



3-SENSOR SELF-CONTAINED THERMAL PROFILER

OvenChecker thermal profiler verifies that ovens remain in spec after a board's initial "characterization" profile. Is designed to be self-contained, and requires no thermocouples or repeated use of golden boards. Reportedly can be taught to an operator in less than two minutes. Comes in a kit that includes a three-sensor pallet, V-M.O.L.E. thermal profiler with M.A.P. software, and a thermal barrier. Is said to perform over 1,000 runs without degradation.

ECD

ecd.com/products/ovenchecker



INLINE IR SPOT CURING

iCure is a fiber-optic system that provides heat by accurate IR radiation in a portable unit, for temperature-sensitive substrates and complex devices. Is made for automated manufacturing processes requiring adhesive curing and localized heating of bonded assemblies. Has a 200W lamp with up to 90W/cm². For spot curing thermal epoxies; bonding and fixing plastic and glass components; fixing lenses; temporary fixing of miniature components; assembly and bonding of semiconductor components; and focused energy for micro soldering.

IRphotonics

icure-irphotonics.com



ANALOG MEASUREMENT ICT

Medalist i3070 Series 5 ICT system now offers analog measurement technology. Is said to be 20 to 30% faster than current model. Permits external circuits to be incorporated for added test coverage, while providing better control of those circuits. Most existing i3070 and 3070 ICT programs will run on the new tester, and fixtures are also compatible. Addresses an array of ICT and functional test needs, including IEEE 1149.6 boundary-scan standard testing and limited-access test applications.

Agilent

agilent.com/find/i3070

OTHERS OF NOTE

'0.02 MM ACCURATE' SELECTIVE COATER

Automatic Selective Coating machine features failure alarming system and on- and offline programming. Coating accuracy is said to be 0.02 mm, and rotation is ±180°. Reads CAD drawings and can be manual taught. Has an arc shape design, servomotors, and steel platform. Has three nozzles: pin, film, and atomizing. Pin and film nozzles can tilt 30°. Has a nozzle auto-cleaning device. Has a dual-conveyor design, with auto-adjusting device and two material containers for different coating material.

Anda

anda-dg.com

THERMAL CONTROL SOFTWARE

Visu2 drives advanced process features and thermal control. Has process and product traceability tools, remote diagnostics and an extensive product library. Extensive system documentation is available with a few keystrokes; offers password-protected security levels and multilingual operations, data recording and maintenance logging. Process and product traceability are supported via barcode and data recording of all relevant process parameters with time stamps.

Rehm Thermal Systems

rehm-group.com

PICK-AND-PLACE UNDERFILM

RP-113178 enhances CSP and BGA solder joint reliability. Air or nitrogen reflow compatible. Requires no boards prebake. Is reportedly 100% reworkable and RoHS-compatible. Is said to reduce solder joint fatigue failures, and requires no additional cure cycle. Implement into design and manufacturing process by utilizing existing SMT line and existing tape and reel feeders. Comes in standard EIA-481 carrier tape.

Alltemated Inc.

alltemated.com

5-MP COLOR AOI

FX Series AOI now comes with a 5 Mp color camera. Has one top-down and four side-viewing cameras, for inspecting solder joints and part assembly. Uses a standard package library to simplify training and aid program portability across manufacturing lines. Configurable for paste, pre- / post-reflow or final assembly inspection. Is offline programmable and has real-time SPC monitoring.

YesTech

yestech-inc.com

NO-CLEAN, HALIDE-FREE TACKY FLUX

Multicore TFN700B is formulated for PoP applications. Is a Newtonian-based system; reportedly eliminates shearing conditions associated with traditional tacky flux formulations. Enables optical recognition of flux by pick-and-place systems; permits visual verification of volume before placement of the top component of the PoP. Is suitable for doctor blading and dip transfer for PoP builds. Is ROLO-classified, or non-hydroscopic and noncorrosive.

Henkel Corp.

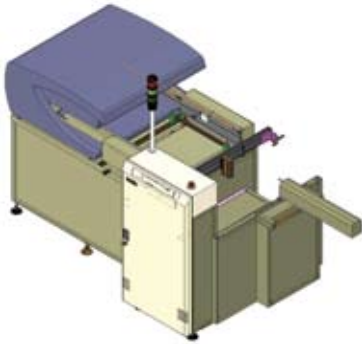
henkel.com/electronics

BENCHTOP RESIN DISPENSER

DXBG Bench Dispenser is a benchtop unit for dispensing two-component reactive resins of a variety of ratios. Permits the A & B components of flowable adhesives to be gravity-fed from separate, refillable 2-gal. containers through a DX Dispenser. Components forced by metering rods directly into a disposable static mixer. Foot pedal actuator permits hands-free operation. Stand is fully adjustable over three axes and can accommodate a range of product applications.

