

## 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/in <sup>3</sup>
⇒ 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:

### Diameter

0.045" (1.2 mm)  
 0.062" (1.6 mm)  
 0.093" (2.4 mm)