

## NICKEL<sup>®</sup> 201

### Key Features

Low-carbon version of Nickel 200

Preferred to Nickel 200 for applications involving exposure to temperatures above 315 °C (600 °F)

Resistant to various reducing chemicals & caustic alkalis

Good magnetostrictive properties

High electrical and thermal conductivity

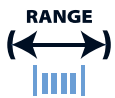
Good ductility and low work hardening rate

Good weldability and solderability

### 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  
(10 ft to 6000 Lbs)



Delivery:  
within 3 weeks



Wire to your spec



E.M.S available



Technical support

### NICKEL<sup>®</sup> 201 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.

Chemical Composition			Specifications	Key Features	Typical Applications
Element	Min %	Max %	ASTM B160 ASTM B162 BS 3076 NA12	Low-carbon version of Nickel 200  Preferred to Nickel 200 for applications involving exposure to temperatures above 315 °C (600 °F)	Electronic components  Electrical components  Lead in wires for heating elements
Ni	99.0	-			
Cu	-	0.25	<b>Designations</b>  W.Nr. 2.4061 W.Nr. 2.4068 UNS N02201 AWS 071	Resistant to various reducing chemicals & caustic alkalis  Good magnetostrictive properties  High electrical and thermal conductivity  Good ductility and low work hardening rate  Good weldability and solderability	Lead in wires for heating elements  Battery connections/terminals  Chemical processing  Aerospace components  Food processing  Synthetic fibre processing
Fe	-	0.40			
C	-	0.02			
Si	-	0.35			
Mn	-	0.35			
Mg	-	0.20			
Ti	-	0.10			
S	-	0.01			
Co	-	2.00			

<b>Density</b>	8.89 g/cm <sup>3</sup>	0.321 lb/in <sup>3</sup>
<b>Melting Point</b>	1446 °C	2635 °F
<b>Coefficient of Expansion</b>	13.1 µm/m °C (20 – 100 °C)	7.3 x 10 <sup>-6</sup> in/in °F (70 – 212 °F)
<b>Modulus of Rigidity</b>	82 kN/mm <sup>2</sup>	11893 ksi
<b>Modulus of Elasticity</b>	207 kN/mm <sup>2</sup>	30000 ksi

Electrical Resistivity	
8.5 µΩ · cm	51 ohm · circ mil/ft

Thermal Conductivity	
79.3 W/m · °C	550 btu · in/ft <sup>2</sup> · h · °F

Properties			
Condition	Approx. tensile strength		Approx. operating temperature
	N/mm <sup>2</sup>	ksi	
Annealed	400 – 500	58 – 73	Tensile strength and elongation drop significantly at temperatures above 315 °C (600 °F). Service temperature is dependent on environment, load and size range.
Hard Drawn	700 – 900	102 – 131	

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