

# Best Practice



Issue 659 | Winter 2022 | 0121 725 1587 | [www.bestpracticeuk.co.uk](http://www.bestpracticeuk.co.uk)

## Experts in stainless steel fasteners

Precision Technology Supplies (PTS) was established in February 1988 by Stephen Edwards. Based in East Grinstead, West Sussex, PTS is a stockist and distributor of stainless steel fasteners, offering a one stop shop for a wide range of quality products, with fast delivery times and efficient customer service.



our current ranges as well as adding new products," said Andy. "Recent additions include the Nord-Lock washers and a range of construction fasteners." An excellent addition to their product range, the Nord-Lock washers secure bolted joints with tension instead of friction, a facility which has documented success in numerous industries worldwide.

"Our whole ethos is about offering a quality product and service to our customers," said Andy Knight, Sales Director.

With over 30 years of experience in managing a growing number of customer production lines on-site, PTS can be counted on to deliver 'just in time' delivery to their OEM customers in 90 countries across the world. Within the UK, PTS provide numerous variations of Direct Line Feed management to suit individual needs. PTS has the facilities to plate standard and special screws. One of their most popular is the 'Touch-Dry' Chemi-Black process, also known as Black Oxide. With this method, the finish is so thin that it doesn't affect any dimensional tolerances. In addition to this, PTS also offers finishes in gold, nickel, silver and zinc. What's more, PTS provides patchlocking, ideal for vibration resistance and added torque performance, and offers screw modifications.

"Recently, we were acquired by the TRIFAST Group, and with their backing we are looking forward to increasing our market share. This will also give us the ability to enhance our systems and services to help the business grow."

PTS always makes sure to exhibit at the bi-annual Fastener Fair in Stuttgart, and were in attendance during the event in March this year. If you would like to find out more information on their full range of products and services, head to their website or use the contact details below.

Contact  
T 01342 410758  
[www.pts-uk.com](http://www.pts-uk.com)

"We are constantly adding new products to our offering, increasing

## Minimising Construction Dust



One of the most common, and biggest, health and safety risks to a huge amount of construction projects may seem small and unassuming but poses a significant risk to health: dust.

So, what is construction dust? Construction dust is the term used to classify the dust created on construction sites by a variety of operations; including planing, grinding and shotblasting. During surface preparation and removal processes, materials such as concrete and stone produce dust which contains silica when cutting or preparing the surface. Silica dust is one of the three main types of construction dust:

- ▼ Silica Dust - created when working with materials such as concrete and sandstone
- ▼ Wood Dust - dust generated by soft and hard-wood products and materials like MDF
- ▼ 'General' Dust - a lower toxicity dust produced from materials such as gypsum, marble and terrazzo

Operations that produce general dust, and the removal of epoxy,

adhesives or elastometric materials may produce a lower toxicity dust, but they all present serious health hazards. Minimising the amount of dust reduces the health risk to operators and others working in the vicinity of the construction site.

### What to know about vacuums and filtration?

For smaller tasks and where hand tools are used, single-motor vacuums may be suitable. However, using a multiple-motor model will allow the operator to increase and decrease suction to save energy and maximise dust containment.

For larger projects where larger plant is required, heavy duty vacuums and large filtration units are usually powered by 3-Phase electricity and contain large volumes of dust. These machines also often benefit from reverse air pulsation; increasing the effectiveness of removing dust from the filter and into the dust container.

It is important to consider that dust contamination is often caused by the incorrect selection of extraction equipment. If you're unsure, or would like further guidance; get in touch with The Preparation Group, where our teams are always on-hand to ensure you get a handle on dust.

Contact  
T +44 (0)1522 561 460  
[sales@ppcgroup.co.uk](mailto:sales@ppcgroup.co.uk)  
[www.thepreparationgroup.com](http://www.thepreparationgroup.com)

Download on the  
App Store



Precision Technology Supplies Ltd  
see them on page..... 6



LAUDA Technology Limited  
see them on page..... 7



### STAINLESS STEEL METRIC FASTENERS



Purchase fasteners, nuts, bolts, screws and more online at PTS – one of the leading global suppliers of industrial stainless steel products.

- Stock range from M1.0 to M36
- A2 and A4 materials available
- Large stocks, fast delivery



Please visit to find out more: [www.pts-uk.com](http://www.pts-uk.com)  
Telephone: +44 (0)1342 410758 | Email: [info@pts-uk.com](mailto:info@pts-uk.com)



### THE COMPLETE SPECTRUM OF PERFECT TEMPERATURE CONTROL



• Process circulators	• Water baths	• Water stills	• Freezers
• Water chillers	• Viscometers	• Shakers	• Contact angle measurement
	• Tensiometers	• Incubators	

+44 (0)1780 243118 | [INFO@LAUDA-TECHNOLOGY.CO.UK](mailto:INFO@LAUDA-TECHNOLOGY.CO.UK)  
[WWW.LAUDA-TECHNOLOGY.CO.UK](http://WWW.LAUDA-TECHNOLOGY.CO.UK)



