Using AT-6030 Metal Bonding Adhesive

AT-6030 is a two-part acrylic adhesives, which was specifically developed with high viscosity for bonding of our Weld Mount System fasteners to metal surfaces. AT-6030 is a 10 to 1 adhesvie which is packaged in a 38 ML cartridge. This adhesive requires our AT-300 adhesive dispensing gun with AT-12 10 to 1 plunger. Because 10 to 1 adhesvies require more mixing they can only be used with AT-650 mixing tips. Proper mixing is important. AT-6030 sets in approximately 15 minutes, develops working strength in 45 - 50 minutes and dries to a dark black color. Please note the following before use:

- 1. **AT-6030 Adhesive** has a shelf life of 6 months when refrigerated. We recommend that the adhesive be refrigerated when not in use to obtain the maximum shelf life. Do not leave either adhesive in high temperature locations as this will severely reduce the shelf life. Expiration dates on the adhesive are approximate as we can not control storage conditions. Always test product first to insure proper cure.
- 2. When using a new tube of adhesive put the cartridge in the gun and remove the protective cap. Save the cap to reseal it later. As air voids or uneven cartridge filling may be possible it is advisable to discard the first bit of material which comes out of the cartridge before affixing the AT-650 mixing tip. Check to insure both cartridges are dispensing material uniformly.
- 3. <u>NOTE</u>: AT-6030 can only be used with AT-650 mixing tip. Note that the bayonet mounting base of the mixing tip has a notch cut out in it. The tip will only go on the cartridge one way. Do not try to force it onto the cartridge.
- 4. AT-6030 is a high viscosity material so some of our lighter parts can be mounted on vertical or overhead surfaces without sagging. When mounting to a horizontal surface or when an AT-690 fixture dot is not required put a 3/8" diameter dot of adhesive on the back of the part to be bonded.
- 5. When using AT-2010 push the part into the substrate and slowly twist the part as it is mated to the substrate to evenly distribute the adhesive. Continue until you see adhesive around the entire base of the part. Hold the part for approximately 2 seconds and release.
- 6. If you use too much adhesive or locate the part in the wrong location remove it and wipe all surfaces with solvent and reapply. After some practice you will quickly learn how much adhesive to apply.
- 7. AT-6030 is temperature sensitive. For every 10 degrees drop in temperature below 72 degrees the set time doubles. 50 degrees is the lowest temperature limit. Below this temperature it will not set. The working strengths listed above are approximately 70% of the full bond strength. Full bond strength is achieved after 24 hours. The normal bond strength for these adhesive is 500 600 lbs. (Tensile). Shear strength is approximately 20% greater.
- 8. Both adhesives can be used on irregular surfaces as these adhesives are gap filling to \(\frac{1}{2}\)".
- 9. One 38 ML cartridge is sufficient for approximately 50 75 parts (continuous bonding).
- 10. If you stop dispensing adhesive the adhesive will set up in the mixing tube. Do not try to force the adhesive out of the nozzle as this may cause the cartridge to leak or you will strip the plunger on the gun. We recommend you purchase 5 mixing tips with each cartridge of adhesive.
- 11. Do not store the adhesive cartridge with the mixing tip attached. Remove the mixing tip and place the cap back on the cartridge as soon as possible. We recommend that you remove the mixing tip and carefully clean the tip of the cartridge by wiping downwards (the wall between cartridges should be vertical). Do not clean from side to side as this will cross contaminate the cartridge. Replace the cap. Note that the cap bayonet base has a notch in it so it will only go on the cartridge one way. This prevents cross contaminating the adhesive when recapping. Before reuse check to make sure that both sides of the cartridge are flowing freely before installing a new tip. If the cartridge is plugged you can normally use a small tube to remove solidified material to get it flowing again.
- 12. While specifically designed for metal bonding AT-6030 will bond to most substrates except rubber and low energy plastics such as polypropylene and starboard. While extensive surface preparation is not required excess dust can interfere with the bond strength of the adhesive. We recommend you solvent wipe the surface to remove excessive dust to achieve the best results. When bonding to metal it is necessary to remove oxides on the surface by using scotchbrite or grinding followed by a solvent wipe with alcohol or mold release solvent.
- 13. Please note the warning information on the cartridge label.