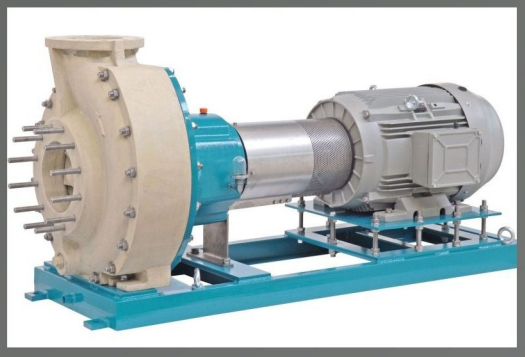
Stainless Steel Electrodes (MMAW)

SME 347-16



SENOR®

One Stop Solution for Welding & Brazing Consumables

SME 347-16 | Stick Electrodes (MMAW) | Stainless Steel

Classifications:

AWS A/SFA 5.4 : E 347-16
IS 5206 : E 19.9 Nb26
Coating Type : Rutile
Coating Factor : Medium
Identification : Brand Printed

Characteristics:

SME 347-16 is a 19Cr/10Nb stabilized electrode with controlled ferrite content of 6 to 9% for maximum resistance to cracking. Nb prevents chromium carbide precipitation in the temperature range of 425-823°C. The weld metal has good creep strength and is of radiographic quality. It gives arc stability and low spatter loss. 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 of AISI 347 and AISI 321 alloys
2) Welding of Cr-Ni alloys of similar compositions stabilized either with Niobium or Titanium.
3) Fabrication of equipments in Chemical Industries , Refineries and Power Plants
4) Food processing
5) Pharmaceutical equipment
6) Centrifugal pump impellers and shafts

Mechanical Properties – All-Weld:

Condition	UTS MPa	% Elong (L=4Xd)	RA %	Ferrite No
As Welded	560-690	30-40	50 min.	6-9

Weld Metal Chemistry (wt%):

C	Mn	Si	S	P	Ni	Cr	Nb	Mo
0.08 max	1.00-2.00	0.9 max	0.03 max	0.04 max	9.0-11.0	18.0-21.0	1.0 max	0.75 max

Current Conditions: AC, DC (+):

5.0	4.0	3.2	2.5	2.0	1.6
150-180	110-140	80-100	50-75	35-45	25-35

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.