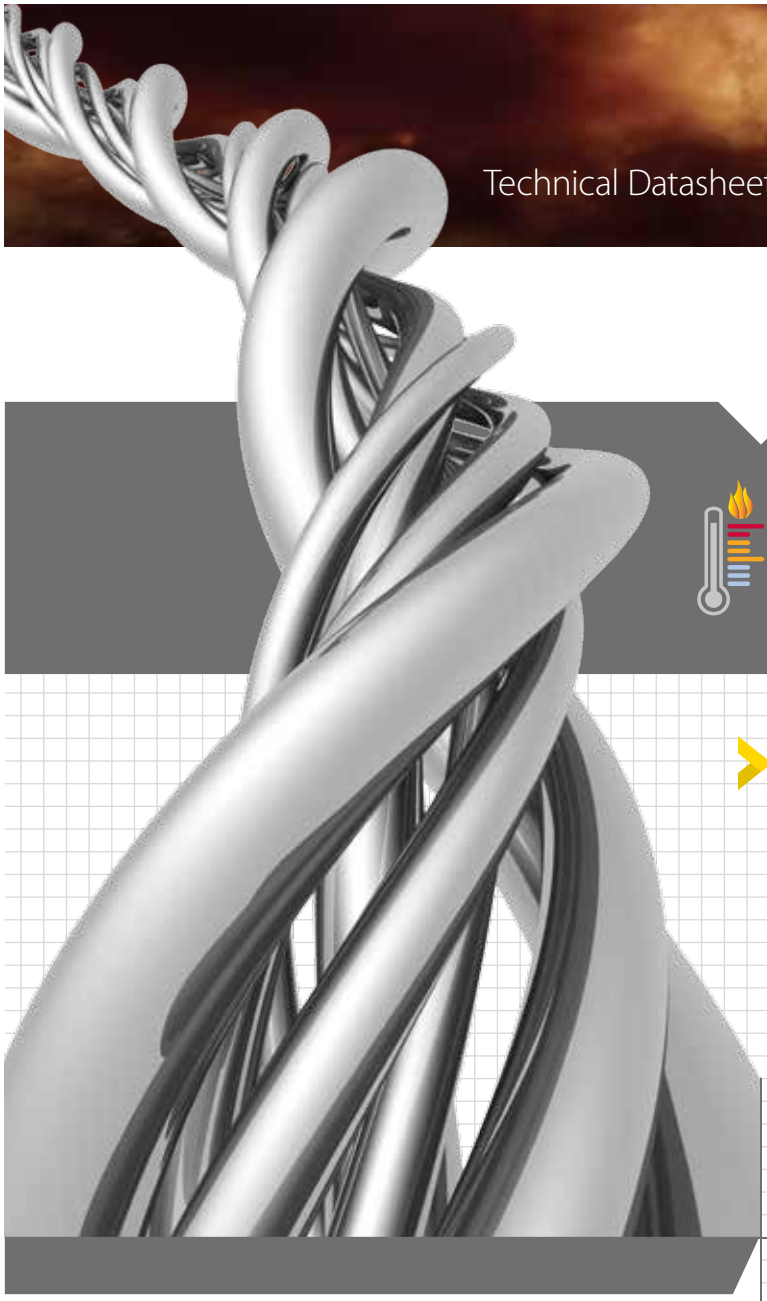
alloy wire® international



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")

3m 3t
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

®Trade name of Special Metals Group of Companies.

Technical Datasheet **AWS 021 Rev.1**

INCOLOY® 800 HT

alloy wire international

Chemical Composition		
Element	Min %	Max %
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

Specifications

BS 3076 NA 15H

Designations

W.Nr. 1.4958
W.Nr. 1.4959
UNS N08811
AWS 021

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

Typical Applications

- Chemical Processing
- Petrochemical Processing
- Industrial Furnaces
- Heat Treating Equipment

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**	
	N/mm^2	**ksi**	**°C**	**°F**
Annealed	600 – 800	87 – 116	-200 to +1000	-330 to +1830
Spring Temper	800 – 1100	116 – 159	-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*

Narrowboat Way, Hurst Business Park, Brierley Hill, West Midlands, DY5 1UF, UK
t +44 (0)1384 262022 e sales@alloywire.com w alloywire.com