

## Classifications

|                        |                  |
|------------------------|------------------|
| <b>EN ISO 18273</b>    | <b>AWS A5.10</b> |
| S Al 5356 (AlMg5Cr(A)) | ER5356           |

## Characteristics and typical fields of application

Aluminium TIG rod for welding of AlMg alloys up to 5 % Mg. The weld metal is resistant against sea water.

Base material should be cleaned near the seam. Pre-heating 150 °C for plates > 15 mm

## Base materials

|               |        |                            |
|---------------|--------|----------------------------|
| AlMg 5        | 3.3555 | EN AW-5019 [AlMg 5]        |
| AlMg 3        | 3.3535 | EN AW-5754 [AlMg 3]        |
| AlMg 4 Mn     | 3.3545 | EN AW-5086 [AlMg 4]        |
| AlMgSi 0.5    | 3.3206 | EN AW-6060 [AlMgSi]        |
| AlMgSi 0.7    | 3.3210 | EN AW-6005A [AlSiMg(A)]    |
| AlMgSi 1      | 3.2315 | EN AW-6082 [AlSi 1 MgMn]   |
| AlMg 1 SiCu   | 3.3211 | EN AW-6061 [AlMg 1 SiCu]   |
| AlZn 4.5 Mg 1 | 3.4335 | EN AW-7020 [AlZn 4.5 Mg 1] |
| AlMg 2.7 Mn   | 3.3537 | EN AW-5454 [AlMg 3 Mn]     |
| G-AlMg 5      | 3.3561 | EN AC-51300                |
| G-AlMg 5 Si   | 3.3261 | EN AC-51400                |
| G-AlMg 3      | 3.3541 | EN AC-51100                |
| G-AlMg 3 Si   | 3.3241 | -                          |

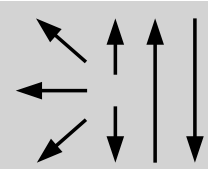
## Typical analysis of solid wire (wt.-%)

|       | Al   | Mn         | Cr         | Mg        | Ti         |
|-------|------|------------|------------|-----------|------------|
| wt.-% | bal. | 0.05 – 0.2 | 0.05 – 0.2 | 4.5 – 5.5 | 0.06 – 0.2 |

## Mechanical properties of all-weld metal

| Condition | Yield strength       | Tensile strength | Elongation A (L <sub>0</sub> =5d <sub>0</sub> ) |
|-----------|----------------------|------------------|---|
|           | R <sub>p0.2</sub>    | R <sub>m</sub>   | %   |
|           | MPa                  | MPa              | %   |
| u         | ≥ 120                | ≥ 250            | ≥ 18  |
| u         | untreated, as welded |                  |   |

## Operating data

|   |                        |   |               |
|---|------------------------|---|---------------|
|  | <b>Polarity:</b><br>AC | <b>Shielding gases:</b><br>(EN ISO 14175)<br>I1<br><br>Base material should be cleaned near the seam. Pre-heating 150 °C for plates > 15 mm | <b>ø (mm)</b> |
|   |                        |   | 1.6           |
|   |                        |   | 2.0           |
|   |                        |   | 2.4           |
|   |                        |   | 3.2           |

## Approvals

TÜV (02322.), DB (61.014.03), CE