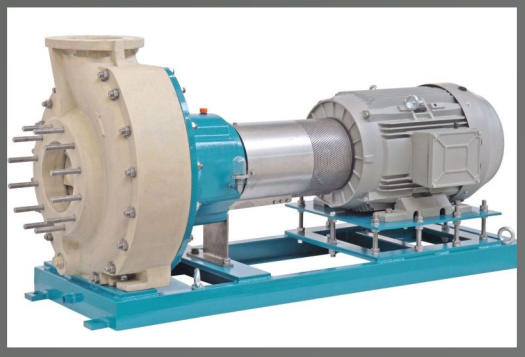
Stainless Steel Electrodes (MMAW)

SME 2209-16



SENOR®

One Stop Solution for Welding & Brazing Consumables

SME 2209-16 | Stick Electrodes (MMAW) | Stainless Steel

Classifications:

AWS SFA5.4/A 5.4M : E 2209-16
UNS NUMBER : W39209
EN ISO 3581-A : E 22 9 3 N L R 32

Characteristics:

SME 2209-16 Electrode the nominal composition of this weld metal is 22.5 Cr, 9.5 Ni, 3 Mo, 0.15 N. Weld metal deposited by these electrodes has "duplex" microstructure consisting of an austenite-ferrite matrix. Weld metal deposited by SME2209 Electrodes combines increased tensile strength with improved resistance to pitting corrosive attack and to stress corrosion cracking.

Applications:

1. SME 2209-16 used for Offshore oil and gas, chemical, petrochemical.
2. Used for welding duplex stainless steels having Cr < 25% and other grades like UNS 32205, UNS 31803, etc.
3. Suitability to Welding of 2205 Stainless Steels
4. Off shore Platforms and Chemical industries.

Mechanical Properties – All-Weld:

Tensile Strength Min. – 690 MPa
Elongation % Min. – 20 %

Weld Metal Chemistry (wt%):

C	Cr	Ni	Mo	Mn	Si	P	S	N	Cu
0.04 max	21.5 - 23.5	8.5 - 10.5	2.5 - 3.5	0.5 - 2.0	1.0 max	0.04 max	0.03 max	0.08 - 0.20	0.75 max

Current Conditions: AC, DC (+):

2.5	3.15	4.0	5.0
60 - 80	80 - 110	100 - 150	150 - 190

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. Use Stainless Steel Wire brush, Clean the area to be weld.
2. Maintain Pre Heat and Inter pass Temperature up to 150°C.
3. To obtain best results re bake the electrodes at 300°C for 1 hour and keep it at 100°C to 150°C Prior to use.
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.