

# SME E21AM

## SPECIAL NICKEL BASED ELECTRODE WITH HIGH STRENGTH AND DUCTILITY UNDER TOUGH CONDITIONS

### Alloy Basis

Ni, Cr, Mn, Fe, Cb, Mo

### Characteristics :

SME E21AM is a nickel-based electrode for high-speed, high-deposition welding in critically stressed applications. The weld deposits exhibit exceptional crack resistance and enhanced ductility maintaining superior tensile strength at elevated temperatures upto 648°C as well as in cryogenic conditions.



### Typical Applications

This electrode is ideal for welding large cross sections in a various steel where cool-down stresses are a concern such as in natural gas plants, forging, iron and steel works and foundry industries. Application includes heat-treating trays & baskets, ingot tongs, continuous casting molds, merchant mill roll guides, LNG Pumps, liquefied gas equipment and more.

### Mechanical Properties

Tensile Strength: 55 – 65 kgf/mm<sup>2</sup>

Elongation: 35-45 %

### Welding Current : DCEP

Size (Ø mm)	2.50	3.15	4.00
Current (amps)	70 - 110	110 - 150	150 - 190

### Availability:

Standard Size: 4.0, 3.15, 2.50 in 350 mm length

Packing: 2 Kg

### Procedure

Clean the area to be welded and lightly grind surface to remove superficial oxides. Preheat sections with high air hardenability at 150°C. Use a short arc and stringer bead technique ensuring complete slag removal between passes. Allow the weldment to cool slowly to room temperature.