

In Brief

GPS is the newest distributor for Indium Corp. of America (indium.com), selling solders and fluxes in Germany, Croatia and Slovenia.

Specialty Coating Systems (scscookson.com), a unit of Cookson Electronics, has opened SCS Shanghai, a full-service conformal coating facility in China. SCS also purchased the assets of former service partner Cycad Specialty Coatings Technology Co. Ltd. China Assembly, part of Cycad, remains SCS's distributor in China.

IslandTek International, a PCBA equipment sales company, will represent Feinfocus' (feinfocus.com) line of x-ray inspection systems in Taiwan.

ARRIS (arrisi.com) selected eValue from Applied Systems Intelligence (asinc.com) for enterprise resource planning.

Sparton Electronics (sparton.com) opened an EMS operation in Albuquerque in a building formerly owned by Honeywell (honeywell.com). Sparton closed and sold a smaller, older facility located in Rio Rancho, NM.

SolderMask Inc. (soldermask.com) will become the first North American licensee of DEK's VectorGuard stencils. SolderMask will manufacture stencils from foil blanks supplied by DEK (dek.com) and will also provide complementary frames.

Fuji Do Brasil Máquinas Industriais LTDA (fujibrasil.com.br) will market Asymtek's (asymtek.com) automated fluid dispensing systems throughout South America.

Cobar Solder Products (cobar.com) appointed Tom Farenò and HiTecs Sales to represent its line of fluxes, solder pastes, alloys and soldering materials in Illinois and Wisconsin.

West Tech Inc. will provide representation for KIC's (kicthermal.com) thermal management tools in Colorado and Utah.

Hitachi (hitachi.com) has adopted a lead-free alloy across its plants worldwide. The company is using SnAgCuIn solder in high-reliability communications and medical equipment and larger PCBs. Hitachi chose the alloy based on its melting point (204°C) and tensile strength, thermal cycling and aging.

Solder Vendors: 'No Difference' in Tested SAC Alloys

Bannockburn, IL—A group of leading vendors of solder in November released white paper findings that "no significant difference" exists between a trio of heavily researched lead-free alloys. The lead-free pastes were found to result in less bridging but more voiding than a tin-lead eutectic control. In a 16-page report, the IPC Solder Products Value Council (ipc.org) announced results of a down-select process of six tin-silver-copper solder pastes and subsequent PCB assembly comparing three of the alloys and a tin-lead solder paste.

The SVPC is made up of 17 solder vendors who aim to achieve worldwide consensus on a standard lead-free alloy. The paper details the second of a three-phase, \$1 million program testing tin-silver-copper alloys.

Five solder manufacturers submitted paste samples for the anonymous testing, which was conducted by an independent party. The pastes studied: 96.5/3.0/0.5 tin/silver/copper, 95.5/3.8/0.7 tin/silver/copper and 95.5/4.0/0.5 tin/silver/copper.

Engent AAT (engentaat.com) tested one alloy per vendor using tin-lead eutectic paste as a control. Testing was performed on FR-4 boards using surface finishes of immersion silver, OSP, electroless nickel/immersion gold (ENIG) and bare copper and components with tin and tin-silver-copper finishes. Tests performed included: reproducibility of printed paste volume, solder paste wetting and spread, and interconnect voiding.

Next, two major EMS companies, Flextronics and Solectron, built a total of 200 assemblies each, using the three alloys and a tin-lead control. The companies then studied the three pastes for testability, rework and repair, handling and storage, printing, reflow and cleaning. There was "no significant difference" between the lead-free solders, they found. However, in general the tin-lead paste outperformed the lead-free alloys.

According to the report, "Submitted samples ... showed that, in general, the lead-free pastes were not as well-defined or as repeatable as tin-lead solder paste nor was their slump performance as good as tin-lead solder paste. This was most likely due to the use of a generic print process that was not optimized for each material."

The lead-free pastes also resulted in less bridging but more voiding than the control paste, the paper notes. The final report is due in early 2005 and will include results and analysis of long-term and thermal-shock reliability testing.

NEMI: RoHS/WEEE Conversion 'Well Underway'

Herndon, VA – Makers of consumer electronics are planning full compliance to new environmental mandates from Europe by the third quarter of 2005, with some early adopters ready now. The supply chain is prepared to support this schedule, NEMI said.

The trade group is basing its findings on a RoHS/lead-free summit held in October at which scores of companies traded insights on the European Union's Restriction on Use of Certain Hazardous Substances and Waste from Electrical and Electronic Equipment (WEEE) directives.

One primary concern: how companies will be able to prove compliance – to regulatory bodies and to their customers. The directives are not explicit on this point, and the EU's Technical Adaptation Committee, responsible for providing guidance on RoHS implementation, has not yet made recommendations, NEMI said in a press statement.

Presentations from the summit and reports from breakout groups are available at nemi.org/newsroom/Presentations/RoHS_summit.html.

