Lead-Free, No-Clean Solder Paste

NC368 is a lead-free, no-clean solder paste formulated to perform in virtually any surface-mount application with broad process windows for printing, placement and reflow. Its wetting ability results in bright, smooth and shiny solder joints. The paste reduces or eliminates solder defects, such as voiding under micro-ball grid arrays (BGAs) and solder beading by discrete components. It can be printed at high speeds without slumping, provides consistent stencil release and repeatable print volumes for fine-pitch applications and performs well with open squeegees and enclosed pump printing processes. The post-process residues of paste are safe to be left on most assemblies without cleaning.

AIM, Cranston, RI

Stand G13

X-Ray System

The Verifier FSX-080 is a portable solder verification and defect detection x-ray system with a footprint of only 30 x 33 in. (762 x 838 mm). The system was designed for fast and intuitive operation, providing continuous real-time x-ray solder verification and defect detection of assemblies up to 16 x 18 in. (406 x 457 mm).

FocalSpot Inc.(with Uniwes Technology), San Diego, CA

Stand D05

X-ray Inspection System

The Jewel Box 70-T is a high-resolution real-time x-ray inspection system for product development and failure analysis. When coupled with the GTI-5000 Image Processing Workstation, the system is ideal for rapid analysis of ball grid arrays (BGAs) and other chip-scale packages. It provides up to 500X magnification and comes with a five-axis positioner.

Glenbrook Technologies Inc., Randolph, NJ

Stand G38

Lead-free Solder Paste

SolderPlus dispensing paste is now available in a range of lead-free alloys with standard no-clean, water-soluble and rosin mildly activated (RMA) flux formulations. Designed for valve and air powered dispensing, the syringe-packaged paste delivers precise, repeatable deposits without waste. The company combines its solder paste and its valve and automated positioning equipment technology to deliver a soldering process solution.

EFD Solder Paste Group, Lincoln, RI

Stand F12

Real-time Placement Inspection

EPV 5 is an embedded sensing technology for high-speed inspection of component placements. Available for Fuji CP6 and CP7 series chipshooters, it provides 100% automated real-time absence/presence detection and panel deflection measurement during the placement process. In addition, high-resolution images provide in-depth placement process insight for incorrect, stray or misplaced components, solder paste inspection and new nozzle qualification.

CyberOptics Corp., Minneapolis, MN

Stand D20

Low VOC Floor Finish

Staticide Ultra lasts up to 18 months and has a quick drying time. Its low volatile organic compound (VOC) content dries to a glossy appearance and does not powder or flake, even in dry conditions. The finish also controls static generation at relative humidities below 15%.

ACL Staticide, Elk Grove Village, IL

Stand D-05

Inspection Software

MPM Enhanced 2-D with BridgeVision verification software uses texture-based image acquisition and a new digital camera system with algorithms to detect bridging defects on circuit boards during the post-print inspection process. The machine process management software helps prevent borderline product from continuing through the assembly process.

Speedline Technologies, Franklin, MA

Stand E08

Coating Accessory

A four-position Tilt accessory on the SC-300 Swirl Coat applicator provides coating access in areas not accessible from the standard vertical approach. Ideal for applying conformal coating to component sides or underneath parts on a board, the mechanism tilts the applicator in four positions: 30° from vertical to the left, right, front or back. The software-controlled tilt can be retrofitted to existing systems. The applicator operates in three modes: bead, monofilament and swirl. Mean time between assist is improved by minimizing material build up at the zero cavity nozzle.

Asymtek, Carlsbad, CA

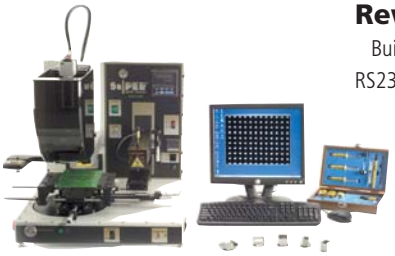
Stand G38

Placement Machine

Each head on the Genesis Lightning machine features a radial array of 30 modular, individually controlled spindles. The two heads on the platform drive placement rates up to 54,000 cph. Dual on-the-head optics allow the placer to address components from 01005s to 30 x 30 mm. It supports component pre-orientation as well as on-the-head rejection for small parts. Plug-in spindle modules can be quickly replaced. Each contains a venturi vacuum generator to maintain a short and low maintenance vacuum path.

Universal Instruments, Binghamton, NY

Stand D48



Rework Vision System

Built upon the Sniper series, the Sniper III's top reflow heater unit has 16 profile and 16 segment program control with RS232 computer cable and automatic cut off after the end of the reflow profile. It also features Windows, a profile editor, operation and data logging software, a computer with a 17 in. flat panel monitor and four integrated real-time thermocouples for profile development. The system will be featured on the EASI line at the upcoming Assembly Technology Expo in Chicago.

APE, Key Largo, FL

www.ape.com

3-D Paste Inspection

In addition to 2-D evaluation for offset, completeness and smearing, 3-D paste inspection is now an auxiliary option for the S3054QS QuickScan Inspection System. The 3-D option can be used for critical components such as ball grid arrays (BGAs) and flip chips. With the aid of the modular 3-D height sensor, a height resolution of 10 µm is possible. In addition to the error characteristics of missing paste, smearing and short circuits, the height of the paste print, the volume and the topography can be measured and evaluated.

Viscom, Norcross, GA

www.ViscomUSA.com

High-Speed Stencil Laser

The MicroCut II stencil laser with a high-resolution scanner is capable of cutting any shape, including square apertures with rounded corners, at up to 50,000 apertures per hour. This translates to a cutting speed of 11 openings per second. The cutting speed is accomplished by a system that reduces mechanical movement by moving the laser beam completely independent from the x/y table. The stencil laser has an aperture resolution of 12.5 nm. It can cut apertures as small as 30 µm, and its effective material focus diameter of 20 µm produces sharp contours.

LPKF Laser & Electronics, Wilsonville, OR

www.lpkfusa.com

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