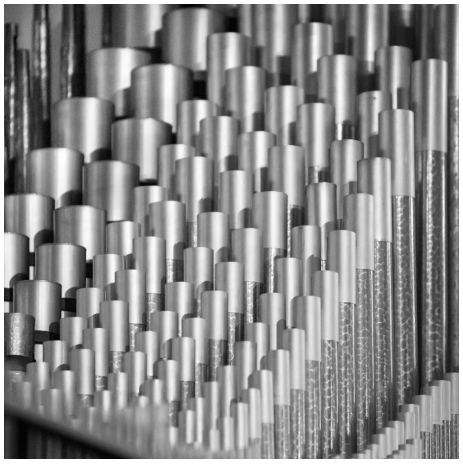
STAINLESS STEEL Advanced Materials. Engineered for Performance.

316Ti Stainless Steel



Stainless Steel | UNS: S31635 | EN: 1.4571 / X6CrNiMoTi17-12-2 | JIS: SUS316Ti

Titanium-stabilised 316. The titanium ties up carbon so the steel keeps its intergranular corrosion resistance after long exposure in the 425 - 815 C sensitisation range, and it holds higher creep strength than 316L in hot service.

Stock status: Mill indent - Typical lead time: 4 - 8 weeks mill indent

Key features

- Titanium stabilised against weld decay and sensitisation
- Higher creep strength than 316L above 500 C
- Molybdenum-bearing for chloride pitting resistance
- Supplied as plate, seamless pipe, tube and fittings

Available forms & sizes

Form	Size range
Plates	1.5 - 60 mm thk, up to 2500 mm wide
Seamless Pipes & Tubes	1/2" - 24" NB, SCH 5S - SCH 160
Seamless Pipes & Tubes	6 - 114 mm OD heat exchanger, boiler and finned tube
Round Bars	6 - 400 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	16.0	18.0
Ni	10.0	14.0
Mo	2.00	3.00
Ti	5xC	0.70

Mechanical properties

Property	Value	Unit
Yield Strength (0.2%)	205 min	MPa
Tensile Strength	515 min	MPa
Elongation	40 min	%
Hardness	217 max	HBW

Physical properties

Property	Value	Unit
Density	8.00	g/cm3
Max Service Temperature	900	C
PREN	25	-

Standards

ASTM A240, ASTM A312 / A213, ASTM A182, EN 10088-2, EN 10204 3.1

Equivalent grades

1.4571, X6CrNiMoTi17-12-2, SUS316Ti, 316Ti

Industries served

Petrochemical, Chemical Processing, Refining, Power Generation, Oil & Gas

Typical applications

- Expansion joints and bellows
- Refinery and petrochemical heat exchangers
- Hot process piping and ducting
- Chemical reactors operating in the sensitisation range

Live datasheet