

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 ³
⇒ 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)