

Inweld LFB & LFBFC

Alloy 681 UNS/CDA C68100
 AWS A5.27 Class RBCuZn-C
 AWS A5.8 Class RBCuZn-C
 ASME SFA 5.27 Class RBCuZn-C
 ASME SFA 5.8 Class RBCuZn-C
 QQ-R-571C, MIL-R-19631B Type RCuZn-C



Description and Applications:

Inweld Low Fuming Bronze (LFB) and Flux-Coated Bronze (LFBFC) are general purpose oxyacetylene rods for braze welding steel, cast iron, malleable iron and some nickel alloys. Commonly used for fusion welding of brass, bronze and copper alloys as well as for building up wearing surfaces. Inweld LFB and LFBFC are excellent choices for rush jobs or temporary applications involving dissimilar metals or where rust is present. Galvanized parts can be brazed without causing damage to the zinc coating. A precisely formulated chemical balance of copper and zinc as well as alloying elements of tin, iron and manganese produce high strength, ductile and sound weld deposits that can be easily machined and work harden once put into service. The high silicon content keeps fumes to a minimum and allows for good tinning action. Preheating is recommended for some applications and bronze brazing flux is required for the bare rods. Use a slightly oxidizing flame for braze-welding and build up applications and a neutral flame for fusion welding. Excellent color matches on yellow brass and bronze castings.

Chemical Composition of LFB & LFBFC RBCuZn-C

Cu	Zn	Fe	Si	Al	Pb	Mn	Sn	Total Other(s)
56.0-60.0	Balance	0.25-1.20	0.04-0.15	0.01	0.05	0.01-0.50	0.80-1.10	0.50

Single values are maximum unless otherwise specified.

Approximate Melting Temperature: 1630 F (888 C)
 Average As-Welded Brinell Hardness: 80-110
 Tensile Strength: 56,000 psi (386 MPA)



Recommended Welding Parameters:

Wire Diameter Voltage* Amperage*

Clean joint area as thoroughly as possible. Bevel cracks or heavy sections. Utilize a slightly oxidizing flame; preheat the part to be brazed. If using bare LFB, dip it into the bronze brazing flux and then back to the area brazed. Apply the torch, keeping it in constant motion to avoid overheating a particular area of the base metal. The molten drops of LFB or LFBFC will follow the heat of the torch flame. Keep adding LFB or LFBFC until the joint is filled.

Note:

When using LFBFC additional flux is not necessary and removal of flux residue between passes is not necessary. Allow the part to cool slowly and remove slag with chipping hammer and wire brush.

*Use low range for iron or nickel-based alloy's, middle range for bronze alloys and high range for copper.