



## INCONEL 600

### Description

A nickel-chromium alloy used in chemical and food processing, nuclear engineering, sparking electrodes, and furnace components. Inconel 600 is created with a resistance to chloride-ion stress-corrosion cracking, caustic corrosion, corrosion by high-purity water, and good oxidation resistance at high temperatures.

### Forms Available

- Pipe
- Fittings
- Flanges
- Plate
- Bar
- Forging

### Specifications

UNS N06600

Welded Pipe

Smls Pipe

Flanges

Fittings

Plate

Bar

ASTM/ASME 517

ASTM/ASME 167

ASTM/ASME 564

ASTM/ASME 366

ASTM/ASME 168

ASTM/ASME 166

### Limiting Chemical Composition, %

Ni...72.0 min.

Si....0.5 max.

Cr....14.0 – 17.0

S....0.015 max.

Fe....6.0 – 10.0

Cu.. 0.5 max.

Mn...1.0 max.

C.....0.15 max.

\*a denotes- Plus Co



## INCONEL 625

### Description

Used in aerospace and marine engineering, pollution-control equipment, chemical processing, and nuclear reactors, Inconel 625 is especially resistant to pitting and crevice corrosion. A nickel-chromium-molybdenum alloy with an addition of niobium that works with the molybdenum to stiffen the alloys matrix providing high strength without a strengthening heat treatment.

### Forms Available

- Pipe
- Fittings
- Flanges
- Plate
- Bar
- Forging

### Specifications

UNS N06625	
Welded Pipe	ASTM/ASME 705
Smls Pipe	ASTM/ASME 444
Flanges	ASTM/ASME 564
Fittings	ASTM/ASME 366
Plate	ASTM/ASME 424
Bar	ASTM/ASME 425

### Limiting Chemical Composition, %

Ni...58.0 min.	C....0.10 max.
Cr...20.0 – 23.0.	Mn...0.50 max.
Mo...8.0 – 10.0	Si...0.50 max.
Nb+Ta...3.15–4.15	S...0.015max.
Fe...5.0 max.	P ...0.015 max.
Ti...0.40 max.	Al...0.40 max.



## INCONEL 800

### Description

Nickel-iron-chromium alloys with higher creep-rupture strength. The close control of the aluminum, titanium, and carbon contents in conjunction with a high-temperature anneal result in the higher strength. Incoloy 800 is used in industrial furnaces, chemical and petrochemical processing, power plants for super-heater and re heater tubing, and heat-treating equipment.

### Forms Available

- Pipe
- Fittings
- Flanges
- Plate
- Bar
- Forging

### Specifications

UNS N08800

Welded Pipe

Smls Pipe

Flanges

Fittings

Plate

Bar

ASTM/ASME 514

ASTM/ASME 407

ASTM/ASME 564

ASTM/ASME 366

ASTM/ASME 409

ASTM/ASME 408

### Limiting Chemical Composition, %

Ni...30.0-32.0

Ti...0.20-0.50

Fe...41.0~47.0

Al+Ti...0.40-0.90

Cr...19.0-21.5

C.....0.10 max

Al...0.20-0.40



## INCONEL 825

### Description

Incoloy 825 has excellent resistance to both oxidizing and reducing acids, pitting and crevice corrosion, as well as stress-corrosion cracking. Incoloy 825 is a nickel-iron-chromium alloy with additions of molybdenum and copper used for oil and gas well piping, chemical processing, nuclear fuel reprocessing, acid production, pollution-control equipment, and pickling equipment.

### Forms Available

- Pipe
- Fittings
- Flanges
- Plate
- Bar
- Forging

### Specifications

UNS N08825	
Welded Pipe	ASTM/ASME 705
Smls Pipe	ASTM/ASME 444
Flanges	ASTM/ASME 564
Fittings	ASTM/ASME 366
Plate	ASTM/ASME 424
Bar	ASTM/ASME 425

### Limiting Chemical Composition, %

Ni...38.0-46.0	Ti...0.6-1.2	Al...0.02 max.
Fe...22.0min.	C...0.05max.	
Cr...19.5-23.5	Mn...1.0max.	
Mo...2.5-3.5	S...0.03 max.	
Cu...1.5-3.0	Si...0.5 max.	