

PRODUCT OVERVIEW

Pmet 865 is a nickel based superalloy alloyed primarily with chromium, titanium, and molybdenum. Similar to Pmet 863, the additions of aluminum and titanium make this alloy age hardenable. This alloy exhibits good strength up to 1800F and oxidation resistance up to 1600F. Welding can be difficult and best performed when the material is in solution annealed condition to avoid cracking.

TYPICAL DEPOSIT CHARACTERISTICS:

- ⇒ Density: 0.296 lb/in³
- ⇒ Melting Range: 2425-2475 F
- ⇒ Oxidation Resistance: Excellent
- ⇒ Corrosion Resistance: Great

APPLICATION

- ⇒ Shafts
- ⇒ Compressors
- ⇒ Fasteners

SPECIFICATION

AMS 5828, EN: 2.4654, UNS: N07001

NOMINAL CHEMICAL COMPOSITION (wt%)

Ni	Cr	Co	Mo	Ti	Fe	Al	Mn	Si
BAL	20.0	14.0	4.0	3.0	2.0	<2.0	<1.0	<1.0

MECHANICAL PROPERTIES:

Tensile Strength		Yield Strength		Elongation
Ksi	MPa	Ksi	MPa	%
193	1330	132	910	37

STANDARD SIZES & PACKAGING:

Diameter	Packaging
0.035" (0.9 mm)	18" and 36" Cut Lengths and 25# LWS
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