Under-cured ink continues to be one of the most common problems found in screen printing shops today. The contributing factors are many and the consequences severe. Even with good equipment and experienced employees, under curing an ink can easily occur. Maintaining a consistent temperature inside the dryer is a challenge given the variables of ambient air temperature, humidity, uncalibrated equipment, changing belt speeds, fabrics, variable ink thicknesses and specialty products like metallics. Gaining control over cure temperatures requires the daily use of a Thermoprobe for each production run.

1. Carefully inspect the Thermoprobe to ensure that the wires are making solid contact with each other. Clean the outer ring and wires with a rag to remove ink or lint.

2. Plug the probe into the handheld console and make sure the battery and probe are working correctly.

3. Set the probe to display either Fahrenheit or Celsius degrees.

4. Prepare a test print to simulate the actual production run. Be sure to use the same fabric and printing sequence as the production run.
5. Position the probe over the area with the most ink density.

6. Push the probe wires into the wet ink film. Make sure the wires are embedded in the ink.

7. Validate the cure temperature by running a test print through the dryer using the same belt speed as the production run.

8. Carefully monitor the display as the print moves down the dryer tunnel. Make sure the peak temperature meets or exceeds the recommended cure temperature for the ink(s) being used.

9. Disconnect the probe from the hand held unit.

10. After the plug and cord have exited the dryer, allow them to cool down before touching them. Caution: The cord and plug will be very hot as it exits the dryer.