

GEMET 702DC

ELECTRODES FOR TIN-BRONZES AND SURFACING.

IDENTIFICATION

Gemet 702 DC, ECuSn-C

CLASSIFICATION

AWS SFA 5.6: E Cu Sn C

DESCRIPTION

A special basic coated electrode for welding and surfacing of copper, brass and bronze. Deposited weld metal is free from porosity. The weld bead is smooth uniform and slag is easy to remove. Weld metal has higher hardness and higher tensile strength & yield strength compared to ECuSnA electrodes.

ALLOY BASIS : Cu, Sn, P

WELD METAL ANALYSIS (RANGE) %

Sn	P	Al	Zn	Fe	Pb
7.0 - 9.0	0.10 - 0.35	0.01 max	0.20 max	0.10 max	0.02 max

MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	EL (%) (L=4D)	Hardness of the Weld Metal
300 - 550	20 % approx.	70 - 90 Brinell

TYPICAL APPLICATIONS

- Welding tin bronze (Phosphor bronzes)
- Bell metal (Cu + 20-25% Zn)
- Brasses
- Manganese Bronzes, pump impellers
- For welding copper base alloys to themselves and to steels or cast irons.
- To weld overlays shafts and engineering components to give a bearing surface and or corrosion resistant layer.
- For joining phosphorus bronzes of similar composition.
- Joining for brasses

PROCEDURE

Prepare large "V" approximately 80 - 90°. Preheat to 300°C to reduce sluggish behaviour of weld pool.

REDRY : Redry if moist at 250 - 300°C for 1 -2 hrs.

WELDING CURRENT : DC (+)

Size (mm)	Length (mm)	Current Condition DC (+) Amps	Packing / Packet (kg)	Packing / Box (kg)
2.5	350	60 - 90	2	2 x 5 = 10
3.15 / 3.20	350	75 - 120	2	2 x 5 = 10
4	350	100 - 160	2	2 x 5 = 10