

EutecTrode 6800

Manual Metal Arc Electrode For Anti-Wear Protective Coatings At High Temperatures

DESCRIPTION

EutecTrode6800 is a special nickel alloy containing Cr, Mo, W giving excellent thermal properties for service in a wide range of high temperature environments and corrosion resistance against oxidizing acids, mixed acids, salts, etc.

A high alloyed electrode for cladding where corrosion and/or abrasion and heat resistance combined with impact is required, on a wide range of base materials including high nickel and chromium molybdenum steels.

Product Details

- Non-hygroscopic coating
- Positional weldability
- High metal recovery (%230)
- Low dilution with base metal
- Ease of arc striking and restriking
- High deposition speeds
- Very thick single pass deposit
- No slag residues

APPLICATIONS:

Main applications

For sinter plant ventilators.

Other applications

Crusher bars, agglomeration fans, blast furnace hoppers and bells, mixer screws and heads in the ceramics industry.

PROCEDURE FOR USE

Preparation: Remove all damaged and fatigued weld metal from areas to be welded and remove sharp edges. Where compression or medium impact factors exist deposit into prepared grooves. Prepare grooves 3-5 mm wide, 6 mm in depth using ExoTrode and deposit two passes using XHD6715.

Preheating: Preheating depends on the steel's Carbon Equivalent and the workpiece size, thickness and the geometry. Castolin Eutectic recommends:

CE < 0.2 : preheating not essential.

CE 0.2- 0.4: preheating 100-200°C

CE 0.4- 0.8: preheating 200-350°C

Note that 12-14% Mn steels should never be preheated and that the workpiece temperature during welding should be kept below 250°C.

Cladding and Intermediate layers For 12-14% austenitic manganese steels apply an intermediate layer using EutecTrode 646XHD.

Welding

Maintain a short arc length, and hold a near vertical electrode angle, in the direction of travel. To complete each weld bead -travel back over the deposit approximately 10 mm and lengthen the arc. For heavy deposits, intermediate layers using EutecTrode 646XHD are recommended.

Depending upon thickness and alloy content of the component, slow cooling after welding may be advisable.

TECHNICAL DATA

Tensile strength: 780 N/mm² (113,000 psi)

Typical Hardness As deposited: 25-28 HRC

Work hardened: 40-42 HRC

Current polarity: AC/DC (-)

DIAMETER	AMPERAGE
3.2mm	120-170

Note: For optimum result use the lowest amperage practical