

A High Alloy Content Electrode for Welding Steels of Unknown Composition
and Dissimilar Steels

EutecTrode® 670E



WELDING

- Fully Austenitic structure helps retain mechanical properties
- Great corrosion and spalling resistances up to 1800°F
- Excellent in Salt-rich environments



DESCRIPTION:

EutecTrode 670E has been specially formulated to meet the critical metallurgical demands when joining stainless and mild steels of unknown composition. Its composition also makes it an ideal candidate product when welding dissimilar steels and when such steels need scaling resistance up to 1800°F.

TYPICAL APPLICATIONS:

Use in marine applications such as salt-water discharge pumps, desalination equipment, furnace baskets that work in both carburizing and reducing environments, salt baths used in drawing and tempering operations

TECHNICAL DATA:

Typical Tensile Strength: 95,000 psi (655 N/mm²)
Typical Yield Strength: 65,000 psi (448 N/mm²)
Typical Elongation (1=5d): min. 25%
Hardness as-deposited (HRB): 85
Maximum Temperature: 1800°F steady-state
Current & Polarity: DCEP (+) and AC

Recommended Amperages

Diameter:	3/32" (2.4mm)	1/8" (3.2mm)	5/32" (4.0mm)
Amperage:	50-70	70-110	110-150

Note: for optimum results use the lowest amperage practical

WELDING PARAMETERS:

Preparation: Clean weld area of scale and/or oxide. Angle prepping normally involves close-butts and infrequently bevel preparations. If needed, a 60° bevel is acceptable. Preheat and inter-pass temperatures will depend on the grade of steel, if known. Unknown grades should be nominally preheated within a 200-300°F range.

Technique: A short, non-contact technique is recommended for both fillet and butt welding. Use a slightly longer arc-length for bead-on-plate welding. Deposit stringer beads or 2x to 3x weave beads. Do not weave more than three times the electrode diameter otherwise slag interference will be encountered.

Post-welding: Parts which have been preheated should be wrapped or covered with heat – retardant material to help with slow cooling.

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



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