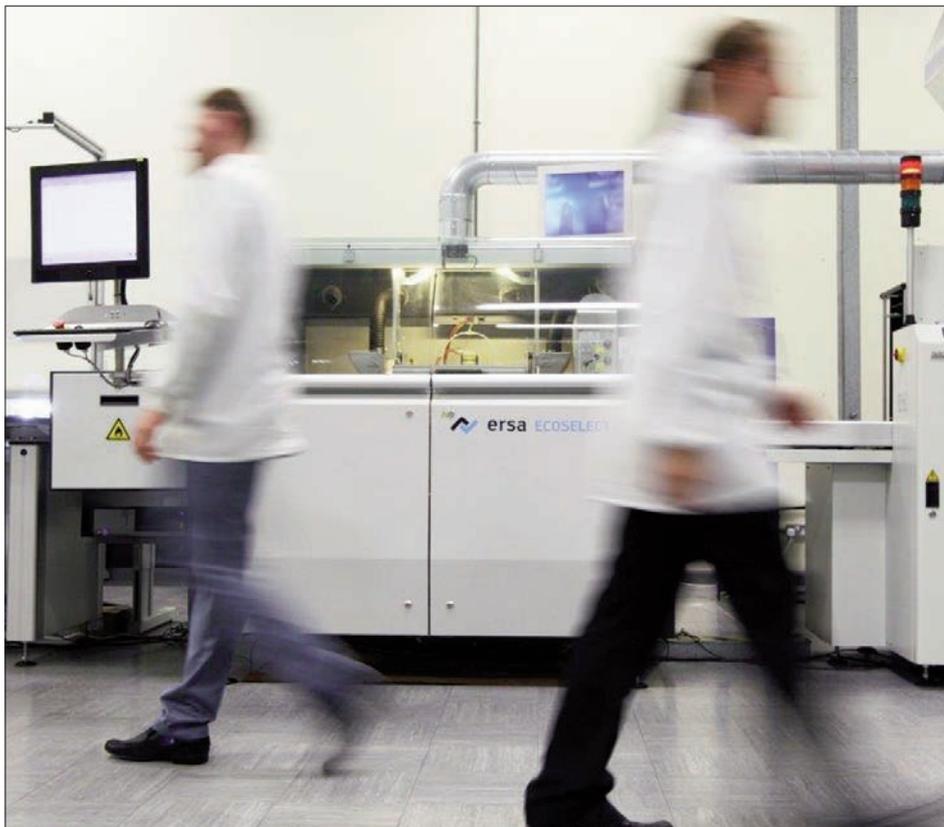


News

Production equipment investment remains strong



2015 was a busy year in the world of electronic production equipment. We saw record sales of some key items of equipment such as SMT placement, selective soldering and vapour phase soldering.

2016 promises to continue in

the same vein, with new product launches from several of our suppliers. i-Pulse is introducing the new S10 and S20 SMT mounters that will accept board sizes of up to 1825 x 635mm and will place components of up to 120 x 90mm, with 3D placement capability and integrated

dispense heads. Look out for more details as the year progresses.

We are also now promoting Yamaha's range of screen printers and AOI systems, and there will be new developments from TWS and Fritsch. More will be revealed at our Technology Week in April.

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Cabinet protects components from moisture at May & Scofield

The protection of components and assemblies from the effects of moisture ingress is a major concern nowadays for electronic assemblers. Moisture absorbed during storage can be a source of many soldering and quality problems.

Basingstoke based May & Scofield has been supplying electronic controls for the automotive, defence and rail industries for over 20 years. Their products are used in vehicle security systems, ECU's, power management systems and many other vehicle related systems.

One key aspect of their manufacturing process is to ensure that their components and completed assemblies are kept in a Low Humidity environment. Many of the components used are moisture sensitive, so protecting them during storage is an essential requirement. In 2014, they purchased an 'X-Treme XTC 510'



dry storage cabinet from Blundell Production Equipment.

Managing Director, Gary James says; "We went through a selection process which included capacity, price and service. We had already purchased equipment from Blundell and were very satisfied with their technical knowledge, service and their cabinets seemed to tick all of the boxes for us. The large capacity of these cabinets was a particular attraction as we have a large amount of stock that needs to be kept in a controlled environment"

"The cabinet has fully met our expectations and is fully utilised. We use a vacuum sealer (also purchased from Blundell) to further protect devices that have to be removed from the cabinet from time to time." This combination gives us a great deal of confidence that our components are being given maximum protection" Gary concludes.