Bradshaw  
see them on page..... 8



Unisig  
see them on pages ..... 11-13





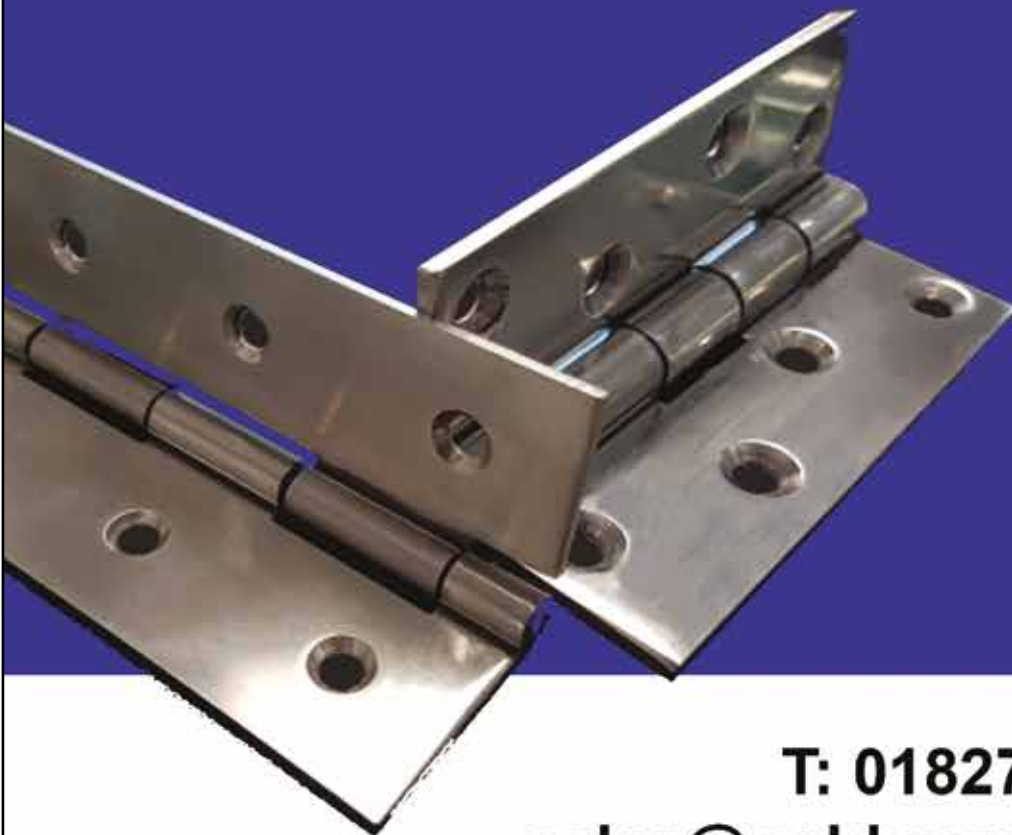
**GOLD & WASSALL**

EST. 1790

# QUALITY HINGES SINCE 1790

Gold & Wassall have been manufacturing hinges for over two centuries, so it's safe to say we know what we're doing.

Our team of experts can design and manufacture almost any hinge, for any application. We have made upwards of 250,000 unique hinge designs, with more designs being drawn up each day.



**T: 01827 63391**  
**sales@goldwassallhinges.co.uk**  
**www.goldandwassallhinges.co.uk**



# The UK's Number One Manufacturer of Hinges

With an impressive, expansive history spanning over 200 years, Gold and Wassall Hinges was first established in 1790. From the company's manufacturing facilities based in Tamworth UK, Gold and Wassall Hinges provides a range of services for design, production and manufacture of hinges, all produced in house and distributed throughout the whole of the UK. An industry leader in its trade, Gold and Wassall Hinges has established itself as the UK's number one manufacturer of hinges.

"We pride ourselves on the quality of what we make. We manufacture all of our hinges right here in Tamworth, so we have complete control over the quality of our goods. Other hinge companies import from abroad, which means we might not always be the cheapest, but we are certainly the best in terms of quality." Said Scott Bareham, Sales and Marketing Manager.



Gold and Wassall Hinges' team engages on a personal basis with each customer to find out their specific requirements, measurements, application and style, to ensure they find the right door hinge for the individual's needs. While providing an impressive range of off-the-shelf hinges, Gold and Wassall Hinges understands that for some projects, a custom built hinge is required.

Whether it's a simple design alteration such as rounded corners or a more complex design with multiple bends, the team at Gold and Wassall Hinges is dedicated to providing the right hinge solution for you, providing a bespoke custom-made hinge solution.

"Our bespoke hinge service is ever growing in popularity and is possibly our biggest asset. We make all the hinges no one else can - we have an in house toolroom which helps us meet customer requirements which would usually be dismissed. We have made over 250,000 unique hinges now, and counting. It really gives the customer flexibility when designing a product." Scott noted.

Gold and Wassall Hinges has created over 250,000 unique hinges and continuously

develops new patterns produced on a daily basis. The company is well equipped with the knowledge, skill and tools to create solutions for any application and has the ability to meet mostly any hinge

size or shape requirements. Another example of the company's customisation services, Gold and Wassall Hinges provides an abundance of finishing options for its customers. Able to customise colour, add branding and create a smooth premium finish. The company's array of finishing options is perfect for increasing protection, matching the application or to create that smooth premium finished look.

With a history spanning across centuries, Gold and Wassall Hinges has seen and experienced many tribulations

We spoke to Scott about how the COVID-19 pandemic has affected the company; he told us that, "We worked all the way through.

We experienced some demand for hinges for the Nightingale hospitals, as well as a customer who is involved in the manufacture of food delivery vans. Although our sales obviously went down during the pandemic, we feel that we are making steady progress coming out the other side. We have managed to keep our workforce whole, with no redundancies."

After what many would describe as a tumultuous year, it is with great pride that Gold & Wassall Hinges receives our award for its hard work and dedication this year during these unprecedented times. We asked Scott about how the company



Gold and Wassall Hinges provides a full turnkey comprehensive design and manufacturing service, offering a wide range of hinges including: piano hinges, butt and backflap hinges, standard, heavy duty and bespoke made to order hinges. With an extensive range of stock on offer, Gold and Wassall Hinges is equipped to meet any hinge requirements and all of its stock is available for immediate dispatch.

