

### **SPRAY NOZZLE**

The Mini-Eductor tank nozzle's design minimizes clogging while ensuring consistent circulation at a higher flow rate. Its compact size of 1-5%" in length and outside diameter of 11/16" makes it ideal for small tanks and are suitable for any application were agitation of tank solutions is needed such as: flux cleaning of assembled PCBs, desmear process in PCBs, wafer pretreatment/cleaning, cleaning prior to plating lead frames, photo mask stripping, resist stripping, stencil washing, etching and plating.

Spraying Systems Co., Booth 847 spray.com



### X-RAY FLUORESCENCE ANALYSIS

The Fischerscope XDV-SD is an X-ray fluorescence spectrometer developed for challenges related to RoHS/WEEE analyses and as the assay determination of gold and other precious metals. Extremely short measurement times are

possible due to high X-Ray intensity produced by a digital pulse processor. Shape samples/precious metal coatings can be analyzed for up to 24 elements with regard to coating thickness and element concentration, which can be determined simultaneously. Coatings down into the 10-nanometer range can be measured.

Fischer Technology Inc., Booth 1546 • fischer-technology.com



### **AIR-CONTROLLED DISPENSER**

Designed for all budgets, the SL101 air-controlled dispenser is CE certified and RoHS compliant. Offers 3 modes of operation as well as 10 memory positions to give user optimum control and flexibility. Is available in both 110 and 220 volt versions and is suitable for use with a wide range of liquids. Equipped with suck-back control, the dispenser reportedly helps prevent drips after the dispensing cycle. Comes complete with an accessory kit.

I&J Fisnar, Booth 2561 ijfisnar.com



The NITON XLt 797X features an X-ray analysis area more than 20 times smaller than that of other analyzers. A color CCD camera locates, specifies and saves the image together with the chemical analysis of an individual component. Is said to be ideal for identifying, accurately analyzing and recording analytical results of small components, previously only achievable with bench-top XRF analyzers.

Thermo Scientific, Booth 1670 thermo.com/niton



### **HIGH-RES X-RAY ANALYSIS**

The Nanotom is a 160 kV nanofocus computed tomography system tailored for material science, micro mechanics, electronics and biological applications. System consists of granite based CT-construction with a 160 kV high-power nanofocus X-ray tube and a digital detector to reach a voxel resolution down to 500 nm. Can examine samples with diameters up to 120 mm and a weight up to 1 kg.

phoenix|x-ray Systems + Services, Booth 2159 phoenix-xray.com



# **DRILLING/ROUTING SYSTEM**

MX-2 two station drilling and routing system is equipped with 125,000-r.p.m drilling and routing spindles, as well as the unique large capacity tool chain that holds 3,300 tools. Able to provide several different depth-control routing options. Available option of vision assisting drilling, routing and panel optimization.

Burkle North America Inc., Booth 537 burkleusa.com



# **PLANARIZING MACHINE**

The Flatstar is a grinding machine for the removal of residues from resins, pastes and inks left behind after the hole plugging process. Includes three independent brushing phases. This single-side processing series is available in two different configurations with the option for automatic double side production.

Wise Worldwide Enterprise, Booth 449 wisecompany.it



### THERMAL FLUID HEATED PRESS SYSTEMS

The Fleetline and Vac-Q-Lam thermal fluid heated press systems have temperature uniformity within +/-2°C across the plate. The vertical press door design reduces the clearance requirement between Hot Presses, allowing you to optimize the productivity of your plant floor space.

OEM Press Systems Inc., Booth 927 oempresssystems.com

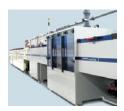




## **XRF TOOLS**

The Benchtop XRF tool systems provide non-destructive measurement of restricted metals, and allow for lead content quantification for reverse RoHS applications including military/ aerospace demands requiring 2-5% min. lead content. Measures the standard circuit and packaging applications including Au/Ni/Cu, immersion coatings of metals on leads pads/ bumps, and gold electroless nickel stacks. Mechanical or optical x-ray beam collimation in conjunction with video camera alignment allows confirmation of specific analysis areas/ features.