Mixpac Equipment Inc.

mixpaceequipment.com



AUTOMATED OFFLINE PCB HANDLER

Marantz Inspection Island is completely automated and is said to eliminate the need for operators to load and unload PCBs. Serves multiple lines. Fully compatible with Marantz' Catch process control system. Software permits post-processing of defects. Comes on iSpec-350 and 650 AOI systems.

Marantz Business Electronics

marantz.com/bus/eu

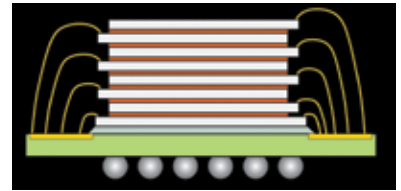


2-HEAD PLACEMENT MACHINE

MC-385 pick-and-place system has dual-heads and an IPC-9805 speed of up to 5,500 cph, plus expandability and compatibility features. Is for high-mix, mid-volume assembly. Uses Cognex flying vision and stationary bottom vision. Chip placement capability includes 0201s and flip chips, while AC motor and linear encoder combined with vision, ensure a placement accuracy of ± 0.03 mm (± 0.001 ""). Accommodates 64 smart tape feeders; up to 128 feeders are installable in the batch mode.

Manncorp

manncorp.com/pick-and-place/mc385



STACKED DIE IMAGING SOFTWARE

Stacked Die Tool software performs acoustic imaging to identify anomalies and defects in stacked die configurations. Images all the interfaces in a stack of eight die. Sorts correct echoes and provides accurate acoustic imaging.

Sonoscan

sonoscan.com

OTHERS OF NOTE

WHITE LED VISION SENSORS

Checker 3G7 vision sensor features 752 x 480 pixel resolution and high-intensity white LED illumination. Can be configured as a presence or measurement sensor; can detect and inspect up to 800 parts per min. Requires no PC for setup, and can be configured in minutes using SensorView teach pendant and one-click setup. Checker 272 offers the same resolution and lighting features, plus a ladder logic editor, encoder-based part tracking, and additional IO. Includes both presence and measurement sensors.

Cognex

cognex.com

PICK-AND-PLACE PROGRAMMING

SMTTrue Run Optimize offline programming and management software module is for use with LS, LE, and CS SMT pick-and-place machines. Incorporates universal CAD translator with offline job and feeder setup, programming, optimization, and management. Converts industry standard, text delimited CAD files into a machine friendly component, location, and orientation database.

APS Novastar

apsgold.com

HIGH-VIBRATION USE PB-FREE SOLDER

InnoLot solder alloy is for high-temperature and vibration environments. Is capable of operating temperatures of 150°C and 2000 thermal cycles from -55° to +150°C. The six-part alloy modifies SAC 387 with the addition of bismuth (3%), antimony (1.4%) and nickel (0.15%). Begins to melt at 206°C, and becomes fully liquid at 217°C. Is compatible with SAC 305 or SAC 387 processes.

Heraeus

heraeuscontact-materials.com

MULTIFUNCTIONAL PLACEMENT SERIES

MY100DX pick-and-place machine assembles components on high-mix boards at up to a reported 34,000 cph. MY100SX handles batches or continuous production up to 21,500 cph. MY100LX is for high-mix operations. Each now has higher-count feeders without change in machine footprint. Works with Agilis intelligent feeders.

Mydata Automation

mydata.se

AUTOMATED BGA REWORK STATION

AT-GDP series automates device removal and installation. Handles SnPb and Pb-free applications consisting of components such as BGAs, CSPs, QFNs, flip chips, and other SMDs. Reportedly enables placement to within 5 [U]m. SplitVision Optics permits simultaneous top of the PCB/bottom of the component viewing. Creates diagonal corner viewing for alignment of larger packages at high magnification. Absence of mirrors in the optics system reportedly ensures a clear image quality. Software contains a database of predefined profiles, which can be modified. Program settings can be adjusted while profile is running.

