Technical Datasheet

PMET 270 Amorphous Alloy

July 16, 2015

PRODUCT OVERVIEW

PMET 270 is a cored wire specifically designed for arc spray systems. It produces a partially amorphous, hard, abrasive and corrosion resistant coating, with a service environment up to 1600 degrees F. High chrome like finishes can be obtained by typical grinding and lapping techniques. PMET 270 has found use in a wide variety of high wear applications, anti-skid surfacing applications, and corrosive environments. The addition of 9% nickel gives it greater corrosion resistance than PMET 273 for most environments.

TYPICAL DEPOSIT CHARACTERISTICS:

- ⇒ Typical Hardness: HRC 45-50
- ⇒ Bond Strength: 5500 psi
- ⇒ Deposit Rate: 10 lbs/hr/100A
- ⇒ Deposit Efficiency 70%
- ⇒ Wire Coverage: 0.6 oz/ft^2 / mil
- ⇒ Surface Finish Grind **

* * Grind using aluminum oxide

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

- ⇒ Boiler Tubes & Tube Shields
- ⇒ Rolls
- ⇒ Anti-Skid

NOMINAL CHEMICAL COMPOSITION (wt%)

Cr	Ni	Mo	B	Cu	Mn	Si	Fe
23.0	9.0	4.0	2.3	2.0	1.3	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)	30# LWS	270062LWS01

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