

# Aluminium Alloys (Filler Rods & Wires)

## SM 5556



 **SENOR<sup>®</sup>**  
One Stop Solution for Welding & Brazing Consumables

### Classifications:

<b>AWS / SFA5.10</b>	: ER 5556
<b>UNS No.</b>	: A95556
<b>ISO 18273 Numerical</b>	: Al5556
<b>ISO 18273 Chemical</b>	: AlMg5Mn1Ti

### Description:

Senor SM 5556 has excellent resistance to sea water corrosion. Suitable for anodizing. This is recommended for welding 5083, 5086 and 5456 high tensile aluminum alloys.

### Technical Data:

<b>UTS</b>	: 26-28 Kgf/mm <sup>2</sup>
<b>YS</b>	: 10-13 Kgf/mm <sup>2</sup>
<b>Elongation (L=D)</b>	: 17%
<b>Melting Range</b>	: 568-635°C
<b>Density</b>	: 2.65 gms/cc
<b>Resistance to Corrosion</b>	: A (Gen) B (SCC)
<b>Anodize Color</b>	: White
<b>Electrical Conductivity</b>	: 29% IACS
<b>Shielding Gas</b>	: 100% Argon , Argon/Helium Mixtures , Flow Rate: 30 - 50 CFH (14.2 - 23.6 L/Min)



### Chemical Composition (%):

Si	Fe	Cu	Mn	Mg	Cr	Zn	Be	Ti	Al	Other Total
0.25	0.40	0.10	0.05-0.10	4.70-5.50	0.05-0.20	0.25	0.0003	0.05-0.20	Rem.	0.15

### Typical Applications:

- Bridge storage tanks
- Truck frames
- Marine and structural industry
- Automotive Components

### Availability :

<b>Standard Size</b>	: 1.6, 2.0, 2.5, 3.2 & 4.0 mm dia in 500 / 1000 mm length
<b>Packing</b>	: 500 mm in 2 kg. & 1000 mm in 5 kg. for TIG welding
<b>Spools</b>	: 0.8, 1.2 & 1.6 mm dia in 6.5 kg. spool for MIG welding

## Note On Usage:

- 1) Follow the recommended welding parameters to achieve good sound welds
- 2) 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.