

# DURAFIX EasyWeld



Aluminium Welding, Brazing, and Soldering & Aluminium Repair

## 3 IN 1 ROD

Now you can repair aluminium and zinc based parts such as this with out a welding machine.

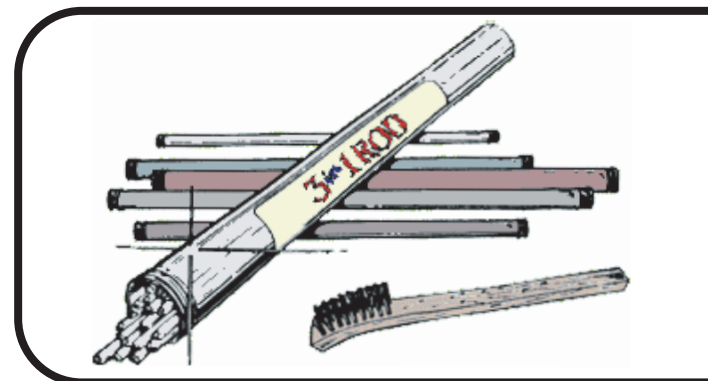
- All you need is a hand held propane type torch for small pieces.
- Produces a sound joint that is stronger than the parent metal.
- No flux is required.
- There are no fumes.
- Low 732°F. working temperature.

### FEATURES:

low cost • stronger than aluminium • no flux or fumes • low working temperature

### Aluminium Welding Instructions

- Clean area to be welded down to base.
- Brush the base with stainless steel brush till shiny.
- Heat the area to be welded, evenly.
- As you heat the base, rub the rod vigorously against the heated piece to be welded till rod flows.
- Never apply heat directly to rod.



### ALWAYS WEAR SAFETY GLASSES AND GLOVES

Do not use on magnesium.

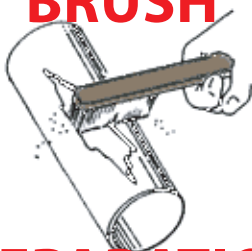
If you are unsure of the material, file off some metal and apply the torch. Magnesium like a flare.

Duralux will not be held liable for any damages, injury or losses due to the misapplication of this product or any other reason whatsoever.

## NOW WELDING ALUMINUM IS AS EASY AS 1- 2 - 3

1

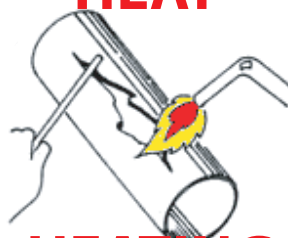
BRUSH



PREPARATION

2

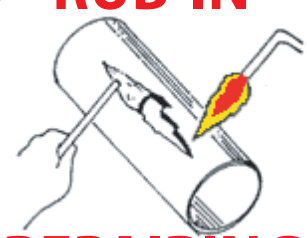
HEAT



HEATING

3

RUB-IN

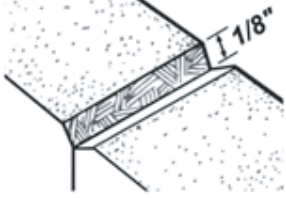


REPAIRING

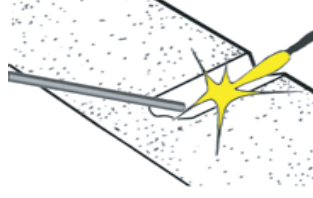
### General Notes

This rod will work with propane, mapp, butane, oxyacetylene or any fuel source as long as the material is brought up to 732°F. The rod will not work if heated directly. You must heat the material that you are working on to 732°F and then apply the rod. The material must be cleaned with a stainless steel brush (included) because the rod will not adhere to stainless steel. The rod will not adhere to the material being brazed if it is cleaned with a steel or other type brush.

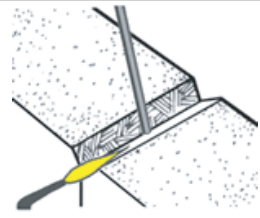
## HOW TO WELD ZINC BASED METALS WITH A 3 IN 1 ROD



Veel the broken edges to about 45 degrees, clean the surface of any plating or scale back from edges of the vee 1/8 of an inch.



