

A Non-Machinable Iron-Base Alloy for Contaminated Cast Irons

# EutecTrode<sup>®</sup> 27



## WELDING

- High Arc force powers through contaminants to clean and seal surfaces
- Good for repair preparation on unknown and low-grade cast iron repairs
- Non-Machinable



## DESCRIPTION:

EutecTrode 27 is an Iron-based electrode designed to cut through contaminants in cast irons where Nickel-based alloys fail to adhere and post-weld machining is not necessary.

As a pre-treatment, EutecTrode 27 is especially effective for the welding and repair of low and unknown grades of cast irons. The high arc force helps to scavenge impurities out and seal the immediate area around repairs, resulting in high-quality final deposits when paired with other Eutectic cast iron products.

## TYPICAL APPLICATIONS:

Heavily contaminated or oxidized cast iron such as furnace grates, oil pans, dies, agricultural equipment, etc.

## TECHNICAL DATA:

Typical Tensile Strength: 60,000 psi (415 N/mm<sup>2</sup>)  
Typical Hardness: 50 HRC  
Current & Polarity: AC or DC (electrode +)

## Availability and Recommended Amperages

|             |              |               |
|-------------|--------------|---------------|
| <b>Dia.</b> | 1/8" - 3.2mm | 5/32" - 4.0mm |
| <b>Amp.</b> | 80-150       | 120-170       |

## WELDING PARAMETERS:

**Preparation:** Prepare the casting defect by chamfering with either Eutectic ChamferTrode® or ExoTrode® AC/DC after nominally preheating the casting within a 150°-200°F temperature range.

**Technique:** Butter or clad the prepared surfaces using a slightly longer arc length (1/4 – 3/8) than normal. The key to sealing porous surfaces is to actually “arc-seal” by lightly melting the surface while at the same time depositing the smallest amount of weld metal. After completing the sealing passes select a companion product such as Eutectic 2240 to finish the repair.

**Post-welding:** Slow cool using any available insulating material. Allow to slow cool out of drafts.

## YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



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