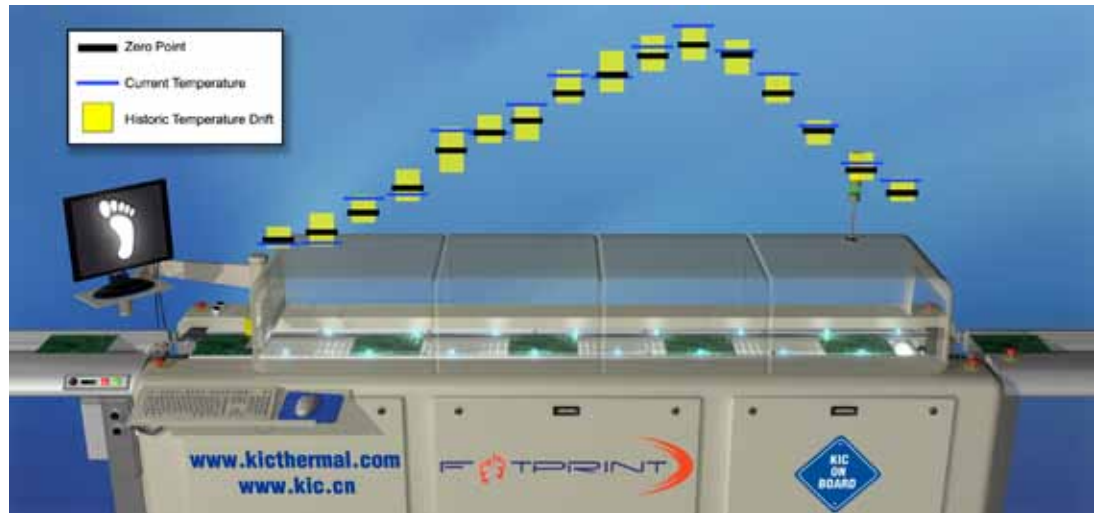




- Maintain reflow production without periodic profiling
- Stop excessive drift before it leads to defects
- See and record oven temperature and conveyor speed fluctuations in real-time
- Soldering quality without the intrusive work requirement



## Footprint Advantages

- No Profiling
- No Programming
- No Process Spec Limits
- 24 Hour Customer Support

## 1-Click Oven Monitoring

### The Footprint concept

- The alternative to frequent profiling and thermal process windows is to monitor the machine drift.
- The Footprint system monitors the oven temperature variations along the conveyor.
- Conveyor speed is also measured in real-time.
- The key decision is to determine allowable versus excessive drift.
- The Footprint can make that decision for you by automatically measuring the acceptable drift, and only alert the user when the conditions reach danger level.
- Users can also select the basic monitoring mode with no alarms. The Footprint will simply record and display the changing conditions in the oven.

### Selectable programming modes for oven monitoring and drift limits

- 1-Click Programming
  - 1-click to start oven monitoring without alarms.
  - 1-click to start oven monitoring with default alarm setup. In this mode the software looks at the oven drift in the recent period of time and sets the alarm accordingly.

2. Load the settings of a previous monitoring run.

3. Advanced programming

The user can select upper and lower limits to drift for individual TC sensors and conveyor speed.

### Monitoring function

1. Real-time oven temperature and conveyor speed variations are displayed on the screen. This 'video' can be stored for record keeping and it can be retrieved at any time.
2. The oven drift is displayed graphically for each temperature sensor and for the speed sensor with the following legend:
  - a. Red line denotes the temperature zero point. This is the actual temperature that the sensor measured when the monitoring program was started.
  - b. Gray line with green dot shows the current temperature.
  - c. Gray shaded area depicts how the temperature has drifted above and below the zero point since monitoring started. No temperature was measured above or below the gray shaded area.

