

SUBSTRATE CLAMPING SYSTEM

Over Top Snuggers clamp the board flat before enabling finite snugging and clamp control for precise board location. Pull board flat to enable a strong vacuum tooling contact; clamps are then pulled away from the board surface to permit close edge printing. Automatically adjust for variations in board thickness and out-of-parallel boards. Are compatible with all tooling variants, including HD Grid-Lok.

DEK
dek.com



PTH DE-SOLDERING MACHINE

PowerRepair is for de-soldering and soldering of through-hole components. Features mini-wave and technology for high-pin-count components and connectors. Handles components with high thermal mass (thick pins, multilayer boards, etc.), and is compatible with all Pb-free solder alloys. Soldering nozzle is designed for high-energy transfer rate, even in high-temperature applications. Features short repair cycles and low thermal stress on PCB and components.

Seho Systems
sehona.com



DESKTOP 2-D AOI

M22X DL-18/460 inspects components (presence, type, polarity, offset, text, etc.) and reflow and wave solder joints (including meniscus). Provides 2-D paste inspection. Handles medium and large PCBs. Features high-speed digital XGA color camera, as well as analysis via synthetic imaging. Three pulse wave modulated LED light sources (main, side and DOAL) can lighten inspection points from three different angles. Up to six different lighting combinations are available.

Marantz
escapethegrayworld.com

OTHERS OF NOTE

DIE ATTACH PASTE

Multicore DA101 incorporates a no-clean, ROLO flux and is formulated for printing processes. Is said to withstand temperatures of 300° to 330°C for high Pb reflow profiles and Pb-free temperatures between 240° and 270°C. Wets to copper, NiPdAu and Ag finishes, among others. Exhibits less than 5% void instances on average. Can be cleaned with standard cleaning chemistries.

Henkel
henkel.com/electronics

PH-NEUTRAL DEFLOXING CLEANING AGENT

Vigon N 501 ensures compatibility with sensitive SMT production materials such as aluminum, copper, brass, nickel, plastics and label materials. Is a water-based, non-flammable MPC (micro phase cleaner) specifically developed for spray-in-air processes. Has short contact times and bath concentration levels as low as 10 – 15%.

Zestron
zestron.com

SCALABLE THIN-FILM PV PLATFORM

Perseas was designed for processing Cadmium Telluride (CdTe) thin film photovoltaic cells. Is modular, featuring configurations with varied throughputs and process capabilities. Is scalable from R&D to pilot and to production-sized units. The CA model is designed for the chlorine annealing process, while CF is for the contact formation process. Is compatible with both glass and web substrates.

BTU International
btu.com

UNDERFILL JETTING

CPJ+ reduces process variability to maintain a constant Takt time by ensuring consistent flow rates for applications such as underfill with tight keep-out zones and sealing applications. With Fluidmove software, integral electro-pneumatic regulators, and precision weigh scale, CPJ+ is said to automatically compensate for both fluid viscosity changes over time, as well as batch-to-batch variations. Reportedly increases dispense accuracy for higher yields and ensures a highly repeatable process, minimizing setup-to-setup and line-to-line variation, while eliminating operator interaction.

Asymtek
asymtek.com

JTAG/FLYING PROBE ON SINGLE PLATFORM

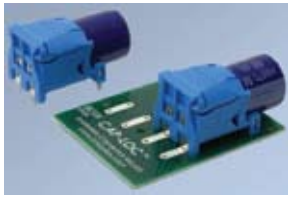
FlyScan integrates boundary scan and flying probe test methods. Comes on the Pilot/Aerial flying probe testers. Features automatic generation of the test program in a single software environment (Seica VIVA); automatic creation of the boundary scan program for nets not of the JTAG type; automatic elimination of test redundancies; automatic fault diagnostics; a single test report, and management of the faults detected by the boundary scan test in Seica Repair Station.

Seica
seica.com

ESD-SAFE WORKSTATION VACUUM PEN

The Push Button Vacuum Pen Kit is for in-house vacuum systems plumed to the workstation. Includes a normally open ESD-safe push button vacuum handle; 4' of 1/16" ID x 1/8" OD coiled ESD-safe vacuum hose; a set of nine ESD-safe vacuum tips, and a 1/16" barbed to 1/8" NPT adapter to connect to the vacuum supply. Optionally, multiple cup pickup tips or small-part tips can be used with this system.

