



Profiling Software

Upgraded software for SlimKIC 2000 oven includes a temperature vs. time feature for profiling a variety of processes. Runs profiles and experiments for practically any thermal process. Measures temperatures from -150° to 1050°F. User-defined process window; software calculates PWI.

KIC, kicthermal.com



Double-Coated Bonding Adhesives

The 3189 and 3474 series of double-coated adhesive tapes bond to a variety of substrates, notably ether foam. Designed to bond dissimilar materials, applications include cushioning, acoustical absorption, vibration damping, equipment and devices for the medical and industrial markets, and automotive interior assembly. Provides pressure-sensitive backing for ether, ester and low-perm urethane foams, as well as other metal and plastic materials. Feature a Kraft paper liner coated on both sides for easy release and application. The carrier consists of a 0.5 mil clear polyester film.

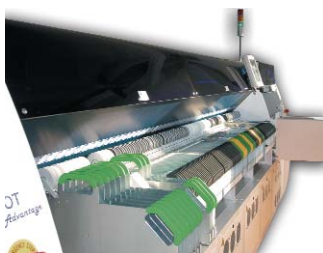
Tyco Plastics & Adhesives, tycoadhesives.com



Cleanroom Cabinets

Series 91SC storage cabinets are constructed with 16-gauge, cold-rolled steel and finished with baked enamel. Reportedly will not crack or harbor contamination. Come with five solid shelves in four standard sizes; custom sizes available.

Clean Air Products, cleanairproducts.com



Multi-Job Placement

Autoplacer pick-and-place machine has over 300 feeders, to maximize flexibility and reduce or eliminate changeover time. Multiple jobs can be run without the need to stop to change feeders during production. Reportedly places components from 0201s to 55 x 55 mm at up to 21,600 cph without a fine-pitch placer or chipshooter.

MIMOT, mimot.com



Squeegee Holder

Permalux low-profile holder reportedly reduces paste sticking. Features enhanced geometry and reduced surface area for paste to stick during the printing. Design incorporates a reference point to ensure replacement blades are accurately aligned against a pin.

Transition Automation, transitionautomation.com

SMT Placement

MX-Series SMT assembly systems for medium- to high-volume operations feature real-time vacuum monitoring. Each feeder stores part number, lot code and feeder pitch. Four-stage transport system results in faster processing of 8 x 12" boards; head-mounted servo driver/motion controller permits higher speeds through faster response times and eliminates 75% of the cabling from the head to bottom chassis. Closed-loop force control head minimizes impact force.

Mirae / Tyco Electronics,

<http://automation.tycoelectronics.com>

Thin Wafer Backgrinding

Wafer Support System for semiconductor wafer backgrinding can produce wafers as thin as 20 µm. Reportedly works with conventional grinders to produce thinner wafers at faster speeds and better yields. Includes both equipment and consumables, such as ultra-clean UV curable spin-on adhesive and a light-to-heat conversion coating.

3M, mmm.com

X-Ray Inspection

XiDAT XD7500 PCBA x-ray inspection system provides oblique angle views of up to 70° for positions 360° around the 18 x 16" inspection area. Inspects BGA and CSP devices. Filament-free, submicron x-ray tube said to provide feature recognition to 950 nm. Incorporates the latest revision of "point and click" operating system.

Dage Precision Industries, dageinc.com

Board Loader

EVP-750 bare-board loader is designed for stacks of up to 170 PCBs, and passes boards from the line loader. Precision extruded aluminum framing with painted vanity panels; features include PLC, open architecture (front loading), load or pass-through models and left-to-right travel. Handles thicknesses of 0.045" minimum, edge contact of 0.118", above-board clearance of 1.1" guard and below board clearance of 1.1".

Pro-Mation Inc., pro-mation-inc.com

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Product SPOTLIGHT

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'All Fluid' Needles

Disposable dispensing needles come in a range of standard and custom designs for dispensing virtually any type of fluid and dot size. Incorporate a helical thread that locks into a syringe and has a positive stop inside ± 0.025 " accuracy on overall length. Features burr-free stainless steel tubing that can be customized with slots, notches and bends, suited for automation. All plastic hub needles and free-flow tips are silicone-free.

Fishman Corp., fishmancorp.com



Backside Die Marking

WaferMark CSP200 marking system uses lasers to mark orientation and traceability information on each die on silicon wafers up to 200 mm. Automated, capable of high throughput and marks on a variety of wafer surface types. Marks dice as small as 0.5 mm. Integrated mark inspection capability verifies accuracy and quality. Other benefits include interfaces to prober map information, compatibility with background and epoxy-coated wafers, and circuit overlay camera to prevent mismarking.

GSI Lumonics, gsilumonics.com



BGA Bumping Flux

WS-364 high viscosity, water-soluble flux is for BGA bumping and board-level attachment. Is said to be easy to clean using room-temperature water. Can be applied by pin-transfer or stencil printing, and has a wide process window. Halide-free, suitable for Sn-Pb and Pb-free applications and comes in syringes or cartridges.

Indium Corp., indium.com



Two-Component Epoxy

EP34AN room-temperature curing epoxy adhesive/sealant features a thermal conductivity of 22-24 BTU/in/ft²/hr/°F. Physical properties are maintained even after long exposure to temperatures of 400°-450°F. Is dimensionally stable and has a low CTE. Features a 100-to-70 mix ratio by weight. Can be applied without sagging or dripping. Spreads smoothly and only contact pressure is required for cure. Contains no solvents or diluents. Cures can be accelerated by the use of heat. Has a Shore D hardness of >85 and a tensile strength of 5,500 psi.

Master Bond Inc., masterbond.com



High-Density Connectors

The high-density Power Mod connector family offers 3 to 30 circuits for straight PCB, right angle PCB, panel or cable mountings. Rated for 30 amps, features mechanical polarized UL94V-0 housings for proper circuit mating. Up to four sequential pin mating options available for mate-first/break-last and make-last/break-first circuits. Available in 13 different sizes.

Anderson Power Products, andersonpower.com

Pb-Free Paste

GTS series of lead-free solder paste withstands preheat temperature of up to 200°C for 120 sec. Reportedly does not require refrigeration for storage and transport, reducing handling care and cost.

Soldercoat Co. Ltd, soldercoat.co.jp

Wafer Bump Reflow

Pyramax 98 solder reflow oven comes with an integrated flux coater and wafer handler for wafer bump reflow. Handles 200- or 300-mm wafers, and comes with an integrated robotic wafer handler and automated unloading station. Features forced impingement for temperature uniformity and optional closed-loop convection control for constant heat transfer and cooling rates. Provides atmosphere purity below 5 ppm.

BTU International, btu.com

Automatic Printer

AuL2220 stand-alone, fully automatic printer with auto-unload is said to cut substrate handling for high-volume, fine-pitch production. May also eliminate bare-board and magazine loaders. Permits auto-transport to pick-and-place station. Can be unloaded manually. Has 20 x 23" print area; accommodates cast and welded tubular stencils.

Surface Mount Techniques, smtprinters.com

Test Floor Monitor

TestScape Web-based dashboard tool provides real-time view of test-floor activity. Provides reporting and analysis of test floor performance based on monitoring and statistical data. Collects data from multiple ATE systems equipped with SwifTest-Monitor, providing a uniform view of ATE results.

Pintail Technologies, pintail.com

Low Profile Conveyors

Steel conveyors are low profile, and come in standard widths of 2" to 24" and lengths up to 144'. Come in standard, cleated, magnetic and angled frame formats, with end and center drives, and with or without adjustable guides and side rails.

QC Industries, qcindustries.com

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