

Stainless Steel Electrodes (MMAW)

SME 310-16



 **SENOR[®]**
One Stop Solution for Welding & Brazing Consumables

SME 310-16

Stick Electrodes (MMAW)

Stainless Steel

Classifications:

AWS SFA 5.4/SFA 5.4M : E310-16

UNS Number : W31010

EN ISO 3581-A : E25 20 R 32

Characteristics:

Senor SME 310-16 is a basic rutile electrode for welding heat resistant steels like 25Cr/20Ni. Weld metal resists scaling up to 1100-1150°C. It can also be used for welding air hardening steels such as armor plate and for welding base metals of unknown composition, as well as dissimilar metals. All sizes strike and re-strike easily the slag is easily controlled and does not interfere with the arc action. Weld beads are smooth, and of good appearance.

Applications:

1. Welding AISI 310 type
2. Welding or build up analogue heat resisting forged steels used in annealing and hardening process in marine, re-conditioning and refurbishment industries.
3. Welding dissimilar steels
4. Head shields, Furnace parts, Ducting
5. Gas turbine combustion chamber parts, high temperature furnace parts, annealing boxes and carburizing pots

Mechanical Properties – All-Weld:

Tensile Strength Min – 550 MPa

Elongation Min – 30 %

Weld Metal Chemistry (wt%):

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.08-0.20	25 -28	20 - 22.5	0.75 max	1.0 - 2.5	0.75 max	0.03 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.