"All our hinges are UK made; we are the only hinge company in the UK which can offer this. We offer a bespoke design and manufacture service, which means we can create virtually any hinge from a simple idea." Added Scott.



One of the main focuses of Gold and Wassall Hinges is to provide first class customer service. Ensuring that from initial inquiry to delivery and aftercare,



feels upon receiving our award, he stated that, "It's an honour to be selected for this award, and it is a satisfying nod to everyone here at G&W for their efforts over the past 12 months. It's been challenging at times, but we are proud to say we worked all the way through, supporting many key sectors too."



Speaking of the company's future, Gold & Wassall Hinges as well as much of the world, is looking towards a brighter, more productive year as the world slowly moves away from the restrictions of COVID-19. "The short term future is all about continuing to pull away from the struggles of the pandemic, and ensuring steady growth back to pre-pandemic levels of production." Scott continued, "The long term goal for Gold & Wassall Hinges is to grow as much as we can within our current market share, and look towards growing our export relationships too."

Gold and Wassall Hinges plans to continue its dominating presence in the industry. Scott stated, "We plan to continue doing what we have been for so long - if it isn't broke, don't fix it!"

Contact  
T 01827 63391  
[www.goldwassallhinges.co.uk](http://www.goldwassallhinges.co.uk)



for the world and its industry since its fruition and has been able to maintain its production and dominate its industry. During the uncertainty for many industries during the ongoing COVID-19 Pandemic, many manufacturers saw a halt in production and in sales. Demonstrating its renowned manufacturing capabilities, Gold and Wassall Hinges maintained production and was approached for providing hinges for the Nightingale hospitals.



# Breaking the Contamination Chain

By using *Bactiscan™* from *EIT International*



## Instantaneous Bacteria Detection

*Bactiscan™* - The Prelude Partner to ATP Swab Tests



Visit [eit-international.com](http://eit-international.com) Today!



# 40 years of environmental engineering and contracting experience



vessels (which are mainly plastic lined with a GRP covering) and can also handle special commissions for the construction of one-off bespoke items.”

Plastic fabrication technology can offer a flexible, low-cost fabrication solution for many bespoke industrial process vessels. ERG (Plastic Fabrication) Ltd has fabricated vessels and units for end customers globally across a multitude of industrial process sectors including

In this issue of Best Practice, we have chosen to recommend ERG (Plastic Fabrication) Ltd for its high-quality custom plastic fabrication that is provided to the process industries.

The ERG Group has over 40 years’ experience in providing bespoke odour and air pollution control systems, and ancillary services around the world. The ERG Group functions through its three core divisions: ERG (Air Pollution Control) Ltd, ERG APC Maintenance Ltd, and ERG (Plastic Fabrication) Ltd.

ERG (Plastic Fabrication) Ltd specialises in the high-quality custom fabrication of process industry vessels and associated components from GRP and composite plastic materials. We spoke to Martin Bulman, who has worked in the plastic fabrication industry for 34 years. He began his career at ERG (Plastic Fabrication) on the production floor, and over the course of nine years has worked his way up to the position of General Manager and Director. “At ERG (Plastic Fabrication) Ltd we design, manufacture and supply scrubbers, tanks, pipework, ducting and also skid packages. We can fabricate a range of



water treatment, food processing, pharmaceuticals, waste handling, ventilation, energy generation, metal processing and refining applications, and many more. Sectional vessels, fume hoods, dosing pump cabinets, and chemical scrubbers are just some of the applications these industries can be supplied with.

ERG (Plastic Fabrication) Ltd has a vast arsenal of services to offer and specialises in manufacturing using a wide range of plastic materials including PVC, CPVC, Polypropylene, PVDF, and other speciality plastic for harsh environments such as ECTFE. “As the manufacturing division, our services combine with ERG APC Maintenance Ltd to provide an on-site aftersales servicing and maintenance service. This service enables us to maintain our products as well as other contracts including many water sites thereby ensuring any problems are rectified as quickly as possible with minimum disruption. We also have a regional headquarters based in Jordan, which deals with many projects across the Middle East for which we are often the source manufacturer,” said Martin.



Other additional services include project management, testing, trial assembly, reconditioning and repair, and emergency call-out for repairs and maintenance. The parent company ERG (Air Pollution Control) Ltd, contributes strong process and engineering design

of material through the factory via a fabrication shop, feeding into a GRP lamination shop, which then feeds into a final fitting out/trial assemble workshop,” explained Martin.

The past 12 months have been challenging for many businesses, however. Martin explained how the company plans to move forward. “I can only see the company improving. Even throughout COVID-19 restrictions, we were lucky enough to avoid the need to place any staff on furlough, and we had a constant flow of work coming through. Our customer enquiry levels have remained high, so the future is bright for ERG (Plastic Fabrication) Ltd.”



Of course, it’s always good business to foresee any potential threats or challenges the future may bring, and we asked Martin how the company will address these. “We have a great management team that stays abreast of the movements in the supply chain. Materials have had a longer lead-time and prices have increased over the last 18 months owing to supply disruption. Things seem to be improving and currently we have had no issues obtaining materials. As a company we are trying to minimise any price increases to maintain our competitive position in the current market.”

capabilities. By using ERG for the design and ERG (Plastic Fabrication) Ltd for the fabrication, clients can benefit from the in-house design, manufacture, installation and commissioning services available.

In the last 12 months, ERG (Plastic Fabrication) Ltd has relocated to a new four-acre site where it has invested in purpose-built factory and office buildings. “The move has enabled us to consolidate all our UK based functions onto one common site which significantly improves our working efficiency, production quality and production capacity. The plastic fabrication workshop now benefits from a 60 m x 24 m workshop with overhead gantry cranes. This has enabled us to build larger diameter vessels more efficiently, and greatly improves production with a linear workflow

For more information, see below.

