# **SME E12**

## SPECIAL CUPPRO-NICKEL ELECTRODE FOR SEAWATER CORROSION RESISTANCE

## **Alloy Basis**

Cu, Ni, Ti, Mn

### **Characteristics:**

SME E12 electrode delivers a weld deposit with superior resistance to seawater corrosion. The deposited weld metal is free from porosity and exhibits exceptional crack resistance. It offers excellent weldability which enables easy slag removal and produces uniform & shiny weld beads.



## **Typical Applications**

This electrode is used for joining and cladding similar grades of copper-nickel alloys with up to 30% nickel content. It is ideal for applications in shipbuilding, the food industry, desalination plants, refrigeration systems, heat exchangers, pumps, valves, pipelines and more.

## **Mechanical Properties**

Tensile Strength: 35 – 40 kgf/mm<sup>2</sup>

Elongation: 20-25 %

## **Welding Current: DCEP**

Size (Ø mm)	2.50	3.15	4.00
Current (amps)	60 - 80	90 - 110	120 - 140

## **Availability:**

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

Packing: 2.0 KG

#### **Procedure**

Clean the area to be welded and bevel out 90° U with SME I00. Preheat sections more than 25 mm to 100°C. Use a short arc and stringer bead technique ensuring complete slag removal between passes. Allow the weldment to cool slowly to room temperature.