



Aufhauser Corporation  
 39 West Mall  
 Plainview, NY 11803  
 Telephone:  
 516-694-8696  
 800-645-9486  
 Fax:  
 516-694-8690

## Aluminum AL-ZN

### ◆ INTRODUCTION

Aufhauser 52-3 is a self fluxing soldering/brazing alloy for aluminum, zinc base metals and galvanized metal. Ideal for sealing holes in aluminum boats, leaders, gutters, siding, kirksite dies, zinc die castings, antique auto grills, gutters, outboard motor castings, carburetors, appliances and automotive hardware. Use where soldering temperatures in excess of 700F (370C) can be tolerated. Produces smooth, dense, porosity-free deposits that match the color of zinc die-castings.

### ◆ PROCEDURE

Use a steel wire brush to remove all dirt, scale, oxide and plating from the joint area. Bevel thicker sections. On thin sections use a "back-up" plate. Preheat to about 400 °F and sprinkle Aufhauser A52-3 Flux in the joint. Use a neutral flame and incline the torch in the direction of travel. Heat until the flux liquefies. The base metal should be hot enough to let the rod melt, tinning the surface, without being directly exposed to the flame. You should rub the rod on the heated part until the alloy melts and flows. Then expose the rod to the flame and add the alloy drop-by-drop and let it flow. Continue until gap is completely filled. No flux is needed on aluminum, but you should use a stainless steel wire brush to clean the surface. Remove the flux residue with warm water. For TIG welding, use argon gas and AC High Frequency.

### ◆ APPLICATIONS

- aluminum boats, leaders, gutters, siding
- kirksite dies, zinc die castings, antique auto grills
- gutters, outboard motor castings, carburetors, appliances and automotive hardware.

### ◆ PHYSICAL PROPERTIES

#### Features

|                         |                             |
|-------------------------|-----------------------------|
| Melting point:          | 720 °F                      |
| Color Match:            | Excellent                   |
| Impact strength:        | 15                          |
| Comprehensive strength: | 60,000 – 75,000lbs/sq. inch |
| Module of rupture:      | 116,000 lbs./sq. inch       |
| Specific heat:          | 0.1047 cal/g                |
| Tensile strength:       | 37,3800 lbs./sq. inch       |
| Brinell hardness:       | 100                         |
| Specific gravity:       | 8.7                         |
| Flux:                   | Self-fluxing on aluminum    |

### ◆ SPECIFICATIONS MEET or EXCEED

- Mil R-4208

### ◆ STANDARD SIZES AND DIAMETERS

| <u>Diameters</u>             | <u>Package Form</u>                                      |
|------------------------------|--|
| 1/8 (3.2mm) x<br>18" (450mm) | five pound tubes, four tubes per<br>twenty-pound carton. |