

NICKEL® 200

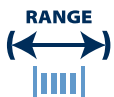
Key Features

- Commercially pure nickel
- 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® 200 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 3075 NA11 BS 3076 NA11 Designations W.Nr. 2.4060 W.Nr. 2.4066 UNS N02200 AWS 070	Commercially pure nickel Resistant to various reducing chemicals & caustic alkalies Good magnetostrictive properties High electrical and thermal conductivity Good ductility and low work hardening rate Good weldability and solderability	Electronic components Electrical components Lead in wires for heating elements Battery connections/terminals Chemical processing Aerospace components Food processing Synthetic fibre processing
Ni	99.0	-			
Cu	-	0.25			
Fe	-	0.40			
C	-	0.15			
Si	-	0.35			
Mn	-	0.35			
Mg	-	0.20			
Ti	-	0.10			
S	-	0.01			
Co	-	2.00			

Density	8.89 g/cm ³	0.321 lb/in ³
Melting Point	1446 °C	2635 °F
Coefficient of Expansion	13.3 µm/m °C (20 – 100 °C)	7.4 x 10 ⁻⁶ in/in °F (70 – 212 °F)
Modulus of Rigidity	81 kN/mm ²	11748 ksi
Modulus of Elasticity	204 kN/mm ²	29588 ksi

Electrical Resistivity	
9.6 µΩ · cm	58 ohm · circ mil/ft

Thermal Conductivity	
70.2 W/m · °C	487 btu · in/ft ² · h · °F

Properties			
Condition	Approx. tensile strength		Approx. operating temperature
	N/mm ²	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.