Advanced Techniques US Inc.

atco-us.com

MULTI-PLATFORM FEEDER TEST JIG

FeederMaster is a second-generation model of FeederMaster Digital. Is said to automatically detect feeder pick-position deviations and record the test results. New feeder generations, including Fuji NXT, are supported.

AdoptSMT

adoptsmt.com



DIGITAL BARCODE READER

BL-1300 uses parallel digital processors for stable performance of up to 1,300 scans and decodes per sec. IP-65-rated readers are resistant to dirt and harsh environments. Provides nearly 100 times the information processing capacity and has a high-speed motor 2.6 times faster than previous models. Aspherical lens doubles the intensity of the received laser reflection. Edge detection process extracts the points of alternation between bars and spaces. The 5-bar LED shows results at a glance.

Keyence

keyence.com

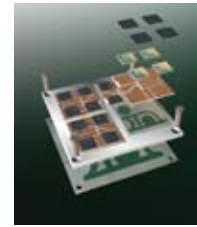


SELECTIVE SOLDERING CONVEYOR

Smart Conveyor controls PCB warpage during selective soldering. Difficult setups are handled automatically. Automatically senses and adjusts to board size, then crowds the PCB for a snug fit; automatically clamps the two parallel edges and resizes the holding area while exerting pressure to eliminate board shape issues.

ACE Production Technologies

ace-protech.com



LOW THERMAL RESISTANCE TIM

Heat-Spring metallic thermal interface material is a soft metal alloy developed as a compressible metallic shim for Infineon PrimePACK IGBT mounting applications. Reportedly reduces thermal resistance below that of other TIMs. Consists of compressible, soft metal preforms. Does not contain silicone, does not outgas, and does not exhibit pump-out. Is stable and requires no special mounting apparatus. Is conductive thermally and electrically.

Indium Corp.

indium.com

OTHERS OF NOTE

LASER-CUT NI STENCILS

Alpha Nickel stencils provide 0.001" and 0.0005" stencil thicknesses for aperture printing, hard nickel for wear resistance, and positional and size accuracy. Features include flatness and low internal stress; custom thicknesses; mirror smooth board side finish; high repeatability and accuracy; fine-pitch printing (targeted for print applications down to 0.4 mm pitch).

Cookson Electronics

cooksonelectronics.com

PLM WITH MULTIPLE BOM HANDLING

PDXpert PLM 2010 Edition software offers bill of materials markup, file content indexing, and other productivity enhancements. Markup Wizard modifies multiple BoMs in one workflow; can automatically add, replace and remove components on assemblies. Creates BoM revisions as needed. Discovers and displays all component "where used" instances.

Active Sensing Inc.

activesensing.com

MULTIPLE-NOZZLE SELECTIVE SOLDERING

FlexSolderW510 is a mini-wave that handles boards up to 510 x 510 mm. Flexible design permits machine to be assembled anywhere; permits complete option upgrades in the field. Has the ability to have multiple mini-wave nozzles soldering simultaneously or running separately using two different size nozzles. A nozzle as small as 1.8 mm can be used for tight areas on densely populated boards, and a larger nozzle for making single passes on large connectors.

Juki Corp.

jas-smt.com

DIE ATTACH SOLDER PASTE

Multicore DA100 is for high-lead and Pb-free applications. Has a no-clean, ROLO flux system. Complies with RoHS. Delivers low void formation, with less than 5% void instances on average. Formulated to hold a higher metal loading for dispensable applications. Reportedly dispenses easily with high pause time and dot-to-dot consistency.

Henkel

henkel.com/electronics

THERMAL PROCESS OPTIMIZATION

Spectrum is said to automatically identify correct furnace setup for a thermal profile within the sweet spot of the established process window. Uses information from a single profile pass to evaluate millions of possible furnace setups. Each possible furnace recipe will yield a profile, and the Spectrum identifies the fit between the profile and the established process window. Within seconds, reportedly can complete an exhaustive ranking and present recommended furnace recipe (zone temperatures and conveyor speed). Comes as option for the SunKIC profiler.

KIC

kicthermal.com

HALOGEN-FREE PB-FREE PASTE

SN100C P600 D4 is a halogen-free, no-clean, Pb-free solder paste that contains no fluorine, chlorine, bromine or iodine. Is said to be high reliability, for high-density assembly with stable printability; reflows easily with good wetting and minimum incidence of mid-chip balling, and low residue. Can be reflowed with profiles similar to SAC 305 and SAC 405 with 240°C peak.

Nihon Superior

nihonsuperior.co.jp/english/