

Low-Heat Input Welding Alloys

SME A03



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

Low-Heat Input Welding Alloys

Alloy Basis :

C, Mn, Si

Characteristics :

SME A03 is an electrode for low heat input welding of mild steel with minimum distortion. This is suitable for all-position welding of Mild steel. It gives good weld appearance at low current, slag peels off easily. The weld bead is radiographic quality.



Technical Data :

UTS : 45-59 kgf/mm²
Elongation : 22-30%

Applications :

1. Suitable for welding sheet metal with low heat input technique in order to prevent distortion
2. Automobiles bodies, chassis
3. Steel Furniture, storage tanks
4. Sheet metal works

Welding Current : AC / DC (+)

Size (~ mm)/ Length	2.5 x 350	3.2 x 350	4.0 x 350	5.0 x 350
Current (amps)	50 - 80	75 - 105	100 - 130	125 - 145

Availability:

Standard Size: 5.0, 4.0, 3.2 and 2.5 in 350 mm length
Packing: 2 , 5 Kg.

Note On Usage:

- 1) Keep electrode dry (Optionally also available in vacuum-packed condition, redrying not required in this packaging)
- 2) Clean the weld area nicely and prepare joint edges.
- 3) Preheat high alloy and high carbon steel to about 200-250°C followed by slow cooling after welding.
- 4) Do not use heat treatment. Adjust cooling rate according to base material and size of work piece.
- 5) Follow the recommended welding parameters to achieve good sound welds
- 6) 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.