

# Stainless Steel Electrodes (MMAW)

## SME 308-16



 **SENOR<sup>®</sup>**  
One Stop Solution for Welding & Brazing Consumables

## SME 308-16

## Stick Electrodes (MMAW)

## Stainless Steel

### Classifications:

AWS SFA 5.4/SFA 5.4M : E 308 - 16

UNS Number : W30810

EN ISO 3581-A : E 19 9 R 32

### Characteristics:

SME 308-16 composition of the weld metal is 19.5Cr, & 10Ni, electrodes of this composition are most often used to weld base metal of similar composition such as AISI Types 301, 302, 304, and 305. E308-16 electrodes provide corrosion resistance and physical properties equal to or greater than the steels for which they are recommended.

### Applications:

1. Used to weld base metal of similar composition, Typical applications include dairy, distillery and restaurant equipment, and chemical tanks.
2. SME308-16 is designed for welding of the following 18-8 stainless steel types: 301, 302, 304 and 308.
3. The weld deposit has the proper chemical content and balance for satisfactory welding of type 308,
4. Suitable for welding 18-8 types of lower alloy content. Sound weld metal.

### Mechanical Properties – All-Weld:

Tensile Strength min – 520 MPa

Elongation – 30 %

### Weld Metal Chemistry (wt%):

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.08 max	18 - 21	9 - 11	0.75 max	0.5 - 2.5	1.0 max	0.04 max	0.03 max	0.75 max

### Current Conditions: AC, DC (+):

2.5	3.15	4.0	5.0
50 - 75	80 - 100	120 - 150	170 - 190

### 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)

## **Note On Usage:**

1. Use Stainless Steel Wire brush, Clean the area to be weld.
2. Maintain Pre Heat and Inter pass Temperature up to 150°C.
3. To obtain best results re bake the electrodes at 300°C for 1 hour and keep it at 100°C to 150°C Prior to use.
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.**