

Aluminum Maintenance and Repair Electrode

EutecTrode® 3021



WELDING

- Aluminum-silicon alloy
- Combat alloy
- Good color match with most aluminum casting grades



DESCRIPTION:

EutecTrode 3021 is a combat version of EutecTrode 2101. This electrode can be used to weld heavy aluminum castings, long joints, defect filling and rebuilding missing sections. It can also be used for welding extrusions, piping, furniture as well as aluminum castings containing manganese and/or silicon. Weld deposits are dense and porosity-free. This user-friendly electrode has a smooth and stable arc. Slag is easily removed after the part has cooled down.

EUTECTRODE 3021 TECHNICAL DATA:

Typical Tensile Strength: 34,000 psi (235 N/mm²)
Typical Yield Strength: 28,000 psi (190 N/mm²)
Typical Hardness: BHN: 45
Electrical Conductivity: IACS%: 39
Color Match Properties: Good, but will darken after clear anodizing

WELDING PARAMETERS:

Current & Polarity:	DCEP (+)
Diameters:	1/8" - 3.2mm
Amperage Range:	90 - 140

TYPICAL APPLICATIONS:

- Engine Blocks
- Cast Differential Housings
- Various Aluminum Pump Casings
- Heavy Gauge Aluminum Truck Bodies
- Foundry Patterns
- Aluminum Rails

WELDING PROCEDURE & TECHNIQUE:

Preparation: Clean weld area to remove contaminants and surface oxides. Parts thicker than 1/8" (3.2mm) should be beveled to have an included angle of 60-75°. Preheat heavy sections or sections thicker than 1/4" (6.4mm) within a 400-500°F (204°-260°C) range.

NOTE: Preheating reduces the need to use high amperage levels.

Technique: Start arc either by lightly drawing the electrode across the work piece or use a copper starting block. To help control the arc response, it is important to maintain a very short stand-off distance and to keep the electrode almost perpendicular. Back-whip craters and allow to cool before de-slagging.

Post-Welding: Slag removal is very important. It can become corrosive if not removed. Scrub in hot, soapy water then rinse.

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



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