Inweld Phos-Bronze C Electrode

AWS A5.6 ECuSn-C

Chemical Composition of Inweld Phos-Bronze C Electrode

Cu	Zn	Sn	Mn	Fe	Si	Ni	P	Al	Pb	Other
Balance	---	7.00-9.00	---	0.25	---	---	0.05-0.35	0.01	0.02	0.50

Single values are maximum unless otherwise specified.

Description and Applications

Inweld Phos-Bronze C electrode is a multipurpose flux-coated electrode used for joining and cladding of bronzes, brasses, steel, cast steel and cast iron. This alloy offers good resistance to sea water and other corrosive environments. Excellent overlays on shafts, pumps, impellers and propeller blades. Phos-Bronze C electrode is also used for building-up bearing journals and frictional wear surfaces on heavier sections. Other common applications include repair and surfacing of gears, bearings, valve bodies, ornamental iron, and galvanized iron and as a substitute for torch alloys on larger sections.

Procedure

Clean and prepare weld zone in accordance with standard welding practice. Preheat thick sections of cast iron or steel to 200°F, phosphor (tin) bronze to 400°F and other copper alloys to 700°F. Thin sections generally do not require preheating. Maintain the preheat temperature during welding and between passes. Maintain a medium arc length and weave slightly. For thicker deposits, shorten the arc length and make stringer beads .Allow weld to cool before removing slag with a chipping hammer and wire brush.

Features

Inweld Phos-Bronze C electrode is specially formulated to be used in any position with minimum spatter. Produces a smooth stable arc that deposits dense porosity free welds. Welds color match bronze. Will also work harden. Slag is easily removed.

Typical Weld Metal Properties

	AWS Spec
Average As-Welded Brinell Hardness:	85-100
Tensile Strength:	40,000 psi
Yield Strength:	
Elongation:	20%

Recommended Parameters

SMAW (DCRP – Electrode+) All-position

Wire Diameter	Voltage	Amperage
3/32”		60-115
1/8”		100-150
5/32”		125-200
3/16”		190-250