

# CORBRONZE 201-G

## CLASSIFICATION

DIN 8555: MSG31-GF-200-C

EN 14700: T Cu1

## DESCRIPTION

- Copper-aluminium hardfacing alloy that resists abrasion and corrosion up to 300°C.
- The crack sensitivity of the deposit is low.
- Iron, nickel and manganese are added to improve the mechanical properties which are maintained 200°C.

## APPLICATIONS

The product is suitable for surfacing of most iron and copper-based materials. It is designed for repairs to bronze castings, slideways, valve covers and for cryogenic applications.

## TYPICAL ALL-WELD METAL ANALYSIS

Al	Fe	Mn	Ni	Cu
9.00	3.50	0.50	0.40	Base

## WELD DEPOSIT MECHANICAL PROPERTIES

Ultimate tensile strength	Hardness (undiluted)	Hardness (welded on steel)	Density
600 MPa	190 HB	190 - 210 HB	7.6 g/cm <sup>3</sup>

## 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

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.

#### 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