

INCONEL® 625

Chemical Composition			Specifications	Key Features	Typical Applications
Element	Min %	Max %	AMS 5666 ASTM B446 BS 3076 NA 21 ISO 15156-3 (NACE MR 0175)	Excellent corrosion resistance in a wide range of corrosive media Especially resistant to pitting and crevice corrosion Good for sea water applications	Marine Industries Aerospace Industries Chemical Processing Nuclear Reactors Pollution Control
C	-	0.10			
Mn	-	0.50			
Si	-	0.50			
P	-	0.015	Designations		
S	-	0.015	W.Nr. 2.4856 UNS N06625 AWS 012		
Cr	20.00	23.00			
Co	-	1.00			
Mo	8.00	10.00			
Fe	-	5.00			
Al	-	0.40			
Ti	-	0.40			
Ni	58.00	-			
Nb/Cb	3.15	4.15			
Ta	-	0.05			
Cu	-	0.50			

Density	8.44 g/cm ³	0.305 lb/in ³
Melting Point	1350 °C	2460 °F
Coefficient of Expansion	12.8 µm/m °C (20 – 100 °C)	7.1 x 10 ⁻⁶ in/in °F (70 – 212 °F)
Modulus of Rigidity	79 kN/mm ²	11458 ksi
Modulus of Elasticity	205.8 kN/mm ²	29849 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	260 – 370	500 – 700	0.5 – 1	Air

Properties				
Condition	Approx. tensile strength		Approx. operating temperature	
	N/mm ²	ksi	°C	°F
Annealed	< 1050	< 152	-200 to + 340	-330 to + 645
Spring Temper	1300 – 1600	189 – 232	up to + 200	up to + 395

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