitations	- welding is done without heating and subsequent heat treating
limited weldability	- welding is possible under heating up to 100-120 grade and subsequent heat treating
hard weldability	- obtaining the quality welding needs the additional operations: heating up to 200-300 grade; the heat treating is annealing

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

