

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 : E 312-16
BS 2926-84 :E-29 9R
ISO 3581-76 :E-29 9R23
Identification : Brand Printed

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:

Condition	% Elong (L=4Xd)
As Welded	22-30

Weld Metal Chemistry (wt%):

C	Mn	Si	Cr	Ni	Mo	S	P
0.15 max	0.70-2.0	0.30-0.90	28.0-32.0	8.0-10.5	0.75 max	0.03 max	0.03 max

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 rebake the electrodes at 250 ~ 300°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.