

PRODUCT OVERVIEW

PMET 885 is a solid wire specifically designed for arc spray systems. It is self-bonding to most materials and requires minimal surface preparation. Bond strengths in excess of 9000 psi can be achieved on clean smooth surfaces. Roughening of the surface by machining, grit blasting or grinding can increase the bond strength up to 10,000 psi. PMET 885 exhibits good resistance to high temperature oxidation and abrasion, and excellent resistance to impact and bending. PMET 885 can be machined and ground to a finish of 5 micro inches. It is a self-bonding, one step material and is also suitable for the build-up and dimensional restoration of nickel-based alloys. PMET 885 is widely used as a bond coat for subsequent thermal spray topcoats and as a one step build up material for dimensional restoration of aircraft engines.

TYPICAL DEPOSIT CHARACTERISTICS:

⇒ Typical Hardness:	HRB 75
⇒ Bond Strength:	10,000 psi
⇒ Deposit Rate:	10 lbs/hr/100A
⇒ Deposit Efficiency	70%
⇒ Wire Coverage:	0.9 oz/ft ² / mil
⇒ Surface Texture	* Variable
⇒ Machineability	Good
⇒ Coefficient of Thermal Exp. (1000°F)	7x10 ⁻⁶ in/in°F

* Depends on air pressure used

APPLICATION

- ⇒ Bond coat
- ⇒ Dimensional restoration

NOMINAL CHEMICAL COMPOSITION (wt%)

Ni	Al	Total Others
93.0	4.0-5.5	1.7 Max

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.

SPECIFICATION

95Ni 5Al, PWA 36937 for PWA 271-37 Rev H, GEAE C07-042 for GE SPM 70-49-38, B50TF56-S11/CL A (Chem only), CFMI CP6039 for 70-48-14, Honeywell FP5045, Type XV Nickel Aluminum

RECOMMENDED SPRAY PARAMETERS:

Diameter	Air Pressure	Voltage	Amperage	Standoff
1/16" (1.6mm)	*50-60 psi	*29-30	*100-200	*3-6 in (8-15 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	885062LWS01