

## CuAl8Ni6 Tig (CuAl10Ni5Fe4)

**CATEGORY** GMAW-GTAW Solid wires

**TYPE** Copper Aluminium Nickel alloy for GTAW welding (Tig)

**APPLICATIONS** Desalting installations, CuNiAl ship propellers, cladding against corrosion, cladding against wear, gliding surfaces, shipbuilding, pump building, shafts, guide grooves, tube systems etc.

**PROPERTIES**

- The weld metal is a Cu-Al-Ni bronze
- Sound, pore free deposits on ferrous and non-ferrous base materials
- Seawater, wear and corrosion resistance; for example when seawater, cavitation and erosion are simultaneously affecting the weld deposit.

**CLASSIFICATION**

AWS	A 5.7: ER CuNiAl
EN ISO	14640: S Cu 6328 (CuAl9Ni5Fe3Mn2)
DIN: W.Nr.	2.0923
DIN	1733T.1: SG CuAl8Ni6

**SUITABLE FOR** CuNiAl, CuAlNi, aluminium bronze, ship propellers, 2.0923, joint welds or building up of aluminum bronze. Cladding (steel) components undergoing metal to metal wear under high pressure. Especially suited for marine environments. The addition of nickel improves corrosion resistance in heated and rough seawater.

**APPROVALS** ABS in progress

**WELDING POSITIONS:**



**WELD DEPOSIT WEIGHT %**

Cu	Mn	Fe	Cr	Ni	Mo	Al	Melting range
Rem	1.5	3.20	-	4.50	-	8.0	1015-1045°C

**TYPICAL MECHANICAL PROPERTIES**

Heat Treatment	R <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	Impact Energy (J) ISO-V			Hardness HB
				-20°C	-40°C	-60°C	
AW	400	700	15				200

AW: as welded

**WELDING PARAMETERS / PACKING**

D (mm)	Welding Parameters		Packing (kg)	
	Current (A) (DC-)		single	master
2.0 x 1000	120-180		5	25
2.4 x 1000	160-230		5	25
3,2 x 1000	200-330		5	25
6.0 x 1000	flame welding		5	25
8.0 x 1000	flame welding		5	25
10.0 x 1000	flame welding		5	25
12.0 x 1000	flame welding		5	25

**REDRYING TEMPERATURE** Not required

**GAS ACC. EN ISO 14175:** I, (pure Argon)