

1.4571

	%C	%Si	%Mn	%P	%S	%Cr	%Ni	%Mo	%Ti
X6CrNiMoTi17-12-2						16.5	10.50	2.00	5 X C
	≤0.08	1.00	2.00	0.045	0.030	18.5	13.50	2.50	0.70

STEEL PROPERTIES

1.4571/AISI 316 Ti is an austenitic chromium-nickel-stainless steel, stabilized with Titanium. Good corrosion resistance to low content of hydrochloric and organic acids.

EQUIVALENT GRADES

EN 10088-1	1.4571	X6CrNiMoTi17-12-2
AISI	316Ti	
AFNOR	Z6CNDT17-12	
BS	320S17	
JIS	SUS316TiTP	
UNS	S31635	

APPLICATIONS

Initially developed to be used in paper mills 316 stainless-steel is now typically utilized in the: Food processing equipment, Brewery equipment, Chemical and petrochemical equipment, Laboratory benches & equipment, Coastal architectural panelling, Coastal balustrading, Boat fittings, Chemical transportation containers, Heat exchangers, Mining screens, Nuts and bolts, Springs, Medical implants etc.

HEAT TREATMENT

Solution annealing.

1.4571

Mechanical properties at room temperature for 1.4571 as per EN 10088-3 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
<160	+AT	215	200	500-700	40

Physical properties of 1.4571 as per EN 10088-1

Density Kg/dm 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
	200°C	400°C	20°C	100°C	300°C	20°C	500°C			
8.0	17.5	18.5	-	16.5	18.0	15	19.0	500	0.75	No