

Spray Fluxer

Optima spray fluxer is said to improve flux deposition and through-hole penetration while eliminating post-wave flux residue. Reportedly sprays a precise, rectangular pattern and maintains head speed and position control. Setup parameters are controlled electronically and password-protected. Operator interface stores hundreds of recipes. Dual-flux tank option for rapid change between flux types. Can be retrofitted to any wave-solder machine.

Ultrasonic Systems, ultraspray.com



User Interface Upgrade

Instinctiv user interface acts as the portal to technical support services via the Internet and now comes on the Micron-class Galaxy and Europa platforms. Displays machine and process data in an easily digestible form. Features advanced graphical techniques, real-time indication of consumables levels and on-board help and error recovery.

DEK, dek.com



Pb-Free Paste

Alpha OM-325 lead-free solder is said to simplify the transition to fine feature printing in lead-free processes. Reportedly offers print transfer efficiency, self-alignment properties with small components (0402 or 01005), joint cosmetics across challenging reflow profiles, low voiding performance and product stability. Made with Type 4 and 5 powder, works in high-soak reflow profiles.

Cookson Electronics Assembly Materials, alphametals.com



High-Mix Pick-and-Place

FLX2010 SMD pick-and-place has 190 feeders and can place 5,000 cph. Places 0201s and 0.3-mm components, condensators up to 15 mm, large connectors and 50-mm BGAs. Features laser and vision centering systems. Feeder management system automatically recognizes feeders and pickup height. Setup control system based on barcode identification. Can be expanded to a twoor three-module production line for more feeder capacity (up to 300 feeders) and production speed (up to 15,000 cph).

Essemtec, essemtec-usa.com

Assembly Engineering Tool

Trilogy 7.3 features line balancer, to specify which machines participate in balancing, and global panel fiducial capability. Permits user-defined labels to be added to components, prevents empty feeder slots from having parts assigned and has new component extraction capabilities. Supports additional Siemens and Panasonic lines.

Valor Computerized Systems, valor.com

Chip Tube Carts

Chip tube carts are ergonomically designed for storage and positioning. Steel construction, with four bin rows that can be subdivided on 0.50" centers. Using available slide-in dividers, rows can be configured in various sizes. Presentation angle of the storage bins can be adjusted for operator comfort during manual component assembly. Includes builtin ESD protection and adjustable height via gas springs.

Bliss Industries, blissindustries.com

3-Gantry Pick-and-Place

Siplace HF/3 reportedly places parts at up to 40,000 cph with accuracy of 30 µm at 4 sigma, and has 180 feeder inputs and a component range from 0201s to 8" connectors. Has a three-gantry parallel placement, for speed and flexibility. Linear motors on all axes for acceleration and deceleration; extra-stiff carbon-fiber gantries permit high travel speed. New camera system for component recognition and placement of CCGAs and BGAs.

Siemens Logistics and Assembly Systems, siplace.com

2-Sided Thermal Printer

T612M-DS double-sided thermal transfer printer can simultaneously print on the front and back of the marker. Can process all TMS System SIX heat-shrinkable markers, from 2.4 to 57.2 mm. Rated for heavy-duty cycles, incorporates a 300-dpi (12-dpmm) print head. Data printed onto the two sides of each marker can be identical, different, same-side up or flipped. Nominal print speeds of 50 to 128 mm/sec.

Tyco Electronics, tycoelectronics.com



Water-Soluble Pb-Free Solder

Indium3.1 water-soluble Pb-free solder paste is formulated for fine-pitch applications. Said to exhibit excellent wetting under both air and nitrogen reflow atmosphere. Features a wide reflow window, slump resistance, low voiding and low foaming.

Indium Corp., indium.com



Humidity-Resistant Solder

Multicore MP218, a halide-free, no-clean solder paste, is pintestable; said to exhibit high resistance to humidity. After 24 hrs. at 75% RH, achieves a high degree of coalescence upon reflow and slump resistance. High tack life results in low paste wastage and initial tack force of 1.6g/mm² decreases component movement during high-speed placement. Suitable for reflow in air or nitrogen, leaves colorless post-reflow residues for visual inspection. Available in Sn62, Sn63 and 63S4 alloys.

