

# Lastek 53

## Welding pure copper

### CLASSIFICATION

EN ISO 24373 : Cu 1897 CuAg1

AWS A5.7 : ER Cu

### GENERAL DESCRIPTION

Copper-silver alloy for oxyacetylene or TIG welding of red copper.

The weld metal is tough and can be deformed without danger for cracking.

High electrical conductivity.

The high silver content gives to the deposit a higher softening point, making this rod excellent for rebuilding electrical contacts.

### APPLICATIONS

Copper kettles, boilers, tubes, joinings of electrical conductors, refacing electrical contacts.

Food industry.

Hardness: 60 HB

Bonding temperature: 900 °C (1650 °F)

Electrical resistivity: 0.022 to 0.033 ohm.mm<sup>2</sup>/m

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

<b>Ag :</b> 0.80 - 1.00	<b>Mn :</b> 0.04 - 0.12	<b>P :</b> 0.025 - 0.05	<b>Cu :</b> Balance	<b>Il others :</b> < 0.05
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### MECHANICAL PROPERTIES (Typical values, all weld metal)

<b>Yield Strength</b> N/mm <sup>2</sup>	<b>Tensile Strength</b> N/mm <sup>2</sup>	<b>Elongation</b> 5d (%)	<b>Impact Strength</b> Charpy V notch (ISO-V)
	400 - 550 MPa	1% - 10%	

### GENERAL INFORMATION

**Welding positions** NA

**Shielding gas** For tig welding: Ar or Ar/He mixture

**Packing** 5 kg in a cardboard box

**Polarity** DC, with the torch on the negative pole.

<b>Diameter (mm)</b>	1.5	2.0	3.0	4.0
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<b>Lenght (mm)</b>	1000	1000	1000	1000
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#### Tips & tricks

Clean the pieces thoroughly, eliminate oil and grease.

Weld with a neutral flame and use the flux Lastek 53A.

Preheat larger work pieces in red copper up to 350-600 °C (660-1110 °F).

Use a torch tip one or two sizes larger than you would use on steel of equivalent thickness.

*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.*