T 01403 290000  
[info@ergapc.co.uk](mailto:info@ergapc.co.uk)  
[www.ergapc.co.uk](http://www.ergapc.co.uk)





# Your solution for stainless steel fasteners and precision turned parts

Precision Technology Supplies Ltd is one of Europe's leading importers and distributors of Stainless Steel fasteners and precision turned parts. The company is a stockist and distributor of Metric and Unified Stainless Steel fasteners and is a specialist stockist of stainless steel Micro screws and fasteners.

Precision Technology Supplies Ltd was established in 1988 and has expanded significantly since its inception, offering its customers the widest range of industrial Stainless Steel fasteners and precision turned parts. Now regarded as one of the leading suppliers in both the UK and Europe, the company delivers on a global scale, offering same day shipping from stock.

"We supply to customers in a wide variety of different industry sectors and in over 90 countries all over the world. We offer the widest range of products in our field. Our quality is renowned along with our services and customer support," stated Andy Knight, Sales Director.

With a vast range of stock, Precision Technology Supplies Ltd is a one-stop-shop for stainless steel fastenings and precision turned parts, and delivers

market knowledge and outstanding customer service. This ethos is echoed throughout the company's operations, from its supply chain partners and manufacturers to logistics and information technology; everything is carefully and meticulously chosen to uphold the company's stance on quality.

The company is dedicated to customer satisfaction, and invests in people and technology, to create a superior level of customer service. In addition, to ensure that its customers needs are constantly met, Precision Technology Supplies Ltd is always self-evaluating and adding to its product range and offering for its customers.

Another area of note is Precision Technology Supplies Ltd.'s services which includes inventory management, plating, pathlocking and screw modification.

Precision Technology Supplies Ltd holds 30 years of experience in managing customer production lines on-site to ensure 'just-in-time' delivery. The company offers a selection of variations for Direct Line Feed management, which can be tailored to suit individual needs.



that does not affect any dimensional tolerances, the company also provides a variety of other finishes such as Gold, Nickel, Silver and Zinc (Rohs Compliant).

Regarding its screw modification services, Precision Technology Supplies Ltd is able to offer a modification service for its customers, from 1.6mm diameter to customer drawings and precise specifications. This can often provide a far more cost effective and efficient solution than manufacturing, especially where smaller quantities are required.

As for the company's future plans, Precision Technology Supplies Ltd.'s main aim is to continue building upon its solid foundation of quality and its reputation of providing excellent services, at competitive prices. The company will also be looking to expand both its premises and increase its staffing level to accommodate its growing demand.

In closing, Andy stated, "The best way to see how good we are, is to try us!"

For any more information, please see below.

T +44 (0)1342 410758  
[www.pts-uk.com](http://www.pts-uk.com)



a fast, reliable and efficient service. In 2015, the company acquired the Bumax range of High Strength Stainless Fasteners and is now more equipped than ever to fulfil its customers needs. Furthermore, its products can be either manufactured or modified and supplied to customers, to their exact requirements.

One of the main focuses for the company, and one that Precision Technology Supplies Ltd places the utmost importance on, is its reputation for quality. Precision Technology Supplies Ltd understands the importance of ensuring that quality runs throughout its entire business and not just its products. Through this ethos, the company has continually invested in its people, to ensure it employs the right people, to provide superior





# The complete range of perfect temperature control



monitoring, performance and ease of use. Most importantly robustness and extremely high levels of reliability are also critical to most of our customers in light of the application demands and longevity of a typical test duration, which in some cases can span over several years for a single test sequence without stopping," stated Paul King, Managing Director.

Paul explained some recent developments for the company: "We have a highly skilled team both in sales and service with over 50 years of experience



between us giving us a thorough understanding of customer application needs and solutions, enabling us to find the very best match for the application at hand. With this in mind, we have worked hard towards developing The LAUDA Cloud, which is new for 2022. It provides an enhanced platform for remote diagnostics, enabling a faster resolution to any issues that do occur."

The Integral product line has proven itself in a wide variety of industries and applications for over 20 years. LAUDA Integral is the new range of Integral process thermostats that involves a more innovative, modern process with a number of new functions. Designed for maximum connectivity and ready for LAUDA LIVE, it offers a flexible and secure communication and data exchange via the Command Touch control or users can simply integrate Integral process

Specialising in the pre and post sales for applications requiring precise heating and cooling solutions ranging from -150 to +550°C, LAUDA Technology Limited is a trusted company based in Stamford and is the UK & Ireland subsidiary for the parent company LAUDA that is widely recognised across 15 locations worldwide for its innovation in bringing the very latest technology to a vast range of sectors.

Established in 2012 by the parent company LAUDA DR. R Wobser GMBH & CO. KG, its main role is to provide a



high level of sales and service support to the numerous industry segments requiring precise temperature control for their process or research project. Temperature control spans across a wide range of industries, and the main sectors to which involve some of LAUDA Technology Limited's key customers include automotive, aerospace, chemical, biotech, pharmaceutical, physical sciences, energy, food & beverage, and digital printing.

