

## P♦MET 270 Amorphous Alloy

### Arc Spray Wire

#### DESCRIPTION:

**P♦Met 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° F. High chrome like finishes can be obtained by typical grinding and lapping techniques. **P♦Met 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/sq.ft/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. 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

#### APPLICATIONS:

- 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 - 20cm)

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# LLWS	270062LWS01

The properties listed are typical and not to be construed as guaranteed values. Actual properties may vary depending on customer operating conditions. Polymet makes no warranties, express or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose, except as expressly stated in Polymet's terms and conditions.