



ER 4043

Aluminium WIRE/GTAW



Standards

EN/ISO-Standard - 18273

EN/ISO-Classification - S Al 4043 (AlSi5)

AWS-Standard - A5.10

AWS-Classification - ER 4043

Features and Applications

- Aluminium wire for welding aluminium alloys with a maximum 2% alloying elements. Including aluminium alloys containing up to 7% Si.
- The silicon addition results in improved fluidity (wetting action), making the alloy the preferred choice for welders.
- ER 4043 is not sensitive to weld cracking and produces bright, almost smut-free welds. Not recommended for anodizing.
- Thicker sections should be preheated to (150°C) prior to welding.
- Typically used on many industrial manufacturing sectors, such as automotive, production of mobile equipment and shipbuilding etc.
- Test Certificates can be found online @wilkinsonstar247.com**



Approvals

CE, UKCA

Typical Base Materials

AlMgSi 0, AlSiMg (A), AlSi 1 MgMn, AlMg1SiCu, 3.3206, 3.3210, 3.2315, 3.3211, EN AW 6060, EN AW 6005A, EN AW 6082, EN AW 6061, EN AC 45000*

* Illustrative, not exhaustive list

Welding Positions

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

Shielding Gases

EN ISO 14175 - TIG: I1, I3

Polarity

AC

Chemical Composition % (Typical)

| Si % | Fe % | Cu % | Mn % | Mg % | Zn % | Ti % | Be% | Al % |
|--------|--------|--------|--------|--------|--------|--------|---------|------|
| 5.0198 | 0.1578 | 0.0124 | 0.0035 | 0.0051 | 0.0036 | 0.0177 | <0.0001 | Rem. |

Packaging Data

| Part No. | Diameter Ø (mm) | Package Length (mm) | Package Weight (Kg) | Package Type |
|------------|-----------------|---------------------|---------------------|----------------|
| 6011100470 | 1.60 | 1000 | 2.5 | Cardboard Tube |
| 6011100471 | 2.40 | 1000 | 2.5 | Cardboard Tube |
| 6011100472 | 3.20 | 1000 | 2.5 | Cardboard Tube |

Other diameters available on request

Liability: Whilst all reasonable efforts have been made to ensure the accuracy of the information contained, this information is subject to change without notice and can be only considered as suitable for general guidance.

Mechanical Properties

| Tensile Strength (N/mm ²) | Yield Strength (N/mm ²) | Elongation (%) |
|---------------------------------------|-------------------------------------|----------------|
| ≥120 | ≥40 | ≥8 |

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.