Matrix Metrologies Inc., Booth 1104 matrixmetrologies.com



### **FLEX MATERIAL ETCH AND STRIP LINE**

The Cupric Etch/Dry Film Resist Strip process line reportedly has a guaranteed damage-free leaderless transport system for 9/25/9 flexible circuits materials using the Ultraflex Transport System, which features airknife module separation for the reduction of dragout on thin flexible materials. Also included: ZBF Cyclone Band Filter system for improved removal of stripped resist particles from stripping solution, cupric chloride etching regeneration system with accurate digital density controller, and PLC process control.

Schmid Systems Inc., Booth 637 schmid-group.net



### **MEASUREMENT EQUIPMENT**

The latest TherMoire PS200 lab tool delivers improvements in the new JEDEC standard for temperaturedependent warpage measurement of packages (JESD22B112), which requires faster heating and cooling rates. This allows the user to more precisely replicate a temperature profile while taking real-time flatness measurements. Includes a new ergonomic design and improved interface ease-of-use.

AkroMetrix LLC, Booth 1509 akrometrix.com

## **DIGITAL LEGEND PRINTING**

The LGP-809 digital legend printing system is said to offer the industry's fastest start-to-finish production time. Combines heat-curable ink with unique legend printing technologies to reportedly ensure the highest level of quality, reliability and performance on rigid, rigid-flex and flex boards. Production cycle times are shortened and the demands upon professional resources reduced.

Printar Ltd., Booth 315 printar.com

#### **EPOXY ADHESIVE**

Araldite 7047 epoxy adhesive is a high purity, 100% solids system designed for void-free bonding of circuitry and microelectronic chips to PCBs. It features an extended work life of up to four days at room temperature and cures in one hour at 329°F. This silver-filled epoxy is formulated without solvents/viscosity diluents to reduce potential outgassing. Compatible with lead-free processing. Once cured, it exhibits aluminum/aluminum lap shear strength of 1300 psi and gold/gold die shear of 1700 psi at room temperature.

**Huntsman Advanced Materials, Booth 2306** huntsman.com/electronics

## **HIGH-SPEED / LOW-LOSS LAMINATE**

N4000-13EP 210°C Tg substrate offers an enhanced performance option that expands the range of the N4000-13 material system within the lead-free assembly market. The series of laminate and prepreg materials is designed to provide high-speed, low-loss, CAF resistant product that has been enhanced specifically for lead-free applications or any application where a high level of thermal robustness is required.

Park Electrochemical Corp., Booth 717 parkelectro.com

#### FRONT-END AUTOMATION SOLUTION

The bundled front-end automation solution includes i-Quote, an intelligent, Web-enabled quotation system. It automates the quoting process by capturing customer specifications, and using predefined workflows and a rules-based costing engine to calculate an immediate quote. Solution also includes Engenix, a pre-production engineering solution that extracts and analyzes job data from CAM systems. Customizable and rules-based, it uses CAM data to generate stack-ups, travelers and reports that can be integrated with any ERP system.

Cimnet Systems Inc., Booth 338 cim-sys.com

# **ETCHING SYSTEM ENHANCEMENT**

The Etch Adjust Module can be added to an etching system to improve etching uniformity on fine-line, tight tolerance circuit boards and chemically milled parts. Contains an adjustable spray system that provides corrections via the solution distribution profile. Using the profile adjustment compensates for common fluid dynamic effects and plated copper thickness variations, allowing the user to achieve a more uniform etching rate across the surface of a board.

Chemcut Corp., Booth 507 chemcut.net

#### **IMMERSION SILVER**

AlphaSTAR microvoid resistant immersion silver reportedly delivers high firstpass yields and lead-free solderability that results in exceptional reliability. The process selectively deposits a high performance silver coating that is said to provide a consistent, exceptionally clean coating that possesses low codeposited organics, tarnish resistance, low contact resistance and ease of cleaning. RoHS and WEEE compliant, the process enables OEM lead-free conversions.

Cookson Electronics, Booth 2419 cooksonelectronics.com