

Stainless Steel Electrodes (MMAW)

SME 312-16



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

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. Gives a quiet and stable arc, low spatter, smooth weld bead and easily detachable slag.



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	Mo	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).

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 1 hour 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.