BRAZING ALLOYS

Stay-Silv® Brazing Alloys

Phos/copper and silver/phos/copper alloys are used to braze copper to copper and copper to brass. The phosphorus content in these alloys makes them self-fluxing on copper. When brazing brass or copper to brass, use Stay-Silv white brazing flux. These alloys are not recommended for brazing steel or other ferrous metals.

Harris 0: Low-cost alloy for many copper-to-copper applications where good fit-up can be maintained and brazing temperature is not critical.

Stay-Silv 5 and Stay-Silv 6: Medium-range alloys; Stay-Silv 5 is useful primarily where fit-up can not be tightly controlled. Stay-Silv 6 is slightly more fluid and can be used where closer tolerances are available. Both alloys are somewhat more ductile than Harris 0.

Dynaflow: Premium, medium-range silver alloy, formulated to even tighter specifications than the Stay-Silv alloys to mirror the performance characteristics of the 15% silver brazing filler metals. Excellent for brazing both tight and poorly-fitted connections, Dynaflow's proven reliability and acceptance by field service engineers has made it the leading choice of brazing operators.

Stay-Silv 15: For many years, the industry standard for air conditioning/refrigeration applications. Still widely used but now often replaced by Dynaflow in many AC/R applications.

Part No.	Description	Chemical Composition	Specifications	Solidus	Liquidus	Typical Application
0620F1 (21035)	Harris 0 .050 x 1/8 x 28 Stick Tube	92.9% Cu 7.1% P	AWS A5.8 BCuP-2	1310° F 710° C	1475° F 802° C	Requires medium fit up
2620F1 (31035)	Stay-Silv 2 .050 x 1/8 x 28 Stick Tube	2% Ag 91% Cu, 7% P	AWS A5.8 BCuP-6	1190° F 643° C	1450° F 788° C	Broader melting range than 0
5620F1 (41035)	Stay-Silv 5 .050 x 1/8 x 28 Stick Tube	5% Ag 89% Cu, 6% P	AWS A5.8 BCuP-3	1190° F 643° C	1500° F 816° C	Used to bridge gaps where close fit-up can't be maintained.
6620F1 (51035)	Stay-Silv 6 .050 x 1/8 x 28 Stick Tube	6% Ag 87.5% C, 6.5% P		1190° F 643° C	1455° F 791° C	Used to bridge gaps where more ductile filler metal is required
15620F1 (61035)	Stay-Silv 15 .050 x 1/8 x 28 Stick Tube	15% Ag 80% Cu 5% P	AWS A5.8 BCuP-5 QQ-B-654A	1190° F 643° C	1480°F 846° C	Good ductility
D620F1 (66000)	Dynaflow .050 x 1/8 x 28 Stick Tube	6% Ag 87.9% Cu, 6.1% P		1190° F 643° C	1465° F 796° C	Premium alloy Excellent strength and ductility

Blockade® Brazing Alloys

Silicon brazing alloys offer significant advantages over phos/copper and silver/phos/copper (BCuP) brazing alloys and present important differences in the brazing of copper and its alloys. The addition of silicon effects such noticeable changes as:

- Outstanding ability to form a large shoulder, or cap, at the braze connection
- Distinct, favorable color changes in the finished braze alloy
- Improved ductility over non-silver-bearing BCuP-2 braze alloys
- Easily brazes brass and brass alloys without the addition of silver
- Significantly reduces brazing temperatures compared to BCuP braze alloys
- The addition of silver further enhances the favorable color change

Part No.	Description	Chemical Composition	Specifications	Solidus	Liquidus	Typical Application
BK220R1 (45535)	Blockade Bare Rod 2 mm x 20 stk tube	86.9 % Cu 6.5 % Sn 6.5 % P .1 % Si	AWS A5.8 BCuP-9	1187° F 637° C	1297° F 674° C	For copper or brass. Reduced brazing temperature, visible braze allows easy joint inspection. Excellent for HVAC applications.
BKFC2500R1 (45235)	Blockade Flux-Coated 2 mm x 20 stk tube					