Dates for Blundell Technology Week 2016 announced

This year's Blundell Technology Week and mini-exhibition will be held from 19th to 21st April at Blundells' Coventry headquarters.

As always, the full product range will be on display and there will be an opportunity to discuss production processes and application issues with our engineers and technicians.

A free buffet lunch is provided and the event is spread over 3 days to give customers plenty of choice of when to attend.

We suggest you make a diary note now. More details will be sent out nearer the time.



New i-Pulse line boosts placement capacity at Tenkay

The future is looking bright for Lancing based contract manufacturer Tenkay Electronics since they upgraded their SMT line to include the latest i-Pulse technology from Blundell Production Equipment.

They were already i-Pulse users, having owned an i-Pulse M4 SMT placement machine since 2007 and it has performed extremely well for them. But they needed to move to the next level after an increase in workload and component mix left them short of capacity on the line.

They found their answer at last year's Southern Manufacturing exhibition in the form of a new state-of-the-art i-Pulse M20 machine from UK distributor Blundell Production Equipment.

Soon afterwards an order was placed with Blundell and since the installation in the autumn of 2015, the new M20 has greatly enhanced Tenkay's production throughput and component handling capability.

The M20's high 8mm tape feeder count of 144 has expanded their on-machine component stock and enabled handling of more complex PCB assemblies. The i-Pulse M20's unique large board handling range and flexibility means that Tenkay



Mr Kawasaki, European Sales Manager for Yamaha Motor Co i-Pulse Sales Group, made a special trip to Tenkay's new i-Pulse M20 in place and working and to give them his personal thanks for the order.

From left to right: Peter Matthews, Quality and Technical Manager – Tenkay, Mr Kawasaki, Yamaha Motors and Robert Doick, Operations Manager - Tenkay.

can now assemble printed circuit boards of up to 1480 x 510mm accurately and efficiently. Their M20 has 6 placement heads and is rated at 23,000 components per hour (IPC rating) which is a big improvement on their previous capacity.

The M20's wide range of options and available retrofits will give Tenkay the ability to update and adapt as future needs develop.

As well as high accuracy dispensing for solder paste and other materials there are upgrades for package on package (PoP) handling and 3D Hybrid assembly, so the M20 is truly a future-proof platform which will stand the test of time.

Blundell engineers were on site at Tenkay for several days and they were praised by Tenkay's production staff for their efficient setting up and training job.

The company prides itself on their quality manufacturing and

customer service, and anyone interested in Tenkay's assembly services can contact them on 01903 855455.



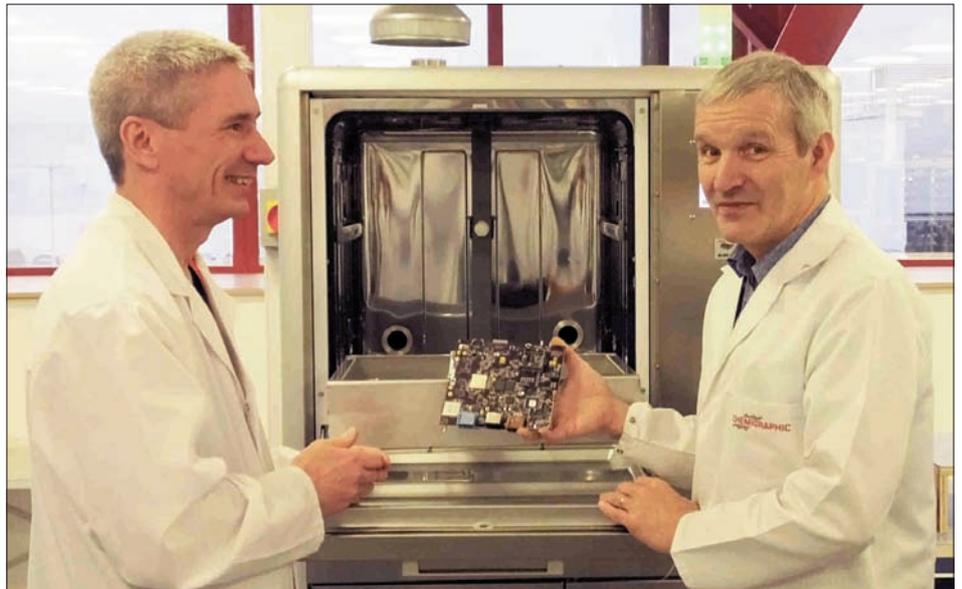
Chemigraphic invests in Cepter Aqueous Cleaner

Following a rigorous evaluation process Chemigraphic have purchased a Cepter 170 Aqueous Cleaning machine from Blundell Production Equipment. It is the first UK installation since Blundell took on the distribution of Cepter in late 2015.

