Speedline Asia E-News

Vol: 1
Date: 24 Feb 09

Momentum Series

Speedline's MPM Momentum stencil printer incorporates an unprecedented level of patented, industry-leading technology and performance unmatched by any other printer in its class.

It's all there: +/- 12.5 micron @ 6 sigma accuracy, CANopen high speed motion control, digital camera, telecentric lenses, Benchmark™ software, and advanced lighting techniques.

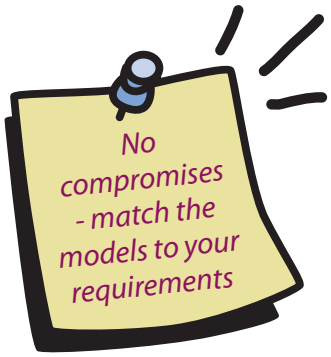
All at a price that won't break the budget.

Momentum Series consists of:

- Momentum
- Momentum+
- Momentum Elite
- MPM125

Momentum also won 2 prestigious awards at Nepcon China 2008 recently – Grand Awards in the Printing Category and the Excellence Award Category for Performance.

For more information, please go to www.speedlinetech.com/mpm.



Momentum Elite
Cycle Time = 7 sec

Up to 28% increase in throughput over Momentum+.

Momentum+
Cycle Time = 9 sec

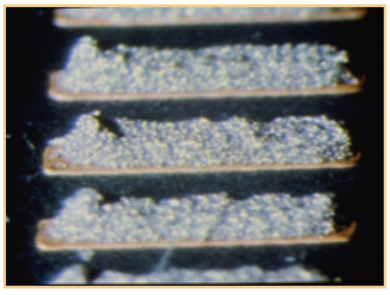
Up to 16% increase in throughput over Momentum.

Momentum
Cycle Time = 11 sec

Alignment Accuracy
± 12.5 microns @ 6 sigma (Cpk ≥ 2.0)

Service Tips: Peaking/ 'Dog Ears'

If you encounter Peaking or 'Dog Ears' after printing solder paste onto the production board then the possibility of such problem is due to:



- Stencil snap off gap between the stencil and the board is too large
- Slow-snapoff parameter which separates the board from the stencil after printing is too quick.
- Temperature / Humidity inside the machine is too high.
- Excess solder paste clinging to bottom of stencil after print. Need to change the wiper frequency to clean the stencil.
- Excess squeegee pressure.

Patent : BridgeVision

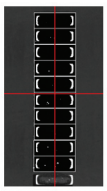
MPM's patented BridgeVision detection technology utilizes a new camera system and algorithms to support the identification of bridging defects during the post-print inspection process.

- BridgeVision is a texture-based 2D verification system capable of detecting bridges on the printed circuit board
- With this option, users can quickly identify issues and prevent further bridging problems, a production concern for many manufacturers

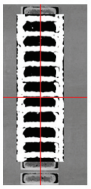
Why "Texture" based?

- No shadowing effect as found with contrast-based products; a critical benefit for bridge analysis
- Pixel level data acquisition enables most accurate analysis for highest confidence results

Pad coverage image ~Pause Mode~



Paste Contrast Image ~Pause Mode~



Texture Paste Image ~Pause Mode~

- Texture-based system provides:
  - Most accurate analysis, taught from stencil apertures, reduces false positives
  - Programmable limits enable threshold values for application matching
  - Minimal impact to cycle time as compared to MPM analog camera verification systems, still considerably faster than competing solutions
- Ease of use:
  - Teach function is modeled after the contrast based 2D system
  - Programmable limits are set on a percent (%) basis
  - Inspection is selectable for each taught device
- Yield improvement:
  - Identifies paste transfer and bridging defects early in the process line
  - Prevents unnecessary downstream processing and final yield defects

ABOUT SPEEDLINE TECHNOLOGIES

Speedline Technologies is the global leader in process knowledge and expertise for the PCB assembly and semiconductor industries. Based in Franklin, Massachusetts, U.S.A., the company markets five best-in-class brands — Accel microelectronics cleaning equipment; Camalot dispensing systems; Electrovert wave soldering, reflow soldering, and cleaning equipment; MPM stencil and screen printing systems; and PROTECT global services, support, and training solutions. For more information, visit us at www.speedlinetech.com.

Speedline technologies

Email: asiamarketing@speedlinetech.com