



High Nickel Alloy for Cast Iron,  
Maximum Machinability

# EutecTrode® 224



- Excellent tie-in and fluidity characteristics
- Excellent for low temperature welding of cast irons
- Unique chemistry for in-process weld cleaning and little to no spatter
- Ductile matrix imparts high crack resistance

# EutecTrode® 224

EutecTrode 224 specially formulated coating gives a pulsed arc for low temperature welding of cast irons. When properly applied the arc will penetrate surface skin and contaminants to produce a porosity free weld. The heat affected zone is not hardened and stress cracks are almost always avoided.

## TECHNICAL DATA

Typical Values	
Typical Tensile Strength:	53,000 psi (365 MPa)
Typical Yield Strength:	37,000 psi (255 MPa)
Typical Hardness:	80 HB
Polarity:	AC/DCEN (-) or DCEP (+, preferred)

DIAMETER	3/32" (2.4mm)	1/8" (3.2mm)	5/32" (4.0mm)
Amp	30-70	55-110	75-135

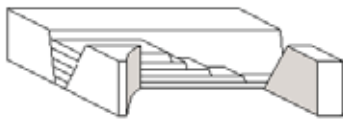
## PROCEDURE FOR USE

### PREPARATION

Prepare casting defect by chamfering with either Eutectic ChamferTrode® or ExoTrode®. Cracks should be prepared with drilled holes to prevent growth and either a single-V or double-V depending on casting thickness and accessibility. Allow a 1/8" root opening for full-penetration welds. Preheat large castings to 400°F (pre-heat temperature will vary with casting size, type and condition)

### WELDING TECHNIQUE

Deposit short runs no longer than 2" and moderately peen the 2nd and subsequent passes. Use either a cascade or block deposition sequence (see figures below) for large sectional thickness castings.



*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 or heat-retardant blankets.

## TYPICAL APPLICATIONS

Low temperature welding of cast iron in all positions. Repairing breaks and cracks in engine blocks, gear housings and machine bases. Ideal for filling holes and building up worn or missing sections which must be machined to final dimension after welding. Also for joining cast iron to steel, iron and stainless steel.

