# Technical Datasheet AWS 054 Rev.2



# HASTELLOY C-276

### **Key Features**

Excellent corrosion resistance in a wide range of corrosive media including, sulphur compounds and chloride ions

Excellent resistance to pitting, crevice corrosion and stress corrosion cracking

Withstands the corrosive effects of wet chlorine gas, hypochlorite and chlorine dioxide

Good for sea water applications

#### IMPORTANT We will manufacture to your required mechanical properties.

# key advantages to you, our customer



0.025mm to 21mm (.001" to .827")





E.M.S available

Order 3m to 3t (10 ft to 6000 Lbs)





Technical support

## HASTELLOY C-276 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			Specifications	Key Features	Typical Applications
Chemica Element Mo Cr Fe W	Min % 15.00 14.50 4.00 3.00	Max %     17.00     16.50     7.00     4.50	ASTM B574 ASTM B575 ASTM B619 ISO 15156-3 (NACE MR 0175) Designations	Key FeaturesExcellent corrosion resistance in a wide range of corrosive media including, sulphur compounds and chloride ionsExcellent resistance to pitting, crevice corrosion and stress corrosion crackingWithstands the corrosive effects of wet chlorine gas, hypochlorite and chlorine dioxideGood for sea water applications	Ippical Applications   Chlorination systems   Nuclear fuel reprocessing   Pickling systems   Chemical processing   Marine industries
Co C Si Mn V P S Ni	- - - - - - - - B/	2.50 0.010 0.08 1.00 0.35 0.04 0.03 AL	W.Nr. 2.4819 UNS N10276 AWS 054		

Density	8.89 g/cm <sup>3</sup>	0.321 lb/in <sup>3</sup>	
Melting Point	1370 ℃	2500 °F	
Coefficient of Expansion	<b>11.2 μm/m °C (20 – 100°C)</b> 6.2 x 10 <sup>-6</sup> in/in °F (70 – 212 °F)		
Modulus of Rigidity	78.6 kN/mm²	11400 ksi	
Modulus of Elasticity	205.5 kN/mm <sup>2</sup>	29806 ksi	

Heat Treatment of Finished Parts							
Condition of sumplied by Alley Wire	Туре	Temperature		Time (III)	Casting		
Condition as supplied by Alloy Wire		°C	°F	Time (Hr)	Cooling		
Annealed or Spring Temper	Stress Relieve	400 – 450	750 – 840	2	Air		

Properties							
Condition	Approx. tensile stren	gth	Approx. operating temperature				
Condition	N/mm <sup>2</sup>	ksi	°C	°F			
Annealed	850 – 1050	123 – 152	-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.

