



## INCONEL<sup>®</sup> 601

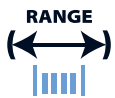
### Key Features

- 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<sup>®</sup> 601 available in:-

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

### Packaging

- Coils
- Spools
- Bars or lengths



\*Trade name of Special Metals Group of Companies.

# 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	<b>Designations</b>		
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				

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

☒ Static application = still/fixe/motionless/rigid