MACHINES

MATERIALS TOOLS SYSTEMS



MULTIFUNCTIONAL DUAL-LANE MATERIAL HANDLER

MH-900 Series is configurable for inline or same-side load and unload operations. Supports single- and dual-lane conveyors, and provides loading and unloading of a variety of parts from very thin strips to large heavy boats and carriers. Includes programmable transport speed and carrier staging. Has multiple carrier sensors, active pinch wheels, and thin strip guides, for safe handling. Elevator and shuttle operate independently with programmable speed. Comes with novel LoaderMove Touch Software and Control System.

Asymtek

asymtek.com



HIGH-SPEED SMD COUNTER

MegaXP is portable and housed inside an aluminum carrying case. Setup involves entering the component type and presetting the quantity. After positioning the spindle posts to vertical, reels are inserted as the taped components are threaded through the sprocket holes. Has rechargeable battery-powered sensor. Up to 10,000 cph. Includes a built-in accessories compartment containing hand crank, battery charger and shoulder strap, plus a RS-232 link to an optional adhesive label printer.

N			

manncorp.com



2-HEAD DISPENSE PUMPS

Camalot SmartStream noncontact dispense pumps now come with optional Dual Head Synchronous Mode. Synchronous dispense mode said to improve throughput by 50%, while eliminating risk of poor yields/scrapped product. Is capable of detecting panel rotation and will automatically switch to an asynchronous dispense mode to ensure both heads dispense accurately on the PCBs within the skewed panel. New software algorithms ensure dual pumps are pitched correctly and have identical flow rates.

Speedline Technologies

speedlinetech.com

OTHERS OF NOTE

LARGE-PANEL SPI

SE500-X 3-D solder paste inspection now accommodates boards/panels measuring 100 x 100 mm up to 810 x 610 mm. SE500 and SE500-X 3-D can inspect pad sizes down to 01005.

CyberOptics Corp.

cyberoptics.com

HIGH-PRECISION DISPENSER COMPONENTS

Ultimus V and Optimeter are said to reduce downtime at automated dispensers. For fluids that change viscosity, UltimusV highprecision dispenser stores and then automatically adjusts dispensing settings to keep the amount of fluid applied constant. To compensate for changing fluid reservoir levels, Optimeter automatically adjusts airflow to maintain uniform deposit size.

efd-inc.com

AUSN DIE ATTACH PASTE

Aurum 2 die attach solder paste includes a special treatment said to improve wetting of eutectic AuSn20 solder powder. Can be reflowed in nitrogen with up to 200 ppm oxygen. Surface is said to be oxideresistant. Flux component is identical to previous versions. Is halide-free and can be applied by stencil printing or dispensing.

heraeus-contactmaterials.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 highvolume 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

INTERCHANGEABLE GANTRY PICK-AND-PLACE

Siplace SX scales performance and capacity independently of each other. Contains rail-mounted, interchangeable SX gantries, MultiStar CPP head, flexible setup and line concepts. To add, remove or transfer feeder performance, has self-calibrating, rail-mounted gantries that can be installed in a reported 30 min. Options include adding an SX+ module (without gantries and heads), equipping with a rented gantry or one of their own, adding 120 feeder slots.

Siemens Electronics Assembly Systems

siplace.com

4-CHANNEL VAPOR PHASE PROFILER

VP4000 temperature profiler has a low mass, hermetically sealed RF data-logger with heat-shield, measuring 130 x 60 x 40 mm. Is capable of passing directly through the preheat, vapor reflow and vacuum stages. Profile data are continuously passed to a PC via two-way wireless RF link. Profile can be viewed in real time as boards are soldered.

