

ROWAC AIMg 5

Solid wire, Aluminium



Classifications

| EN ISO 18273-A | EN ISO 18273-B | AWS A5.10 |
|------------------------|----------------|-----------|
| S Al 5356 (AlMg5Cr(A)) | - | ER5356 |

Characteristics and typical fields of application

Solid wire for AlMg alloys containing up to 5 % Mg. Seawater resistant weld metal. Good colour matching with base metal after anodizing. Thorough cleaning of the workpiece bevels is necessary. Thicker plate materials require preheating to 150 °C (302 °F).

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 | Fe | Si | Zn | Cu |
|------|------------|------------|-----------|------------|-------|--------|-------|-------|
| bal. | 0.05 - 0.2 | 0.05 - 0.2 | 4.5 - 5.5 | 0.06 - 0.2 | < 0.4 | < 0.25 | < 0.1 | < 0.1 |

Mechanical properties of all-weld metal

| Yield strength R _{p0.2} | Tensile strength R _m | Elongation A (L ₀ =5d ₀) |
|-------------------------------------|------------------------------------|--|
| MPa | MPa | % |
| 110 | 240 | 17 |

Operating data

| | | | |
|--|-----------------------------|---|-----------------------|
| | Ø (mm) 1.0 1.2 1.6 | Shielding gas: (EN ISO 14175) I1, I3 Base material should be cleaned near the seam. Pre-heating 150 °C for plates > 15 mm | Polarity: DC (+) |
|--|-----------------------------|---|-----------------------|

Approvals

TÜV (2197.) • DB (61.132.01) • GL • LR