## Alloy Sol - Aluminum Repair & Joining Rod

- \* Note: On light Aluminum: Use a Carburizing flame. This is a flame with less oxygen or compressed air. This softens the flame and allows the work area to reach proper temperature without the risk of overheating or damaging the parent metal.
- \* On heavier Aluminum: Use a hotter flame to attain and maintain the proper temperature, and as always we suggest using Hot Block heat absorption putty, to focus your heat in the work area and not allow the heat to disperse.

Here are the 10 steps to effective Aluminum Welding:

**Step 1.** With your torch, heat the tip of the Rod and dip the Rod into the powdered Flux. The Flux will stick to the Rod and allow you to transfer it to the welding area.

**Step 2.** Pre-heat the aluminum softly for about 10 seconds before applying the Flux, as to help the Flux to stick to the work area. On heavier Aluminum, pre-heat the Aluminum with hotter flame for longer.

**Step 3.** Melt the Flux onto the repair area and remove the rod without removing the flame from the work area. Keep the flame moving. Add more Flux if necessary.

**Step 4.** Keep the flame moving, as this will help eliminate hot spots. Remember, you are trying to heat the parent metal and flow the Flux around the surface area. This will melt the Rod when you add the Rod to the repair area.

**Step 5.** On lighter Aluminum, hold the torch tip 3-4 inches away from the repair surface. Heavier Aluminum, hold the torch closer. If possible, keep the torch perpendicular to the surfaced keep the flame moving back and forth. No circles.

**Step 6.** As you continue to move the flame back and forth, the Flux will become watery or milky and is indicating its time to add the Rod.

**Step 7.** Without pulling the flame away, apply the rod softly on the repair area and allow the rod to flow. If the Rod "balls up", then you need more heat and a little more Flux won't hurt.

**Step 8.** As the Rod flows out, you can move the deposit material a little longer with the flame movement, however it has in fact flowed and the flame should now be pulled away.

**Step 9.** If you have stopped the welding process too soon and want to flow the deposit out more, add more Flux by repeating steps 1 and 2. The Flux will help in the bonding process whether adding more Rod or just flowing out the previous deposit.

**Step 10.** Remove the excess Flux with warm water and a wire brush.