



Stainless Steel 317/317L

Henan Sheng He Pipe Industry Co., Ltd., have an experience spanning for over ten years, producing and supplying best-in-class products, minimize cost by getting manufacturing processes under one roof and delivering consignments on a daily basis only because of a diligent and dedicated team. We are manufacturers, suppliers and exporters of Stainless Steel 317/317L material.

UNS - S31700 / S31703

Type 317 317 is an austenitic chromium-nickel stainless steel with phenomenal corrosion resistance; its high Molybdenum content improves the grade's superior pitting resistance.

It is the most corrosion resistant of the 300 series alloys and possesses the highest tensile and creep strength properties at high temperatures.

Type 317L is a low carbon austenitic chromium-nickel stainless steel that can be utilized in applications where it is not possible to anneal after welding and where maximum corrosion resistance is needed. It gives good oxidation resistance in intermittent service to 1600°F and in continuous service to 1700°F.

Characteristics

- Improved general and localized corrosion to 316L stainless
- Good formability
- Good weldability

Applications

- Air Pollution Control — flue gas desulfurization systems (FGD)
- Chemical and Petrochemical Processing
- Explosives
- Food and Beverage Processing
- Petroleum Refining
- Power Generation — condensers
- Pulp and Paper



Sheng He Pipe Industry offers Stainless Steel 317/317L in a variety of forms, including:

- Pipe & Welded pipe
- Pipe fittings
- Seamless tube & Welded tube
- Flanges
- Bar
- Sheet
- Wire
- Plate
- Forgings
- Weld Rod

ASTM Specifications

Pipe / Tube (SMLS)	Sheet / Plate	Bar	Forging	Fitting
A 213, A 249	A 167, A 240	A 276	A 182	A403

Chemical Composition %

Grade	C	N	Si	P	S	Cr	Mn	Ni	Mo	Fe
317	0.08 max	0.1 max	0.75 max	0.045 max	0.03 max	18.0 - 20.0	2.0 max	11.0 - 15.0	3.0 - 4.0	Remainder
317L	0.03 max	0.1 max	0.75 max	0.045 max	0.03 max	18.0 - 20.0	2.0 max	11.0 - 15.0	3.0 - 4.0	Remainder

Mechanical Properties

Grade	Tensile Strength (ksi)	0.2% Yield Strength (ksi)	Elongation% in 2 inches
317	75	30	35
317L	75	30	40



Physical Properties

	317	317L	Temperature in °C
Density	7.99 g/cm ³	7.99 g/cm ³	Room
Specific Heat	0.12 Kcal/kg.C	0.12 Kcal/kg.C	22°
Melting Range	1371 - 1421 °C	1371 - 1421 °C	-
Modulus of Elasticity	193 KN/mm ²	193 KN/mm ²	20°
Electrical Resistivity	74 µΩ.cm	79 µΩ.cm	Room
Coefficient of Expansion	16.0 µm/m °C	16.0 µm/m °C	20 - 100°
Thermal Conductivity	16.2 W/m -°K	16.2 W/m -°K	20°