

Lastifil 5003

Easy flowing copper alloy for MIG welding

CLASSIFICATION

EN ISO 24373 : CuSi3Mn1

AWS A5.7 : ER CuSi-A

GENERAL DESCRIPTION

Solid welding wire for joining, refacing and repairing pure copper, copper-silicon, copper-manganese alloys and brass. Also suitable for building up a copper layer on carbon steel, lowalloyed steel, cast iron and for joining copper to steel.

APPLICATIONS

Welding CuSi2Mn (Wn° 2.1522), CuSi3Mn (Wn° 2.1525) and brass (Cu-Zn alloys). Also suitable for joining galvanized steel, where the low working temperature helps to prevent zinc burnoff. Suitable for Mig brazing of thin galvanized sheet metal.

Hardness: 80 - 100 HB

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

Si : 2.80 - 3.00	Mn : 0.80 - 1.00	Sn : < 0.10	Zn : < 0.10	Cu : Balance
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MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
150 MPa	≥ 350 MPa	≥ 40%	

GENERAL INFORMATION

Welding positions All

Shielding gas Argon (or Helium)

Packing 15 kg spool (in a cardboard box)

Polarity DC+

Diameter (mm) 0.8 1.0 1.2 1.6

Tips & tricks

Shielding gas: argon (or Helium for thicker materials or for higher welding speeds.)

Weld thin beads in order to obtain a fast cooling rate of the deposited metal.

Preheat pure copper.

Weld CuSi castings without preheat and limit the interpass temperature to max. 70 °C (160 °F).

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.