

## News

# Production equipment investment remains strong



**2**015 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.

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.

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

# Cabinet protects components from moisture at May & Scofield

**T**he 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.

Manging 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 7th – 9th June 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



**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.**

**T**he 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



# WAVE SOLDERING • SELECTIVE SOLDERING

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 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.

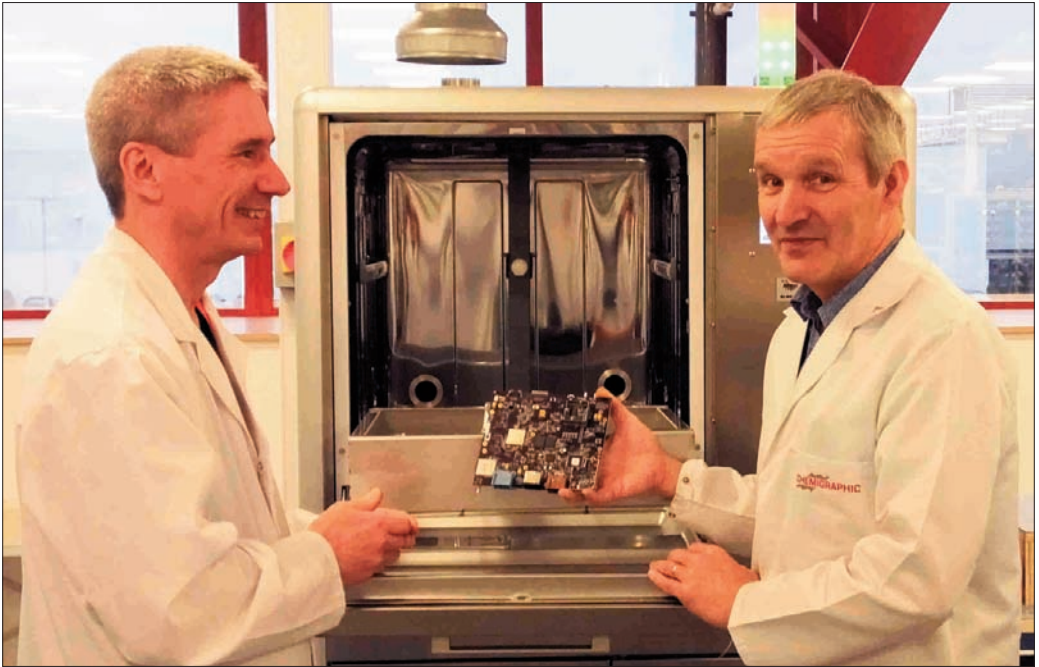
The M20's wide range of options and available retro-fits will give Tenkay the ability to update and adapt as future needs develop. As well as high accuracy dispensing for solder paste and other materials there are upgrades for package on package (PoP) handling and 3D Hybrid assembly, so the M20 is truly 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



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

**F**ollowing 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

# PCB CLEANING • SOLDERING IRONS • FUME EXTRACTION

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

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 Manufacturing of Lutterworth, Leics, with valuable benefits and has reduced their 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 using it, their Principal Production Engineer Richard Barratt told us that it's an invaluable tool they use every day.

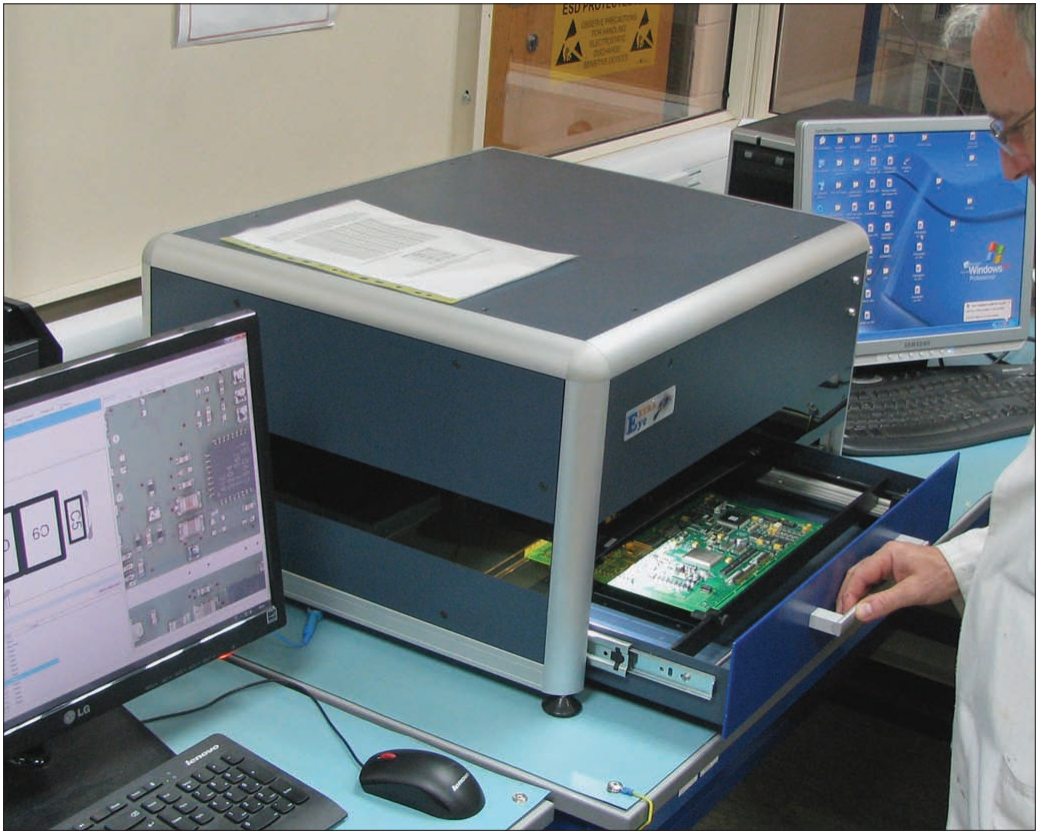
"At JJS we consider 'first off' inspection to be very important as it ensures a verified assembly is used for AOI program generation. The 'Extra Eye' system uses a camera to capture the board image, along with intelligent software built into it which compares the customer's Bill of Materials (BOM) with the internal parts list that is used to build the board. CAD generated drawings of boards can also be loaded into the system to assist with the comparison. The 'Extra Eye' 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".

