STAINLESS STEEL Advanced Materials. Engineered for Performance.

317L Stainless Steel

Stainless Steel | UNS: S31703 | EN: 1.4438 / X2CrNiMo18-15-4 | JIS: SUS317L

A molybdenum-up step on 316L. Raising Mo to 3 - 4% lifts PREN to around 30, which buys real margin against pitting and crevice attack in pulp, scrubber and chloride service where 316L is borderline but duplex is more than the duty needs.



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

Key features

- 3 - 4% molybdenum for PREN around 30
- Low carbon for as-welded corrosion resistance
- Cost step between 316L and duplex for chloride service
- Available as heat exchanger, boiler and finned tube

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	-	0.030
Cr	18.0	20.0
Ni	11.0	15.0
Mo	3.00	4.00
Mn	-	2.00

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	870	C
PREN	30	-

Standards

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

Equivalent grades

1.4438, X2CrNiMo18-15-4, SUS317L, 317L

Industries served

Petrochemical, Chemical Processing, Power Generation, Desalination, Fertiliser

Typical applications

- Flue gas desulphurisation scrubbers
- Chemical and pulp bleaching plant
- Condenser and heat exchanger tubing
- Seawater-cooled process equipment

Live datasheet