

SPECIAL ELECTRODE FOR HIGH - TEMPERATURE AND CORROSION RESISTANCE APPLICATIONS

Alloy Basis

Ni, Cr, Mo, Mn, Nb

Characteristics :

SME E24 is a non-synthetic electrode with excellent resistance to abrasion, oxidation and corrosion. It maintains high strength and stability at elevated temperatures providing outstanding oxidation resistance. The weld deposit exhibits exceptional resistance to seawater corrosion, a wide range of acids and alkalis, and offers superior protection against pitting, crevice, inter-crystalline and stress corrosion cracking.



Typical Applications

These electrodes are ideal for overlaying steel in corrosive environments including chloride-contaminated cooling water, chemical engineering and offshore & marine applications. They also excel in high-temperature service for petrochemical plants, flue gas collectors and furnace equipment. Additionally, used for valves, impellers, bearings, and hot-working tools like shear blades and forging dies offering superior corrosion resistance and durability.

Mechanical Properties

Tensile Strength: 75 - 80 kgf/mm²

Elongation: 30-35%

Welding Current : DCEP

Size (Ø mm)	2.50	3.15	4.00	5.00
Current (amps)	50 - 80	80 - 110	110 - 140	140 - 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. Adopt short arc stringer bead technique, chip the slag completely. Allow the job to cool slowly to room temperature. Properly fill the crater using back whipping or dwelling.