



DESCRIPTION

Tin bronze alloy solid wire

Oxygen-free copper alloy with alloyed elements such as silicon, tin and manganese suitable for copper alloys welding. The alloyed elements improve the weldability without reducing the electrical conductivity. Phosphorus and silicon have a deoxidizer action. Suitable for joining OF-copper and copper materials subject to high strain. Easily workable. In case of high thickness, it is recommended to preheat to 300 °C.

SPECIFICATIONS

ISO 24373	S Cu 1898 (CuSn1)	AWS A5.7	ERCu
DIN 1733	SG-CuSn	Werkstoff Number	-
Certifications	-	Shielding	I1, I3
Positions	PA, PB, PC, PD, PE, PF, PG	Current	DC+

ASME QUALIFICATIONS

F-No (QW432)	31
A-No (QW442)	-

FERRITE

F-No (QW432)	-
A-No (QW442)	-

PREN

F-No (QW432)	-
A-No (QW442)	-

HARDNESS

F-No (QW432)	60HB
A-No (QW442)	-

CHEM. COMP. %

DEFAULT

Al	0.001
Sn	0.9
P	0.01
Si	0.01
Zn	0.01

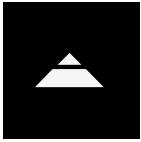
MECHANICAL PROPERTIES

	MIN	VARIANT
Tensile strength R _m MPa	170	190
Yield strength R _{p0.2} MPa	-	70
Elongation A (L ₀ =5d ₀) %	0	33
Impact Charpy ISO-V	-	-
Impact Charpy ISO-V	-	-

WELDING PARAMETERS

	1 mm	1.2 mm
Ampere	130A - 200A	185A - 245A
Voltage	24V - 28V	26V - 30V
Packaging	Ø 0,8÷1,6mm	Ø 0,8÷1,6mm
Packaging Type	Drums, B300, D200 and D100 spools.	Drums, B300, D200 and D100 spools.





Cu

DESCRIPTION

COPPER ALLOYS

Cu

APPLICATION

It generates a deoxidized pure copper deposit, ensuring optimal thermal and electrical conductivity. Common applications encompass plates for chemical plants and molds, as well as stills, calorifiers, rods, and wires for electrical components, along with tubes for heat exchangers. With the exception of very thin materials (<3mm thick), a preheat becomes necessary. The specified preheat varies, ranging from approximately 100°C for 6mm thick materials to around 400/500°C for materials measuring 15mm in thickness.

ALLOY TYPE

Deoxidized pure copper.

MICROSTRUCTURE

Single phase (fcc).

MATERIALS

Oxygen free copper.

