

SPECIAL ELECTRODE FOR JOINING OF DIFFERENT STEEL WITH HIGH STRENGTH HEAT AND CORROSION RESISTANCE

Alloy Basis

Cr, Ni, Mn

Characteristics :

SME A07 is a fully austenitic, high-strength electrode that offers exceptional heat and corrosion resistance up to 1200°C. Its unique Frigid Arc coating enables low-amperage operation, minimizing distortion and warping. The electrode provides smooth handling with either a short arc or contact technique.



Typical Applications

Ideally used for joining and surfacing all types of steels. Suitable for components exposed to heat, corrosion, and impact as well as for use as a cushioning layer beneath hard deposits, fabrication and repair of valves, rolls, gears, hot dies, and gas turbines. Also used for cladding carbon steels and in hydrogenation plants, combustion chamber components, furnace parts etc.

Mechanical Properties

Tensile Strength: 55 - 65 kgf/mm²

Elongation : 30 – 35 %

Welding Current : AC, DCEP

Size (Ø mm)	2.50	3.15	4.00	5.00
Current (amps)	50 - 80	90 - 120	120 - 140	150 - 180

Availability:

Standard Size: 5.0, 4.0, 3.15, 2.50 in 350 mm length

Packing: 2 Kg

Procedure

clean the area to be welded. Prepare the edges for heavy sections. Preheating requirements depend on the composition of the base metal. Use a stringer bead technique with a short arc. Remove slag after each pass to ensure proper penetration and back-whip to fill craters effectively.