Henkel Electronics, henkel.com/electronics



Remote Diagnostics Software

RemoteTech diagnostics permits remote diagnoses of equipment and application problems. Improves troubleshooting and problem-solving over the Internet and telephone, minimizing field service visits and cutting mean time to repair. Provides equipment recipe files and error logs for software upgrade uploading.

Speedline Technologies, speedlinetech.com



Combination Tester

HAL Combi combination tester performs all standard electrical safety tests, permits full traceability of test results and records via internal data memory storage. Performs earth ground, AC/DC hi pot and insulation testing. Tests can be applied individually or in set automatic sequences for repetitive multi-test routines. Test specs configured into the tester by scanning in pre-defined bar codes. Has selectable 50- or 60-Hz output frequencies, incorporates a 30A constant current low voltage ground bond test. Includes a large high-contrast bar graph display of the mOhm value from 0 to 1000.

Clare Instruments U.S., clareinstruments.com

Desktop AOI Verification

ScanPoint DT desktop inspection tool is for traditional, first-article and statistical quality verification. Inspects for solder paste deposition, placement errors and solder faults. Uses dual lighting to optimize image quality. Windows based.

DiagnoSys Systems, diagnosys-usa.com

Stencil Cutter

LS 800F cuts one to 10 holes/sec. (or 36,000 apertures/hr.), reportedly without heat damage, burrs or oxidation. Uses a fiber laser source for thin, precision stencils and masks. Fiber lasers have high pulse-to-pulse stability and are compact, robust and maintenance-free. Said to offer a fine cut, higher cutting speed and a higher accuracy than conventional lasers. 100 µm fiber core diameter enables users to apply water jets below 30 µm.

Synova S.A., synovia.ch

Pb-Free Wave Solder Flux

270WR VOC-free, no-clean liquid flux fits a variety of process parameters and applications, including Pb-free wave soldering with tin-silver-copper, tin-silver, tin-copper and other alloys. Reportedly offers a broad activation range, good barrel fill, bright and shiny solder joints and solderability even to difficult-to-wet materials. Has ultra-low post-process residues. Said to be a drop-in for alcohol-based fluxes; non-hazardous. Reduces flux usage, wave soldering defect levels and preventative maintenance requirements for spray fluxing applications.

AIM, aimsolder.com

Stainless Steel Conveyor

Fully rated for product washdown, conveyor has side frames built in 304 polished stainless steel. Can be wet-cleaned after production runs. Corrosion-resistant construction said to reduce wear and tear and extend conveyor component life. Offers styles for zero-pressure accumulation, transportation, incline, decline and metering. Uses modular plastic belt conveying surface, eliminating the need for rollers. Operates at up to 300 ft./min., and has a live load weight capacity of 70 lb./ft.

FKI Logistex, fkilogistex.com



Handheld Adhesive Dispenser

Mixpac handheld cartridge dispenser for two-component adhesives consists of a manual or pneumatic dispensing gun, cartridge and static mixer. Can accommodate volumetric ratios such as system 50, system 200 and system 400. Molded of durable polypropylene, uses twist-and-lock static mixers.

ConProTec, mixpacusa.com

Transparent Encapsulant

OptiClear low modulus, one-component liquid encapsulant protects light-dependent devices without interfering with their light reception features. Transparent and UV or thermally curable, encapsulates electronic components in digital cameras, LEDs and optical sensors. Cures faster than acrylate-based encapsulants, cures in thin and thick applications and is odorless. Will fully cure even under partial UV exposure. Available in three viscosity levels.

Polysciences Inc., polysciences.com

High-Speed SOC Tester

93000 SOC series for functional, at-speed tester is for high-pin-count devices (PC chipsets up to 3.6 Gb/s). Digital card offers per-pin scalability from 800 Mb/s to 3.6 Gb/s. Each pin offers both single-ended and differential I/O test capabilities to test interfaces including DDR, G-DDR, PCI Express, S-ATA, HyperTransport and Front Side Bus. Differential pin edge placement accuracy of better than ±30 ps. Up to eight independent clock domains, can satisfy timing needs for concurrent at-speed testing of multiple buses running at non-friendly speed ratios (bus fractions).

