

TECHNICAL SHEET

CuMn13Al8

Product name

CuMn13Al8

Class of product

Cu alloy wire for MIG welding and weld surfacing

Corresponding standards

ISO 24373 Cu 6338 CuMn13Al8Fe3Ni2
DIN 1733 SG-CuMn13Al7
Werkstoff nr. 2.1367
BS 2901 P.3 C 22
AWS A5.7 ER-CuMnNiAl

Nominal composition (weight %)

Cu: balance
Al: 7,00 – 8,50
Ni: 1,50 – 3,00
Fe: 2,00 – 4,00
Mn: 11,00 – 14,00
Others: 0,5 max

Physical and technical properties

Melting range: 945 – 985 °C
Density: 7,4 g/cm³
Thermal conductivity: 30 W/m·K
Coeff. of linear mean expansion (20-300°C): 21,5 · 10⁻⁶ 1/K
Electric conductivity: 3 - 5 m/Ω·mm²
Resistivity: 0,20 – 0,333 Ω·mm²/mm

Mechanical properties of welded joint (not treated, standard data)

Tensile strength: 900 N/mm²
Elongation 10 %
Brinell Hardness 290 HB 2,5/62,5
Notched bar impact test 180 Av (J)

Applicable inert gas

Argon 4.8/5.0/5.3/5.6/6.0

Range of application

Copper-aluminium alloy, with high manganese content, to be used for joining, surfacing and build-up on aluminium bronzes.
High mechanical strength, low friction, and high resistance to corrosion, cavitation, erosion, friction and also sea-water proof.
Typical applications are in the shipbuilding and chemical industry, as well as in the surfacing of bearings, slide rails, raceways, dies, ship propellers, valves, pumps shafts, turbine blades, etc.

Characteristics make-up

Wires

NOTE:

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