"Before we had the 'Extra Eye' system we had to compare the first-off board to a parts list manually, ticking off each component as we went. As a comparison one of our boards with over 1,200 components took 3 hours 30 minutes to check but after installing the 'Extra Eye' system inspecting the same board now takes just 30 minutes."

Prior to material being loaded onto the pick and place machines, JJS checks that the material presented matches the customer's requirements. Although JJS have x 3 AOI machines, there is currently no software on them to perform this function. "We need to check that the first board built is correct to our customer's data" says Richard. "Each works order has a unique kit of parts to build that assembly. Before we had the 'Extra Eye' system we used to have to compare the first board to the parts list and tick off each component individually, a labour intensive manual task that was prone to errors".

Richard Barratt goes on to say: "Using the 'Extra Eye' system we now load in the program which gives us a reference, a part number and a description that is generated from our internal BOM. We then load in our customer's BOM and





compare the two.”

“First off inspection is an important part of our process and helps avoid incorrect images being generated for our AOI machines. Previously, if boards had been built using incorrect data there was a possibility things could have been missed using the manual method. 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’ first article inspection system is invaluable. It gives us confidence that the work we are passing to the AOI is correct which in

turn 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 ‘Extra Eye’ developing AOI programmes and ensuring new products are built efficiently and without mistakes would be more difficult”

**JJS Manufacturing can be contacted on 01455 555500 or by visiting their website [www.jjsmanufacturing.com](http://www.jjsmanufacturing.com)**

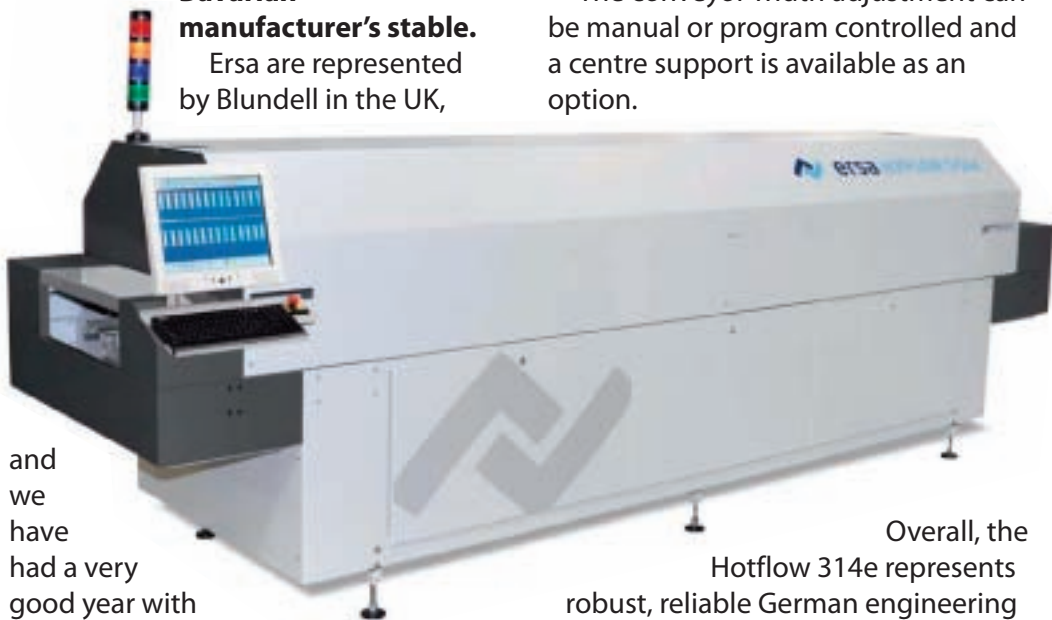
# Ersa's best selling reflow oven delivers exceptional results

**E**rsa 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,

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.



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,

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](mailto:sales@blundell.co.uk)**

# Intelligent Fume Extraction system saves power and extends filter life

**A**t Blundell we have been suppliers of fume extraction for many years. Modular systems provide the most flexibility in today's factory environments where lines are regularly reconfigured according to the product being built. Another noticeable trend is that volume extraction is more popular today than tip extraction, a trend that started with the introduction of lead free solder wires.

A new modular volume extraction unit from Ersa has some unique features. The Ersa **Easy Arm** is specifically designed to interface with Ersa's **I-CON** and **VARIO** soldering tools and it only runs when the soldering tool is in use.



The **Easy Arm** system is ultra-quiet during operation without compromising the extraction efficiency. Single and dual arm versions are available. A three stage filtering system meets the requirements for COSHH regulations, and the added intelligence of the **Easy Arm** takes the responsibility for turning the unit on and off away from the operator. Filter life is extended and power consumption reduced in comparison with systems that are running all the time regardless of whether they are needed or not.

**Please contact our sales department for more information or to arrange an onsite demonstration or trial.**

# 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 Ersas Versaflow VF345 high speed selective soldering machine.

**Led-Pro Lighting** have purchased an IBL SLC 309 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 Ersas Hotflow 314e convection reflow ovens in the last quarter.

# BLUNDELL

PRODUCTION EQUIPMENT

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