

# Lastek 780

## Welding of hardenable aluminum plates and profiles

### CLASSIFICATION

DIN 1732 : SG-AISi5  
AWS A5.10 : ER 4043

### GENERAL DESCRIPTION

Welding rod for TIG welding of aluminum alloys.  
Particularly suitable for welding heat-treatable aluminum grades (AA 6000 series).  
The deposit is hardly tear susceptible when welding curable aluminum alloys and hot crack-sensitive aluminum alloys.  
For welding AlMg alloys with a high Mg content, the use of Lastek 77 is recommended for strength reasons.  
Do not use when the welded parts have to be anodized after welding because the welds turn dark when anodized.

### APPLICATIONS

Welding of AA6060; AA6082; AlMgSi0.5; AlMgSi0.7; AlMgSi1; AlMg1SiCu; G-AISi7Mg; G-AISi5Mg; G-AISi6Cu4 and dissimilar aluminum alloys.

### CHEMICAL COMPOSITION (%) (Typical values, all weld metal)

<b>Si</b> : 4.50 - 6.00	<b>Fe</b> : < 0.40	<b>Mg</b> : < 0.05	<b>Zn</b> : < 0.10	<b>Cu</b> : < 0.05
<b>Mn</b> : < 0.05	<b>Ti</b> : < 0.15	<b>Al</b> : Balance		

### MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm <sup>2</sup>	Tensile Strength N/mm <sup>2</sup>	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
≥ 100 MPa	120 - 170 MPa	≥ 15%	

### GENERAL INFORMATION

<b>Welding positions</b>	NA		
<b>Shielding gas</b>	Argon		
<b>Packing</b>	5 kg in a cardboard box		
<b>Polarity</b>	AC		
<b>Diameter (mm)</b>	2.0	2.4	3.2
<b>Length (mm)</b>	1000	1000	1000

**Tips & tricks**

- Clean the welding zone well.
- Avoid moisture and contamination of the welding rod by e.g. skin fat, to avoid hydrogen porosity. Work in a clean and dry environment.
- Use high purity Argon (EN ISO 14175: I1) as shielding gas.
- TIG welding of aluminum alloys is done with alternating current (AC).
- As a tungsten electrode, the use of an electrode with turquoise or golden head color is recommended.

*The information in this document is based on intensive tests and is accurate to the best of our knowledge. Do note that these values are only typical values for tests in accordance to prescribed standards. The suitability of the product should always be confirmed by qualification tests before use in any application. The information can be changed without previous notice.*