

A Versatile General Purpose Hardfacing Electrode For Both 2-Body & 3-Body Abrasion

# EutecTrode<sup>®</sup> 700E

- Excellent resistance to abrasion
- High deposition rate
- Good weldability

## EutecTrode® 700E

EutecTrode 700E is a medium chromium alloy with a very fine dispersion of chromium carbides. This fine carbide dispersion imparts high resistance to matrix erosion while maintaining superior general abrasion resistance.

## TECHNICAL DATA

| Typical Values          |  |
|-------------------------|--|
| Hardness:               | 58 - 60 HRC                            |
| Carbide Hardness (VPN): | 1200 (Cr <sub>7</sub> C <sub>3</sub> ) |
| Current & Polarity:     | DCEN (-) and AC                        |

#### SUGGESTED WELDING PARAMETERS:

| Diameter      | Amperage  |
|---------------|-----------|
| 1/8" (3.2mm)  | 105 - 140 |
| 5/32" (4.0mm) | 120 - 170 |
|               |           |

Note: Always keep electrodes in their container during storage. Damp electrodes can cause cracking & porosity. For re-drying procedures consult Eutectic Technical Service for more information on specific application and alloys.

## PROCEDURE

**PREPARATION:** Clean weld area of scale and/or oxide. A nominal preheat of 150°F is advised if part is below 40°F or over 1" thick. For higher carbon steels higher preheats will be needed. Check the Reference Section for information regarding specific preheating levels for specific steel grades. Note: Do not preheat Hadfield manganese steel castings above 400°F as this will cause time-temperature embrittlement.

**TECHNIQUE:** Maintain a medium arc and incline the electrode at a 45° angle in the direction of travel. Excessive weaving (more than 2x the electrode diameter) is not advised as wide beads can cause excessive base metal overheating and degrade the weld deposit wear properties. Back whip craters to reduce crater-cracking tendencies.

*Note:* If wide beads are needed to produce thin coatings, hold a short-to-medium arc length and move rapidly from side-to-side.

**POST-WELDING:** Allow parts to slow cool in still air. High carbon steels should covered with a heat-retardant blanket.

### TYPICAL APPLICATIONS

- Dredger Teeth
- Plow Shares
- Augers
- Dredge PumpsSlurry Pipe Elbows

• Excavator Buckets

Pulverizers

- Sub-Soiler Blades
- Cement Grinder Rings
- Cultivator Chisel Points

Observe normal welding practices, respiratory protection and proper air fl ow pattern advised. For general welding practices, see AWS publications Z49.1 "Safety in Welding and Cutting and Allied Process". Welding is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before begin-ning welding operations. DO NOT operate welding equipment or use welding materials before you have thoroughly read the proper instruction manual(s).Please refer to the Eutectic internet site for Material Safety Data Sheet (MSDS) information.DISREGARDING THESE INSTRUCTIONS, AND/OR THE INSTRUCTIONS OF WELDING EQUIPMENT OR MATERIAL MANUALS, MAY BE HAZARDOUS TO YOUR HEALTH.

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