

## INCONEL 600

Inconel 600 (UNS N06600 W.Nr. 2.4816) is a standard engineering material for applications which require resistance to corrosion and heat. The alloy also has excellent mechanical properties and presents the desirable combination of high strength and good workability. The versatility of Inconel 600 has led to its use in a variety of applications involving temperatures from cryogenic to above 2000°F (1095°C).

### Chemical Composition

Limiting Chemical Composition, % by Weight.

- Nickel (plus Cobalt).....72.0 min.
- Chromium.....14.0–17.0
- Iron .....6.00–10.00
- Carbon .....0.15 max.
- Manganese.....1.00max
- Sulfur.....0.015 max.
- Silicon.....0.50max.
- Copper.....0.50 max

### Physical Constants

- Density.....0.306lb/in<sup>3</sup>(8.47mg/m<sup>3</sup>)
- Melting Range.....2470–2575°F(1354–1413°C)
- Specific Heat.....0.106Btu/lb–°F(444J/kg–°C)
- Electrical Resistivity.....620ohm–circ mil/ft(1.03μΩ–m)
- Curie Temperature.....–192°F(–124°C)
- Permeability at 200 oersted (15.9 kA/m) .....1.010

### Specifications

Inconel® Alloy 600 is designated as UNS N06600 and Werkstoff Number 2.4816.

Available Product Forms: Pipe, tube, sheet, strip, plate, round bar, flat bar, forging stock, hexagon, wire and extruded.

### **Rod, Bar, Wire and Forging Stock**

- ASTM B166; ASME SB166; ASTM B564; ASME SB564
- AMS 5665; AMS 5687
- BS 3075NA14 and 3076NA14
- DIN 17752; DIN 17753 and DIN 17754
- ISO 9723, 9724 and 9725
- MIL-DTL-23229
- QQ-W-390.

### **Plate, Sheet and Strip**

- ASTM B168; ASME SB168; ASTM B906; ASME SB906
- ASME Code Cases 1827 and N-253
- AMS 5540
- BS 3072NA14 and 3073NA14
- DIN 17750
- ISO 6208
- EN 10095
- MIL-DTL-23228.

### **Pipe and Tube**

- ASTM B167; ASME SB167, ASTM B163; ASME SB163, ASTM B516; ASME SB516, ASTM B517; ASME SB517, ASTM B751; ASME SB751, ASTM B775; ASME SB775, ASTM B829; ASME SB829
- ASME Code Cases 1827, N-20, N-253, and N-576
- SAE/AMS 5580
- DIN 17751
- ISO 6207
- MIL-DTL-23227

### **Other**

- ASTM B366/ASME SB366
- DIN 17742
- ISO 4955A
- AFNOR NC15Fe