



Stainless Steel 17-4PH

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 17-4PH material.

UNS - S17400

S.S.17-4 PH is one of the most common grades of martensitic, precipitation hardenable (PH) alloys. 17-4 gives a remarkable combination of high strength, very good mechanical properties at temperatures up to 600°F (316°C), and short-duration, low-temperature heat treatments which minimize warpage and scaling.

Its good corrosion resistance, formability as well as weldability make it perfect for a different variety of applications in aerospace, petrochemical, and other structural applications. In the annealed condition Stainless Steel 17-4 PH keeps up high mechanical properties, making some forming operations difficult.

Characteristics

- High strength and hardness
- Good corrosion resistance
- Magnetic
- Easily welded

Applications

- Aerospace structural and parts
- Biomedical hand tools
- Chemical Processing
- Food Process Equipment
- Gate Valves
- Mechanical Components
- Nuclear Waste Processing and Storage
- Oil and Gas Production foils, helicopter deck platforms, etc.
- Pulp and Paper mill equipment



Sheng He Pipe Industry offers Stainless Steel 17-4PH 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

Sheet / Plate	Forging
A 693	A 705

Chemical Composition %

C	Si	P	S	Cr	Mn	Ni	Cu	Fe	Cb (Nb+Ta)
0.07 max	1.0 max	0.04 max	0.03 max	15.0 - 17.5	1.0 max	3.0 - 5.0	3.0 - 5.0	Remainder	0.15 - 0.45

Mechanical Properties

Tensile Strength (ksi)	0.2% Yield Strength (ksi)	Elongation% in 2 inches
160	145	15



Physical Properties

	Units	Temperature in °C
Density	7.8 g/cm ³	Room
Specific Heat	0.11 Kcal/kg.C	22°
Melting Point	1400 - 1440 °C	-
Modulus of Elasticity	200 KN/mm ²	20°
Electrical Resistivity	98 μΩ.cm	Room
Coefficient of Expansion	10.8 μm/m °C	20 - 100°
Thermal Conductivity	17.9 W/m -°K	149°