



High Quality Electrode for Welding
Gray Cast Irons when Strength and
Machinability are Required

EutecTrode®

3055/4055



- Excellent crack resistance
- Good for thick or variable section castings
- Machines cleanly with no smearing
- Better mechanical properties than conventional cast iron rods

EutecTrode® 3055/4055

EutecTrode 3055 and 4055 are recommended for welding engineering grade cast iron when mechanical properties similar to the base metal are required.

EutecTrodes 3055 & 4055 deposit high-strength weld metal with excellent crack resistivity properties on thick-section castings. Ease of welding in all positions gives high welder appeal.

TECHNICAL DATA

Typical Values	
Typical Tensile Strength:	55,000 psi (380 N/mm ²)
Hardness:	90 HRB
Polarity:	DCEP (electrode +)

DIAMETER	3/32" (2.4mm)	1/8" (3.2mm)
Amp	110-120	130-140

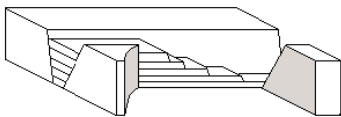
PROCEDURE FOR USE

PREPARATION

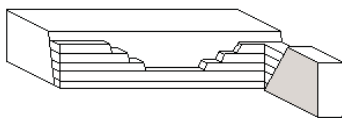
Clean joint and/or parts to be welding thoroughly. Terminate crack growth by drilling 1/4" holes at the leading points. Preheat casting to 400°F, holding for 1 hour per inch of thickness. Prepare joint with Eutectic ChamferTrode® or ExoTrode® with either a single-V or double V, depending on joint thickness and accessibility. Allow a root opening of 1/8" for full penetration welds.

WELDING TECHNIQUE

Deposit short runs no longer than 2-in. and moderately peen 2nd and subsequent passes. For long cracks in heavy castings use either a cascade and/or block deposition sequence.



Cascade Sequence: Weld metal is deposited in overlapping layers.



Block Sequence: Weld metal is deposited in intervening increments.

POST WELDING

Slow cool after welding using insulating material such as vermiculite, sand or fire retardant blankets.

TYPICAL APPLICATIONS

- Pump and Differential Housings
- Motor Blocks
- High Phosphorus Irons and Steels
- Heavy Section Casting Repair
- Dimensional Restoration

