Medium Flowing, Intermediate Temperature and Economical Silver Alloy

Typical Applications

Crown Sil 35 is an intermediate temperature silver brazing alloy with a fairly large (125°F) melting range. This large melting range is helpful when wide gap joints are brazed and is used where the fit up is poor or a fillet is desired. Crown Sil 35 is used to join copper, brass, bronze, nickel-silver, steel and other ferrous and nonferrous alloys that melt above the liquidus point of the Crown Sil 35. It is commonly used to braze electrical components and brass parts such as brass lamps or brass band instruments. Crown Sil 35 is not well suited for brazing stainless steel because it is not resistant to interface corrosion. Crown Sil 50 Ni is much preferred for stainless steel applications. Due to its lower cost, the Crown Sil 35 is more economical than the higher percent silver alloys and can be used in many of the same applications.

Specifications

AWS A 5.8/A5.8M
BAg-35

- Silver 34.0 – 36.0%
- Copper 31.0 – 33.0%
- Zinc 31.0 – 35.0%
- Other Elements (total) 0.15% max.
- Color yellow
- Solidus (melting point) 1265°F
- Liquidus (flow point) 1390°F
- Brazing Range 1390°F – 1545°F
- Electrical Conductivity (%IACS) 19.8
- Joint Strength

Joint strength will generally surpass the strength of the base metals. Strength is a function of the base metals being joined, type of joint, design of joint, joint clearances and brazing procedures.

Procedure

Clean joint area. It is helpful to mechanically remove oxides with emery cloth, wire brush, sandblasting, etc. Apply Crown 45 Flux to remove more oxides and to facilitate flow of the solder into the joint area (capillary action). Use any heat source that will produce 1450°F in the base metal. If a torch is used, heat the base metal indirectly (4 to 6 inches away) to avoid burning the flux. When the flux turns to a clear liquid, add a small amount of the Crown Sil 35 to form fillets or pull it through the joint area. If the flux turns black and has been burned, let the area cool, clean it (be sure to use emery cloth) and start over. Allow to cool slowly. Remove flux residue with hot water and a wire brush.

Sizes and Part Numbers

<table>
<thead>
<tr>
<th>Diameter</th>
<th>1 ounce package</th>
<th>16 ounce standard package</th>
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<tbody>
<tr>
<td>1/16 x coil</td>
<td>LS35/CL-BP</td>
<td>LS35/CL</td>
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WELDING FUMES AND GASES CAN BE DANGEROUS TO YOUR HEALTH.

BEFORE USING THIS PRODUCT THE WELDER (END-USER) MUST READ AND UNDERSTAND THE COMPLETE PRODUCT WARNING LABEL AND THE NEW 16 SECTION SAFETY DATA SHEET (SDS).

THE SAFETY DATA SHEET (SDS) WHICH OUTLINES THE POTENTIAL HEALTH HAZARDS AND SAFETY INFORMATION RELATED TO THIS PRODUCT CAN BE DOWNLOADED FROM THE SDS PORTION OF THIS WEBSITE. IT IS ALSO AVAILABLE FROM YOUR EMPLOYER AND WELDING SUPPLY DISTRIBUTOR.

DO NOT PROCEED WITH USE OF THIS PRODUCT UNTIL YOU READ AND UNDERSTAND THE SAFETY DATA SHEET (SDS) AND PRODUCT WARNING STATEMENT.

BE SURE TO CONSULT THE LATEST VERSION OF THE SDS.

SEE THE PRODUCT WARNING LABEL AND SDS FOR COMPLETE WARNING INFORMATION.