However, its services are not limited to only these sectors, for example, they can be applied to a research project in a laboratory that requires a small temperature-controlled bath, shaker or freezer, though to pilot plant processes and full-scale productions that require several hundred kW of heating or cooling. "LAUDA products are designed to bring the very latest technology possible to the customer, with regards to connectivity,

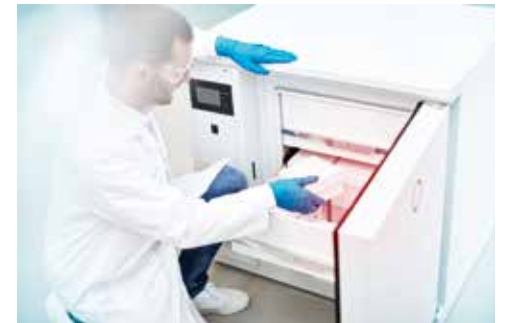


thermostats into their company network and access them via app or web browser. Just some of the benefits of LAUDA LIVE include faster service, lower costs, efficient system use and fast reaction in the event of malfunction, higher reliability and availability, continuous performance updates, secure storage, and location-dependent control.

The reputable business also boasts an enhanced platform of energy-efficient temperature-controlled solutions for industrial systems and machines. Industrial application areas for process circulation chillers are usually used to dissipate heat from different systems during continuous operation. In the best-case scenario, they can save half the energy required and make considerable cost savings.

Typical application areas for process circulation chillers include the printing industry, metal processing, laser technology and UV exposure. Any investment in a system with demanding cooling requirements and high temperature fluctuations pays off more quickly. The new LAUDA Ultracool process circulation chillers were developed with a focus on energy efficiency. Paul

commented: "Our latest range of water chillers are designed with improved efficiency providing tangible energy savings to the user, whilst complying fully with the Ecodesign Directive."



We asked Paul what the company's future plans are, he responded, "We have an ambitious plan for growth and innovation over the next five years with many new products and capabilities driven by changing customer requirements, supported by application specialists and a healthy plan for employee growth and development."

For more information, see below.

T 01780 243118  
[info@lauda-technology.co.uk](mailto:info@lauda-technology.co.uk)  
[www.lauda-technology.co.uk](http://www.lauda-technology.co.uk)





# Bradshaw EV release two industry leading electric vehicles

At Best Practice, we take pride in showcasing the very best services provided by companies that provide a wealth of benefits for their industry. As such, in this issue we are proud to announce that we have selected Bradshaw Electric Vehicles as the recipient of our Commitment to Excellence Award.

Established in 1976, Bradshaw Electric Vehicles (Bradshaw) have been manufacturing and distributing electric vehicles, producing some of the safest, most robust and versatile products. As the UK's largest manufacturer of electric vehicles for industry, Bradshaw specialises in delivering electric transport solutions that help reduce costs and improve efficiency.

"Our range includes electric road vehicles, utility vehicles, people carriers, tow tractors, load carriers, walkalong tugs and bin trailers which are



supplied to companies for a variety of applications including, waste movement, manufacturing and line feed, logistics and distribution, hospitals, railways and airports. If a client has the need to transport goods, then we can supply a tailor-made vehicle to suit their requirements," stated Ramsy Labassi, Marketing Manager.

A note-worthy addition within their range is their third generation T800, the leading four-wheel, 8-tonne tow tractor on the market. Providing an endless number of capabilities, the T800 is very popular and used for baggage towing in airports and many other applications. Some T800 product features include electronic steering, enhanced suspension, a new front axle, larger wheels, new brakes, and a redesigned cab.

Ramsy commented: "We have replaced hydraulic steering with electronic power steering, the leaf spring suspension has been re-configured, and we have also added a few aesthetic changes such as a soft-touch panel and instruments on the inside of the vehicle. It comes with a range of cab options and is the most robust, reliable and durable machine we have built that uses a low maintenance AC traction motor for more power whilst reducing costs and downtime."

In other news, The Goupil G6, a 100% electrical utility vehicle is now available

in the UK. The new addition expands the Goupil family, making the G6 a credible, environmental and economical solution for the sub-3,500kg market. The Goupil G6 boasts generous payloads and volume, a novel design that incorporates unprecedented body mounting options, and an unrivalled unique cab and driving position that is the best on the market for ergonomics and comfort.

"The Goupil G6 will be an instrumental part of our growth in 2022 and will have more options added in the year. We are also excited to release the PT2500, which is a fully electric, remote-controlled pedestrian-operated tow tractor designed for moving articulated lorry trailers up to 25 tonnes. It's an ideal partner for manufacturing and



distribution applications or anyone working in logistics and distribution," said Ramsy.

Bradshaw's vast customer base has expanded immensely over the years by the increasing investment, innovation and commitment given to producing



a strong product portfolio and a trustworthy service.

Ramsy commented: "We offer a first-class service, aiming to match the right vehicles to the right job. We are the authorised dealer for Club Car and offer many other services such as leasing or hire of our vehicles. We strive to deliver the best after-sales service possible from quickly dispatching spare parts to offering on-going maintenance contracts to keep customers vehicles running smoothly."

T 01780 782621  
[www.bradshawev.com](http://www.bradshawev.com)

**NEW PT2500**      **REMOTE CONTROLLED  
ARTICULATED TRAILER MOVER**

**TOW 25-TONNE LOADS AT THE TOUCH OF YOUR FINGER TIPS**

[WWW.BRADSHAWEV.COM/PT2500](http://WWW.BRADSHAWEV.COM/PT2500)  
[ENQUIRIES@BRADSHAWEV.COM](mailto:ENQUIRIES@BRADSHAWEV.COM)

**BRADSHAW**  
ELECTRIC • VEHICLES



# New report uncovers the hidden cost of workplace accidents

Organisations may be unwittingly paying the price for poor health and safety practices in the workplace, a new report suggests. While accidents that cause injuries, absences, compensation claims and fines are known to be costly, employers aren't always aware that a poor safety culture can also impact staff morale, productivity and turnover – and ultimately their bottom line.

