

## 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:-

We will manufacture to your required mechanical properties.

Round wire

**IMPORTANT** 

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

#### **Packaging**

- Coils
- Spools
- Bars or lengths

\*Trade name of Special Metals Group of Companies.



### Technical Datasheet AWS 011 Rev.1

# **INCONEL®** 601



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

Density	8.11 g/cm <sup>3</sup>	0.293 lb/in <sup>3</sup>	
Melting Point	1411 °C	2571 °F	
Coefficient of Expansion	13.75 μm/m °C (20 – 100°C) 7.6 x 10 <sup>-6</sup> in/in °F (70 – 212 °F)		
Modulus of Rigidity	81.2 kN/mm²	11777 ksi	
Modulus of Elasticity	206.5 kN/mm <sup>2</sup>	29951 ksi	

Heat Treatment of Finished Parts							
Condition or supplied by Alley Wive	Туре	Temperature		Ti (11-)	Caaling		
Condition as supplied by Alloy Wire		°C	°F	Time (Hr)	Cooling		
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/mm²	ksi	°C	°F			
Annealed	700 – 900	102 – 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.







