



Unique Chromium-Carbide Bearing  
Electrode with Superior Abrasion  
and Impact Properties

# EutecTrode® 5005



- For use on most carbon, low-alloy and manganese steels
- Resistant to coarse particle abrasion with moderate impact
- Provides dense, smooth, easy to clean deposits

# EutecTrode® 5005

EutecTrode 5005 is an electrode for the overlay and protection of carbon, alloy and manganese steels. A high chromium carbide content makes it especially favorable against coarse particle abrasion, moderate gouging impact and mild corrosion in any number of service conditions.

## TECHNICAL DATA

Typical Values	
Hardness as-deposited:	57-60 HRC (as deposited)
Carbide Hardness:	1200 (Cr <sub>7</sub> C <sub>3</sub> ) VPN
Current polarity:	DCEP (+) or AC

DIAMETER	1/8" (3.2mm)	5/32" (4.0mm)	3/16" (4.8mm)
AMPERAGE	90-130	120-160	150-210

## PROCEDURE FOR USE:

**PREPARATION:** Clean weld area of scale and/or oxide. A nominal preheat of 150°F (65.5°C) is advised if part is below 40°F (4°C) 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 heat Hadfield manganese steel castings above 400°F (204°C) as this will cause time-temperature embrittlement.*

**TECHNIQUE:** For base metals which high hardenability a buffer layer is highly recommended prior to application of EutecTrode 5005. For Manganese steels, use EutecTrode 40; for air-hardenable steels, use EutecTrode 680 and for cast irons, Xuper 2233N. Only one pass of EutecTrode 5005 should be used on cast irons.

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. 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.

## TYPICAL APPLICATIONS

- Muller tires
- Conveyor Chains
- Dredger parts
- Bucket arms
- Pug mill paddles



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