

PRODUCT OVERVIEW

Pmet 838 is a nickel based superalloy alloyed primarily with chromium and cobalt. Pmet 838 is a precipitation hardenable alloy with excellent oxidation and sulfidation resistance and creep-rupture strength at temperatures up to 1800F. This alloy is coated mainly for its use in the hot corrosive environments of turbine engines.

TYPICAL DEPOSIT CHARACTERISTICS:

⇒ Density	0.293 lb/in ³
⇒ Melting Range:	2250-2400 F
⇒ Machinability:	Good
⇒ Oxidation Resistance:	Excellent
⇒ Corrosion Resistance:	Good

APPLICATION

- ⇒ Gas Turbine Blades
- ⇒ Gas Turbine Vanes
- ⇒ High Oxidation and Sulfidation Environments

NOMINAL CHEMICAL COMPOSITION (wt%)

Ni	Cr	Co	Al	Ti	W	Mo	Ta	C	Fe
BAL	16.0	9.0	4.0	4.0	3.0	2.0	2.0	<1.0	<1.0

MECHANICAL PROPERTIES:

Tensile Strength		Yield Strength		Elongation
Ksi	MPa	Ksi	MPa	%
159	1096	138	950	9

STANDARD SIZES & PACKAGING:

Diameter	Packaging
0.035" (0.9 mm)	18" and 36" Cut Lengths
0.045" (1.2 mm)	18" and 36" Cut Lengths
0.062" (1.6 mm)	18" and 36" Cut Lengths
0.079" (2.0 mm)	18" and 36" Cut Lengths