



Zinc Wire Made Exclusively for the
Twin Wire Arc Spray Process

EuTronic® Arc 520 Wire



- Protects iron and steel base metals in atmospheric and marine environments
- Excellent for EMI/RFI shielding
- Conductive coating may be applied to capacitors
- Best used in environments where pH is greater than 6.0 and wet environments where temperatures are less than 140°F (60°C)

EuTronic® Arc 520AS

EuTronic Arc 520 is essentially pure zinc wire made exclusively for the twin wire arc spray process. The coatings produced are generally used in one of the following applications areas:

- EMI/RFI shielding
- End coating on capacitors
- Galvanic protection of iron and steel

Coatings of 520 zinc can be successfully applied to plastic electronic housings in order to provide effective EMI/RFI shielding. 520 coatings have a higher dB rating than conductive paints, bond to the plastic better and will not flake or peel.

A conductive coating on zinc can be applied to the ends of capacitors in order to create a surface for subsequent soldering.

The most common use for arc sprayed 520 zinc is as a corrosion resistant coating to protect iron and steel base metals in both atmospheric and marine environments.

Coatings of 520 zinc are more effective long term than hot dip galvanized coatings particularly when top coated with a suitable primer and sealer system.

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.

Please contact your Eutectic Surface Coatings Specialist for more information.

Spray Parameters:

Diameter: 2.0 mm
Air Pressure: *50 – 60 psi
Voltage: *20-21
Amperage: *50-300
Standoff: *3-10 in.

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

TECHNICAL DATA

Typical Values	
Nominal Hardness:	HR15T 80-85 (HRB 60-73 Converted)
Bond Strength:	1224 psi on grit blasted steel
Deposit Rate:	20 lb/hr/100 amps
Deposit Efficiency:	70%
Wire Coverage:	0.9 oz /ft ² /mil (wire consumption)
Coating Density:	6.36 gm/cc
Coating Weight:	0.034 lb/ft ² /0.001 inches
Melting Point:	788°F (≈420°C)
Wire Weight:	66 feet / lb @ 2.0 mm

TYPICAL APPLICATIONS

- Plastic Electronic Housings (EMI/RFI Shielding)
- Capacitor Ends
- Marine Hardware
- Bridge Structures and Overpasses
- Valves (atmospheric exposure)
- Steel I-Beams

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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