

Alloy 214 Super Alloy

**Trade name
Haynes 214**

**UNS
N07214**

**DIN
W2.4646**

**EN
2.4646**

Chemical Composition %

Cr	Mo	Ni	Fe	Co	C	Mn	Si	P	S	W	B
15-17	1 max	Balance	2-6	2	0.15max	1max	0.5max	0.15max	0.015max	1max	0.015max

Recommended Welding Consumables

Wire AMS5799
Rod AMS 5838/AMS5831

Y	Ti	Zr	Al
0.02-0.4	0.5max	0.2max	4-5

Form	Smls Pipe/Tub	Weded Pipe	Welded Tube	Fittings	Plate	Bar	Forgings
Standard	ASTM B622	ASTM B 619	ASTM B 626	ASTM B 366	ASTM B333	ASTM B335	ASTM B564

Properties

Elevated temperature oxidation resistance

Applications

Gas turbine components
Industrial furnace components
Gas fired radiant heating tubes.

METALHEART

Physical Properties

Density: 0.291 lbs/in³, 8.05 g/cm³
Electrical Resistivity: microhm-in.(microhm-cm)
70 ° F (21 °C): 53.5 (135.9)
Specific Heat: Btu/lb.-° F(J/Kg-K):
At 70 ° F (21 °C): 0.108 (452)
Mean Coefficient of Thermal Expansion: in/in/° F (mm/m/°C):
70 - 212 °F (20 - 100 °C): 7.2 x 10⁻⁶ (13.0)
Thermal Conductivity: BTU-in/h-ft-° F (W/m-°K):
70 ° F (21 °C): 83 (12.0)
Modulus of Elasticity: KSI (MPa)
31.6 x 10³ (218 x 10³) in tension
Melting Range: 2475 - 2550 ° F (1355 - 1400 °C)
Properties annealed
Ultimate Tensile Strength: 110 KSI min (758 MPa min)
Yield Strength (0.2% offset): 65 KSI min (438 MPa min)
Elongation: 25% min (gauges > .003 inches)
Hardness: Re 30 max

SC METALHEART SRL
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