A Nickel Chromium Molybdenum Wire Made Exclusively
for the Electric Arc Spray Process

EuTronic Arc® 547 Wire




COATING

- Erosion, oxidation and corrosion resistance at temperatures up to 1600°F (870°C)
- Dimensional restoration of Inconel 625 and other nickel based superalloys
- Superior corrosion control in a broad range of acidic and chloride environments
- Good resistance to stress corrosion cracking

Castolin Eutectic®
Eutectic Castolin

PRODUCT DESCRIPTION:

EuTronic Arc 547AS is high purity nickel chromium molybdenum (Alloy 625) wire specifically designed for arc spraying.

It produces dense, well-bonded coatings with good erosion, corrosion and oxidation resistance at temperatures up to 1600°F (870°C). Coatings have good resistance to stress corrosion cracking in various caustic, acidic and chloride environments.

TYPICAL APPLICATIONS:

- Pulp and Paper Digesters
- Corrosive Environments
- Boiler Tubes
- Chemical Manufacturing Industry
- Incinerators

TYPICAL WIRE CHARACTERISTICS:

Typical Composition:

Nickel:	62.5%
Chromium:	22%
Molybdenum:	10%
Iron:	2%

Niobium (Columbium) and Tantalum: 3.5%

TYPICAL COATING CHARACTERISTICS:

Melting Temperature:	2400°F (1360°C)
Bond Strength:	7000 psi (48 MPa)
Deposit Efficiency:	70 %
Hardness:	92 HRB
Coating Density:	7.2 gm/cm^3
Spray Rate:	11 lbs/hr/100 amps
Wire Coverage:	0.8 oz / ft^2/0.001“

FINISHING:

EuTronic Arc 547AS coatings can be machined with conventional tooling.

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.

SPRAY PARAMETERS:

Diameter:	1/16" (1.6 mm)
Air Pressure:	*40 - 50 psi ([1])
Voltage:	*28 - 30
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.

([1]) 55 psi max. when using ArcJet.

AVAILABILITY:

1/16”(1.6 mm) diameter wire on 30lb. spools.
Product Code: 547AS-16-11.36K

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 Publication “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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