

EutecTrode EC 2026

Manual Metal Arc Electrode For Crack Resistant Welding Of Cast Iron

DESCRIPTION

High nickel alloy electrode with fast fusion speed ensuring dense, crack resistant, easy to machine deposits on cast iron with comparable hardness and coefficient of expansion which minimises residual stresses.

Product Details

The special ionising flux coating creates a fine spray metal transfer promoting low heat input and reduced dilution effects.

APPLICATIONS

This electrode is recommended for both joining and overlaying applications on grey, nodular graphite, alloy and chilled cast irons, especially when the requirements call for high strength combined with crack resistance. It can also be used for joining steel to cast iron. Machine bases, pump casings, gear housings, die cladding, heavy sections of cast iron, etc.

PROCEDURE FOR USE

Preparation: Ensure that all areas to be welded are free from contaminants, remove casting defects such as sand inclusions and blow holes and damaged or fatigued base material. Prepare for the repair of cracks, by gouging suitable «U» or «V» type joint-design, depending on wall thickness, using ExoTrode.

Preheating: For small and intricate castings, pre-heating between 200° C-300°C may be necessary. For large and complicated sections, where pre-heating cannot be successfully applied (avoid local pre-heating) maintain the workpiece at ambient temperatures throughout the repair operation by allowing each weld bead to cool before commencing subsequent welds

Welding: For non-preheated parts, select the lowest possible amperage in order to minimize heat input and employ a balanced welding technique. Hold a nearly vertical electrode angle and maintain a short arc length, deposit stringer beads 3-4 cm in length followed by peening (do not peen thin section components). Allow each weld bead to cool completely prior to subsequent welds. Ensure that each weld pass is completely free from slag, defects, etc. Preheated parts should be cooled at a slow, even rate, down to room temperature.

TECHNICAL DATA

Tensile strength: 350 N/mm² (51,000 psi)

Typical Hardness: 165 HB

Current polarity: AC/DC (+)

DIAMETER	AMPERAGE
2.5mm	50-90
3.2mm	80-120
4.0mm	110-140

Note: For optimum result use the lowest amperage practical