kester°

How To Test Outdated Flux

Please note that this method is to test performance of flux and it is in no way a method used to re-certify, by Kester, flux that had passed its shelf life.

Tools needed:

- Hot plate that can achieve a set temperature of 240°C
- 0.5" X 0.125" piece of solder or a 0.5" piece of solid wire
- 1" X 1" X 0.001" copper coupon which is treated with OSP or ENIG
- 1" X 1" ceramic or non-metallic coupon
- Cutters that can cut a length of solder wire or the chunk off the end of a bar

Process:

- 1. Turn hot plate on and set to 215°C degrees if testing Sn63Pb37 wire, or 240°C degrees if testing K100LD or SAC305 wire. Allow the hot plate to reach the set point.
- 2. Cut or 0.5" X 0.125" piece of solder or a 0.50" piece of solid wire
- 3. Place the piece of solder or solid wire on the copper coupon.
- 4. Deposit enough flux to cover the coupon or piece of wire.
- 5. Using a hot gloved hand, place the coupon on the hot plate.
- 6. Allow the solder to melt then remove the coupon from the hot plate and let it cool.
- 7. Observe the wet out area of solder. If there is no de-wetting or pull back then the flux is working correctly.
- 8. Cut a second piece of 0.5" X 0.125" of solder or 0.50" length of wire. Place this on the ceramic slide or non-metallic coupon.
- 9. Deposit enough flux to cover the coupon or piece of wire.
- 10. Place this coupon on the hot plate.
- 11. Remove the coupon once the solder has flowed.
- 12. The results should be a single ball of solder in the middle of the coupon. No metal particles should be found in the flux field around this ball.

For any questions, please contact: Mike Kaminsky, Senior Field Support Engineer Cell: 704-706-4026 <u>mkaminsky@kester.com</u>