# Selectarc WELDING

# TIG CUA8
*Old reference*: TIG CuAl8

## Classification

AWS A5.7    :   ERCuAl-A1                    ISO 24373    :   S Cu 6100 (CuAl7)

## Description & Applications

Solid rod for GTAW of Copper-Aluminium alloys with Aluminium content up to 10%. Also used for heterogenous assemblies between copper alloys and steels, galvanised sheets, special brass (CuZn20Al) and for hardfacing of wearing surfaces.

**Main applications:** Shipyard building, chemical industry (desalination of sea water).

Base materials:

| UNS | Alloy | DIN | Material N° |
|---|---|---|---|
| C60600 | | CuAl5 | 2.0916 |
| C61000 | | CuAl8 | 2.0920 |
| C68700 | Yorcalbro | CuZn20Al2 | 2.0460 |

## Typical Chemical Composition ( % )

| | Al | Fe | Mn | Ni+Co | Pb | Si | Sn | Zn | O/T | Cu |
|---|---|---|---|---|---|---|---|---|---|---|
| Min | 6.0 | | | | | | | | | |
| Max | 8.5 | | 0.50 | | 0.02 | 0.10 | | 0.20 | 0.4 | Rem. |
| Type | 0.001 | 0.01 | 0.06 | 0.02 | 0.005 | 0.02 | 0.01 | 0.9 | <0.4 | Rem. |

## All Weld Metal Mechanical Properties

| | $R_{p0.2}$ ( MPa ) | $R_m$ ( MPa ) | $A_5$ ( % ) |
|---|---|---|---|
| Min | - | - | - |
| Max | | | |
| Type | 180 | 400 | 40 |

## Welding Current & Instructions

| Welding mode | Shielding Gas |
|---|---|
| GTAW<br>= - | ISO 14175:<br>I1 (100% Ar) / I2 (100% He) / I3 (Ar+ 5-30%He)<br>5-10 L/min |

Preheating of massive parts between 200°C (>6mm) up to 500°C (>15mm).

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