

CuAl9Fe

CATEGORY GMAW-GTAW Solid wires

TYPE Copper-aluminium welding wire for Mig / Tig

APPLICATIONS Joint welds or building up of aluminum bronze. Cladding components undergoing metal to metal wear. Joining steel to copper alloys, cast iron and or bronze.

PROPERTIES

- Special alloyed copper wire for Mig and Tig welding
- The weld metal is a Cu-Al bronze
- Sound, pore free deposits.

CLASSIFICATION

| | |
|------------|------------------------|
| AWS | A 5.7: ER CuAl-A2 |
| EN ISO | 24373: Cu6180 CuAl10Fe |
| DIN: W.Nr. | 2.0937 |
| DIN | 1733: SG-CuAl9Fe |

SUITABLE FOR Suitable for seawater resistant applications. Joining steel to copper alloys, cast iron and or bronze. Excellent for metal spraying. Ship propellers, shipbuilding, pump building, shafts, guide grooves etc, UNS : C 60600 - C 61600 - C 68700, DIN : Cu Al5 - Cu Al8 - CuZn20Al2, Werkstoff Nr : 2.0916 - 2.0920 - 2.0960

WELDING POSITIONS:



WELD METAL ANALYSIS %

| Mn | Ni | Fe | Al | Cu | rest |
|------|----|---------|---------|-----|------|
| >1.0 | - | 1.0-1.3 | 9.0-9.5 | bal | <0.5 |

MECHANICAL PROPERTIES

| Heat Treatment | R _{p0,2} (N/mm ²) | R _m (N/mm ²) | A ₅ (%) | Impact Energy (J) ISO-V | | Melting range °C | Hardness HB 2.5/62.5 |
|----------------|--|-------------------------------------|--------------------|-------------------------|-------|------------------|----------------------|
| | | | | +20°C | -40°C | | |
| AW | | 500 | 35 | 95 | | 1030-1040 | 140 |

AW: as welded

WELDING PARAMETERS / PACKING

| D (mm) | Welding Parameters | | | Packing | | |
|--------|--------------------|-------------|------------|------------|-------------|--|
| | Voltage (V) | Current (A) | spool type | kg / spool | kg / pallet | |
| 0.8 | 25-26 | 80-140 | KD-300 | 15 | 1080 | |
| 1.0 | 26-27 | 130-200 | KD-300 | 15 | 1080 | |
| 1.2 | 27-28 | 185-245 | KD-300 | 15 | 1080 | |
| 1.6 | 28-30 | 250-400 | KD-300 | 15 | 1080 | |

REDRYING TEMPERATURE not required

TIG WELDING Tig rods in 1000 mm length are available from 1.6 til 3.2 mm in 5 kg tubes