



PMET 86-10-4 / WC-10Co-4Cr HVOF Powder

June 2024

PRODUCT OVERVIEW

PMET 86-10-4 is a tungsten carbide-cobalt-chrome powder specifically designed for HVOF systems. It produces a hard, abrasive and corrosion resistant coating, with a service environment up to 850° F (450° C). High chrome like finishes can be obtained by typical grinding or lapping techniques. PMET 86-10-4 is ideal for use in a wide variety of erosive and abrasive wear applications and corrosive environments. It should be used where added corrosion protection is required versus 88WC-12Co coatings. It has proven to be an excellent alternative to hard chromium plating.

APPLICATION

- ⇒ Hard chrome replacement
- ⇒ Fan blades
- ⇒ Compressor shafts
- ⇒ Ball and gate valves
- ⇒ Oil field apparatus

HAZZARDS:

Observe safe spraying practices. See Polymet material safety data sheet for details.

POWDER MORPHOLOGY

Agglomerated and sintered

NOMINAL CHEMICAL COMPOSITION (wt%)

W	Co	Cr	Ct	Cf	O	Fe
BAL	9.0-11.0	3.5-4.5	5.0-5.8	<0.12	<0.1	<0.5

APPARENT DENSITY:

3.7-4.1 (g/cm³)

PARTICLE SIZE DISTRIBUTION:

+53µm	-53+45µm	-45+38µm	-38/+20µm	-20+15µm	-15µm
<1.0	<3.0	5.0-15.0	—	5.0-15.0	<5.0

STANDARD SIZES & PACKAGING:

Packaging	Part Number
10 lb bottles	86104POWDER02