

# Aluminium Alloys (Filler Rods & Wires)

## SM 5554



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

## SM 5554

## Aluminum Magnesium

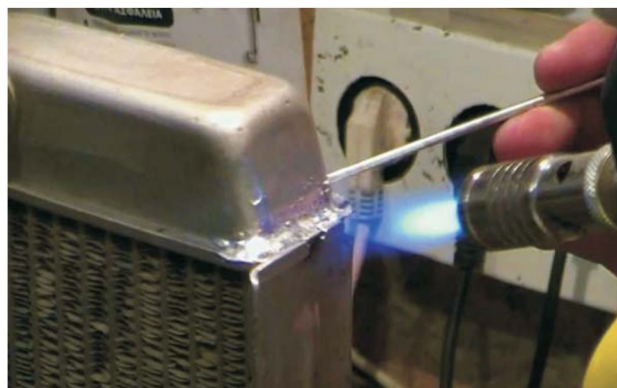
## Al Filler Metal

### Classifications:

<b>AWS / SFA5.10</b>	: ER 5554
<b>UNS No.</b>	: A95554
<b>ISO 18273 Designation</b>	: Al,g4.5MnZr (Germany)
<b>ISO 18273 Numerical</b>	: Al5554
<b>ISO 18273 Chemical</b>	: AlMg2.7Mn

### Description:

Senor SM 5554 is suitable for alloy 5454 that is widely used in the manufacturing of chemical storage tanks and those that may be subjected to temperatures in excess of 800°C. This combination of alloys does not become sensitive to stress corrosion cracking at elevated temperatures.



### Technical Data:

<b>UTS</b>	: 22.50-24.61 Kgf/mm <sup>2</sup>
<b>YS</b>	: 9.84-11.60 Kgf/mm <sup>2</sup>
<b>Elongation (L=D)</b>	: 16-18%
<b>Melting Range</b>	: 623-648°C
<b>Density</b>	: 0.097 lb/cu.in (2.68 gms/cc)
<b>Resistance to Corrosion</b>	: A (Gen) A(SCC)
<b>Anodize Color</b>	: White
<b>Electrical Conductivity</b>	: 34% IACS
<b>Shielding Gas</b>	: 100% Argon , Argon/Helium Mixtures , Flow Rate: 30 - 50 CFH (14.2 - 23.6 L/Min)

### Chemical Composition (%):

Si	Iron	Cu	Mn	Mg	Cr	Zn	Ti	Be	Al	Other Total
0.25	0.40	0.10	0.50-1.0	2.4-3.0	0.05-0.20	0.25	0.05-0.20	0.0003	Rem	0.15

### Typical Applications:

- Chemical storage tanks
- Automotive wheels

### 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.**