

PRODUCT OVERVIEW

PMET 699 is a 99.5% pure aluminum wire specifically designed for thermal spraying. It produces dense, well bonded coatings with excellent corrosion resistance, electrical conductivity, and machineability.

PMET 699 is used widely for atmospheric and immersion corrosion applications, electrical conductivity applications and dimensional restoration of aluminum-based components.

TYPICAL DEPOSIT CHARACTERISTICS:

⇒ Typical Hardness:	HRB 65
⇒ Bond Strength:	4300 psi
⇒ Deposit Rate:	6 lbs/hr/100A
⇒ Deposit Efficiency	65%
⇒ Wire Coverage:	0.3 oz/ft ² / mil
⇒ Surface Texture	*Variable
⇒ Machinability	Good

* Depends on air pressure used

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

- ⇒ Dimensional restoration
- ⇒ High temperature corrosion
- ⇒ Aluminum pattern restoration
- ⇒ Aluminum casting repair
- ⇒ Decorative purposes

SPECIFICATION

Aluminum

NOMINAL CHEMICAL COMPOSITION (wt%)

Al
99.5

RECOMMENDED SPRAY PARAMETERS:

Diameter	Air Pressure	Voltage	Amperage	Standoff
1/16" (1.6mm)	*40-60 psi	*28-30	*100-300	*4-8 in (10-20 cm)

STANDARD SIZES & PACKAGING:

Diameter	Packaging	Part Number
1/16" (1.6mm)	22# LWS	699062LWS01 (lubricated)
1/16" (1.6mm)	22# LWS	699062LWS00 (un-lubricated)
1/8" (3.2mm)	22# LWS	699125LWS01 (un-lubricated)