

321 / 347

Stainless Steel | UNS: S32100 / S34700 | EN: 1.4541 / 1.4550

Titanium and niobium stabilised austenitic grades. The stabilising addition ties up carbon so the steel resists intergranular corrosion after prolonged exposure in the 425-815 C sensitisation range.

Available Forms & Sizes

Form	Size Range
Plates	1.5 - 100 mm thk, up to 2500 mm wide
Seamless Pipes & Tubes	1/2" - 24" NB, SCH 5S - SCH 160
Round Bars	6 - 500 mm dia
Flanges	1/2" - 48", 150# - 2500#
Fittings	1/2" - 48", SCH 10S - SCH 160

Chemical Composition (%)

Element	Min	Max
C	-	0.08
Cr	17.0	19.0
Ni	9.0	12.0
Ti / Nb	5xC	-

Mechanical Properties

Property	Value	Unit
Yield Strength (0.2%)	205 min	MPa
Tensile Strength	515 min	MPa
Elongation	40 min	%

Physical Properties

Property	Value	Unit
Density	7.92	g/cm3
Max Service Temperature	900	C

Standards

ASTM A240, ASTM A312, EN 10088-2

Equivalent Grades

1.4541, 1.4550, SUS321, SUS347



Typical Applications

- Expansion joints and bellows
- Refinery heat exchangers
- Exhaust manifolds
- High temperature ducting

Industries Served

Refining, Power Generation, Petrochemical