

TECHNICAL SHEET

CuSn6

Product name

CuSn6

Class of product

Cu-Sn alloy wire for MIG / TIG welding and weld surfacing.

Corresponding standards

DIN1733	SG-CuSn6
Werkstoff nr.	2.1022
BS 2901P.3	C 11
AWS A5.7	ERCuSn-A

Nominal composition (weight %)

Cu: balance
Sn: 6,00 – 6,60
P: 0,2 – 0,25
Other: 0,5 max

Physical and technical properties

Melting range:	910 - 1040 °C
Density:	8,7 g/cm ³
Thermal conductivity:	75 W/m · K
Coeff. of linear mean expansion (20-300°C):	18,1 · 10 ⁻⁶ 1/K
Electric conductivity:	6 -7 m/Ω mm ²

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

Tensile strength:	260 N/mm ²
Elongation	20 %
Brinell Hardness	80 HB 2,5/62,5
Notched bar impact test	32 J

Range of application

Suitable for joining copper and copper alloys (e.g. tin-brasses) materials.
Ideal for joining copper-zinc alloys and steels.
Particularly suitable for repair works of bronze castings.
For pieces of big dimension, preheating is advised.
For layered weld-surfacing on ferrous base metals pulsed arc welding is recommended.
Also suitable for brazing in oven.

Characteristics make-up

Rods: Ø 1,6 · 6,0 mm Length: 1.000 mm
Wires: Ø 0,8 – 1,0 – 1,2 – 1,6 – 2,4 mm (on spools D300 and wire basket spools)
Other dimensions are available upon request

NOTE:

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