Siemens Set to Launch New Placement Platform

Munich – Siemens Logistics and Assembly Systems (siplace.com) in December disclosed its latest machine platform to CIRCUITS ASSEMBLY, the equipment giant's first new platform in years.

The Siplace X-series features an innovative head with 20 nozzles capable of placement speeds of up to 20,000 components per hour, Siemens says. It comes in two, three and four gantry versions.

The new machine is currently in beta testing at BMK Electronics and Fujitsu Siemens. Siemens will officially roll out Siplace X next month at Apex.

In Brief

Interplex Industries (interplex.com) opened a facility in Dalian, China, to provide tooling and precision-metal stamping and heat-treating services. The company hopes to add electroplating, insert and injection molding and assembly services.

Autron Corp. (autroncorp.com) opened a center in Singapore for remanufacturing and sale of complete lines of previously owned equipment. The new center houses process R&D and remanufacturing facilities, spare parts, component engineering and demo lines. The company estimates the market for refurbished equipment will reach \$500 million in 2005.

EMS provider MiQuest (miquest.com) will expand its Grand Rapids, MI, factory to meet higher demand. Production will start early this year, the firm said.

Hangzhou Eastcom Cellular Phone Co. will purchase \$20 million worth of SMT equipment and maintenance over the next three years from Autron Pte. Ltd., a subsidiary of Autron Corp. Autron will also help manage Hangzhou's spare parts inventories.

People

FocalSpot Inc. named **Jeff Herberg** global customer support manager and **Glenn Olaes** x-ray product line manager. Herberg was in technical support at GenRad/Nicolet Imaging Systems and Teradyne. Olaes was in applications engineering and product support positions at Nicolet Imaging Systems/SRT, GenRad, Teradyne and VJ Electronix.

Samuel Sher was named VP of sales and marketing at Bliss Industries. Sher was a sales and marketing consultant to tech companies.

Pete Waddell, UP Media Group Inc. (publisher of CIRCUITS ASSEMBLY), received a Special Recognition award from IPC in October for contributions to the Designers Council. **Bill Brooks** and **Susan Webb** were also honored. They were among 26 individuals whom IPC cited for contributions to the association or the electronics industry.

New CEO Corbett Sewing Up Cookson Units

Providence, RI — When Ray Sharpe abruptly stepped down as chief executive of Cookson Electronics last May, it opened a huge can of worms over who was next in line to run one of the world's largest suppliers of electronics assembly materials. Sharpe's departure (he is now chief executive of Isola) was just one of a string of top-level changes: Stephen Howard, chairman of Cookson Group, Cookson Electronics' parent company, had already announced plans to retire.

It took some months, but the pieces are being put back together. One question was addressed in July, when Nick Salmon was named the new chairman. And another was answered in October, as the company promoted Steve Corbett, head of its wildly successful specialty chemistries division, to the top spot. Since 2002 Corbett has headed Enthone, the \$450 million chemicals business Cookson acquired in 2000. In past 12 months, the division's operating profit improved 60%, and return on sales doubled to 13%, from 6% in 2002.

Corbett is a Cookson veteran, having previously managed its semiconductor packaging materials and Alpha Metals divisions. (He was also general manager of Heraeus Cermalloy Inc. in the 1980s.) Still, he has his work cut out as he tries to rearrange Cookson Electronics, a \$786 million division in 2003 that also includes Alpha-Fry Technologies and Polyclad Technologies. In October he spoke with CIRCUITS ASSEMBLY's Mike Buetow. Excerpts (see full interview in our November online news archives).

CA: Why do you think you were tapped for this job?

SC: [Laughs] You'll have to ask my boss [Salmon]. My slant is, the process that Cookson went through was fairly long. They looked at both internal and external candidates. The decision to bring in an insider was one part of the requirement to have someone who was familiar with the businesses, in order to shorten the learning curve. That, and there is always a desire to promote from within. As far as why me ... probably has more to do with Enthone. It has improved significantly in very, very difficult market conditions.

CA: Your predecessor followed a one-stop shopping strategy. The announcements, with Polyclad having a direct line to Nick Salmon, suggest a different approach.

SC: There's a lot of discussion over Polyclad and I wouldn't read too much into that. [I]f you looked at the financial analyst community and didn't know better you would conclude that the only thing Cookson has is laminates. Precious metal, ceramics — our other businesses — get very little press. To answer the analysts, Nick felt he needed to have firsthand knowledge of what was going on, and firsthand influence over the business. This period where Nick will manage it will not be one of long duration. As for one-stop shopping, we're going to do what our customers value. I'm not going to say that none of our customers value it, but I will say that's not a common thread in our marketplace. Our customers want the best technology, at the best price point. That's not always Cookson's strong point where it touches the customer. That's probably the fundamental difference between our philosophies: I'm not going to push it where it doesn't fit.

CA: Are any other changes expected in the management ranks, at Alpha or Polyclad?

SC: No short-term plans.

CA: Is Polyclad being packaged for a possible sale?

