

A Nickel Chromium Molybdenum (C276) Wire made for the Electric Arc Spray Process

EuTronic® Arc 546 Wire



COATING

- Dense, well bonded coatings with excellent corrosion resistance and stress corrosion cracking resistance in various alkaline, acidic and chloride environments
- Good resistance to abrasion and metal to metal wear



DESCRIPTION:

EuTronic Arc 546AS is high purity nickel chromium molybdenum tungsten (Alloy C276) wire specifically designed for arc spraying.

It produces dense, well-bonded coatings with excellent corrosion resistance and stress corrosion cracking resistance in various alkaline, acidic and chloride environments.

Its hardness makes it resistant to abrasion and resists metal to metal wear.

TYPICAL APPLICATIONS:

- Pump housings / casings, valves (chemical processing industry)
- Pulp and paper digesters
- Guide rolls
- Corrosive environments

TYPICAL WIRE CHARACTERISTICS:

Melting Point: 2400°F (1360°C)
Nickel: 60%
Chromium: 15%
Molybdenum: 16%
Iron: 5%
Tungsten: 4%

TYPICAL COATING CHARACTERISTICS:

Bond Strength: 7000 psi (48 MPa)
Deposit Efficiency: 70%
Hardness: 35 HRC
Coating Density: 7.2 g/cm³
Spray Rate: 11 lb/hr/100 amps
Wire Coverage: 0.8 oz/ft²/0.001"

FINISHING:

EuTronic Arc 546AS coatings can be machined or ground.

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.

ARC SPRAY PARAMETERS:

Air Pressure: *50 - 60 psi
Voltage: *29 - 32
Amperage: *50 - 300
Standoff: *3 - 8 in.

* Parameters are typical and may vary depending on the equipment used.

AVAILABILITY:

25 lb per spool @ 1/16" diameter
Part Number: 546AS-16-11.64K

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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