

1.4116

	%C	%Si	%Mn	%P	%S	%Cr	%Mo	%V
X50CrMoV15	0.45	-	-	-	-	14.0	0.50	0.10
	0.55	1.00	≤1.00	≤0.040	≤0.030	15.0	0.80	0.20

STEEL PROPERTIES

1.4116 steel is a high carbon martensitic stainless steel with excellent corrosion and wear resistance properties. The hardness of 1.4116 stainless steel is 54-57 HRC as per the Rockwell hardness scale. The low hardness level is associated with the low amounts of Carbon, Vanadium, and Molybdenum in its composition.

EQUIVALENT GRADES

EN 10088-3	1.4037	X65Cr13
AISI	420MoV	
UNS	420MoV	

APPLICATIONS

1.4116 is used in Steel rod, bars and steel wire for cold heading and cold extrusion

HEAT TREATMENT

1.4116 is offered in soft annealed solution.

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Mechanical properties at room temperature for 1.4116 as per EN 10088-1 in the usual delivery condition

Flat products with thickness a	Heat Treatment Condition	Hardness HB max.	0.2% Proof strength MPa. min.	Tensile Strength R _m MPa.	A % Min. Long Products
-	A+	280	-	Max 900	-

Physical properties of 1.4116 as per EN 10088-3

Density Kg/cm ³	Linear Expansion Coefficient 10 ⁻⁶ k ⁻¹ Between 20°C and (°C)					Thermal conductivity W/(m.K)	Specific Heat capacity kJ(kg.K)	Electrical resistivity Ωmm ² /m At 20°C	Magnetizability
	100°C	200°C	300°C	400°C	-				
7.7	10.5	11.0	11.0	11.5	-	30	-	0.65	yes