

Stainless Steel Electrodes (MMAW)

SME 309-16



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

SME 309-16

Stick Electrodes (MMAW)

Stainless Steel

Classifications:

AWS A/SFA 5.4 : E 309-16
 IS 5206 : E 23.12 R26
 Coating Type : Rutile
 Coating Factor : Medium
 Identification : Brand Printed

Characteristics:

SME 309-16 is a rutile type stainless steel electrode suitable for welding of AISI 309 grade in cast or wrought form. The weld-metal has good resistance to corrosion. The slag is easily controlled and does not interfere with the arc action. Weld beads are smooth, and of good appearance.



Applications:

- 1) Welding of similar and dissimilar steels, eg. stainless steels to mild steels
- 2) Welding stainless steel piping in refineries and chemical plants.
- 3) Deposition of buffer layer on Carbon steel or low alloy steels before deposition of 18/8 type of weld metal.

Mechanical Properties – All-Weld:

Condition	UTS MPa	% Elong (L=4Xd)	Ferrite No.
As Welded	560-660	35-45	12-15

Weld Metal Chemistry (wt%):

C	Mn	Si	S	P	Ni	Cr
0.10 max	1.0-2.5	0.90 max	0.03 max	0.03 max	12.0-14.0	22.0-25.0

Current Conditions: AC, DC (+):

5.0	4.0	3.2	2.5	2.0
150-180	110-135	80-100	50-75	35-45

Welding Positions:

F, H, V-up, OH

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.