DAIKOWT CuSn

GTAW

COPPER ALLOYS
Cu

DESCRIPTION

Tin bronze alloy rod

Oxygen-free copper alloy with alloying elements such as silicon, tin, and manganese, specifically for welding copper alloys. The alloying elements improve weldability without compromising electrical conductivity. Phosphorus and silicon serve a deoxidizing function. Suitable for joining copper and copper-based materials subjected to high stress. It is easy to work with. In the case of high thicknesses, preheating to 300 °C is recommended.

SPECIFICATIONS

EN ISO 24373	S Cu 1898 (CuSn1)	**AWS A5.7**	ERCu
DIN 1733	SG-CuSn	**Shielding**	I1
Positions	PA, PB, PC, PD, PE, PF	**Current**	DC-
Packaging Type	5kg carton tube		

ASME QUALIFICATIONS

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

HARDNESS

60HB

CHEM. COMP. %	DEFAULT
Al	0.001
Sn	0.9
P	0.01
Si	0.01
Zn	0.01

MECHANICAL PROPERTIES	MIN. PER STANDARD	PRODUCT
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	1.6 mm	2.4 mm
Ampere	110A - 150A	175A - 250A
Voltage	-	-
Packaging	Ø 1,6÷4,0 mm	Ø 1,6÷4,0 mm
Packaging Type	5kg carton tube	5kg carton tube

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DESCRIPTION

APPLICATION

This wire produces a deposit of deoxidized pure copper, ensuring maximum thermal and electrical conductivity. The main applications include plates for chemical plants and molds, distillers, radiators, rods and wires for electrical components, as well as tubes for heat exchangers. A preheating phase is necessary, except for very thin materials with thicknesses less than 3 mm. The required preheating varies: around 100 °C for a thickness of 6 mm, up to 400-500 °C for materials with a thickness of 15 mm.

ALLOY TYPE

Deoxidized pure copper.

MICROSTRUCTURE

Single phase (fcc).

MATERIALS

Oxygen free copper.