



# ER 4043

Aluminium WIRE/GMAW



## Standards

EN/ISO-Standard - 18273

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

AWS-Standard - A5.10

AWS-Classification - ER 4043

## Features and Applications

- Aluminium filler metal used to weld aluminium magnesium base materials with a maximum of 5.3% Mg.
- Provides the highest as-welded strengths in fillet welds, offering characteristics of corrosion resistance, toughness, workability and weldability.
- Not recommended for elevated temperature service applications.
- Typically used in general construction, military, pressure vessels and storage tanks 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 % | Al % |
|--------|--------|--------|--------|--------|--------|--------|---------|------|------|
| 5.0198 | 0.1578 | 0.0124 | 0.0035 | 0.0051 | 0.0036 | 0.0177 | <0.0001 | Rem. | Rem. |

## Packaging Data

| Part No.          | Diameter Ø (mm) | Package Weight (Kg) | Package Type | Pallet Quantity |
|-------------------|-----------------|---------------------|--------------|-----------------|
| <b>6011100293</b> | 1.00            | 7                   | D300 PLW     | 72              |
| <b>6011100294</b> | 1.20            | 7                   | D300 PLW     | 72              |

Other diameters available on request

## Mechanical Properties

| Tensile Strength<br>(N/mm <sup>2</sup> ) | Yield Strength<br>(N/mm <sup>2</sup> ) | Elongation<br>(%) | Impact Strength<br>(J) |
|------------------------------------------|----------------------------------------|-------------------|------------------------|
| ≥275                                     | ≥126                                   | ≥17               | ≥16                    |

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