

P♦MET 885 Arc Spray Wire

DESCRIPTION

P♦Met 885 is a solid wire specifically designed for arc spray systems. It is self-bonding to most materials and requires minimal surface preparation. Bond strengths in excess of 9000 psi can be achieved on clean smooth surfaces. Roughening of the surface by machining, grit blasting or grinding can increase the bond strength up to 9800 psi. **P♦Met 885** exhibits good resistance to high temperature oxidation and abrasion, and excellent resistance to impact and bending. **P♦Met 885** can be machined and ground to a finish of 5 micro inches. It is a self-bonding, one step material and is also suitable for the build-up and dimensional restoration of nickel based alloys. **P♦Met 885** is widely used as a bond coat for subsequent thermal spray topcoats and as a one step build up material for dimensional restoration of aircraft engines.

TYPICAL DEPOSIT CHARACTERISTICS:

• Typical Hardness	HRB 75
• Bond Strength	9500 psi
• Deposit Rate	10 lbs /hr/100A
• Deposit Efficiency	70%
• Wire Coverage	0.9 oz/ft ² / m
• Surface Texture	*Variable
• Machineability	Good

* Depends on air pressure used.

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:

- Bond Coat
- Dimensional Restoration

SPECIFICATION:

95Ni 5Al,
PWA 36937 for PWA 271-37 Rev H, GEAE C07-042 for GE SPM 70-49-38, B50TF56-S11/CL A (Chem only), CFMI CP6039 for 70-48-14, Honeywell FP5045, Type XV Nickel Aluminum

SURFACE PREPARATION:

NOMINAL CHEMICAL COMPOSITION (wt%):

Al	Ni
5.0	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 manufacture for optimum spray parameters.

STANDARD SIZES & PACKAGING:

Diameter	Packaging	Part Number
1/16 (1.6mm)	25# LLWS	885062LWS01

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.