

Classifications

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|-----------------------------|-----------|
| EN ISO 18273-A | AWS A5.10 |
| S Al 5183 (AlMg4,5Mn0,7(A)) | ER5183 |

Characteristics and typical fields of application

TIG-rod for welding of AlMg alloys. 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

| | | |
|---------------------------|-----------|--------|
| EN AW-5083 [AlMg4,5Mn0,7] | AlMg4,5Mn | 3.3547 |
| EN AW-5086 [AlMg4] | AlMg4Mn | 3.3545 |
| EN AW-5019 [AlMg5] | AlMg5 | 3.3555 |
| EN AW-6060 [AlMgSi] | AlMgSi0,5 | 3.3206 |
| EN AW-6005A [AlSiMg(A)] | AlMgSi0,7 | 3.3210 |
| EN AW-6082 [AlSi1MgMn] | AlMgSi1 | 3.2315 |
| EN AW-6061 [AlMg1SiCu] | AlMg1SiCu | 3.3211 |
| EN AW-7020 [AlZn4,5Mg1] | AlZn4,5Mg | 3.4335 |
| EN AC-51300 | G-AlMg5 | 3.3561 |
| EN AC-51400 | G-AlMg5Si | 3.3261 |

Typical analysis of TIG-rod (wt.-%)

| | Al | Mg | Mn | Cr | Ti |
|-------|------|-----------|-----------|-------------|--------|
| wt.-% | bal. | 4.3 – 5.2 | 0.6 – 1.0 | 0.05 – 0.25 | < 0.15 |

Mechanical properties of all-weld metal

| Yield strength $R_{p0.2}$ | Tensile strength R_m | Elongation A ($L_0=5d_0$) |
|------------------------------|---------------------------|-----------------------------|
| MPa | MPa | % |
| 125 | 275 | 17 |

Operating data

|  | Polarity: AC | Shielding gases: (EN ISO 14175) I1 | Marks: ✦3.3548 / AlMg4,5Mn | ø mm 1.6 2.0 2.4 3.2 4.0 |
|---|-----------------|--|----------------------------------|---|
|---|-----------------|--|----------------------------------|---|

Approvals

TÜV (02196), DB (61.132.03), CE