Seton, a health and safety solutions provider, has published a new report highlighting the benefits of prioritising employee safety, with insights from experts in personal injury law and HR.

Across the UK, almost 700,000 people suffered a non-fatal

workplace injury in 2019/20, while 142 were killed in 2020/21, according to the HSE (Health and Safety Executive). This is clearly devastating for workers and their families but it also comes at a cost £5.6billion per year to individuals, employers and the government – or around £1.7million per fatal injury and £8,800 per non-fatal injury.

However, Alex Hinton, a product innovation manager at Seton, believes this is just the tip of the iceberg.

“All employers have a legal obligation to protect their staff from harm but it's more than a tick-box exercise,” he said. “Employees who understand and consistently follow best practice are more likely to perform well and take fewer risks.

Similarly, someone who is engaged with company life is more inclined to follow health and safety rules, which is why we'd urge health and safety teams to work closely with their HR teams to communicate relevant messages.”



You can read the full free report [Worth the Risk? Counting the cost of health and safety breaches at www.seton.co.uk/safety-culture-form.html](http://www.seton.co.uk/safety-culture-form.html)

## Pawā® Gloves

Exclusive to  
**SUPERTOUCH®**

Under the strain of working life, Pawā® Gloves are here to take on more day after day. In environments where safety is critical, these gloves are made to withstand everything that comes their way. The range is feature-heavy, meaning that there's a glove suitable for the task at hand.

Over recent years, updates to production line machinery have meant that touchscreen devices are now commonplace in work environments. As a result, workers now require gloves that can offer protection and touchscreen compatibility - enabling them to operate the necessary equipment on-site.

Pawā® offers durable gloves that are capable of being used with multi-touch displays, namely the Pawā® PG310 & Pawā® PG535. In addition to being touchscreen compatible, the PG310 offers certified EN ISO cut-level C protection and a sandy nitrile palm coating that offers excellent grip, making it ideal for manufacturing tasks.

The Pawā® PG535 provides users with excellent EN ISO cut-level D protection. This tough glove features a reinforced thumb crotch for additional durability and is ideal for modern production lines thanks to its touchscreen compatible PU coating.

Why not feel the Pawā® for yourself? Visit our website and request a sample today!

[www.pawaworkwear.com/request-a-sample](http://www.pawaworkwear.com/request-a-sample)

# Ultimate comfort. Ultimate durability.

EN ISO Cut Level **C**



360° Breathability



Grippy Sandy Nitrile Coating



Touchscreen Capable



Reinforced Thumb Crotch



Pawā® PG310

Durability should never inconvenience the wearer. Featuring a highly breathable, cut-resistant liner that remains comfortable over prolonged use, the Pawā® PG310 is ideal for sharp-handling tasks. In addition to this, the PG310 is touch screen compatible - enabling safe use of devices on-site.

The Pawā® PG310 features

**PawāLIFE™**

Designed for durability against heavy duty activity and repetitive forces to prolong glove life - optimising lifetime cost.



Pawā® PG111



Pawā® PG330



Pawā® PG535



Pawā® PG550

0121 516 9934  
[pawaworkwear.com/request-a-sample](http://pawaworkwear.com/request-a-sample)  
#feelthepawa

Exclusive to  
**SUPERTOUCH®**



# Protect your brand with Cupio Services

In this issue of Best Practice, we are proud to announce that we have chosen to recommend Cupio for its innovative inspection, production and test solutions.

In 2004, Cupio was established with the intention of bringing test and production systems, sourced in the USA and Far East to the UK market. By drawing on over 40 years of experience in the test and inspection area, Cupio was able to attract some of the world's best inspection systems to its marketing strategy and Cupio began selling production inspection systems into the rest of the EMEA area through a chain of local representatives.

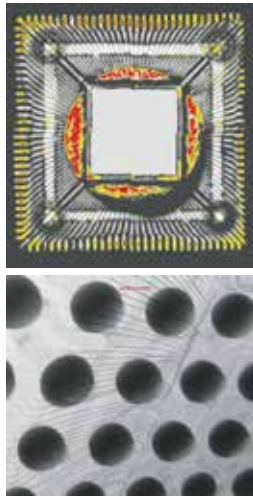
Specialising in the inspection and quality control aspects of electronics manufacturing Cupio took on the representation of more tools with X-Ray and acoustic inspection capabilities. These were mostly for representation in the UK, particularly as Brexit restricted the ability to support customers in the EU.

Cupio's inspection, measurement and test solutions have been specifically designed to meet

one single objective: to give electronics manufacturers fast access to significantly improved productivity, quality and profitability.

Originally based in Alton, Hampshire, Cupio has seen significant growth and moved to a larger premises located in Chineham Business Park, Basingstoke in 2019. Its purpose-built demonstration facility is much bigger and is the base for its highly knowledgeable and experienced workforce, who work with some of the world's best X-Ray, test and AOI systems. The facility is fitted with the necessary antistatic flooring and facilities and houses the company's CSAM system. This facility gives the company the capability to offer a full inspection and failure analysis service to customers who have insufficient throughput to warrant system investment.

Cupio Services is a branch of Cupio and is the place for failure analysis and non-destructive inspection. Its innovative, specialist equipment is of the highest quality and is used to provide specialist equipment for failure analysis, counterfeit detection and other types of testing and analysis work. Its cutting-edge inspection and test equipment includes high resolution X-Ray with multiple CT imaging options, scanning acoustic microscopes for delamination detection within boards or complex devices, high magnification automated optical inspection and testers for counterfeit part detection. Its capabilities can find the smallest defects within



an assembly and image them with sub-micron resolution. Full failure analysis reports can be provided to help understand where and how issues are occurring or to simply assure the customers their equipment will stand the test of time. Its Non-Destructive Testing uses a multitude of advanced diagnostics on materials such as plastics, metals, ceramics, or electronics. Whether the need to diagnose production or in field failures, validate complex manufacturing procedures or perfect new product introductions, Cupio Services can help. Furthermore, demonstrations on its X-Ray, AOI and test systems are offered to all customers who are interested in how the systems operate or wish to acquire one of their own.

