Manufacturers of Custom Welding Lines for Resale
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SELECTRODE 6008

Silicon Bronze TIG

INTERNATIONAL CLASSIFICATIONS

AWS/ASME A5.7 ERCuSi-A
BS 2901P.3:C9
DIN1733: SG-CuSi3
UNS C65600

FEATURES & APPLICATIONS

The high silicon content allows this alloy to be used in welding and brazing applications. Silicon bronze is best known for welding plain or galvanized steel metal. Principal applications are GTAW or oxyacetylene welding of copper, copper-silicon and copper-zinc based metals to themselves and to steel. Silicon bronze is also used for surfacing parts that may be exposed to a corrosive environment. The deposits of this alloy exhibit high strength, excellent corrosion resistance and good weldability.

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

Cu	Zn	Sn	Mn	Fe	Si	Al	Pb	Other
Bal.	1.0	1.0	1.5	.5	4.0	.01	.02	.50

Values are Maximums

TYPICAL MECHANICAL PROPERTIES

Undiluted Weld Metal	**Maximum Value Up to:**
Tensile Strength	50,000 PSI Min. (345 N/mm2)
Elongation	65%
Hardness	Brinnell 80-100
Approximate Melting Temperature	1866 °F (1019 °C)

WELDING CURRENT & INSTRUCTIONS

Recommended Current: DC Reverse (+), Straight (-) or AC

Diameter (mm)	1/16 (1.6)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Minimum Amperage	70	120	170	220
Maximum Amperage	120	160	230	280

Welding/Brazing Techniques: When oxyacetylene welding, apply a high boric acid flux before and during welding. The gas flame should be slightly oxidizing. Keep a small weld pool that promotes rapid solidification and this will minimize cracking. Preheat is not recommended.

GAS SELECTION:

GTAW: 100% Helium 40-45 cfh
100% Argon 45-55 cfh