CEWELD®

# E CuMnAlNi

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| CATEGORY | SMAW Stick Electrodes |
| TYPE | Manganese aluminium bronze electrode developed for welding on DC+. High tensile strength alloy with good sliding properties. |
| APPLICATIONS | CuMnAlNi is designed for welding and overlaying of almost all bronzes but can also be used on cast iron and most kind of steels. Due to the high tensile strength and the very good sliding properties it is often used for surfacing of shafts, ship propellers, bearings, dies etc... |
| PROPERTIES | This alloy has exceptional corrosion resistance against several items such as seawater or other chemical attack when accompanied by erosion. - Welding instructions: CuMnAlNi is only Weldable on DC + and has an easy removable slag. Use the normal standard welding techniques. |
| CLASSIFICATION | AWS A 5.6: E CuMnNiAl<br>EN ISO 1071: CuAlMn 2 B2<br>DIN: W.Nr. 2.1368<br>DIN 1736: E 31-UM-200-CN |
| SUITABLE FOR | joining brass, bronze, and steel, ship propellors, dies, shafts, pump parts, valves, UNS : C62300 - C63000, DIN : CuAl10Fe3Mn2 - CuAl10Ni5Fe4 - G-CuAl10Fe, Mat n° : 2.0936 - 2.0966 - 2.0940! Cunial. |
| WELDING POSITIONS: |   |

| Cu | Mn | Si | Al | Ni | Mo |
|---|---|---|---|---|---|
| Rem | 12-13 | 0,4 | 7-9 | 2-3 | |

## MECHANICAL PROPERTIES

| Heat Treatment | $R_{P0,2}$ (N/mm$^2$) | Rm (N/mm$^2$) | A5 (%) | Impact Energy (J) ISO-V -20°C | -40°C | -60°C | Hardness HB |
|---|---|---|---|---|---|---|---|
| AW | | 640-735 | < 20 | | | | 220 |

AW: as welded

## WELDING PARAMETERS PACKING

| Welding Parameters | | | Packing | |
|---|---|---|---|---|
| D (mm) | Length (mm) | Current (A) | kg / can | kg / 6 pack |
| 2.5 | 350 | 55-80 | 2.5 | 15 |
| 3.2 | 350 | 80-120 | 2.5 | 15 |
| 4.0 | 350 | 120-160 | 3.0 | 18 |

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| REDRYING TEMPERATURE | 300C / 2hr |
| EQUIVALENT | GMAW- CuMn13Al7Ni2 |