



HASTELLOY[™] C-4

Key Features

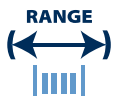
Excellent resistance to stress-corrosion cracking and to oxidizing atmospheres at high temperature

Exceptional resistance to a wide variety of chemical process environments including, hot contaminated mineral acids, solvents, chlorine, formic and acetic acids, and salt waters

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

HASTELLOY[™] C-4 available in:-

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

Packaging

- Coils
- Spools
- Bars or lengths



Trade name of Haynes International.

HASTELLOY™ C-4

Chemical Composition			Specifications	Key Features	Typical Applications
Element	Min %	Max %	ASTM B574 ASTM B575 ASTM B619	Excellent resistance to stress-corrosion cracking and to oxidizing atmospheres at high temperature Exceptional resistance to a wide variety of chemical process environments including, hot contaminated mineral acids, solvents, chlorine, formic and acetic acids and salt waters	Chemical processing
Cr	14.00	18.00			
Mo	14.00	17.00	Designations W.Nr. 2.4610 UNS N06455 AWS 052		
Fe	-	3.00			
C	-	0.015			
Si	-	0.08			
Co	-	2.00			
Mn	-	1.00			
P	-	0.04			
S	-	0.03			
Ti	-	0.70			
Ni	BAL				

Density	8.64 g/cm ³	0.312 lb/in ³
Melting Point	1399 °C	2550 °F
Coefficient of Expansion	10.8 µm/m °C (20 – 100 °C)	6.0 x 10 ⁻⁶ in/in °F (70 – 212 °F)
Modulus of Rigidity	81.2 kN/mm ²	11777 ksi
Modulus of Elasticity	212.4 kN/mm ²	30807 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	400 – 450	750 – 840	2	Air

Properties				
Condition	Approx. tensile strength		Approx. operating temperature	
	N/mm ²	ksi	°C	°F
Annealed	<1100	<159	-200 to +400	-330 to +750
Spring Temper	1300 – 1700	189 – 247	-200 to +400	-330 to +750

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