

CuAl8Ni6

CATEGORY GMAW-GTAW Solid wires

TYPE Copper Aluminum Nickel alloy for GMAW welding

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, aluminum bronze, ship propellers, 2.0923, UNS C63000, C630A1Bz, 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 heat 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 _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HB
				-20°C	-40°C	-60°C	
AW	400	700	15				200

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A) (DC+)	spool type	kg / spool	kg / pallet
1,2	27-28	185-245	KD-300	15	1080
1,6	28-30	250-400	KD-300	15	1080

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: I, Ar/He (70-30)