



MWA Product Guide 2nd Edition

## **BRONZES**

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#### **MAC BRONZE E808**

A versatile coated electrode which deposits a tough overlay of fully deoxidised bronze. Designed for joining and overlaying steels, cast irons, malleable iron, bronzes, brass and copper based metals. Due to the high thermal conductivity of copper alloys, pre-heating is advisable particularly if heavy sections are involved. The electrode is recommended for overlaying and building up bearing surfaces, bushes, impellor blades, valve seats, etc.

# Typical All Weld Metal Chemical Analysis (%)

Cu	Mn	Sn
91.0	0.4	7.5

### Typical All Weld Metal Mechanical Properties

#### **As Welded**

Tensile Strength	465 N/mm²
0.2% Proof Stress	310 N/mm <sup>2</sup>
Elongation	20%

#### **Sizes Available & Recommended Amperages**

2.5mm	3.2mm	4.0mm
60-80	80-130	130-180

#### **Related Specification:**

BRONZES

AWS E Cu Sn-C

Current:

AC/DC (+)

Storage:

If allowed to become damp, the electrodes should be re-dried for one hour at 110°C before use.

### **MAC BRONZE E809**

#### **MAC BRONZE E809**

Superior coated tough bronze electrode for joining and overlaying steels, cast irons, malleable irons, bronzes and copper based metals. Due to the high thermal conductivity of copper and copper alloys pre-heating is advisable in certain instances particularly where heavy sections are involved. Highly recommended for bearing surfaces and for wear facing against sea water corrosion.

### Typical All Weld Metal Chemical Analysis (%)

Cu	Mn	Sn
84.30	0.40	14.20

### **Typical All Weld Metal Mechanical Properties**

### As Welded

Tensile Strength	386 N/mm²
0.2% Proof Stress	278 N/mm <sup>2</sup>
Elongation	20-25%

### **Sizes Available & Recommended Amperages**

2.5mm	3.2mm	4.0mm
50-75	80-120	120-175

### Related Specification:

AWS E Cu Sn | 14% Tin Bronze Type Current:

DC (+)

Storage:

If allowed to become damp, the electrodes should be re-dried for one hour at 110°C before use.

#### **MAC BRONZE E810**

An electrode designed for joining and overlaying aluminium bronze and for corrosion and wear resistant deposits on steel and cast irons. The weld metal deposits will produce good friction and corrosion resistance. Ideal for bearing surfaces, shafts, guides, slides, gear teeth and any wear application involving metal to metal friction.

## **Typical All Weld Metal Chemical Analysis (%)**

Al	Cu	Fe	Mn
7.5-9.5	BAL	0.99-Max	0.5-1.8

#### **Typical All Weld Metal Mechanical Properties**

#### As Welded

As weided		
Tensile Strength	480 N/mm <sup>2</sup>	
Hardness	160 HB	
Elongation	20%	

#### Sizes Available and Recommended Amperages

sizes Available and Recommended Amperages			
	2.5mm	3.2mm	4.0mm
	60-80	80-130	130-180

#### **Related Specification:**

**AWS E Cu Al-A2** 

**Current:** 

DC (+)

Storage:

If allowed to become damp, the electrodes should be re-dried for one hour at 200°C before use.