

Superior Electrode for Abrasion with Moderate Impact

# EutecTrode<sup>®</sup> 5003



## ELECTRODES

- **Welder Friendly Hardfacing Electrode**
- **Excellent Weldability in All Positions on Carbon, Alloyed Steels Manganese and Cast Irons.**
- **Supported by a High Concentration of Chromium Carbides**
- **Maximum Wear Resistance for Abrasion Combined with Moderate Impact**



## DESCRIPTION

EutecTrode 5003 is a conventional hardfacing product with improved weldability. Ideal for combatting abrasion when accompanied by moderate impact. Deposits polish while in service to further reduce the rate of wear.

## WELDING PROCEDURE & TECHNIQUE

**Preparation:** Clean weld area of scale and/or oxide. A nominal preheat of 150°F is advised if the part is below 40°F or over 1" thick. 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 2 times the electrode diameter) is not advised as wide beads can cause excessive base metal overheating and degrade the weld deposit wear properties. The optimum bead width is a stringer bead. Back whip craters to reduce crater-cracking tendencies.

**Post-Welding:** Allow parts to slow cool in still air. High carbon steels and air hardenable steels should be covered with a heat-retardant blanket to control the cool-down rate.

## TYPICAL ANTI-WEAR APPLICATIONS & INDUSTRIES

### APPLICATIONS

- Augers
- Crusher liners
- Scrapers
- Dredge pumps
- Dipper teeth & lips

### INDUSTRY

Construction Industry  
Power Generation  
Mining Industry  
Cement Industry  
Iron and Steel Works

## EUTECTRODE 5003 TECHNICAL DATA & SET-UP INFORMATION

Typical Hardness as-deposited: HRC: 55-58  
Carbide Hardness (VPN): 1200 (Cr<sub>7</sub>C<sub>3</sub>)  
Carbide % Avg. count: Medium  
Current & Polarity: DCEP (+) and AC

Diameter [mm] / [in.]		Amperage [A] Range
3.2	1/8	120 - 150
4.0	5/32	130 - 170

Note: Always keep electrodes in their container during storage. Damp electrodes can cause cracking and porosity. For re-drying procedures check with Eutectic Technical Services.



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