## Automatic Oven Monitoring

**Technical Support**  
**24 Hours Every Day**  
**Everywhere**

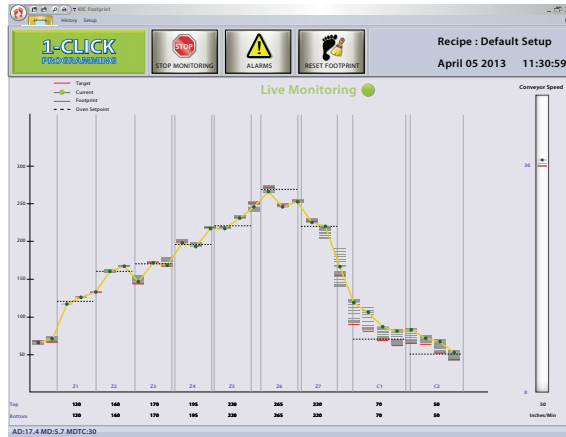
### Risk Free Guarantee

All KIC products are designed to give maximum value and fast payback by streamlining your thermal process. Investment in a KIC product is a step toward total process control and quality management. All KIC products come with a no questions asked, 30 day money back guarantee.

For more information on any of our products or service please visit us on the Web at: [www.kicthermal.com](http://www.kicthermal.com) or [www.kic.cn](http://www.kic.cn).

### Service Available

Technical Support  
Installation and Setup  
Application Support  
Hardware Support  
Guaranteed Warranty



**Footprint™ Live Monitoring**

## FOOTPRINT HARDWARE

- 30 thermocouple sensors are permanently installed in the reflow oven tunnel. They are housed in two probes, each containing 15 sensors.
- The sensors are attached with brackets to the left and right edge conveyors in close proximity to PCBs as they are processed in the oven.
- The probes are connected to a data acquisition unit that delivers the information to the computer. The Footprint system can use the oven computer or a separate PC.
- One speed encoder is attached to the conveyor gear to continuously measure the speed.

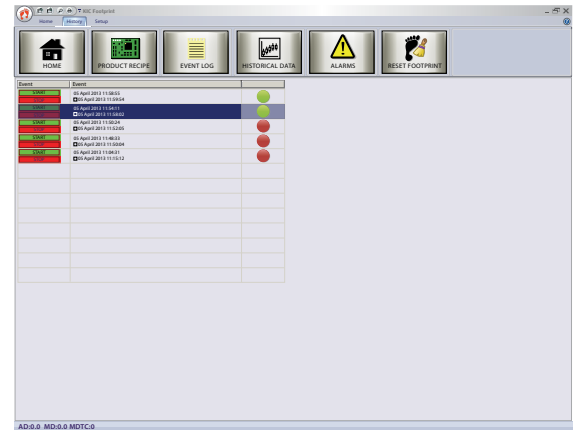
### System Components

Two (2) thermocouple probes (each probe has 15 thermocouples)  
1 ea. FTM eTPU data acquisition box with cables  
1 ea. speed encoder  
1 ea. Footprint software with software protection dongle

### Optional Hardware Components

**Alarm Relay:** The Alarm Relay connects to the eTPU and allows the system to activate warning lights, audible alarms and/or stop the process infeed conveyor.

**Light Bar:** Used when system goes into 'warning' or 'alarm' state to show change in process and can make audible sound.



**Footprint™ History Log**

## COMPUTER CONFIGURATION

### Minimum System Requirements

- Dual Core / 1 GHz Processor PC with 2 GB RAM
- 2 GB available storage
- Video 1024 x 768 resolution / 16-bit
- 1 available USB port (for software key)
- 1 available Ethernet port or 1 available USB port with Ethernet to USB

Visit our website at <http://kicthermal.com/support-download/os-compatibility-chart> for product compatibility with Windows operating systems.

\*\*Note: 2 additional powered USB ports may be needed for optional accessories



### Compatibility

- The Footprint system can be ordered for a new reflow oven or it can be retrofitted to a previously installed oven.
- The Footprint system is compatible with virtually all reflow ovens in the market. Please contact KIC for confirmation of compatibility to your ovens.

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