

# P+MET 273 Fe Cr B Si Amorphous Alloy

## **Arc Spray Wire**

#### **DESCRIPTION:**

**P**◆Met 273 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 1700° F. High chrome like finishes can be obtained by typical grinding and lapping techniques. **P**◆Met 273 is used in a wide variety of high wear applications, anti-skid surfacing applications and corrosive environments.

#### TYPICAL DEPOSIT CHARACTERISTICS:

Typical Hardness HRC 55-60
 Bond Strength 6000 psi
 Deposit Rate 10 lbs/hr/100A

Deposit Efficiency 70%

Wire Coverage 0.6 oz/sq.ft/mil

Surface Finish Grind\*\*

#### **APPLICATIONS:**

- Boiler Tubes & Tube Shields
- Yankee Dryer Rolls
- Anti-Skid
- Fan Blades
- Drill Collars

### **NOMINAL CHEMICAL COMPOSISTION (wt%):**

| Cr   | В   | Mn  | Si  | Fe  |
|------|-----|-----|-----|-----|
| 27.5 | 3.7 | 1.7 | 1.6 | 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
 273062LWS01

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.

#### 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.

<sup>\*\*</sup>Grind using aluminum Oxide