Wear and Corrosion Resistant Stainless Steel Wire Designed for use with the Twin Arc Spray Process

EuTronic® Arc 532 Wire

COATING

- Self bonding
- Excellent resistance to metal-to-metal friction, corrosion and oxidation
- Alternative to 13% stainless steel wire
- Excellent for projects requiring thick coating build-up

Castolin Eutectic®
Eutectic Castolin

DESCRIPTION:

Self-bonding alloy with enhanced surface wear resistance properties to combat metal-to-metal friction, corrosion and oxidation.

KEY FEATURES

- No distortion of the workpiece or alteration to its dimensions and structure
- Compact, lamellar structure with strong interparticle bonding
- Excellent abrasion resistance combined with outstanding bonding to substrates
- Low coefficient of friction
- Non-magnetic, oxidation-resistant protective coating
- Applied by EuTronic Arc Spray 4 HF system.

TYPICAL APPLICATIONS:

- Cylinder Liners
- Journals
- Crankshaft Bearings
- Pistons
- Hydraulic Rams
- Machine Elements

TYPICAL WIRE CHARACTERISTICS:

Melting Point:	2600°F (1427°C approx.)
Wire Weight:	96 feet/lb @ 1/16 inch diameter

TYPICAL COATING CHARACTERISTICS:

Nominal Hardness:	HRC 56*
Bond Strength:	5100 psi
Spray Rate:	10 lb/hr/100 amps
Deposit Efficiency:	70 - 80% (paramenter dependent)
Wire Coverage:	0.8 oz/ft^2/0.001" (wire consumption)
Coating Density:	6.74 g/cm^3
Surface Texture:	Variable (dependent on spray param.)
Shrinkage:	0.0018 in/in
Coefficient of Thermal Expansion:	6.6 x 10^{-6} in/in °F (up to 1000°F)

FINISHING:

EuTronic Arc 532AS coatings can be machined or ground to an excellent finish.

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 aluminum oxide, rough grind, or rough machine in a lathe. Adequate air ventilation is recommended.

ARC SPRAY PARAMETERS:

Air Pressure:	*50 - 60 psi
Voltage:	*28 - 30
Amperage:	*100 - 200
Standoff	*4 - 6 in. (10-15cm)

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

AVAILABILITY:

15 kg per spool @ 1/16" diameter
Part Number: 532AS-16-15K

HEALTH & SAFETY:

To insure a safe work environment observe normal spraying practices, provide appropriate respiratory protection and pay attention to air flow patterns. For general spray practices, see AWS "Safety and Health Fact Sheet No.20 - Thermal Spray Safety". 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.

Contact Eutectic for Material Safety Data Sheet (MSDS) information.

DISREGARDING THESE INSTRUCTIONS MAY BE HAZARDOUS TO YOUR HEALTH

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS

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