# G-TECH CuSn

SMAW

**COPPER ALLOYS**
Cu

## DESCRIPTION

**Electrode with special coating and pure copper core.**

Special electrode for welding of copper base alloys. It has an excellent electrical conductivity. It is specific for welding of electrolytic cells and components for steel plants. Phosphorus and silicon act primarily as deoxidizers, the other elements improve ease of welding and the properties of the final weldment. Preheating, 200°C to 500°C, is desirable on most work especially on thick base metal. Also suitable for weld overlays on steel component. Not suitable for stainless steels because Cr pick-up cause embrittlement.

## SPECIFICATIONS

| | | | |
|---|---|---|---|
| **AWS A5.6** | ECu | **DIN 1733** | EL-CuMn2 |
| **Shielding** | - | **Positions** | PA, PB, PC, PD, PF |
| **Current** | DC+ | **Packaging Type** | Carton box |

## ASME QUALIFICATIONS

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

## HARDNESS

70HB

| CHEM. COMP. % | DEFAULT |
|---|---|
| **Mn** | 1.5 |
| **Sn** | 0.9 |
| **Si** | 0.2 |

| MECHANICAL PROPERTIES | MIN. PER STANDARD | PRODUCT |
|---|---|---|
| **Tensile strength $R_m$ MPa** | 170 | 180 |
| **Yield strength $R_{p0.2}$ MPa** | - | 70 |
| **Elongation A ($L_0$=5$d_0$) %** | 20 | 33 |
| **Impact Charpy ISO-V** | - | - |
| **Impact Charpy ISO-V** | - | - |

| WELDING PARAMETERS | 2.5 mm | 3.2 mm | 4.0 mm |
|---|---|---|---|
| **Ampere** | 55A - 60A | 80A - 90A | 100A - 120A |
| **Voltage** | - | - | - |
| **Packaging** | pcs/kg | pcs/kg | pcs/kg |
| **Packaging Type** | Carton box | Carton box | Carton box |

## NOTES

Pcs/kg is indicative, actual number may vary ± 5%.





DAIKO

# Cu

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.