



# SIL-TRODE®

Silicon-Bronze

## Classifications

AWS A5.7 Class E CuSi-A

## Description

- A silicon bronze welding alloy (UNS C65600) for the inert gas welding of copper-silicon, copper zinc, copper to copper and also mild steel. Used extensively in the welding of galvanized steel. The silicon content of 2.8-4% increases the tensile strength, hardness and work hardening rates.
- Silicon bronze also provides good corrosion resistance and has good weldability.
- With the gas-tungsten process arc welding process, welding is accomplished with DCEN current and argon or helium gas shielding. ACHF with argon gas shielding may be used to take advantage of the arc cleaning action.
- Preheat slightly to remove moisture.
- Interpass temperature should not exceed 66 °C.

## Limiting chemical composition of all-weld metal (%)

Cu*	Si	Zinc	Tin	Mn	Fe	Al	Pb	Others
Rem.	2.8-4.0	1.0 max.	1.0 max.	1.5 max.	0.50 max	0.01 max.	0.02 max.	0.05 max.

## Mechanical properties (nominal all-weld metal values)

	Y.S. (MPa)	T.S. (MPa)	El. (% in 51mm)	BHN (500 kg) (6.4 mm deposit)
Example	-	350	40	80

## Sizes available

Diameter	(mm)	1.6	2.4	3.2
Length	(mm)	914	914	914
Tube size	(kg)	4.5	4.5	4.5

## Recommended welding parameters

Refer to AMPCO® welding products brochure or website for recommended welding parameters.