# **TECHNICAL DATA SHEET**

Aluminium WIRE/GTAW

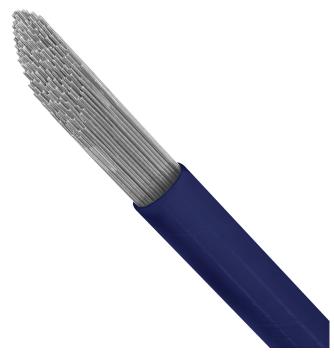
# ER 1070

### Standards

EN/ISO-Standard - 18273 EN/ISO-Classification - S Al 1070 (Al99.7) AWS-Standard - A5.10 AWS-Classification - ER 1070

### **Features and Applications**

- High purity aluminium wire for welding pure aluminium.
- Highly resistant to weathering and chemical attack.
- Good resistance to atmospheric conditions in a wide range of corrosive media, particular alkaline environments.
- ER 1070 wire offers excellent weldability when properly cleaned prior to welding.
- Heavy parts and thicker plates should be pre-heated to (150°C) prior to welding.
- Typically used on applications for chemistry, electronics, construction and food industries etc.
- Test Certificates can be found online @wilkinsonstar247.com



## **Typical Base Materials**

Al99,0 Al.99,5 Al.99,7 E-Al., 99,5, 3.0205, 3.0255, 3.0275, 3.0257, EN AW 1200, EN AW 1050A, EN AW 1070A, EN AW 1350\*

\* Illustrative, not exhaustive list

#### Welding Positions

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

| Shielding Gases            | Polarity |  |  |
|----------------------------|----------|--|--|
| EN ISO 14175 - TIG: I1, I3 | AC       |  |  |

#### **Mechanical Properties**

| Tensile Strength | Yield Strength | Elongation |
|------------------|----------------|------------|
| (N/mm²)          | (N/mm²)        | (%)        |
| ≥65              | ≥20            | ≥35        |

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

# **Chemical Composition % (Typical)**

| Si %   | Fe %   | <b>Cu</b> % | <b>Mn</b> % | Mg %   | <b>Zn</b> % | ۷%     | <b>Ti</b> % | Be%   | AI %    |
|--------|--------|-------------|-------------|--------|-------------|--------|-------------|-------|---------|
| 0.0391 | 0.0414 | 0.0013      | 0.0006      | 0.0007 | 0.0037      | 0.0045 | 0.0055      | 0.003 | 99.8900 |

#### **Packaging Data**

| Part No.   | Diameter Ø (mm) | Package Length (mm) | Package Weight (Kg) | Package Type   |
|------------|-----------------|---------------------|---------------------|----------------|
| 6011100390 | 1.60            | 1000                | 2.5                 | Cardboard Tube |
| 6011100392 | 2.40            | 1000                | 2.5                 | Cardboard Tube |
| 6011100394 | 3.20            | 1000                | 2.5                 | Cardboard Tube |

Other diameters available on request

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