

PRODUCT OVERVIEW

Pmet 914 is a cobalt based superalloy alloyed mainly with chromium, tungsten, and nickel. The additions of nickel and chromium give this alloy excellent resistance to oxidizing and corrosive environments. The addition of tungsten gives the alloy great mechanical properties, especially at higher temperatures. Pmet 914 is mainly used for turbine blade vanes.

TYPICAL DEPOSIT CHARACTERISTICS:

- ⇒ Density 0.300 lb/in³
- ⇒ Melting point: 2375 F
- ⇒ Machineability: Good
- ⇒ Oxidation Resistance: Excellent
- ⇒ Corrosion Resistance: Excellent

APPLICATION

- ⇒ Gas turbine engines
- ⇒ Turbine vanes

NOMINAL CHEMICAL COMPOSITION (wt%)

Co	Cr	Ni	W	Fe	C	Si	Al	Ta
BAL	30.0	11.0	6.0	2.0	<1.0	<1.0	<1.0	<1.0

MECHANICAL PROPERTIES:

Tensile Strength		Yield Strength		Elongation
Ksi	MPa	Ksi	MPa	%
107	740	64	440	11

STANDARD SIZES & PACKAGING:

Diameter	Packaging
0.045" (1.2 mm)	18" and 36" Cut Lengths and 25# LWS
0.062" (1.6 mm)	18" and 36" Cut Lengths and 25# LWS
0.093" (2.4 mm)	18" and 36" Cut Lengths and 25# LWS