

## PRODUCT OVERVIEW

**PMET 980** is a cobalt based superalloy alloyed mainly with chromium, molybdenum, and silicon. PMET 980's microstructure is a roughly 50-50 mixture of a soft solid solution cobalt matrix and hard intermetallic Laves phase. This gives the alloy fantastic wear and galling resistance. The addition of chromium also gives the alloy great corrosion resistance.

## TYPICAL DEPOSIT CHARACTERISTICS:

⇒ Density	0.311 lb/in <sup>3</sup>
⇒ Melting Range:	2354-2462 F
⇒ Machineability:	Poor
⇒ Oxidation Resistance:	Good
⇒ Corrosion Resistance:	Good
⇒ Galling Resistance:	Good
⇒ Tensile Strength:	< 70 ksi
⇒ Elongation:	<< 1%
⇒ Hardness:	52-62 HRC

## APPLICATION

- ⇒ Gas turbine engine components
- ⇒ Mechanical seals
- ⇒ Thrust rings

## NOMINAL CHEMICAL COMPOSITION (wt%)

Co	Mo	Cr	Si	C
BAL	29.0	18.0	4.0	<1.0

## STANDARD SIZES:

### Diameter

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