Although Chemigraphic have been successfully running a no-clean process for many years, they were recently approached by a customer who had specific requirements for their boards to be cleaned. As they always try to introduce new processes to match their customers' requirements they decided to invest in new PCB cleaning equipment.

Chemigraphic's Technical Director Stewart Gadd, says: "We started by looking at what cleaning process would suit the volumes required by our customer, and the niche application meant low volume cleaning. So we were looking at batch cleaning with a chemical followed by a water wash. The price of the machine was going to be important given the low volumes and this left us looking at two machines. We had a specification from our customer, and we narrowed the choice down to one of two machines. Both the machines we tried cleaned to the required standard, so we had to decide which machine suited our needs. We preferred the Cepter's baskets, and also ease of use for our operators. Cost was also an issue and the Cepter from Blundell offered us a very competitive price for the solution we needed."

"Although we knew we would be the first user in the UK, we have our



Stewart Gadd, Technical Director of Chemigraphic and Graham Hill, Production Engineering Manager inspect a PCB from the Cepter cleaner.

own in house engineers and they felt the machine was well built and very simple to maintain. Also we have been dealing with Blundell for

many years and are more than happy with the support and service levels we get."

"The Kyzen cleaning medium was supplied by Temple4, and they were on site while we did all the on-site trials, they requested details of all the fluxes and solder pastes we wanted to use, and they selected an appropriate chemistry to ensure best removal of our fluxes. They showed us how to prepare and test the chemical mixture correctly.

It was reassuring to have both parties on site during the trials and good to see the support and training was of a high standard."

Since 1972 Sussex based CEM Chemigraphic have been providing their services for design, manufacture of printed circuit boards and mechanical assemblies to the communications, medical and instrumentation industries.



First-off inspection pays dividends at JJS

A unique inspection aid is providing JJS Electronics of Lutterworth, Leics, with valuable benefits and had reduced first-off inspection times by up to 80%.

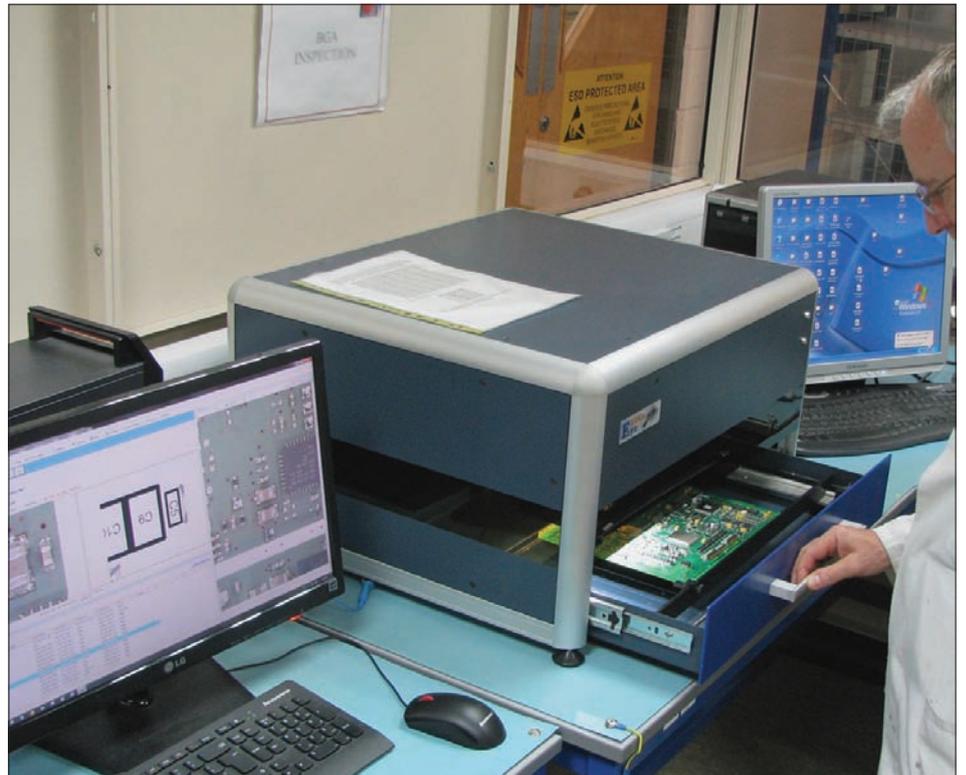
The 'Extra Eye' first article inspection system, purchased in 2013, has paid for itself many times over since it was installed. Now that they have had plenty of experience in using it, JJS's Principal Production Engineer Richard Barratt has told us that it's an invaluable tool that they use every day.

