

PRODUCT OVERVIEW

Pmet 870 is a nickel based superalloy alloyed primarily with chromium, iron, and molybdenum. Pmet 870 is coveted for its ability to join dissimilar alloys including solid solution strengthened nickel alloys. This alloy exhibits excellent weldability and is widely used in the chemical and aerospace industries as a filler metal. Pmet 870 also has good oxidation resistance up to 1400F.

TYPICAL DEPOSIT CHARACTERISTICS:

- ⇒ Density: 0.325 lb/in³
- ⇒ Melting Range: 2350-2510 F
- ⇒ Oxidation Resistance: Good
- ⇒ Corrosion Resistance: Good

APPLICATION

- ⇒ Joining dissimilar metals
- ⇒ Gas Turbine Rings

SPECIFICATION

AMS 5786, UNS: N10004, AWS: ERNiMo-3

NOMINAL CHEMICAL COMPOSITION (wt%)

Ni	Mo	Cr	Co	Fe	Si	Mn	C
BAL	25.0	5.0	3.0	3.0	1.0	1.0	<1.0

MECHANICAL PROPERTIES:

Tensile Strength		Yield Strength		Elongation
Ksi	MPa	Ksi	MPa	%
140	965	76	524	51

STANDARD SIZES & PACKAGING:

Diameter	Packaging
0.020" (0.5 mm)	18" and 36" Cut Lengths
0.031" (0.8 mm)	18" and 36" Cut Lengths and 25# LWS
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