STAINLESS STEEL

UNS S17400 - 17-4PH



UNS S17400 - 17-4PH

UNS S17400, commonly known as 17-4PH (Precipitation Hardening) stainless steel renowned for its unique combination of strength, hardness and corrosion resistance. The mechanical properties of 17-4 PH stainless steel can vary significantly depending on the heat treatment condition. The alloy can be heat-treated to different conditions such as Condition A (solutiontreated), H900, H1025, H1075, H1150 and others.

KEY FEATURES

- High strength and hardness
- Good corrosion resistance
- Precipitation hardening
- Machined using standard techniques
- Good weldability

CHEMICAL PROPERTIES

Chromium	Nickel	Copper	Manganese	Silicone	Carbon	Phosphorus	Niobium	Sulphur
(Cr)	(Ni)	(Cu)	(Mn)	(Si)	(C)	(P)	(Nb)	(S)
15-17.5%	3-5%	3-5%	1%	1%	0.07%	0.04%	0.15-0.45%	0.03%

MECHANICAL PROPERTIES

Tensile strength (N/mm ²)	1030-1400
Yield strength (N/mm ²)	965-1310
Elongation (% in 4D)	10-16
Hardness - Rockwell C (HRC) max	30-45
Hardness - Brinell (HB) max	311-388

PHYSICAL PROPERTIES

Density (kg/m ³)		7780
Modulus of elasticity (Gp	oa)	200
Manage of Circle and a C	0-100°C (µm/m/°C)	10.8
Mean coefficient of	0-350°C (µm/m/°C)	11.3
thermal expansion	0-538°C (µm/m/°C)	12.1
Thermal	at 100°C (W/m.K)	15.5
conductivity	at 500°C (W/m.K)	18.0
Specific Heat 0-100°C (J	/kg.K)	460
Electrical resistivity (nΩ.	793	
Melting point (°C)		1420

MARKET SECTORS







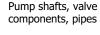
Processing equipment, parts, containers



Tooling, dies, components in gears, shafts, bearings



Fasteners, drive shafts, suspension components





Valve components, drilling equipment



Landing gear, structural parts, missile components

Contact us: sales@ppnonferrous.co.uk

Visit our website: www.ppnonferrous.co.uk

