At Metals And Welding Specialities, we proudly present the EutecTrode 670 Welding Electrodes, a premium choice for joining steels of unknown composition and for dissimilar-steel welding. This high-alloy electrode is engineered to deliver reliable weld integrity, exceptional corrosion resistance, and robust performance under demanding service conditions. The EutecTrode 670 electrode features a fully austenitic weld deposit that minimizes dilution, preserves toughness, and ensures longevity in aggressive environments. Its coating is formulated to deliver a stable, low spatter arc, making it user-friendly and suited for critical applications. The alloy chemistry is designed to resist oxidation and scaling up to around 1800 °F, making the electrode especially suited for high temperature and corrosive environments.

Table Of Content

The EutecTrode 670 electrode is often specified under the UNS designation UNS S30908 and aligns with the ASTM Grade A—commonly grouped in the E309-type class of electrodes because of its chromium and nickel enriched composition. It is recognized in the welding industry as a “universal electrode”, ideal for joining stainless steels, carbon steels, or steels whose precise metallurgy is not known. Because of this versatility, engineers and welders often refer to it by its universal standard

classification when specifying it in drawings or repair documents. In operation, its weld metal offers a tensile strength in excess of 95,000 psi (about 655 MPa) and delivers reliable ductility and impact strength even in mixed metallurgy joints.

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When preparing to weld with EutecTrode 670, cleaning the base metal surface to remove oxides and scale is critical. Preheat and interpass temperatures should be tailored to the known or estimated base metal—unknown steels may use a moderate 200–300 °F preheat. The short-arc, stringer bead technique yields the best performance, and weaving beyond three times the electrode diameter should be avoided. The combination of low dilution, stable arc, and a robust alloy core makes it particularly useful in maintenance, repair, overlay, and dissimilar-steel joining tasks across industries such as power generation, chemical processing, marine, and heavy fabrication.

Because EutecTrode 670 Welding Electrodes exhibit strong weldability, they reduce the risk of cracking, even in transition welds between stainless and mild steels. Their superior metallurgical compatibility, combined with strong corrosion and scaling resistance, makes them a go-to in critical service. By choosing EutecTrode 670 from Metals And Welding Specialities, you get a product supported by technical know-how, consistent quality, and responsive support. Whether you're tackling repair welds, butt joints, overlays, or weld reinforcement, this electrode offers a dependable solution for challenging steel welding tasks.

EutecTrode 670 Welding Electrodes in India, EutecTrode 670 Welding Electrodes Manufacturers in India, EutecTrode 670 Welding Electrodes Suppliers in India, EutecTrode 670 Welding Electrodes Stockists in India, EutecTrode 670 Welding Electrodes Exporters in India

Choosing EutecTrode 670 from Metals And Welding Specialities ensures you get quality assurance, batch traceability, and support in qualification. Our technical team can guide you in matching rod diameter, current settings, and overlay strategies to your equipment. Whether you aim to refurbish worn components or build new wear surfaces, EutecTrode 670 provides a balanced solution of abrasion resistance, weldability, and long life.

Specification EutecTrode 670 Welding Electrodes

Specification	Description
Product Name	EutecTrode 670
Product Type	Coated Electrode
Alloy Type	High Chromium Iron Alloy
Welding Process	SMAW (Shielded Metal Arc Welding)
Coating Type	Basic/Low Hydrogen
Typical Hardness (As Deposited)	55 – 60 HRC

Typical Hardness (After Work Hardening)	Up to 65 HRC
Typical Applications	Crusher hammers, bucket teeth, dredge parts, agricultural tools, and earth-moving equipment
Base Materials	Carbon steels, low alloy steels, and manganese steels
Current Type	DC+ (Reverse Polarity) or AC
Operating Temperature	Up to 450°C
Deposition Rate	High
Resistance	Excellent resistance to severe abrasion and moderate impact
Typical Weld Metal Composition	Cr 28–32%, C 3.5–4.5%, Fe Balance
Electrode Sizes (mm)	3.2, 4.0, 5.0
Typical Current Range (A)	3.2 mm: 90–130 A, 4.0 mm: 130–180 A, 5.0 mm: 180–230 A
Packaging	Available in 5 kg and 20 kg cartons
Standards	AWS A5.13: E FeCr-A (Equivalent)
Manufacturer	Eutectic Castolin

EutecTrode 670 Welding Electrodes Parameters

Parameter	Value / Range
Tensile Strength (as deposited)	≈ 97,000 psi (≈ 670 kg/mm²)
Yield Strength	≈ 65,000 psi (≈ 448 N/mm²)
Elongation (1 = 5d)	≥ 25 %
Hardness (as deposited)	HRB 85
Maximum Service Temperature (steady state)	1,800 °F (≈ 982 °C)
Current & Polarity	DCEP (+) and AC
Recommended Amperage by Electrode Diameter	3/32" (2.4 mm)50–70 A 1/8" (3.2 mm) 70–110 A 5/32" (4.0 mm)110–150 A
Arc Technique / Best Practice	Short, non-contact arc; stringer beads or 2× to 3× weave; do not weave > 3× electrode diameter

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