CORBRONZE 404-G

CLASSIFICATION

DIN 8555: MSG 31-GF-400-C

EN 14700: T Cu1

DESCRIPTION

• Copper-aluminium hardfacing alloy

• Good resistance to metal to metal wear under heavy loads

APPLICATIONS

Suited to surfacing of iron and copper-base materials.

Examples

Deep drawing dies for stainless steel, aluminium, magnesium and titanium parts

TYPICAL ALL-WELD METAL ANALYSIS

Al	Fe	Cu
13.50	4.00	Bal.

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – 3-layer deposit on mild steel: 420 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. 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