

PRODUCT OVERVIEW

Pmet 747 is a stainless steel used primarily in strong oxidizing environments at temperatures up to 1500°F. Pmet 747 is compatible with most 300 series stainless steels and exhibits good corrosion resistance in aqueous environments and at temperatures between 800-1500F. Pmet 747 is alloyed with niobium, which makes the alloy resistant to intergranular attack and carbide formation. This alloy is ideal for oil refineries due to its resistance to polythionic acid stress corrosion cracking.

TYPICAL DEPOSIT CHARACTERISTICS:

⇒ Density	0.286 lb/in ³
⇒ Melting Range:	2550-2600 F
⇒ Oxidation Resistance:	Excellent
⇒ Corrosion Resistance:	Good

APPLICATION

- ⇒ Oil Refineries
- ⇒ Paper and Pulp Processing
- ⇒ Fired Heater Tubes
- ⇒ Fluid Catalytic Cracking Units
- ⇒ Hanger Rods

SPECIFICATION

AMS 5680

NOMINAL CHEMICAL COMPOSITION (wt%)

Fe	Cr	Ni	Nb+Ta	C	Si	Mn
BAL	20.0	10.0	<1.0	0.06	<0.75	<2.0

MECHANICAL PROPERTIES:

Tensile Strength		Yield Strength		Elongation
Ksi	MPa	Ksi	MPa	%
75	517	30	207	40

STANDARD SIZES:

Diameter

- 0.030" (0.8 mm)
- 0.035" (0.9 mm)
- 0.045" (1.2 mm)
- 0.062" (1.6 mm)