

# An Advanced Electrode for highest Quality Welding of Carbon Steels to Molybdenum-Containing Austenitic Stainless Steel of type AISI 316 or Equivalent Grades.

## **Principal Applications:**

For joining Carbon Steels to 18 Cr/ 12 Ni/ 2 Mo type stainless steels, and to deposit the 'barrier' layer for Molybdenum - containing stainless overlays on carbon steels.

## **Outstanding Features:**

- Excellent operating features and easy slag control in all positions.
- · Smooth, well-rippled weld beads with negligible spatter.
- · Good for repair of hydel components (guide vain, runners etc.)
- Confirms to ASME Sec II, Part C, SFA 5.4, Class E 309Mo- 15.

#### **Characteristics:**

Precisely controlled chemistry of the core wire and the flux coating enables consistent achievement of outstanding weld properties. High deposit ductility and optimum ferrite content always assures total freedom from cracking, in spite of dilution.

## **Procedure:**

Clean weld area. Bevel heavy sections 60° to 90° groove. Clamp/ tack long seams. Use chill bars and back-up plates to minimize distortion. Deposit stringer beads with shortest arc length. Chip slag between passes. Prevent localized heat build-up by staggered welding.

Technical Characteristics: Typical All-weld Chemistry (Wt%)

С	Mn	Si	Cr	Ni	S	Ρ	Мо	Cu
0.04	0.80	0.3	22.5	13.00	0.02	0.03	3 2.50	0.20

Typical Mechanical Properties:

Tensile Strength: 580MPa Elongation (L=4D): 35%

### Length of Electrode: 350mm

### Welding Parameters:

Size (mm)	2.50	3.15	4.0
Amps	50 - 80	70 – 110	90 – 140