



An Nickel-Aluminum-Molybdenum,  
Cored Wire Made Exclusively for the  
Twin Wire Arc Spray Process

# **EuTronic<sup>®</sup> Arc 548 Wire**



- Dense, well bonded coatings
- May be used as a one step coating for machine element repair
- May be finished by machining with carbide and ceramic tools or by grinding

# EuTronic® Arc 548AS

EuTronic Arc 548AS is a nickel-aluminum-molybdenum cored wire designed specifically for the dual wire arc spray process. The coatings produced are dense, well bonded and resistant to moderate wear.

EuTronic Arc 548 coatings serve a dual function. First, they can be used as a bond layer and subsequently top coated with an alternate product. Second, they can be used as a one-step coating for machine element repair / parts restoration applications.

The target applications are similar to those for ProXon 21021.

## TECHNICAL DATA

| Typical Values         |  |
|------------------------|--|
| Hardness:              | 80 HRB                                 |
| Typical Macrohardness: | 200 DPH                                |
| Deposit Efficiency:    | 75%                                    |
| Bond Strength:         | 7500 psi                               |
| Melting Temperature:   | 1250°F (677°C) (Aluminum component)    |
| Density:               | 7.2 g/cc                               |
| Spray Rate:            | 8.5 - 9 lb/hr/100 amps                 |
| Wire Coverage:         | 0.7 oz / ft <sup>2</sup> /0.001" thick |
| Coating Roughness:     | 300-700 micro-inch AA (as sprayed)     |

## PROCEDURE FOR USE:

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 aluminium oxide.

EuTronic Arc 548AS coatings can be finished by machining with carbide or ceramic tool bits or by grinding using silicon carbide wheels.

Please contact your Eutectic Surface Coatings Specialist for more information.

### Spray Parameters:

Diameter: 1.6 mm  
Air Pressure: \*50 – 60 psi  
Voltage: \*30-32  
Amperage: \*100-200  
Standoff: \*4-6 in.

*\*Parameters are typical and may vary depending on the equipment used. Contact your equipment manufacturer for optimum spray parameters.*

## TYPICAL APPLICATIONS

- Bond coating
- Re-build worn bearing areas
- Pump shafts and housings
- Air seals

To ensure a safe work environment observe normal welding practices, provide appropriate eye, hearing, skin and respiratory protection and pay attention to air flow patterns. For general spray practices, see AWS Publications AWS C2. 1-73, "Recommended Safe Practices for Thermal Spraying" and AWS T55-85, "Thermal Spraying, Practice, Theory and Application." Thermal spraying is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before starting spray operations. DO NOT operate your spraying equipment or use the spray material supplied, before you have thoroughly read the equipment instruction manual. Refer to the Eutectic web site for Material Safety Data Sheet (MSDS) information. . DISREGARDING THESE INSTRUCTIONS MAY BE HAZARDOUS TO YOUR HEALTH.



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