SC: It's no secret that the laminates business is hurting. Polyclad is doing well in Asia. We're treading water in Europe and suffering in the U.S. That business needs to be fixed. I would put the prospects of a sale as pretty low. Cookson doesn't have the appetite to take another haircut like they did on Speedline.

CA: What's your top priority right now?

SC: We're in the middle of our budgeting process for 2005. Also, I'll travel the world of Cookson, listening to employees and customers and trying to develop a plan. I certainly want to go back and touch ground zero and reassure myself that the existing strategic plans are sensible and I can see where the lines intersect between customers and our plans.



Intersecting lines: Corbett

People

Ann Wood, corporate vice president of operations at IEC Electronics, resigned for personal reasons and was replaced by **Don Doody**, formerly of Plexus.

Dage Precision Industries appointed **John Travis** Eastern regional sales manager. Travis previously worked with Electrovert as a field engineer, Trig Technologies as owner/operator and as VP of sales for contract manufacturer Accutronics.

Bruce Moloznik (right) was promoted to global director of product management for Cookson Electronics Assembly Materials Group, responsible for the



Alpha brand and product line strategies. Also, **Mike Murphy** (left) was named regional marketing manager for the Americas region. He will also work with field sales in training and product support.

Joseph D'Andrea has joined Printed Circuits Corp. as sales manager. D'Andrea spent the past 11 years in sales and marketing at T-Tech Inc.

Vijay Patel has been promoted to president of View Engineering. He has spent 20 years in technical and marketing management at the company.

Hover-Davis Inc. named **Mike Hayward** (right) European sales manager. He previously worked for ECD and Philips EMT. **Roland Heitmann** (left) will also join the company



as director of the new Semiconductor Feeding Solutions Group. Heitmann has held various positions at IBM, DEC, Universal Instruments, ESEC and Kulicke & Soffa.

EMS Firms Must 'Stand Up' to OEMs

New York — Top tier electronics manufacturing services providers need to adopt a small business mindset if they are remain viable and profitable companies, says a report issued by a major consulting firm.

McKinsey & Co. said that although contract assemblers can leverage economies-of-scale and have generated tremendous value for their customers, "they have proved less adept at capturing value for themselves" and further restructuring awaits unless the sector adopts better habits.

In the McKinsey *Quarterly*, the firm asserted, "Fierce competition, the economic downturn and an outdated pricing model have combined to produce razor-thin or nonexistent margins for most of the industry's top-tier players. The takeaway EMS players must learn to stand up to their powerful OEM customers, just as suppliers in the automotive industry have done. They can no longer afford to offer generous terms simply to fill up their factories."

"A bright future awaits these companies only if they adopt a small-business mindset by charging for every service they provide on the OEMs' behalf and by closely monitoring their pricing and collection processes," McKinsey wrote.

CTS to Buy SMTEK

Moorpark, CA — CTS Corp. (ctscorp.com), a manufacturer of components and EMS provider, will acquire SMTEK International (smtek.com) in a cash and stock deal. CTS will pay between \$14.20 and \$15 per share, 75% in cash and 25% in CTS common stock, for SMTEK. CTS will also assume about \$15 million in outstanding debt of SMTEK. The acquisition is subject to shareholder approval and is expected to close this quarter.

Upon completion of the deal, SMTEK will merge with CTS' EMS business unit, Interconnect Systems. The companies had combined revenues of about \$625 million over the past 12 months.

Elkhart, IN-based CTS had revenues of \$521 million over the past 12 months. SMTEK had sales of \$102.4 million and operating earnings of \$4 million.

Datacon, BE Semiconductor Form Nice Package

Radfeld, Austria — A pair of leading semiconductor gear makers, BE Semiconductor Industries (besi.com) and Datacon Technology (datcon.at), will merge this month.

Besi will assume 100% of Datacon's shares. Datacon shareholders will receive 90% cash and shares in Besi. The purchase price was 3 million euros and includes net financial liabilities.

Negotiations are in the final stages and the merger is scheduled to close in January, pending antitrust and other reviews. Besi is listed on Nasdaq and Euronext. After the close, Datacon will become a wholly owned subsidiary of Besi.

Datacon makes microchip assembly platforms (die bonders), while Besi manufactures semiconductor assembly equipment.

Flip Chip Substrate Demand Taxing Taiwan Capacity

Taipei — Companies needing flip chip parts might do well to order them now. Word from Taiwan is that flip chip substrate capacity might be maxed during the first half of the year, due to heavy demand for graphics chips and chipsets. Rumors of price hikes of up to 10% abound.

Bough Lin, chairman of Siliconware Precision Industries Ltd., reportedly told *DigiTimes* that demand for flip chip substrates will be over 10 million units per month, 70 to 80% of which could be consumed by ATI Technologies and Nvidia combined. The two firms' combined demand was five to six million units per month in 2004, *DigiTimes* said. And VIA Technologies and Silicon Integrated Systems will need 300,000 to 400,000 units per month, Lin reportedly said.

Phoenix Precision Technology, Taiwan's largest flip chip substrate supplier, will double its capacity to five million units per month by the end of February, according to Lin.