



TH899 Molybdenum

DESCRIPTION

TH899 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:

- Bond Strength 2,000 + with 1000 psi being typical
- Typical Hardness NA
- Deposit Rate 18-65 lbs. per hr.
- Deposit Efficiency 60-70%
- Wire Coverage 4 sq. ft. per lbs. at 8-10 mils thick
- Surface Finish Textured

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. *Thermion recommends a 3.5 mil minimum anchor tooth profile.

Applications:

- Wear resistance
- Corrosion resistance
- Anti-Galling

NOMINAL CHEMICAL COMPOSITION (wt. %):

Mo
99.95

RECOMMENDED SPRAY PARAMETERS:

Diameter	Air Pressure	Voltage	Amperage	Standoff
1/16" (1.6mm)	80-100 psi	28-32	100-300	4-7" (10-17cm)

Parameters are typical and may vary depending on equipment used.

STANDARD SIZES & PACKAGING:

Diameter	Packaging
1/16" (1.6mm)	25# Spools
1/8" (3.2mm)	27.5# Spools