

## Chemical Composition

C ≤%	Si ≤%	Mn ≤%	P ≤%	S ≤%
0.08	1.00	2.00	0.045	0.015
Cr %	Ni %	Ti ≤%		
17.0-19.0	9.00-12.0	5xC		

## 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.

## Steel Grade

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

## Mechanical Properties 20 C

Hardness HB 30 ≤ HB	0.2% Yield strength R <sub>p</sub> ≥ N/mm <sup>2</sup>	Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Elongation A <sub>5</sub> ≥ %	Modulus of elasticity kN/mm <sup>2</sup>
215	190	500-700	40/30	200

## Physical Properties 20°C

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

## Suitable Welding Filler Materials

1.4316 / 1.4551/1.4576

## Application

Foodstuff industry

## Available Forms for AISI321

Sheets/Coils	Bars	Tubes / Pipes	Wires	Fittings	Forged / cast parts	Finished part (drawing)
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