



Unibraise 1400

(ECuSn-C)

Unibraise 1400 is an all position Phos-Bronze electrode used for joining copper base alloys to themselves and to stainless steels and cast irons. It is excellent for overlays on pumps, shafts, impellers and propeller blades. Unibraise 1400 is used for building up bearing journals and frictional wear surfaces on heavier sections, galvanized iron, and ornamental iron. It provides a good color match on bronze and will work harden. Weld deposits are ductile, strong, and machinable. It offers corrosion resistance to salt water and chemicals. Remove all surface contamination from the weld area. Maintain a short arc gap and fill in craters prior to extinguishing the arc.

Typical Chemical Composition

Copper	Balance
Tin	8.0 max.
Manganese	0.01 max.
Iron	0.10max.
Silicon	0.05 max.
Aluminum	0.001 max.
Nickel	0.05 max.
Phosphorus	0.10 max
Others	0.50 max.

Typical Mechanical Properties

(Undiluted Weld Metal)

Tensile Strength	50,000 psi, min. (340 N/mm ²)
Yield Strength	30,000 psi, min. (210 N/mm ²)
Elongation	18%
Brinnell Hardness	105
Rockwell Hardness	B78

Specifications

AWS A5.6 / ASME SFA5.6 Class ECuSn-C

Recommend Amperages

3/32" (2.4MM)	75 – 105
1/8" (3.2MM)	100 – 135
5/32" (4.0MM)	120 - 160

Recommended Current: DC Straight (-) or AC