



HAYNES™ 214

Key Features

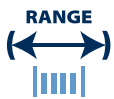
Resistance to oxidation that far exceeds most heat resistant alloys at temperatures of 955 °C (1750 °F) and above

**High temperature static applications

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

HAYNES™ 214 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 %	-	Resistance to oxidation that far exceeds most heat resistant alloys at temperatures of 955 °C (1750 °F) and above **High temperature static applications	Mesh belts Trays and fixtures for the firing of pottery and china, and the heat treatment of electronic devices and technical grade ceramics
Al	4.10	5.00	Designations W.Nr. 2.4646 UNS N07214 AWS 061		
B	-	0.004			
C	-	0.05			
Nb/Cb	-	0.15			
Co	-	2.00			
Cr	15.00	17.00			
Fe	2.00	4.00			
Mg	-	0.01			
Mn	-	0.50			
Mo	-	0.50			
Ni	BAL				
P	-	0.015			
S	-	0.015			
Si	-	0.20			
Ti	-	0.50			
W	-	0.50			
Y	0.003	0.04			
Zr	-	0.02			

Density	8.05 g/cm ³	0.291 lb/in ³
Melting Point	1400 °C	2550 °F
Coefficient of Expansion	13.3 µm/m °C (20 – 100 °C)	7.4 x 10 ⁻⁶ in/in °F (70 – 212 °F)
Modulus of Rigidity	84 kN/mm ²	12183 ksi
Modulus of Elasticity	217 kN/mm ²	31474 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 depending on load** and environment	
	N/mm ²	ksi	°C	°F
Annealed	900 – 1200	131 – 174	-200 to +1100	-330 to +2010
Spring Temper	1300 – 1700	189 – 247	-200 to +1100	-330 to +2010

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

**Static applications = still/fixd/motionless/rigid