We asked Andrew how Cupio has fared through COVID-19, he responded, "Despite the slowdown from COVID-19, we started to pick up new customers for the analysis service throughout 2020 and, as it often happens, we found new areas of the industry interested in what we had to offer. As of 2021, we now offer a complete inspection service with high resolution X-Ray with CT and CSAM inspection and electronic test. This service is complementing of our system and offering very well and is enabling us to offer turnkey inspection systems capable of automated analysis of parts in the X-Ray systems. As a business, we weren't particularly affected by COVID-19 except in our

ability to travel and the delay in people being able to travel to see us."

Through initiating a new style of approach, and various marketing activities, Cupio has been able to target new markets, while introducing three extra personnel to its team. Recently, the company has been actively promoting its services into the wider inspection market place where high resolution X-Ray and CSAM imagery is needed for both production and quality control. "We have modified our marketing slightly to account for the lack of shows and have done more print and online advertising. This seems to be a successful strategy and we will be reviewing that as the exhibitions return during next year," stated Andrew.

As the company looks ahead, in the future Cupio will continue to monitor market trends and developments within its industry as it plans to bring more inspection equipment into its lab enabling them to offer additional services.

If you would like to find out any further information, please see the details below:  
**T 01256 262800**  
[info@cupio.co.uk](mailto:info@cupio.co.uk)  
[www.cupio.co.uk](http://www.cupio.co.uk)  
[www.cupioservices.co.uk](http://www.cupioservices.co.uk)



**Cupio**  
SERVICES

## THE PLACE FOR Failure Analysis and In-depth Non-Destructive Inspection

**Cupio Services** brings knowledge and expertise gained through many years of working with some of the world's best X-Ray, test and AOI systems to our new facility in Chineham Business Park, Basingstoke.

Whether you need to diagnose production or in field failures, validate complex manufacturing procedures or perfect new product introductions, we're here to help.

We have a variety of cutting-edge inspection and test equipment on hand, including functional testers and counterfeit part detection, high resolution x-ray with multiple CT imaging options, and acoustic microscopes for delamination detection within boards or complex devices.

We have the capability to find the smallest defects within your samples and image them with sub-micron resolution. Full failure analysis reports can be provided to help you understand where and how issues are occurring.



**Cupio  
BP22**



**Cupio Services Ltd** ☎ +44 (0) 1256 262800 ✉ [info@cupioservices.co.uk](mailto:info@cupioservices.co.uk) 🌐 [www.cupioservices.co.uk](http://www.cupioservices.co.uk)  
 Beechwood, Chineham Business Park, Basingstoke, Hampshire, RG24 8WA



# UNISIG DEEP HOLE DRILLING SYSTEMS: PERFECTION IS NEVER AN ACCIDENT

UNISIG produces deep hole drilling machines that are used around the world by nearly every industry imaginable – and at UNISIG, striving for perfection has never been an accident. To secure long-term success, the company decided to further invest in machining its own precision parts rather than subcontracting components, as some of the most critical parts they produced have tolerances and complexity that cannot be made by most machine shops.



MCR-A5CII 35x10 double column machine for the exacting geometry and overall volumetric accuracy needed.

The collective Okuma team ensured the MCR-A5CII machine tool specifications were defined and perfect for UNISIG's application. A quick-change fixture system was developed by UNISIG to allow two parts up to 3 m (10 ft) long to be machined simultaneously and removed for setup offline. The results after installation were very impressive, allowing lights-out automatic machining of parts previously not possible for UNISIG to manufacture.



leveraging their internal team's knowledge, the MB-10000H horizontal machining centre from Okuma was selected for medium-sized, high-accuracy part machining.

One of the most important factors in this capital investment was the need to trust the machine accuracy enough to program from its centre of rotation and let the machine run without stopping and manually verifying the machining process many times during the cycle. The Okuma MB-10000H installation was a success and reinforced UNISIG's wisdom to focus on automated machining – and the benefits were so extraordinary that UNISIG continued to look to additional Okuma solutions to bring its strategic vision to life.

With two machines from Okuma running and performing to expectations, one more opportunity identified for upgrade resulted in the new MA-12500 machine. The OSP Control common to these three Okuma machines was a big value to the programming and simulation group at UNISIG. "This baseline trust in Okuma is what allows UNISIG to excel at advanced manufacturing," said Mr. Fetting.

To machine their own parts while continuing to grow and develop new products, UNISIG embarked on a new approach to machining which would allow for industry-leading CNC machine tool accuracy and performance to be coupled with new technology that would ultimately eliminate manual intervention in machining that prevails in many shops.

programmers, and machinists. To harness this new direction, UNISIG put in the time and energy to secure the best manufacturing resources available, including several Okuma machine tools.

To begin, UNISIG devised a plan to combine modular fixturing, offline tool setup, and full simulation of the machine, workpiece, and tools to provide a platform of innovation within their machine shop. The team's intent was to radically improve spindle uptime and exploit the full potential of automated CNC machining, even when the batch size would be only one part.

The first step of the UNISIG strategy was to move away from classic CNC boring mills and adopt the higher productivity potential of CNC horizontal machining centres with twin pallets. After consulting with credible industry sources and

"The deliberate connection between engineering, design, and machining improves our product. Our ability to rely on very high accuracy and productivity from our internal machining capacity allows UNISIG to provide more advanced solutions and value to its customers," quoted Anthony Fetting, CEO of UNISIG.

