

INCONEL® nickel-chromium-iron alloy 601 (UNS N06601/W.Nr. 2.4851) is a general-purpose engineering material for applications that require resistance to heat and corrosion. An outstanding characteristic of INCONEL alloy 601 is its resistance to high temperature oxidation. The alloy also has good resistance to aqueous corrosion, has high mechanical strength, and is readily formed, machined and welded. The alloy's nickel base, in conjunction with substantial chromium content, provides resistance to many corrosive media and high temperature environments. Oxidation resistance is further enhanced by the aluminum content.

FEATURES

- High temperatures have excellent oxidation stability
- Very good Anti-carbonation
- Very good oxidation stability of sulfur atmosphere
- Very good mechanical properties at room temperature and high temperature
- Very good resistance to stress corrosion cracking due to control the carbon content and grain size, Inconel 601 has a high creep rupture strength, so in areas above 500°C Inconel 601 recommended

APPLICATIONS

- Thermal-processing equipment
- Baskets, trays, and fixtures for annealing, carburizing, carbonitriding, nitriding and other heat-treating operations, radiant tubes, muffles, retorts, flame shields, strand-annealing tubes, woven-wire conveyor belts, chain curtains, burner nozzles, and electrical resistance heating elements thermocouple protection tubes, furnace-atmosphere generators, and infrared radiant screens, ...

TECHNICAL INFORMATION

Chemistry

El. Químico		% Máx.
C	C Carbon	0,10
Mn	Manganese	1,00
S	Sulphur	0.015
Si	Silicon	0.50
Ni	Nickel	58,0-63,0
Cr	Chromium	21,0-25,0
Fe	Iron	Balance
Al	Aluminium	1,0-1,7

Mechanical properties according standards


Norm ASTM	Cond.	Rm min.	Rp 0,2% min.	E4d min.%	Conditions info
B-167		80 (550)	30 (205)	30	c= Hot rolled plate d= Hot rolled sheet e= Cold rolled sheet f=Cold rolled strip 1= Annealed
B-163		80 (552)	30 (207)	30	
B-516		80 (550)	35 (240)	30	
B-517		80 (550)	35 (240)	30	
B-168	c.1	80 (552)	30 (205)	30	
	d.1	80 (550)	30 (205)	30	
	e.1	80 (550)*	30 (205)	30*	
	f.1	80 (550)*	30 (205)	30*	
B-166		80 (550)	30 (205)	30	



ROUND BAR
Diam. 10 to 400 mm
ASTM B-166



DIN / ASA FLANGES
1/2" to 24" 150lbs - 3000lbs
ASTM B-166



SEAMLESS PIPE
1/2" to 8" SCH10 to SCH80S
ASTM B-167 / B-163



PLATE - LONG PRODUCT
Thickness 0.5 to 40 mm
ASTM B-168



WELDED PIPE
Diam. 10 to 400 mm
ASTM B-516 / B-517



BW, SW, High pressure FITTINGS
1/2" to 24" SCH10 to SCH80S
ASTM B-366

