

1.4541

	%C	%Si	%Mn	%P	%S	%Cr	%Ni	%Ti
X6CrNiTi18-10	-	-	-	-	-	17.0	9.00	5 X C
	0.08	≤1.00	≤2.00	≤0.045	≤0.030	19.0	12.00	0.70

STEEL PROPERTIES

1.4541/AISI321 is an austenitic chromium-Nickel-Stainless steel, stabilized with titanium. Good Corrosion resistance to low content of hydrochloric & organic acids.

EQUIVALENT GRADES

EN 10088-3	1.4541	X6CrNiTi18-10
AISI	321	
AFNOR	Z6CNT18-10	
BS	321S12	
JIS	SUS321	
UNS	S32100	

APPLICATIONS

Chemical plants, refineries, petrochemical plants, bleaching tanks for the paper industry, flue gas desulfurization plants, applications in seawater, sulfuric and phosphoric acids.

HEAT TREATMENT

Solution annealing.

1.4541

Mechanical properties at room temperature for 1.4541 as per EN 10088-3 in the usual delivery condition

Flat products with thickness <i>a</i>	Heat Treatment Condition	Hardness HB max.	0.2% Proof strength MPa. min.	Tensile Strength R _m MPa.	A % Min. Long Products
<160	+AT	215	190	500-700	40

Physical properties of 1.4541 as per EN 10095

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			
7.9	16.5	17.5	-	16.0	17.0	15	18.0	500	0.73	No