



## HASTELLOY<sup>™</sup> C-22

### Key Features

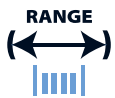
Better overall corrosion resistance than Hastelloy C-4 & C-276 and Inconel 625

Outstanding resistance to pitting, crevice corrosion and stress corrosion cracking

### 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<sup>™</sup> C-22 available in:-

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

### Packaging

- Coils
- Spools
- Bars or lengths



Trade name of Haynes International.

Chemical Composition			Specifications	Key Features	Typical Applications	
Element	Min %	Max %	ASTM B574 ASTM B575 ASTM B619 ISO 15156-3 (NACE MR 0175)	Better overall corrosion resistance than Hastelloy C-4 & C-276 and Inconel 625  Outstanding resistance to pitting, crevice corrosion and stress corrosion cracking	Chlorination systems Nuclear fuel reprocessing Pickling systems	
Cr	20.00	22.50				
Mo	12.50	14.50				
Fe	2.00	6.00				
W	2.50	3.50				
<b>Designations</b>						
C	-	0.015				W.Nr. 2.4602 UNS N06022 AWS 053
Si	-	0.08				
Co	-	2.50				
Mn	-	0.50				
V	-	0.35				
P	-	0.02				
S	-	0.02				
Ni	BAL					

<b>Density</b>	8.69 g/cm <sup>3</sup>	0.314 lb/in <sup>3</sup>
<b>Melting Point</b>	1399 °C	2550 °F
<b>Coefficient of Expansion</b>	12.4 µm/m °C (20 – 100 °C)	6.9 x 10 <sup>-6</sup> in/in °F (70 – 212 °F)
<b>Modulus of Rigidity</b>	78.6 kN/mm <sup>2</sup>	11400 ksi
<b>Modulus of Elasticity</b>	205.5 kN/mm <sup>2</sup>	29806 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 <sup>2</sup>	ksi	°C	°F
Annealed	800 – 1100	116 – 159	-200 to +400	-330 to +750
Spring Temper	1400 – 1700	203 – 247	-200 to +400	-330 to +750

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