

P♦MET 899 Molybdenum
Thermal Spray Wire

DESCRIPTION

P♦Met 899 is a pure (99.95%) molybdenum wire specifically designed for arc spraying. It produces dense, well-bonded coatings with excellent wear resistance and good corrosion resistance. It is particularly effective for applications where scuffing or galling is a problem, such as piston rings, shift forks and synchronizing rings.

**TYPICAL DEPOSIT CHARACTERISTICS
ARC SPRAY COATINGS:**

- Typical Hardness HRC 15-20
- Bond Strength 7900 psi
- Deposit Rate 10 lbs /hr/100A
- Deposit Efficiency 75%
- Wire Coverage 1.1 oz/ft² / m
- Surface Texture *Variable

* 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:

- Wear Resistant Coatings
- Corrosion Resistance
- Anti Galling
- Bond Coats

SPECIFICATION:

PWA 36913C for PWA 271-13 Rev H,
Honeywell FP5045 Type I, Molybdenum

NOMINAL CHEMICAL COMPOSITION (wt%):

Mo
99.95

RECOMMENDED SPRAY PARAMETERS:

Diameter	Air Pressure	Voltage	Amperage	Standoff
1/16" (1.6mm)	*50 - 60 psi	*32 - 34	*100 - 250	*3 - 7 in (7 - 17cm)
**1/8" (3.2mm)	N/A	N/A	N/A	N/A

* Parameters are typical and may vary depending on equipment used. Contact your equipment manufacture for optimum spray parameters.
** 1/8" used for combustion wire spray process. Consult equipment manufacturer for spray parameters and coating characteristics.

STANDARD SIZES & PACKAGING:

Diameter	Packaging	Part Number
1/16 (1.6mm)	25# LLWS	899062LWS01
1/8" (3.2mm)	27.5# Coils	899125COIL01

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.