SILVALOY® 560 FLUX COATED ROD
(BRAZETM 560 FLUX COATED ROD, SILVALOY® A56T FC)

GENERAL DESCRIPTION
Silvaloy 560 Flux Coated Rod consists of a .062 in diameter filler rod that is coated with a precise coating of flux to a final diameter of 0.125 in. This product is available in rods for hand feed applications.

Some of the primary advantages of coated products include:
- It simplifies the brazing process by eliminating the manual fluxing operation; this also reduces flux exposure to your brazing personnel.
- Joint quality and throughput can be improved due to the consistent application of flux and filler metal.
- Reduces heating time and secondary post braze operations, increasing productivity and throughput.
- Improved strength due to a reduction in flux inclusions at the joint interface.
- Reduces the flux in your wastewater effluent by as much as 50-75%.

NOMINAL COMPOSITION

<table>
<thead>
<tr>
<th>Element</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver</td>
<td>56.0% ± 1.0%</td>
</tr>
<tr>
<td>Copper</td>
<td>22.0% ± 1.0%</td>
</tr>
<tr>
<td>Zinc</td>
<td>17.0% ± 2.0%</td>
</tr>
<tr>
<td>Tin</td>
<td>5.0% ± 0.5%</td>
</tr>
<tr>
<td>Other Elements (Total)</td>
<td>0.15% Max</td>
</tr>
</tbody>
</table>

PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color (Metal Only)</td>
<td>White</td>
</tr>
<tr>
<td>Melting Point (Solidus)</td>
<td>1145°F (620°C)</td>
</tr>
<tr>
<td>Flow Point (Liquidus)</td>
<td>1205°F (650°C)</td>
</tr>
<tr>
<td>Brazing Temperature Range</td>
<td>1205°F - 1400°F (650°C - 760°C)</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>9.42</td>
</tr>
<tr>
<td>Density (Troy oz/in³)</td>
<td>4.96</td>
</tr>
<tr>
<td>Electrical Conductivity (%IACS)</td>
<td>8.32</td>
</tr>
<tr>
<td>Electrical Resistivity (Microhm-cm)</td>
<td>20.8</td>
</tr>
</tbody>
</table>

IACS = International Annealed Copper Standard

PRODUCT USES
Silvaloy 560 is a silver-based brazing alloy used for ferrous and non-ferrous alloys in joints requiring a low temperature, cadmium-free alloy, as in food handling equipment. For improved corrosion resistance in joints on stainless steel, use alloys containing small amounts of nickel, such as Silvaloy 630 or Silvaloy 505.
BRAZING CHARACTERISTICS

Silvaloy 560 is a low temperature, free-flowing brazing filler metal with a slight tendency to liquate (i.e. separate into low and high melting constituents) if heated slowly through its melting range.

PROPERTIES OF BRAZED JOINTS

The properties of a brazed joint are dependent upon numerous factors including base metal properties, joint design, metallurgical interaction between the base metal and the filler metal.

Tensile Strength
(lbs/in²)

<table>
<thead>
<tr>
<th>Material</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Carbon Steel</td>
<td>40,000 - 50,000</td>
</tr>
<tr>
<td>Copper</td>
<td>25,000 - 30,000</td>
</tr>
<tr>
<td>Brass</td>
<td>30,000 - 40,000</td>
</tr>
</tbody>
</table>

AVAILABLE FORMS

Silvaloy 560 Flux Coated Rods are available in the following sizing and packaging:

- .062” Dia (alloy) x 18” x 8 Rods-Plastic Tube (PN 98120)

SPECIFICATIONS

Silvaloy 560 alloy conforms to the following specifications:

- American Welding Society (AWS) A5.8/A5.8M BAg-7
- ASME Boiler & Pressure Vessel Code, Sec II-C, SFA-5.8 BAg-7
- Society of Automotive Engineers (SAE) / AMS 4763

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet:

Distribution P/N: 98120.

SAFETY INFORMATION

The operation and maintenance of brazing equipment or facility should conform to the provisions of American National Standard (ANSI) Z49.1, “Safety in Welding and Cutting”. For more complete information refer to the Material Safety Data Sheet for Silvaloy 560 Flux Coated Rod.
WARRANTY CLAUSE

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