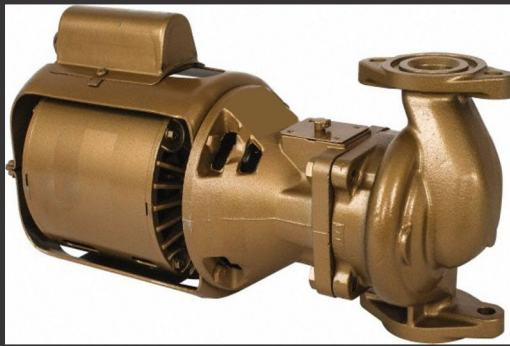


# Mild Steel Electrode (MMAW)

## SME 6010



 **SENOR**

## SME 6010

## Stick Electrodes (SMAW)

## Mild Steel

### Classifications:

AWS SFA5.1/SFA 5.1M : E6010  
UNS NO : W06010  
EN ISO 2560-B : E 43 10  
IS 814 : EC4213 X

### Characteristics:

SME 6010 Electrodes are characterized by a deeply penetrating , forceful, spray type arc and readily removable, thin friable slag which may not seem to completely cover the weld bead. Fillet welds usually have a relatively flat weld face and have a rather course, unevenly spaced ripple. The covering are high in cellulose, usually exceeding 30% by weight. The other materials generally used in the covering include titanium dioxide, metallic deoxidizers such as ferromanganese, various types of magnesium or aluminium silicates, and liquid sodium silicates, and liquid sodium silicate as a binder because of their covering composition, these electrodes are generally described as the high cellulose sodium type.

### Applications:

1. SME 6010 Electrodes are recommended for all welding position, particularly on multiple pass applications in the vertical and overhead welding positions and where weld of good soundness are required.
2. They frequently are selected for joining pipe and generally are capable of welding in the vertical position with either uphill or downhill progression.
3. Used majority for in joining Carbon Steel, Galvanized Steel, and Some Low Alloy steels.
4. Typical Applications include shipbuilding, buildings, bridges, Storage Tanks, Piping and Pressure vessel fittings.

### Mechanical Properties – All Weld

Tensile Strength Min : 430 MPa  
Yield Strength Min : 330 MPa  
Elongation Min : 22 %  
CVN impact : -30°C , 27 J min

### Weld Metal Chemistry (wt %)

C	Mn	Si	Ni	Cr	Mo	V
0.2 max	1.20 max	1.0 max	0.30	0.2 max	0.30 max	0.08 max

### Welding Current : DC(+)

2.5	3.15	4.0	5.0
40 - 80	75 - 120	110 - 170	140 - 210

### Welding Current : DC(+)

Moist Electrodes may be reconditioned at 100-110 °C For ½ Hours.

## Note On Usage:

- 1) Cellulose Covering For E6010 Electrodes need moisture levels of approximately 3% To 7% proper operation, therefore storage or coordinating above ambient temperature may dry them too much and adversely affect their operation.
- 2) Use wire brush for cleaning of slag
- 3) Follow the recommended parameters to achieve good weld Soundness.
- 4) Do not use Excessive Currents, Hold Short Arc, Use good fit up 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.**