

PMET 297 WC Amorphous Alloy

September 4, 2015

PRODUCT OVERVIEW

PMET 297 is a cored wire specifically designed for arc spray systems. It is a titanium and tungsten carbide alloy in an amorphous matrix. PMET 297 produces a hard, abrasive and corrosion resistant coating, with a service environment of up to 1000° F. PMET 297 is used in a wide variety of industrial high wear applications.

TYPICAL DEPOSIT CHARACTERISTICS:

⇒ Abrasion Resistance Good
⇒ Typical Hardness: HRC 65
⇒ Bond Strength: 5000 psi

⇒ Deposit Rate: 10 lbs/hr/100A

⇒ Deposit Efficiency 70%

 \Rightarrow Wire Coverage: 1.0 oz/ft²/ mil

⇒ Surface Texture variable⇒ Machineability No

SURFACE PREPARATION

Surface should be clean, white metal, with no oxides (rust), dirt, grease, or oil on the surface to be coated. **Note:** It is best not to handle surfaces after cleaning.

Recommended method of preparation is to grit blast with 24 mesh aluminum oxide, rough grind, or rough machine in a lathe.

APPLICATION

- ⇒ Fan Blades
- ⇒ Boiler Tubes
- ⇒ Other High Wear Application

NOMINAL CHEMICAL COMPOSITION (wt%)

WC	Cr	TiC	Ni	В	Si	Fe
26.0	13	6.0	6.0	2.0	1.0	Bal

RECOMMENDED SPRAY PARAMETERS:

Diameter	Air Pressure	Voltage	Amperage	Standoff
1/16" (1.6mm)	*50-60 psi	*29-32	*100-200	4-8 in (10-20 cm)

^{*} Parameters are typical and may vary depending on equipment used. Contact your equipment manufacturer for optimum spray parameters

STANDARD SIZES & PACKAGING:

Diameter	Packaging	Part Number
1/16" (1.6mm)	25# LWS	297062LWS01

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^{*} Depends on air pressure used