



INCOLOY® 825

Key Features

Resistant to reducing environments such as those containing sulphuric and phosphoric acids

Resistant to a variety of oxidising substances such as nitric acid and nitrates

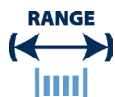
Resistant to chloride-ion stress corrosion cracking and, pitting & crevice corrosion

Good for chemical processing

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



Technical support

INCOLOY® 825 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 %	ASTM B425 BS 3075 NA 16 BS 3076 NA 16 ISO 15156-3 (NACE MR 0175) Designations W.Nr. 2.4858 UNS N08825 AWS 022	Resistant to reducing environments such as those containing sulphuric and phosphoric acids Resistant to a variety of oxidising substances such as nitric acid and nitrates Resistant to chloride-ion stress corrosion cracking, pitting and crevice corrosion Good for chemical processing	Chemical Processing Nuclear Fuel Reprocessing Acid Production Pickling Equipment
Ni	38.00	46.00			
Co	-	2.00			
Cu	1.50	3.00			
Cr	19.50	23.50			
Mo	2.50	3.50			
Al	-	0.20			
C	-	0.05			
Si	-	0.50			
Mn	-	1.00			
S	-	0.03			
Ti	0.60	1.20			
Fe	BAL				

Density	8.14 g/cm ³	0.294 lb/in ³
Melting Point	1400 °C	2550 °F
Coefficient of Expansion	14.0 µm/m °C (20 – 100 °C)	7.8 x 10 ⁻⁶ in/in °F (70 – 212 °F)
Modulus of Rigidity	75.9 kN/mm ²	11009 ksi
Modulus of Elasticity	196 kN/mm ²	28428 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	<800	<116	-100 to +250	-145 to +480
Spring Temper	800 – 1100	116 – 159	-100 to +250	-145 to +480

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