

Database of Steel and Alloy (Marochnik)

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Characteristics for grade R10F5K5 (P10Φ5K5).

Grade :	R10F5K5 (P10Φ5K5)
Classification :	High speed tool steel
Equivalent grades:	Is absent

Chemical composition in % for grade R10F5K5 (P10Φ5K5)

C	Si	Mn	Ni	S	P	Cr	Mo	W	V	Co
1.45 - 1.55	max 0.5	max 0.4	max 0.4	max 0.03	max 0.03	4 - 4.6	max 1	10 - 11.5	4.3 - 5.1	5 - 6

Temperature of critical points for grade R10F5K5 (P10Φ5K5).

$Ac_1 = 825$, $Ac_3(Ac_m) = 850$, $Ar_1 = 740$

Brinell hardness for R10F5K5 (P10Φ5K5) (annealing) ,

HB 10 ⁻¹ = 285 MPa

Physical properties for grade R10F5K5 (P10Φ5K5)

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				8300		

Specification :

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).
Helpfull for specialists in grade technology, structural engineer, mechanical engineer, metallurgy and metal trader

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