Agilent Technologies, agilent.com

Coating for Squeegees

Squeegees now available with the entire blade coated with Permalex. Reportedly reduces solder paste sticking. Infuses the blade with a polymer lubricant, developed through a multi-step metallurgical bonding process. Said to reduce stencil pulling and stretching, improving pad registration and stencil life.

Transition Automation Inc., transitionautomation.com

'All Fluids' Dispensing Valve

TS5622VU-DVD dispenses low- to medium-viscosity fluids, delivers consistent deposits at high speed over a range of shot and bead sizes, and reduces turbulence to counteract air bubbles. Reportedly accurate to a fraction of a microliter. Stainless steel fluid housing ensures compatibility with a variety of chemicals, including UV cure adhesives, resins and lacquers. Short opening stroke provides a fast and positive shut-off, external stroke control adjustment fine-tunes shot size. Weight (0.268 lb.) and design (1.06" diameter x 3.45" long) permits mounting flexibility. Operates up to 400 cycles/min.

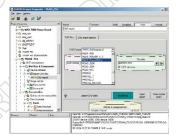
Techcon Systems, techconsystems.com



JTAG/Boundary Scan Software

Cascon v. 4.1.2 integrated boundary scan development environment now interfaces with external software components. Fully integrated application programming extends test coverage of other test platforms and integrates execution, debug and diagnostics tools. Offers several access levels with over 80 functions, can be used with nearly all programming languages and test executive packages. Backwards compatible, supports controllers based on VXI, PXI, PCI, USB, GPIB, parallel port, RS232 and fast ethernet.

Göpel Electronic, goepel.com



ESD for Wheels/Floors

Caster Cleaner said to reduce ESD risks caused by ungrounded carts. Enhances wheel performance by continually cleaning the wheel, reducing the build-up of dirt, wax and residue. Extends life of floor finishes. Provides electrical path from wheel to stem of caster, bypassing potentially insulative grease in caster bearings and wheel bushings that may cause an unreliable path to ground.

Static-Dynamics, static-dynamics.com



Color Vision Sensors

In-Sight 5100C color vision sensors verify the position of color LEDs at electrical testers. In-Sight 5101 high-resolution (1024 x 768) industrial-grade vision sensor is for gauging applications that inspect small objects, or capturing images of larger parts. Meet IEC specifications for shock and vibration, IP67 (NEMA 6)-rated for dust and wash-down.

Cognex Corp., cognex.com





One-Step Hand Cleaning

GlobalTech saturated disposable wipes remove dirt, oil, grease and common contaminants from hands, tools and other surfaces. Have a chelating agent, to remove lead and toxic metal residues from skin and other surfaces. Waterless, citrus-scented. Leave no residue. Will not scratch glass, acrylics, plastics, metal or other composite materials.

JNJ Industries, jnj-industries.com

Inspection Software Update

Graphical User Interface (FGUI) software version 2.2 offers real-time background subtraction. Background subtraction reduces shading in x-ray imagery that limits image contrast. New capabilities include an AVI recorder, 16-bit image processing, integration of Direct Digital Detectors (DDD) and image saving in a variety of formats (e.g., TIF, BMP and JPG). New image-processing operators have also been added.

FeinFocus, feinfocus.com

Design and Simulation Software

Multisim 8 optimizes repetitive capture tasks, and is said to provide almost 50% time savings over previous version. Includes real Virtual Instruments from Tektronix, allowing circuit validation and optimization during schematic entry. An unlimited number of probes can be placed on the schematic to annotate a circuit with real-time, dynamic values such as current and voltage. Users can configure, save and reuse complete SPICE simulation parameter setups. Notes can be attached to any point in the circuit.

Electronics Workbench, electronicsworkbench.com

Passive Thick Film Attenuator

IMA303 surface-mount, thick film "T" pad attenuator is suited for RF and microwave applications. Operational to 4 GHz, available from 1 to 20 dB in 1-dB steps. Power handling on input is 2W. Comprised of a 0.145" x 0.122" x 0.020" alumina substrate. Impedance is 50Ω on input and output with a VSWR of 1.25:1 at dc to 4 GHz.

International Manufacturing Services Inc. (IMS), ims-resistors.com

Send product releases to Robin Norvell at rnorvell@upmediagroup.com.