# MIG CUA9NI

*Old reference*: MIG CuAl9Ni

## Classification

AWS A5.7 : ERCuNiAl ISO 24373 : S Cu 6328 (CuAl9Ni5Fe3Mn2)

## Description & Applications

Solid wire for GMAW of cupro-aluminium alloys with similar chemical composition. It has better resistance to wear and corrosion than TIG CUA8NI.

**Main applications:** Shipbuilding (accessories, propulser fans), pumps…

## Typical Chemical Composition ( % )

| | Al | Fe | Mn | Ni+Co | Pb | Si | Zn | O/T | Cu |
|---|---|---|---|---|---|---|---|---|---|
| Min | 8.5 | 3.0 | 0.60 | 4.0 | | | | | |
| Max | 9.5 | 5.0 | 3.5 | 5.5 | 0.02 | 0.10 | 0.10 | 0.50 | Rem. |
| Type | 8.8 | 3.4 | 1.5 | 4.5 | 0.002 | 0.04 | 0.005 | <0.50 | Rem. |

## All Weld Metal Mechanical Properties

| | $R_{p0.2}$ ( MPa ) | $R_m$ ( MPa ) | $A_5$ ( % ) |
|---|---|---|---|
| Min | - | - | - |
| Max | | | |
| Type | 400 | 700 | 15 |

## Welding Current & Instructions

| | Ø (mm) | Welding parameters | | Shielding gas |
|---|---|---|---|---|
| | | Current (A) | Voltage (V) | |
| GMAW<br>= + | 0.8<br>1.0<br>1.2 | 120 - 180<br>180 - 220<br>220 - 250 | 20 - 22<br>22 - 24<br>24 - 26 | ISO 14175:<br>I1 (100% Ar)<br>I2 (100% He)<br>I3 (Ar+ 5-30%He)<br>12-18 l/min |

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