

# CORBRONZE CMA1-G

## CLASSIFICATION

DIN 8555: MSG 31-GF-200-C

EN 14700: T Cu1

## DESCRIPTION

- Special cored wire for GMAW
- The weld metal is a Cu - Mn - Ni - Al bronze
- Weld deposit resists the combined effects of corrosion, erosion and cavitation
- Sound, pore free deposits on ferrous and non-ferrous base materials

## APPLICATIONS

The building up of aluminium bronze, 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

Heat exchanger elements for sea-water desalination equipment, bearings, valves, gears etc.

Boat propeller castings as specified in American specifications Mil-B-21230-A

## TYPICAL ALL-WELD METAL ANALYSIS

Al	Fe	Mn	Ni	Cu
8.00	3.00	11.50	2.00	Bal.

## TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – 3-layer deposit on mild steel: 210 HB

## SHIELDING GAS

ISO 14175: I1 (pure argon)

I3 (Ar + 30% He)

## OPERATING CONDITIONS

Current type	Gas flow rate	Recovery
DC(+) continuous or pulsed	12 - 20 l/min.	90 %
Diameter [mm]	Intensity [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

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 cause increased element burn-off (particularly Al) and dilution, leading to lower hardness levels.

**WELDING POSITIONS**

EN ISO 6947 : PA, PB

ASME IX: 1G, 1F, 2F

**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