

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