WPI

WAVE PROCESS INSPECTION™

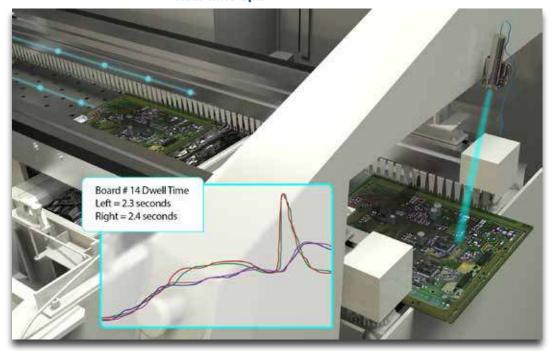## *Always knowing your production profile and dwell time!*

For every production board:
- **Dwell & Parallelism**
- **Process Control**
- **Real-time Cpk**
- **Automatic Profile Data Collection**
- **Traceability**

Board # 14 Dwell Time
Left = 2.3 seconds
Right = 2.4 seconds

WPI — Wave Process Inspection — Innovative solutions and automation for the wave solder process including automatic profiling, real-time Cpk, real-time preheat and wave analytics, and 100% production traceability. WPI even calculates and displays the dwell time and parallelism measurements of each PCB processed. Get better insight into your wave solder process with the WPI.

Key Features

Embedded sensors which enable automatic measurement, recording and display of a wide range of process related details including:

Industry First! Dwell time and Parallelism per board - The Dwell (contact) time and Parallelism is calculated and displayed for each production board.

Complete PCB temperature profile through preheat and solder wave - User selectable specifications. Automatically calculate key process parameters.

Full process control and traceability

- Confirm proper setup for a selected product before it enters the machine. Complete traceability linking profile temperature data and dwell time to each production board via the scanned barcode ID.

Real-time SPC/Cpk charting

- The process results for each PCB are automatically plotted on SPC charts. Cpk is automatically calculated and saved. Warnings and alarms will be activated if trends in production indicate process drifts.
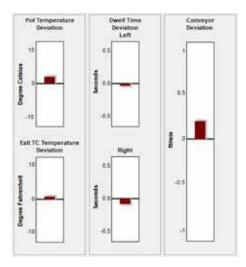
Real-time analysis

- Intuitive troubleshooting shows deviations in your process, helping you quickly identify where process changes are occurring.

Available Configurations	
WPI includes as standard:	**WPI—Essential includes as standard:**
Automated Recipe Optimization	Manual Recipe Optimization
Process Window Index (PWI)	Process Window Index (PWI)
Interface with barcode scanning or MES output of board ID	Dwell & Parellelism for each PCB
Connectivity-Connection with factory systems and MES software	Automatic Profile Data Collection
SMEMA interface at entrance conveyor	
Audible/visual notifications of process conditions	

KIC® Making Ovens Smarter®

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Minimum System Requirements

CPU: Dual Core / 1 GHz Processor PC
RAM: 2 GB available
Video: 1024 x 768 resolution / 16 bit
USB(s): 2 available ports (1 for data download, 1 for software key)
Ethernet and/or USB: 1 available Ethernet port or 1 available USB port for USB to Ethernet adapter
** Note: 2 additional powered USB ports may be needed for optional accessories

Operating Systems

Visit our website at:

http://kicthermal.com/support-download/os-compatibility-chart for product compatibility with Windows operating systems

System Components

Two (2) thermocouple probes (each probe has 15 thermocouples)
One (1) Pyrometer sensor
One (1) data acquisition unit
One (1) speed encoder
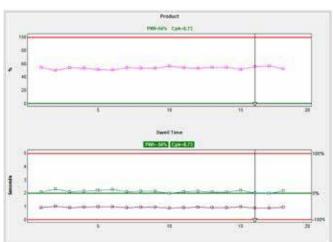One (1) board sensor
One (1) alarm relay *
One (1) light tower *
One (1) KIC WPI software with software protection dongle
Note: The WPI requires a KIC profiler. Contact KIC for compatibility with your profiler.

Optional equipment with WPI—Essential

Data Acquisition Unit / KIC Probe

Accuracy: $\pm 1.2°C$
Readings/second: 13
Thermocouples: Type K
Temperature Range: -150°C to 450°C
Dimensions: Data acquisition unit (LxWxH):
313.7mm x 158.0mm x 35.1 mm
KIC Probe: Length and thermocouple spacing is customized to each machine
Communications: Ethernet, RJ-45 connector
Computer Capability: PC
Power Requirements: 12V DC @ 200mA

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 sevice, please visit our website at: www.kicthermal.com or www.kic.cn.

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