## **SME E21**

# NI BASE ELECTRODE FOR JOINING HIGH ALLOY STEELS SUBJECTED TO THERMAL CYCLING.

## **Alloy Basis**

Ni, Cr, Mn, Fe, Nb

## **Characteristics:**

Electrode gives a stable arc on low currents. Deposits are smooth, tough and have excellent resistance to scaling, corrosion resistance

at normal as well as elevated temperatures. Also possesses good thermal cycles and shock resistance. Any amount of build-up is possible. The deposit is tough and free from porosity.



## **Typical Applications**

Welding of nickel, Inconel, Monel, nickel-chromium-iron alloys. HK alloys, steel, stainless steel and heat resisting steels. Also for welding dissimilar metals such as carbon steels, stainless steels, nickel, nickel alloys to each other. For use on equipment and components made of pure nickel, for fabrication of corrosion resistant tanks and containers, heat exchangers, furnace components, boilers, fittings, anchors, mill trunnions, symmetry gears, etc. Very good for repair of cracks in kiln tyres.

## **Mechanical Properties**

Tensile Strength: 540 – 620 MPa

Elongation: 30 - 40 %

### Welding Current : AC, DCEP

Size (Ø mm)	2.50	3.15	4.00	5.00
Current (amps)	50 - 80	90 - 110	110 - 140	140 - 160

#### **Availability:**

Standard Size: 5.0, 4.0, 3.15, 2.5 in 350 mm length

Packing: 2 kg.

### **Procedure**

Clean the area to be welded. Preheat sections above 25 mm to 100°C. Adopt short arc, stringer bead technique, chip the slag completely. Allow the job to cool slowly to room temperature..