

PRODUCT OVERVIEW

Pmet 905 is a cobalt based superalloy alloyed mainly with chromium, tungsten, and nickel. Pmet 905 exhibits fantastic strength at high temperatures while still maintaining good oxidation and sulfidation resistance. This alloy exhibits excellent galling resistance which makes the alloy ideal for ball bearings.

TYPICAL DEPOSIT CHARACTERISTICS:

- ⇒ Density: 0.330 lb/in³
- ⇒ Melting Range: 2425-2570 F
- ⇒ Oxidation Resistance: Good
- ⇒ Corrosion Resistance: Good
- ⇒ Galling Resistance: Excellent

APPLICATION

- ⇒ Gas turbine engine components
- ⇒ Ball bearings
- ⇒ Springs

SPECIFICATION

AMS 5796

NOMINAL CHEMICAL COMPOSITION (wt%)

Co	Cr	W	Ni	Fe	Si	Mn	C
BAL	20.0	15.0	10.0	3.0	1.0	1.5	<1

MECHANICAL PROPERTIES:

Tensile Strength		Yield Strength		Elongation
Ksi	MPa	Ksi	MPa	%
146	1006	69	476	51

STANDARD SIZES:

Diameter

- 0.031" (0.8 mm)
- 0.035" (0.9 mm)
- 0.045" (1.2 mm)
- 0.062" (1.6 mm)