Virtual Industries Inc.
virtual-ii.com



SOLDERLESS INTERCONNECT

Cap-Loc electrical and mechanical interconnect is for electrolytic capacitors. Is said to eliminate secondary processes and soldering, adhesives, or clamps commonly used to make electrical or mechanical connections to PCBs. Reportedly withstands applications with operating temperatures up to 125°C. Accommodates 18 mm diameter capacitor bodies with lengths up to 42 mm. Offers 1 mΩ contact resistance between lead and PCB. Features strain-relief design to protect capacitor leads.

Interplex

interplex.com



FULLY ENCLOSED STORAGE CABINET

The fully enclosed, lockable SMT storage cabinet is available as an accessory to stockroom units; is only available in a shorter height. Is fully ESD-compliant. Features interchangeable shelves and subdividers. Is available in both single- and double-sided models. Doors are clear.

Bliss Industries

blissindustries.com



LONG SHELF LIFE, HALOGEN-FREE PASTE

Multicore HF108 is a Pb-free, halogen-free solder paste. Has excellent high-speed print capability, a shelf life of up to six months when refrigerated or four weeks at room temperature, and a wide process window.

Henkel

henkel.com/electronics

OTHERS OF NOTE

PLANT MANAGEMENT SOFTWARE

CheckMate Work In Process Lite tracks who is assigned a job, where it is in the plant, and how long it's been in that location. Work order can be tracked to department, task, employee; multiple jobs may be assigned to the badge; timeframes may be set for each task and reported when overdue. Multiple work orders may be checked out to one badge. When a work order is moved, the transaction is recorded. Keeps an audit trail of all activities associated with the work order. Work orders may be put on hold.

Dynamic Systems Inc.

abarcode.com

HIGH VISCOSITY CONFORMAL COATING

NVOC moisture-cure now comes in high viscosity, gel and aerosol versions. High viscosity is for thicker coating or manual application (brush, dip and selective spray). Gel is a single-part thixotropic material designed for glob-top applications where the coating should not flow once applied. Cures at room or elevated temperatures, and incorporates a UV trace to aid inspection. Aerosol uses standard NVOC coating for manual application. Is polyurethane-based and VOC-free.

Electrolube

electrolube.com

PB-FREE, NO-CLEAN SOLDER PASTE

NL930 is said to feature good solderability, improve stencil life and provide superior cosmetics, especially when using SN100C. Offers print consistency with high process capability index and wetting characteristics. Post-reflow flux residues are penetrable. Is compatible with SN100C and SAC alloys with Type 3, 4 and 5 solder meshes, and with OSP, ENIG, immersion silver, and immersion tin finishes. Features high-volume repeatability with 16 mm pitch QFP pads and 12 mm circles, as well as good response to one-hour pause after two knead strokes at 35-65% RH.

FCT Assembly

fctassembly.com

DIE ATTACH SOLDER

Gold-Tin die attach solder paste can be reflowed in nitrogen environments with up to 200 ppm oxygen. Aurum 2 uses a special treatment to improve the wetting of eutectic 80-20 AuSn solder powder. The flux component of the solder paste remains the same; no requalification testing is needed. Is halide-free and can be applied by stencil printing or dispensing.

Heraeus

heraeus-contactmaterials.com

COMPONENT OVERLAP SOFTWARE

Siplace SiCluster Professional software determines component overlaps in family setups. Groups shared components on constant component tables, which remain on the machine during setup changeovers. Reportedly reduces setup time by hours, while reducing space and investment requirements for feeders and component carts by up to 33%. Comes as an add-on to Siplace Pro v. 7.1, which offers setups for single products or product families combined with fixed setups, offline setups of feeder tables and changeover table concepts, or nonstop setup changeovers.

Siemens Electronics Assembly Systems

siplace.com

POSITIVE-DISPLACEMENT VALVES

Model 340PS and 340PSL for fluid dispensing incorporate the efficiency of a disposable fluid path from the reservoir to the dispense tip. Sequenced piston actuation dispenses a consistent shot-to-shot volume. Are effective with materials that are shear sensitive, high or low in viscosity, possess tacky or stringy characteristics, or have drifting viscosities due to limited pot life. 340PS is suited for shot volumes from 0.004 to 0.180 mL. 340PSL offers shot size capability up to 1.200 mL.

