



INCOLOY® 800

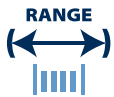
Key Features

- Excellent resistance to oxidation and carburisation at high temperatures
- Corrosion resistant in many aqueous environments
- **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
(10 ft to 6000 Lbs)



Delivery:
within 3 weeks



Wire to your spec



E.M.S available



Technical support

INCOLOY® 800 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.

INCOLOY® 800



alloy wire®
international

Chemical Composition			Specifications	Key Features	Typical Applications
Element	Min %	Max %	BS 3075 NA15 BS 3076 NA15	Excellent resistance to oxidation and carburisation at high temperatures Corrosion resistant in many aqueous environments **High temperature static applications	Process Piping Heat Exchangers Carburising Equipment Heating Element Sheathing
Ni	30.00	35.00			
Co	-	2.00	Designations		
Cu	-	0.75	W.Nr. 1.4876 UNS N08800 AWS 020		
Cr	19.00	23.00			
Al	0.15	0.60			
C	-	0.10			
Si	-	1.00			
Mn	-	1.50			
Ti	0.15	0.60			
Fe	BAL				
S	-	0.015			

Density	7.94 g/cm ³	0.287 lb/in ³
Melting Point	1385 °C	2525 °F
Coefficient of Expansion	14.4 µm/m °C (20 – 100 °C)	7.9 x 10 ⁻⁶ in/in °F (70 – 212 °F)
Modulus of Rigidity	78.9 kN/mm ²	11444 ksi
Modulus of Elasticity	196.5 kN/mm ²	28500 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	450 – 470	840 – 880	0.5 - 1	Air

Properties				
Condition	Approx. tensile strength		Approx. operating temperature depending on load** and environment	
	N/mm ²	ksi	°C	°F
Annealed	600 – 800	87 – 116	-200 to +815	-330 to +1500
Spring Temper	800 – 1100	116 – 159	-200 to +815	-330 to +1500

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

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