

# CORBRONZE 302 G

## CLASSIFICATION

DIN 8555: MSG 31-GF-300-C

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

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

Ship propellers, shafts, guide grooves etc

## TYPICAL ALL-WELD METAL ANALYSIS

Al	Fe	Mn	Ni	Cu
11.50	2.00	1.00	4.80	Bal.

## TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

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

## SHIELDING GAS

ISO 14175: I1 (pure argon)

I3 (Ar + 30% He)

## OPERATING CONDITIONS

Diameter [mm]	Current type		Gas flow rate		Recovery	
	Range	Pulsed	Continuous	Range	Optimum	Stick-out [mm]
1.2	150 - 320	22 - 25	27 - 31	12 - 20 l/min.	10 - 20	90 %

Diameter [mm]	Intensity [A]		Voltage [V]		Stick-out [mm]	
	Range	Pulsed	Continuous	Range	Optimum	
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.

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

#### 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