



1.4541

Description -1.4541 / AISI 321 is an austenitic chromium-nickel-stainless steel, stabilized with titanium.

Special properties - Good corrosion resistance to low content of hydrochloric and organic acids.

Suitable welding filler materials - 1.4316, 1.4551, 1.4576.

Application - Foodstuff industry.

Chemical Composition in %

C	Si	Mn	Cr	Ni	Ti	Fe
≤0.08	≤1.00	≤2.00	17.0-19.0	9.0-12.0	≤5 x C	Rest

Standards

Material No.	1.4541
EN Designation	X6CrNiTi18-10
AISI/SAE	321
UNS	S32100

Mechanical Properties 20 °C

Hardness HB 30	≤215
0,2% Yield strength Rp, N/mm ²	≥190
Tensile strength Rm, N/mm ²	500-700
Elongation A5, %	≥40/30
Modulus of elasticity, kN/mm ²	200

Physical Properties 20 °C

Density, g/cm ³	7.9
Specific heat capacity, J/kg K	500
Thermal conductivity, W/m K	15
Electrical resistivity, Ω mm ² /m	0.73