

PMET 714 / High Carbon Steel

June 2024

PRODUCT OVERVIEW

PMET 714 is a high carbon steel wire specifically designed for arc spraying. It produces dense, well-bonded coatings with excellent wear resistance. PMET 714 is widely used for machine element repair, dimensional restoration, and wear resistant applications. PMET 714's low shrink characteristics allow for increased coating thickness.

TYPICAL DEPOSIT CHARACTERISTICS:

⇒ Typical Hardness:	HRC 20-25
⇒ Bond Strength:	8400 psi
⇒ Deposit Rate:	10 lbs/hr/100A
⇒ Deposit Efficiency	70%
⇒ Wire Coverage:	0.8 oz/ft ² / mil
⇒ Surface Texture	*Variable
⇒ Machinability	Good

* 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

- ⇒ Part Restoration
- ⇒ Seating Surfaces
- ⇒ Press Fit Surfaces

NOMINAL CHEMICAL COMPOSITION (wt%)

C	Mn	Si	Fe
0.8	0.7	0.3	Bal

RECOMMENDED SPRAY PARAMETERS:

Diameter	Air Pressure	Voltage	Amperage	Standoff
1/16" (1.6mm)	*50-60 psi	*28-30	*100-300	*4-6 in (10-15 cm)

STANDARD SIZES & PACKAGING:

Diameter	Packaging	Part Number
1/16" (1.6mm)	30# LWS	714062LWS00