

Green Technology, Chromium-Free, Wearfacing Electrode

# EutecTrode® 600 Cr Free



## WELDING



- Wearfacing electrode with no hazardous chromium by-products
- Excellent single pass properties
- Provides dense, smooth deposits
- Superior wear resistance against standard chromium carbide
- 60-65 HRC maximum hardness



## DESCRIPTION:

EutecTrode 600 is a chromium-free, wearfacing electrode specifically designed with boron carbides to combat wear by abrasion and erosion.

Eutectrode 600's superior properties and versatile, welder-friendly performance, increase productivity and profitability by offering a cost effective solution for protection of parts in high-wear service without excess exposure to harmful, chromium bearing fumes.

## APPLICATIONS:

Wear protective coating for a wide range of steel components subject to severe abrasion or erosion by mineral particles, sand, rocks and gravel.

- Mixer shafts
- Excavator bucket teeth
- Impellers
- Conveyor chutes
- Buckets, shovels
- Sand pumps
- Transport screws
- Concrete mixers
- Asphalt handling

## TECHNICAL DATA:

### Operating Conditions:

Current Type: DCEN (-) preferred

### Typical Mechanical Values:

Hardness: 60-65 HRC

ASTM G65 Vol. Loss: 18 mm<sup>3</sup> (Average)

DIAMETER	AMPERAGE
5/32" (4.0mm)	130-150
3/16" 4.8mm)	150-190

## PROCEDURE FOR USE:

### Preparation:

Remove any previous weld deposits or cracked and contaminated metal and any residues or oxides that remain.

### Preheating:

**It is very important that the weld deposit not exceed 475°F in order to maintain its high wear resistance.** For base materials that require preheating due to their carbon equivalent, it is recommended that the preheat temperature not exceed 250°F in order to avoid temperature excursions of the weldment above 475°F.

**Note: Do not apply Eutectrode 600 directly over 12-14% Mn steels as it will not bond!**

### Intermediate layer:

On 12-14% manganese steels, an intermediate buffer layer is required using either EnDOTec® DO\*68S wire or EutecTrode® 680. On hardenable and air-hardening steels, deposit intermediate layers with Xuper® 6868 XHD. To build up missing sections on low-alloy steels, EnDOTec DO\*66 is recommended.

## WELDING TECHNIQUE:

Maintain a medium arc and incline the electrode at a 30 to 45° angle in the direction of travel. Excessive weaving (more than 4x 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 the possibility of porosity and crater-cracking.

## YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



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