



Stainless Steel 347/347H

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 347/347H material.

UNS - S34700 / S34709

SS 347 is a balanced, austenitic, chromium steel containing columbium which takes into consideration the end of carbide precipitation, and thus intergranular corrosion.

SS 347 is balanced out by the increases of chromium and tantalum and offers higher creep and stress rupture properties than SS 304 and 304L, which may also be utilized for exposures where sensitization and intergranular corrosion are of concern. The expansion of columbium likewise permits SS 347 to have outstanding corrosion resistance, better than that of SS 321. SS 347H is the higher carbon composition form of SS 347 and display enhanced high temperature and creep properties.

Characteristics

- Higher creep stress and rupture properties when compared with 304
- Ideal for high temperature service
- Overcomes sensitization and intergranular corrosion concerns
- Can be used in elevated temperature applications
- Due to stabilisation the material offers better overall corrosion resistance when compared to 304/304L

Applications

- Chemical Processing
- Food Processing equipment and storage
- Petroleum Refining fluid catalytic cracking units, polythionic acid service
- Pharmaceutical Production
- Waste Heat Recovery recuperators



Sheng He Pipe Industry offers Stainless Steel 347/347H 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	Fittings
A 213	A 240, A 666	A 276	A 182	A 403

Chemical Composition %

Grade	C	Si	P	S	Cr	Mn	Ni	Fe	Cb (Nb+Ta)
347	0.08 max	0.75 max	0.045 max	0.03 max	17.0 - 19.0	2.0 max	9.0-13.0	Remainder	10x (C + N)- 1.0
347H	0.04- 0.10	0.75 max	0.045 max	0.03 max	17.0 - 19.0	2.0 max	9.0-13.0	Remainder	8x (C + N)- 1.0

Mechanical Properties

Tensile Strength (ksi)	0.2% Yield Strength (ksi)	Elongation% in 2 inches
75	30	40



Physical Properties

	Units	Temperature in °C
Density	7.97 g/cm ³	Room
Specific Heat	0.12 Kcal/kg.C	22°
Melting Range	1398 - 1446 °C	-
Modulus of Elasticity	193 KN/mm ²	20°
Electrical Resistivity	72 $\mu\Omega\cdot\text{cm}$	Room
Coefficient of Expansion	16.0 $\mu\text{m}/\text{m } ^\circ\text{C}$	20 - 100°
Thermal Conductivity	16.3 W/m $^{-\circ}\text{K}$	20°