



INCOLOY® 800 HT

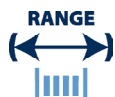
Key Features

- Higher creep rupture strength than Incoloy 800 due to close control of C, Al, Ti
- 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



RANGE
0.025mm to 21mm
(.001" to .827")



Order 3m to 3t
(10 ft to 6000 Lbs)



DELIVERY
3
WEEKS
Delivery:
within 3 weeks



Wire to your spec



E.M.S available



HOW CAN I HELP?
Technical support

INCOLOY® 800 HT available in:-

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

Packaging

- Coils
- Spools
- Bars or lengths



Chemical Composition			Specifications	Key Features	Typical Applications
Element	Min %	Max %	BS 3076 NA 15H Designations W.Nr. 1.4958 W.Nr. 1.4959 UNS N08811 AWS 021	Higher creep rupture strength than Incoloy 800 due to close control of C, Al, Ti Excellent resistance to oxidation and carburisation at high temperatures Corrosion resistant in many aqueous environments **High temperature static applications	Chemical Processing Petrochemical Processing Industrial Furnaces Heat Treating Equipment
Ni	30.00	35.00			
Co	-	2.00			
Cu	-	0.75			
Cr	19.00	23.00			
Al	0.15	0.60			
C	0.05	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	<800	<116	-200 to +1000	-330 to +1830
Spring Temper	800 – 1200	116 – 174	-200 to +1000	-330 to +1830

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

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