Heat until it stars to flow. Turn flame parallel to surface and with side of flame, hold at this heat. Heat welding rod to same temperature. Now with both bases and welding rod at this temperature, touch rod to the break and rod will flow into vee, thoroughly fusing the parts.

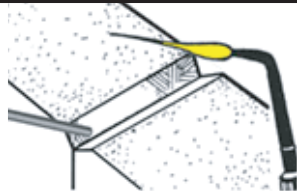


Repeat operation until break is completely filled. Be sure to kick rod into weld to break down skin resistance as filler rod will lay on surface and will not fuse if only heat is applied.

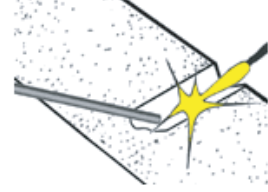
## HOW TO BRAZE ALUMINUM WITH A 3 IN 1 ROD



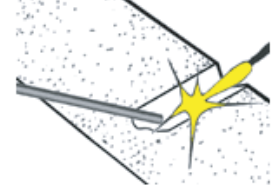
Brush surface to be repaired thoroughly under heat to break up surface oxide.



Heat the joint hot enough for the rod to flow without the aid of the flame, thoroughly tinning the surface.

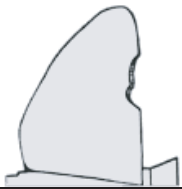


Brush Tinned surface under heat, thoroughly filling the open pores.

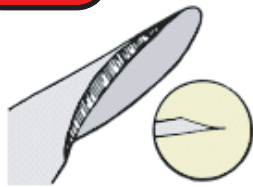


With sides thoroughly tinned, flow in enough rod to fill the Vee. Be sure filler fuses with the tinned surface without melting the base metal.

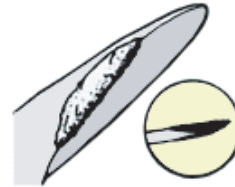
## HOW TO PREPARE A PROPELLER



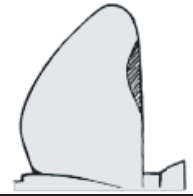
Wire brush thoroughly to break up surface oxide and remove paint.



Heat hot enough for the rod to flow without the aid of the flame. Tin the flat (not bevelled) side and attach a temporary support of carbon or



Turn and tin bevelled side, building out the blade slightly large than its original size. Grind damaged edges to a 45 bevel. Pitch propeller to standards.



Let cool, then grind proper standards. Results? ...a well prepared wheel without porosity for you to balance and paint!

## Durafix 3 in 1 Rod

The most widely used rod on the market for WELDING ZINC BASE metals - white - die cast-pot metal. Alloyed from pure virgin metals.

Welds made with ROD are clean and free from slag. Produces a sound joint that is stronger than the parent metal. BRAZING ALUMINUM without the use of flux, sound and free from porosity. SOLDERS GALVANIZED also used as a RUB-ON solder. Use a slightly carburizing flame (excess of acetylene), with small tip for most work. MELTING POINT 7320F.

Durafix is used to: repair Kirksite dies, power tools, aluminium radiators, power mower casting, propellers, lower units and boat hulls.

**THOUSANDS OF OTHER USES.**

## Specifications

Tensile Strength, lbs/sq. in.....	47,000
Compression Strength, lbs/sq. in.....	60,000-75,00
Shear Strength, lbs/sq. in.....	34,000
Charpy Impact Str, lbs/sq. in.....	4ft/lb to break 1/4" bar
Hardness (Brinell) .....	100
Ductility Good .....	Good
Melting Point .....	732°F
Specific Gravity .....	6.7
Density (lbs/cu. in.).....	0.25
Elongation (in 2") .....	3%
Coefficient of Linear Expansion .....	15.4x10-6/°F
Electrical Conductivity .....	24.9% of Cu
Thermal Conductivity .....	0.24 cal/cu. cm/°C