# Stainless Steel Electrodes (MMAW) SME 312-16















**SME 312-16** 

### **Stick Electrodes (MMAW)**

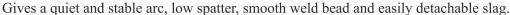
**Stainless Steel** 

#### **Classifications:**

AWS A/SFA 5.4 : E312-16 EN ISO 3581-A : E19 9 R23

#### **Characteristics:**

Senor SME 312-16 is a rutile based medium coated all position electrode giving 30Cr/10Ni deposit which has excellent oxidation resistance. The weld metal has a two phase structure with substantial amount of ferrite in the austenitic matrix. The deposited weld metal is highly resistant to weld metal cracks and fissures.





#### **Applications:**

- 1) Welding difficult to weld steels e.g. high carbon hardenable tool, die and spring steels, 13% Mn steels, free cutting Steels, high temperature steels.
- 2) Joining/welding of dissimilar steels, cast steels nickel steels, chrome steels
- 3) Marine, re-conditioning and refurbishment industries
- 4) Welding wrought and cast alloys of similar composition

#### **Mechanical Properties – All-Weld:**

Tensile Strength min – 660 MPa Elongation – 22-30 %

#### Weld Metal Chemistry (wt%):

C	Cr	Ni	Мо	Mn	Si	P	S	Cu
0.15 max	28 - 32	8 - 10.5	0.75 max	0.5 - 2.5	1.0 max	0.04 max	0.03 max	0.75 max

#### Welding Current -AC, DC(+)

2.5MM 3.15MM 4.00MM 50-75 80-100 120-150

#### **Re-drying Conditions:**

To obtain best results re dry the electrodes at 300°C for 1hour (Optionally available in vacuum-packed condition, re-drying not required in this packaging).

## **SENOR**

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

- 1) Keep electrode dry (Optionally also available in vacuum-packed condition, redrying not required in this packaging)
- 2) To obtain best results Re-back the Electrodes at 350 400 °C for 1hour and keep it at 100 150 °C Prior to use..
- 3) Use stainless steel wire brush for cleaning of slags
- 4) Follow the recommended welding parameters to achieve good sound welds
- 5) Do not use excessive currents. Hold short arc. Use good fit-up on joints.

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.