TECHNICAL SHEET
CuSn

STELLA
WELDING ALLOYS

Product name
CuSn

Class of product
Cu-Sn alloy wire for MIG / TIG welding.

Corresponding standards

ISO 24373	CuSn1 Cu 1898
DIN 1733	SG-CuSn
Werkstoff nr.	2.1006
BS 2901 P.3	C7
AWS A5.7-84	ER Cu

Nominal composition (weight %)

Cu:	balance
Sn:	0,75 – 0,90
Mn:	0,15 – 0,30
P:	0,005 – 0,020
Si:	0,15 – 0,25
Others:	0,5 max

Physical and technical properties

Melting range:	1.020 – 1.050 °C
Density:	8,9 g/cm^3
Thermal conductivity:	120 – 145 W/m · K
Coeff. of linear mean expansion (20-300°C):	18,1 · 10-6 1/K
Electric conductivity:	15 - 20 m/Ω mm^2
Resistivity:	0,05 – 0,0667 Ω·mm^2/mm

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

Tensile strength:	220 N/mm^2
Elongation	30 %
Brinell Hardness	60 HB 2,5/62,5
Notched bar impact test	75 Av(J)

Applicable inert gas
Argon 4.8/5.0/5.3/5.6/6.0

Range of application
Copper-Tin alloy filler metal, with good flow characteristics.
Suitable for joining OF-copper and copper materials subject to high strain.
Easily workable, welding seams without pores are obtained.
For TIG welding of large work pieces preheating is recommended.

Characteristics make-up

Rods:	Ø 2,0 ⇨ 6,0 mm	Length:	1.000 mm
Wires:	Ø 0,8 – 1,0 – 1,2 – 1,6 – 2,4 mm		

Other dimensions are available upon request.

NOTE:
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