

Electrode for the Welding of Gray Cast Irons to Themselves or
Dissimilar Ferrous Alloys

EutecTrode® 3099



WELDING

- Dilution Tolerant
- Great crack resistance
- High ductility helps maintain properties of engineering-grade castings



DESCRIPTION:

EutecTrode 3099 is a high nickel alloy ideal for applications requiring dilution tolerance and/or mechanical properties matching those of most gray cast irons. With proper application, 3099 provides sound, dense deposits for pore-free, machinable repairs and cladding.

TYPICAL APPLICATIONS:

High ductility and elongation properties make 3099 a good choice for applications which castings experience cyclic stresses. Excellent for repairing lathe beds and ways, bushings, gearboxes and cast iron die bodies. Ideal for heavy sections, ductile or high nickel castings.

TECHNICAL DATA:

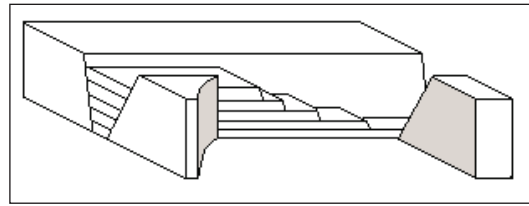
Current and Polarity: AC or DCEN (electrode -)
Typical Tensile Strength: 53,000 psi (365 N/mm²)
Hardness: HRB 85

Diameter	Amperage
3/32" (2.4mm)	40-75
1/8" (3.2mm)	65-115
5/32 (4.0mm)	100-150
3/16" 4.8mm)	120-175

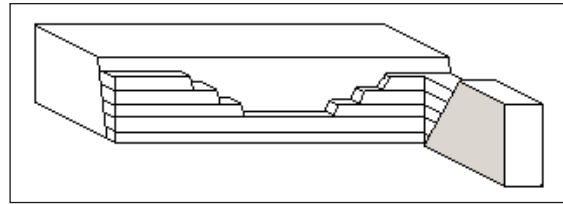
WELDING PARAMETERS:

Preparation: Clean joint and/or parts to be welding thoroughly. Terminate crack growth by drilling ¼" holes at the leading points. Preheat casting to 150-200°C, 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.

Technique: Deposit short runs no longer than 2-in. and moderatelypeen 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 available insulating material such as vermiculite, sand or fire retardant blankets.

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



EUTECTIC CORPORATION
N94 W14355 Garwin Mace Drive
Menomonee Falls, WI 53051 USA
Tel.: +1 (800) 558-8524
eutectic.com

EUTECTIC CANADA
428, rue Aimé-Vincent
Vaudreuil-Dorion, Québec
J7V 5V5 Canada
Tel.: +1 (800) 361-9439
eutectic.ca