Tridak

tridak.com



LOW-VOLUME PLACEMENT MACHINE

7700-FV pick-and-place machine places 0402 components, CSPs, BGAs, and fine pitch QFPs. Is said to place 0201s with optional nozzle and feeder. Comes in three versions, with cut strip feeders or filled reels of 8 and 12 mm tapes, along with standard holders for JEDEC trays and stick feeders.

Manncorp

manncorp.com/pick-and-place/7700fv/

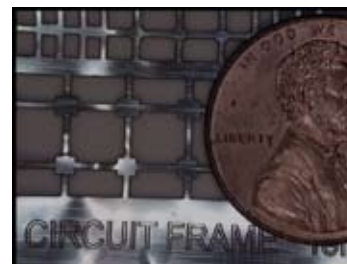


'QUICK-DRY' CONFORMAL COATING

DCA-FD is a modified silicone conformal coating said to dry to the touch in 20 min. Increased solids content reportedly gives 35% greater coverage per liter compared to standard DCA. Has a wide operating temperature range and is suitable for a range of applications. VOC levels lower than standard DCA. Has excellent adhesion and is resistant to most solvents, lubricants and chemicals. Resistant to mold growth and UV light. Can be sprayed, dipped or brushed.

Electrolube

electrolube.com



CUSTOM PCB REPAIR FRAMES

Circuit frames for PCB repair can be custom laser-engraved to match the pads or trace areas requiring repair. Patterns on the frames can accommodate spaces/traces down to 0.025 mm. Designed for SnPb and Pb-free processes. Cutouts replace pads or traces on 1 oz. copper PCBs. Come in epoxy and dry-film versions. Custom patterns can be laser-machined with lot sizes as low as one.

BEST Inc.

solder.net

OTHERS OF NOTE

'RULES-BASED' PROCESS SOFTWARE

AutoSeeker automatic reflow process optimization software reportedly eliminates trial-and-error approach. Given a user profile, it uses a rules-based algorithm to search for the best machine settings. User criteria such as process window centered, fastest throughput or lowest running costs can be defined.

SolderStar Ltd.

solderstar.eu

2-D BARCODE READER

Point-and-shoot Mobile Hawk handheld imager is said to read any 2-D barcode, including direct part marks. Combines MAXlite machine vision illumination with X-Mode DPM algorithms. MAXlite leverages machine vision lighting with an integrated multi-axis lighting solution. Is plug-and-play, mobile, and reliable for low-contrast DPM applications. Features blue line targeting pattern for quick symbol location and easy barcode output into standard databases.

Microscan

microscan.com

SUBSTRATE HANDLING TIPS

Extended Reach substrate handling tips are for solar cells, wafers or flat panels. Come in three sizes for reaching up to 200 mm into an area to pick up a substrate. Substrates handled can range from 4" to more than 12". Can be used with any of the firm's wafer wands. Handle temperatures up to 212°F.

Virtual Industries Inc.

virtual-ii.com

DUAL LANE REFLOW OVEN

Dual Lane Reflow Oven provides high- and low-volume SMT soldering in one unit. Features flexible production in parallel and is compatible for both Pb-free and leaded SMT. Reportedly reduces floor space 47% compared to traditional dual-lane production lines. Contains two independent conveyor lanes and two heating areas. Has 18 independently programmable heating zones, with both top and bottom side heating areas. Conveyor speeds and widths are independently controlled and adjustable.

SEHO Systems

sehona.com

SOLAR CELL ADHESIVES AND INKS

SolAg conductive adhesives and inks reportedly deliver efficient, long-lasting solar power. Are said to be superior in damp heat and thermal cycle aging. Deliver low, stable electrical contact resistance for silver grid buss lines, ribbon attachment and metal wrap-through in CIGS, amorphous silicon and similar thin film platforms.

Engineered Conductive Materials

conductives.com

'CLASS 1K' PARTS STORAGE

McDry MCU-401 HEPA filter model dry storage cabinet is for precision instruments, electronics components, or other materials that require a cleanroom and low humidity environment. Meets cleanroom Class 1000 specifications. Is said to maintain relative humidity inside the cabinet below 10%, and can hold up to 50 kg (approximately 110 lb). Comes with digital meter that displays the RH level at all times. Features adjustable stainless shelves and high resistance ground terminal.

Seika Machinery

seikausa.com