# Low-Heat Input Welding Alloys SME E11















SME E11

# **Electrodes for MMAW Process**

Ni & Ni Alloys

# **Low-Heat Input Welding Alloys**

# **Speicification:**

AWS / SFA 5.14M : ER Ni Cu-7 UNS No. : N04060

DIN 1736 : SG-Ni Cu 30 Mn Ti

## **Characteristics:**

SME E11 is an electrode for low heat input welding of Nickel and suitable for Corrosion resistance against seawater, heat & good creep-resistance at high temperature The weld metal is free from porosity and resistant to many chemicals.. Suitable for applications with working temperatures from -196 to +450°C. Protection of the reverse side is necessary when welding root runs.



## **Technical Data:**

UTS :  $48-53 \text{ kgf/mm}^2$ 

Elongation (L = 5D): 30-40%

# **Applications:**

- 1. Pump impellers, tubes
- 2. Welding of Monel and Monel-clad steels. Joining Monel to steel.
- 3. Chemical Industry, Oil Industry, Shipbuilding Industry
- 4. Distillation tower, tanks

# Welding Current: DC (+)

Size (~mm)/Length	2.5 x 350	3.2 x 350	4.0 x 350
Current (amps)	60 - 75	90 - 120	110 - 140

# **Availability:**

Standard Size: 5.0, 4.0, 3.2 and 2.5 in 350 mm length

Packing: 2, 5 Kg.

# **SENOR**

#### **Note On Usage:**

- 1. Clean the area.
- 2. Preheat sections above 25 mm.
- 3. Use short arc and adopt stringer bead technique.
- 4. Chip the slag completely.
- 5. Allow the job to cool slowly to room temperature.
- 6. Do not exceed recommended Welding Parameters

Above are basic guidelines and will vary depending on joint design, number of passes and other factors.

#### WARNING

Protect yourself and others. Read and understand this warning. Do not remove this warning.

#### Fumes and Gases can be hazardous to your health

- Before use, read and understand the Material Safety Data Sheet (MSDS), the manufacturer's instructions, and your employer's safety practices.
- If MSDS is not enclosed. Obtain from your employer.
- Keep your head out of the fumes. See Section 5 of the MSDS for specific fume concentration limits.
- Use enough Ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone and the general area. If needed, use a proper respirator.
- No hazards exist before this product is used in arc welding.

#### Electric Shock can kill

- Always wear dry insulating gloves
- Insulate yourself from work and ground.
- Do not touch live electrical parts.

#### ARC Rays can injure eyes and burn skin

- Wear welding helmet with correct filter.
- Wear correct eye, ear, and body protection.

#### Welding can cause fire or explosion

- Do not weld near flammable material.
- Watch for fire, keep, extinguisher nearby.

Read American National Standards Z49.1, "Safety In Welding, Cutting and Allied Process." from American Welding Society.