SolderStar Ltd.

solderstar.eu





MULTI-HEAD PLACER

XPii comes with one or two placement heads, 8 or 12 nozzles, tape or feeder trolleys, a matrix tray sequencer and an internal matrix tray. Features linear motors, high-res digital cameras, turret head(s) and intelligent feeders. Onhead optical sensors detect presence of components as small as 01005 and as large as 50 x 50 mm on-the-fly. Handles components up to 70 x 70 mm and 100 mm connectors with fixed camera option. Gantry platform has a 40 position "smart" nozzle bank (2 x 40) or (1 x $40 + 1 \times 20 + 1$ special) optional.

Europlacer

europlacer.com



MULTI-USE IMAGE ACQUISITION **SOFTWARE**

VisionPro is hardware-independent software that expands image acquisition options with support for large camera images and nontraditional sources such as 3-D, thermal and x-ray imagers. Offers high-accuracy calibration and image correction for line-scan cameras, and expanded ID reading capability of 2-D codes. Image acquisition has been enhanced to support images up to 16 bits in depth. Has built-in compatibility with selected thermal cameras and 3-D profile scanners. Enables users to switch between 32-bit and 64-bit operating systems.

Cognex Corp.

cognex.com/visionpro



VARIABLE ATTACK ANGLE PRINTING

MCP screen printer has a head design with variable attack angle printing that reportedly permits constant solder pressure independent of stencil thickness. Board cycle time is as low as 11 sec. Reduces defect per million figures by up to 50%. Has a flat-metal single-head squeegee. Variable angle print head improves repeatability of paste deposition for 01005 components. Produces solder shapes with stencil thickness down to 50 µm, and half-edging stencils with stencil steps of 30 to 50 µm.

Assembléon

assembleon.com

OTHERS OF NOTE

X-RAY INSPECTION SYSTEM

XT V 130 is compact and comes with a 30-130 kV open micro-focus x-ray source, 4-axis programmable manipulator and 16bit imaging system based on a 4" image intensifier. Focal spot size down to 3 µm, 320X geometric magnification and tilt angle up to 60°. Rotate stage and CT capability optional. Hinged door provides access to inspection area, which fits samples up to 40 x 35 cm.

Nikon Metrology

nikonmetrology.com

2-PART ENCAPSULATION RESIN

ER2218 epoxy resin is designed to meet UL94 flame retardancy. Incorporates a novel flame retardant, resulting in lowviscosity flame-retardant formulation. Is RoHS-compliant, non-halogenated and free of aromatic amines. Adheres to a variety of substrates; exhibits resistance to water and a variety of chemicals. Is reflowcompatible. Comes in resin packs for airfree mixing of small volumes.

Electrolube

electrolube.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

DRY CABINET SYSTEMS MONITORING

XDry M.O.L.E., based on the ECD V-M.O.L.E., is for internal temperature and humidity recording and reporting inside a dry cabinet. Comes standard with one moisture and one temperature sensor, with an optional second moisture sensor. Provides detailed reporting on the interior conditions of the desiccant dry cabinet. Sensor accuracy is within 1% RH and ±1°C. Data recording frequency is adjustable by the user, permitting data to be captured for up to a full year.

XDry

xdrv.com

HIGH-SPEED DEVICE PROGRAMMING

FlashCORE III programming architecture is said to offer significant performance gains by increasing the download and read/write speeds by a factor of ten. Supports flash memory devices, including SD, MMC, MoviNAND and iNAND. Is compatible with all existing FlashCORE algorithms and adapters; field upgrade kits are available for existing automated system installations.

Data I/O

dataio.com

TABLETOP MULTIFUNCTIONAL DISPENSER

IP-500 platform for automated processes comes with a dispenser with an open application area for combined 2-D and 3-D applications. Application-specific robot heads use one or multiple Z-axes, Z- and theta-axes combinations. Dispense or high-speed spindle heads can be added. Exchanged needles are calibrated in X, Y and Z. Integrated visual control inspects dispensing area immediately after dispensing of the media. CAD data import for point, matrix, line, curve or individual dispense patterns is possible; and the X,Y and Z-axis are synchronized.

Zevac AG

zevac.ch