



INCONEL[®] 601

Key Features

Outstanding resistance to oxidation & other forms of high temperature corrosion

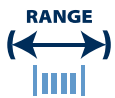
Higher mechanical properties at elevated temperatures than Inconel 600

**High temperature static applications

IMPORTANT

We will manufacture to your required mechanical properties.

key advantages to you, *our customer*



0.025mm to 21mm
(.001" to .827")



Order 3m to 3t
(10ft to 6000Lbs)



Delivery:
within 3 weeks



Wire to your spec



E.M.S available



Technical support

INCONEL[®] 601 available in:-

- Round wire
- Bars or lengths
- Flat wire
- Shaped wire
- Rope/Strand

Packaging

- Coils
- Spools
- Bars or lengths



INCONEL® 601



Chemical Composition			Specifications	Key Features	Typical Applications
Element	Min %	Max %	ASTM B166	Outstanding resistance to oxidation & other forms of high temperature corrosion Higher mechanical properties at elevated temperatures than Inconel 600 **High temperature static applications	Petrochemical - Processing Industrial Furnaces Gas Turbine - Components Heat Treating - Equipment
Ni	58.00	63.00			
Cr	21.00	25.00	Designations		
S	-	0.015	W.Nr. 2.4851 UNS N06601 AWS 011		
Mn	-	1.00			
Al	1.00	1.70			
C	-	0.10			
Cu	-	1.00			
Si	-	0.50			
Fe	BAL				

Density	8.11 g/cm ³	0.293 lb/in ³
Melting Point	1411 °C	2571 °F
Coefficient of Expansion	13.75 µm/m °C (20 – 100°C)	7.6 x 10 ⁻⁶ in/in °F (70 – 212 °F)
Modulus of Rigidity	81.2 kN/mm ²	11777 ksi
Modulus of Elasticity	206.5 kN/mm ²	29951 ksi

Heat Treatment of Finished Parts					
Condition as supplied by Alloy Wire	Type	Temperature		Time (Hr)	Cooling
		°C	°F		
Annealed or Spring Temper	Stress Relieve	480 – 870	900 – 1600	1	Air
Temperature depends on composition and amount of cold work					

Properties				
Condition	Approx. tensile strength		Approx. operating temperature depending on load** and environment	
	N/mm ²	ksi	°C	°F
Annealed	<900	<131	-200 to +1000	-330 to +1830
Spring Temper	1200 – 1450	174 – 210	-200 to +1000	-330 to +1830

The above tensile strength ranges are typical. If you require different please ask.

**Static applications = still/fixed/motionless/rigid