Technical Datasheet **AWS 053 Rev.1**

alloy wire international

HASTELLOY˜ 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*

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

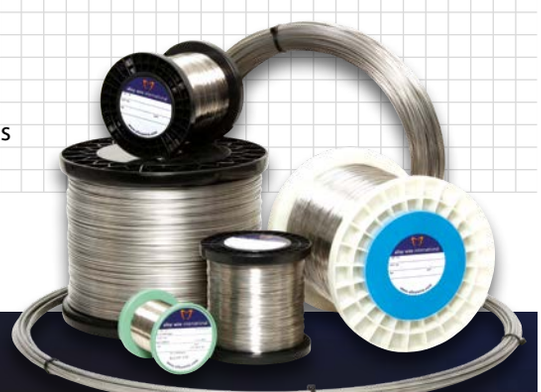
HOW CAN I HELP?
Technical support

HASTELLOY˜ 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.

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Chemical Composition		
Element	Min %	Max %
Cr	20.00	22.50
Mo	12.50	14.50
Fe	2.00	6.00
W	2.50	3.50
C	-	0.015
Si	-	0.08
Co	-	2.50
Mn	-	0.50
V	-	0.35
P	-	0.02
S	-	0.02
Ni	BAL	

Specifications

ASTM B574
ASTM B575
ASTM B619
ISO 15156-3
(NACE MR 0175)

Designations

W.Nr. 2.4602
UNS N06022
AWS 053

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Outstanding resistance to pitting, crevice corrosion and stress corrosion cracking

Typical Applications

Chlorination systems

Nuclear fuel reprocessing

Pickling systems

Density	8.69 g/cm^3	0.314 lb/in^3
Melting Point	1399 °C	2550 °F
Coefficient of Expansion	12.4 µm/m °C (20 – 100 °C)	6.9 x 10^{-6} in/in °F (70 – 212 °F)
Modulus of Rigidity	78.6 kN/mm^2	11400 ksi
Modulus of Elasticity	205.5 kN/mm^2	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^2	**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.

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AS 9100 Aerospace & Defence
ISO 9001 Quality Management
ISO 14001 Environmental
ISO 45001 Health & Safety