At JJS they consider 'first off' inspection to be very important. It avoids faults going down the line where they are much more expensive to correct. Although JJS have AOI on all of their 3 lines, they give priority to not allowing faults to get that far.

'Extra Eye' uses a camera to capture the board image, along with clever software built into it which compares the customer's Bill Of Materials (BOM) with the actual parts list that is used to build the board. The CAD generated drawing of the board can also be loaded into the Extra Eye to assist with the comparison. It also compares the board to the drawing and has a full report function, and creates a 'Golden Board' which acts as a template for all subsequent assemblies.

Richard Barrett comments: "Before we had the Extra Eye we had to compare the first-off board to a parts list manually, ticking off each component as we went. A board with 1,220 components took us 3 hours 30 minutes to check. When we installed the extra Eye, inspecting the same board took just 30 minutes."

JJS's parent company, Paragon Electronics Group supplies JJS's components and does their kitting. They take the customer's BOM and



convert it into the parts list. JJS have to make sure that the kit matches the customer's specifications.

When the kits come in they have to be checked against the customer's requirements. Although JJS have AOI machines, there is no software on the AOI that performs that function. "We needed to check that the first board built was correct to customer data" says Richard. "Each job has a kit of parts to build that assembly. Before we had the extra Eye we used to have to compare the first board to the parts list and tick off each component individually, a long winded job that was prone to errors.

"Using the Extra Eye we load in the program, it gives us a reference, a part number and a description that is generated from our internal BOM. Then we load the customer's BOM and compare."

"First off inspection is very important, it avoids faults going

down the line to AOI. If the board is built to incorrect data we wouldn't know about it until it reached the end of the line. By that time it's too late. It also gives us the ability to load a drawing so that on screen you see a scanned image together with a drawing to show the orientation."

For us the Extra Eye is invaluable. It's a nice bit of kit and easy to use. It gives us confidence that the work we are passing to the AOI is correct, this cuts down AOI faults and improves overall yield.

"It's a nice tool, simple but effective" concludes Richard. "We use it almost every day and would be lost without it, as using it at the front of the line determines the quality of what's coming off the other end. Without the extra Eye many more faults would reach the end of the line"

JJS Electronics can be contacted on 01455 555500.

Ersa's best selling reflow oven delivers exceptional results

Ersa has long been associated with producing quality soldering equipment, and the Hotflow 314e is the latest in a long line of high performing convection reflow ovens to come out of the Bavarian manufacturer's stable.

Ersa are represented by Blundell in the UK, and we have had a very good year with the 314e with orders from several high profile customers including Meridian Audio and Tynetec.

The 4.7 metre long oven has 2.6 metres of heating and 735mm of cooling divided into 14 zones, producing repeatable textbook lead free profiles. Standard features

include programmable conveyor chain lubrication, process data recorder and full PC control with a touch screen monitor.

The conveyor width adjustment can be manual or program controlled and a centre support is available as an option.

Overall, the Hotflow 314e represents robust, reliable German engineering at a very competitive price.

For more information call us on 024 7621 0270 or email sales@blundell.co.uk



ORDER BOOK

Recent Blundell orders and installations:

In December we installed a new iPulse M20 SMT placement machine at **Circad Design** in Ipswich. Circad are electronics designers who also offer a manufacturing service.

Measurement specialist **Renishaw** has installed a further 2 XTC low humidity storage cabinets at its Woodchester plant.

Martin-Woolman of Welwyn Garden City has installed a TWS Quadra-evo pick and place

machine and an 'Extra Eye' PCB inspection system. Power generation specialists **Deep Sea Electronics** have taken delivery of an Ersa Versaflow VF345 high speed selective soldering machine.

Led-Pro Lighting have purchased an IBL SCC309 vapour phase soldering system.

Contract manufacturers **Cambertronics** and **UK Circuits** have both recently installed iPulse M20 SMT placement machines.

We have installed a new PVA Delta 6 conformal coating machine at **TT Electronics IMS** of Rogerstone, South Wales.

Tynetec and **Meridian Audio** have installed Ersa Hotflow 314e convection reflow ovens in the last quarter.

BLUNDELL

PRODUCTION EQUIPMENT

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