

ROWAC Al Si 12

Solid wire, Aluminium



Classifications

EN ISO 18273-A

AWS A5.10

S Al 4047A (AlSi12(A))

ER4047

Characteristics and typical fields of application

Is used for aluminium-silicium casting alloy with a Si-content up to 12 %. Good mechanical characteristics, an excellent corrosion resistance and a low melting point ensure high quality welding results.

Base materials

G-AlSi12, G-AlSi10Mg(Cu), G-AlSi11, G-AlSi5Mg, G-AlSi7Mg, ,G-AlSi6Cu 4, AlMgSi0.8, 3.2581, 3.2383, 3.2373

Typical analysis of solid wire (wt.-%)

| Al | Si | Fe | Cu | Mg | Ti | Mn | Zn | Be |
|------|-------------|-------|-------|-------|--------|--------|-------|----------|
| bal. | 11.0 - 13.0 | < 0.6 | < 0.3 | < 0.1 | < 0.15 | < 0.15 | < 0.2 | < 0.0003 |

Mechanical properties of all-weld metal

| Yield strength $R_{p0.2}$ | Tensile strength R_m | Elongation A ($L_0=5d_0$) | Melting range |
|------------------------------|---------------------------|--------------------------------|---------------|
| MPa | MPa | % | °C |
| 60 | 130 | ≥ 5 | 573 - 585 |

Operating data

| | | | |
|---|-----------------------------|---|------------------------------|
|  | Ø (mm) 1.2 1.6 | Shielding gas: (EN ISO 14175) I1, I3 | Polarity: DC (+) |
|---|-----------------------------|---|------------------------------|

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

Approvals

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