Technical data sheet 011121MBA	Cored welding wire # CORBRONZE 302-G	Welding Alloys

CLASSIFICATION

EN 14700: T Cu1

DESCRIPTION

- Special cored wire for GMAW
- The weld metal is a Cu – Mn –Ni – Al bronze
- Sound, pore free deposits on ferrous and non-ferrous base materials

APPLICATIONS

- Building up of aluminium bronze alloy
- Cladding 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.
- Excellent resistance to cavitation and stress corrosion cracking.

Examples

Ship propellers, shafts, guide grooves etc

TYPICAL ALL-WELD METAL ANALYSIS

Al	Fe	Mn	Ni	Cu
11.5	2	1	4.8	Bal.

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – 3-layer deposit on mild steel: 320 HB

CONDITIONS OF USE

Current type	Shielding gas	Gas flow
DC+ or pulsed	EN ISO 14175: I1 (pure Ar) , I3 (Ar+30 % He)	12 - 20 l/min

OPERATING CONDITIONS

Diameter [mm]	Current [A]	Voltage [V]		Stick-out [mm]	
	Range	Pulsed	Continuous	Range	Optimum
1.2	150 – 320	22 – 25	27 – 31	10 - 20	15
1.6	200 – 350	22 – 25	27 – 31	10 - 20	15

Recovery: 90 %

Stringer or weaved beads

Can be welded gun leading or gun trailing

The use of pulsed current is recommended for improved wetting and bead appearance

Higher currents and voltages can be used, but because increased element burn-off (particularly Al) and dilution, leading to lower hardness levels.

Use of preheat and working temperatures up to 300°C will help forestall cracking.

WELDING POSITIONS

Flat, half up, half down

PACKAGING

Diameter	1.2 mm	1.6 mm	
Spool type	EN ISO 544: BS300	EN ISO 544: BS300	EN ISO 544: B450
Weight	15 kg	15 kg	25 kg

Other packaging and other diameters: please consult us