

A5356

Comparable specifications

ASME SFA- 5.10: ER5356
EN ISO 18273: S Al 5356 (AlMg5Cr(A))
Werkstoff Nr.: 3. 3556

Description and applications*

* Illustrative, not-exhaustive list

Aluminum alloy filler metal for welding Al-Mg or Al-Mg-Zn aluminum alloys, as well as dissimilar aluminum alloys with maximum 5% of magnesium. Used also for welding components that shall be anodized.

Non-heat treatable.

Due to its excellent corrosion resistance, even in seawater, and good mechanical properties, it is the most known Al welding consumable.

Main applications in construction of boats, ships, bicycles, trucks, pressure vessels, storage tanks, railways and in the automotive industry.

Weldable base materials*

* Illustrative, not-exhaustive list

Series 5xxx aluminum alloys, Al-Mg and Al-Mg-Zn alloys such as Peraluman 3,5 and 5 type or Anticorodal 11.

All-weld metal mech. properties*

* For reference only values

Tensile strength (Rm): $\geq 235 \text{ N/mm}^2$ **Yield Strength (Rp_{0.2}):** $\geq 110 \text{ N/mm}^2$
Elongation: $\geq 17\%$ **Charpy-V Impact (R.T.):** $\geq 16 \text{ J}$

Chemical composition*

* For reference only values

| Si | Fe | Cu | Mn | Mg | Cr | Zn | Ti | Be |
|------|------|------|------|------|------|------|------|--------|
| max | max | max | 0.05 | 4.50 | 0.05 | max | 0.06 | max |
| 0.25 | 0.40 | 0.10 | 0.20 | 5.50 | 0.20 | 0.10 | 0.20 | 0.0003 |

Standard packaging data*

| Welding process | Product type | Ø mm (inches) | Packing type | Weight kg (lbs) | Length mm (inches) |
|-----------------|--------------|-----------------------------|-------------------------|--------------------|-----------------------|
| GMAW ** | filler wire | 0.80 - 1.20 (0.030 - 0.047) | spools BS300 / D300 | 7 (33) | n.a. |
| GTAW ** | filler rod | 1.60 - 4.00 (1/16 - 5/32) | cardboard boxes / tubes | 5 (11) | 1000 (39.4) |


* Other sizes and packing types are available upon request

** GMAW: gas metal arc welding; GTAW: gas tungsten arc welding

Marking

Each filler rod for GTAW welding is durably marked with an identification traceable to the unique product type. Welding filler materials wound on spools or in coils are durably marked on the coil or spool with an identification traceable to the unique product type.

The outside of each unit package is suitably labelled with at minimum the following data: grade, diameter, heat, lot no., classifications.

 marking type-testing performed and available.

Customized labels are available upon request.

Type approvals

ABS (GMAW) **BV** (GMAW) **CWB** (GMAW/GTAW) **DB** (GMAW)
DNV (GMAW) **KR** (GMAW) **LR** (GMAW) **RINA** (GMAW)
TUV Nord (GMAW)

Lot classification

All our productions fulfil the **Class S3** requirements acc. to EN ISO 14344.