



An Iron Chrome Aluminum Alloy Solid Wire
Made Exclusively for the
Twin Wire Arc Spray Process

EuTronic® Arc 514 Wire

- Dense, well bonded, high integrity coatings
- Excellent machinability
- Excellent wear and high temperature oxidation resistance
- Used for dimensional restoration of various parts
- Can be applied in excess of 0.150"

EuTronic® Arc 514AS

EuTronic Arc 514AS is an iron chrome aluminum alloy solid wire made for electric arc spraying. It produces dense, well-bonded coatings with excellent machinability, including excellent wear and high temperature oxidation resistance (1600°F).

EuTronic Arc 514AS is used for dimensional restoration applications on various carbon and stainless steels and cast iron. Its low shrink characteristic allows increased coating thickness. Coating thickness greater than 0.150" can be achieved.

TECHNICAL DATA

Typical Values	
Hardness:	85 - 90 HRB
Deposit Efficiency:	70%
Bond Strength:	6,300 psi average
Spray Rate:	11 lb/hr/100 amps
Melting Temperature:	2770°F (1520°F)
Density:	7.1 gm/cc
Shrinkage:	0.0018 in/in
Coating Weight:	0.0375 lb/ft ² /0.001" (0.73 kg/m ² /100microns)

Properties:

Iron based alloy containing chromium, aluminum and manganese.

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.

EuTronic Arc 514AS coatings can be machined with conventional tooling.

Please contact your Eutectic Surface Coatings Specialist for more information.

Spray Parameters:

Diameter: 1/16" (1.6 mm)
Air Pressure: *50 – 60 psi
Voltage: *29-30
Amperage: *100-300
Standoff: *5-7 in. (12.5-17.5 cm)

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

Availability:

25 lb per spool @ 1/16" diameter
Part Number: 514AS-16-11.36K

TYPICAL APPLICATIONS

- Boiler Rods - Corrosion Resistance
- Shafts, Dies, Rolls - Dimensional Buildup
- Machine Element Repairs

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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