

Stainless Steel Electrodes (MMAW)

SME 316L-16



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

SME 316L-16

Stick Electrodes (MMAW)

Stainless Steel

Classifications:

AWS A/SFA 5.4 : E316L-16
EN ISO 3581-A : E19 12 3L R31

Characteristics:

Senor SME 316L-16 an extra low Carbon, SS electrode with controlled Ferrite content of 3 to 8% for maximum resistance to cracking. It possesses properties similar to SME 316-16 except with a much lower carbon content which reduces susceptibility to sensitization during welding. Weld metal is resistant to Stress Corrosion cracking, Hot Cracking, Chemical corrosion at high temp. upto 850°C. The slag is easily controlled and does not interfere with the arc action. Weld beads are smooth, and of good appearance.



Applications:

- 1) Welding Stainless Steel types 316, 316-L and 318
- 2) Stainless steel piping and vessels in oil and gas industry,
- 3) For welding in refineries and chemical and petro-chemical plants.
- 4) For welding of equipments in Chemical industries, Paper and Pulp industry, Paint and Dye industries

Mechanical Properties – All-Weld:

Tensile Strength min – 490 MPa
Elongation – 30-40 %

Weld Metal Chemistry (wt%):

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.04 max	17 - 20	11 - 14.5	2 - 3	0.5 - 2.5	1.0 max	0.04 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

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 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.