

Classifications

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

Characteristics and typical fields of application

Solid wire for GMAW of AlMg alloys. Seawater resistant weld metal. Good colour matching with base metal after anodizing. Thorough cleaning of the workpiece bevels is necessary prior to welding.

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 |

and similar.

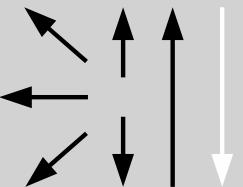
Typical analysis of solid wire (wt.-%)

| Al | Fe | Mn | Mg | Cr | Zn | Ti |
|------|--------|-----------|-----------|-------------|--------|--------|
| Bal. | < 0.40 | 0.6 – 1.0 | 4.3 – 5.2 | 0.05 – 0.25 | < 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: DC (+) | Shielding gases: (EN ISO 14175) I1, I3 | \varnothing mm 1.0 1.2 1.6 |
|-------------------------------------------------------------------------------------|---------------------|----------------------------------------------|---------------------------------------|

Approvals

TÜV (02195.04), DB (61.132.03), ABS, DNV GL, BV, LR, CE