Automated machining was the goal, which required a change in thinking by the team's engineers,

UNISIG's next target was large-part machining. Previously, to hold

In addition to offline tool presetting and modular workholding on all machines, UNISIG uses a variety of Okuma's Partners in THINC suppliers including: Mastercam, Vericut® and Renishaw. Using a layered approach to technology and understanding the benefits of eliminating the gaps between



the finished machine tolerances, extensive hand scraping was necessary which added a lot of time and expense to produce these machines. UNISIG established a set of machining accuracy parameters that would eliminate much of this handwork to achieve tolerances.

engineering, design, and manufacturing, UNISIG has differentiated itself as a machine tool builder. The company's long history of achievement is one Okuma and Morris Midwest are proud to be a part of – especially in helping UNISIG achieve their goal of capitalising on the full potential of automated machining.

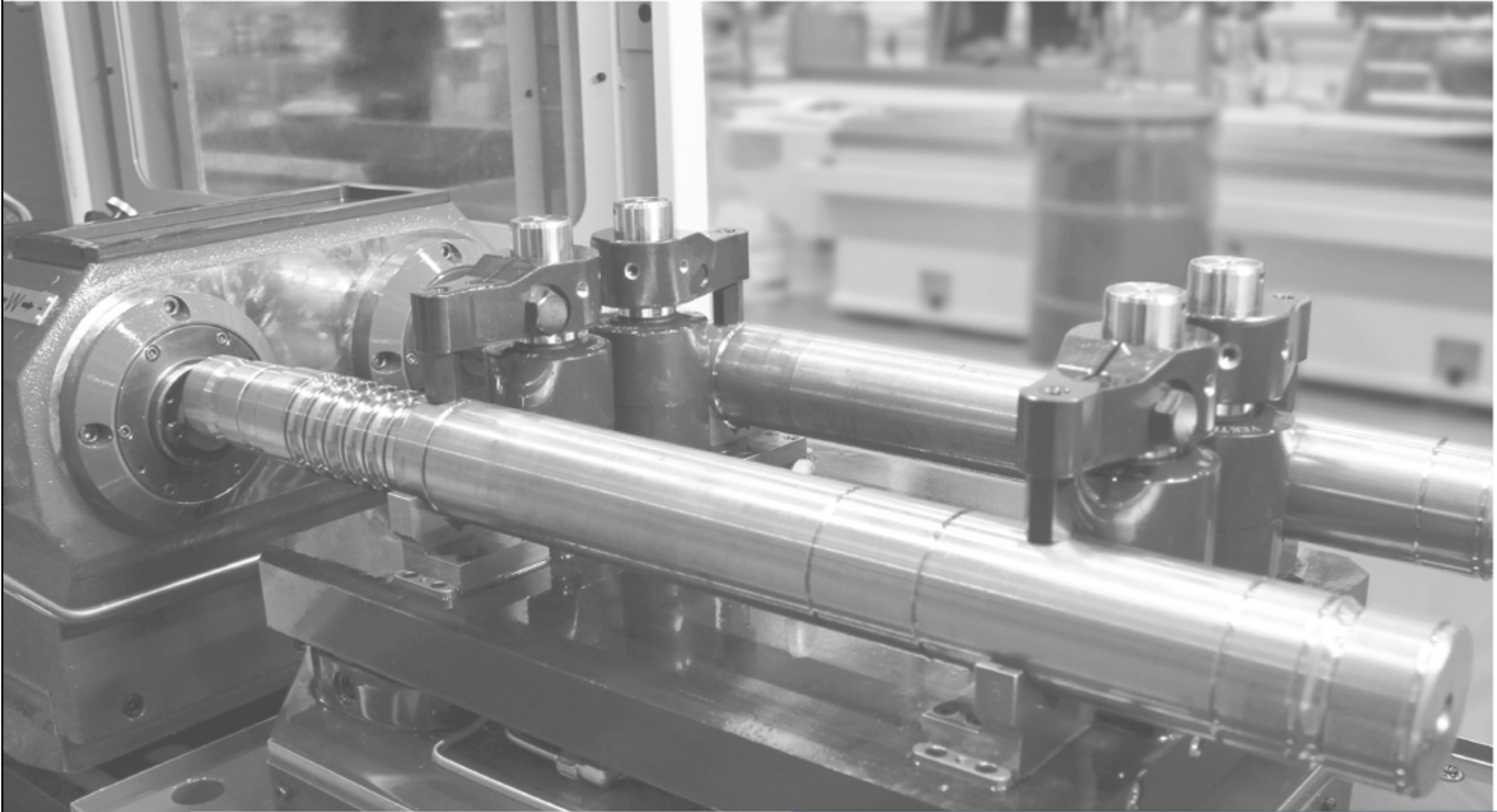
Working directly with the local distributor, Morris Midwest, UNISIG was able to engage with Okuma America and Okuma Corporation's technical leadership to tailor the specification of an Okuma

For more information, see below.

T +49 7125 9687590  
www.unisig.com







**UNISIG**

**UNISIG TAKES YOUR  
GUNDRILLING  
PRODUCTION FURTHER**

**Gundrilling and BTA deep hole drilling  
for highly productive shops.**

Whether your shop needs on-center or off-center holes, specialized job shop work or fully automated production, UNISIG has a deep hole drilling solution with the accuracy and performance you need.

Take your shop's production further - learn more at UNISIG.COM.



**Machines • Tools • Automation**

*UNISIG machines, engineered and manufactured in the USA*





# Drilling deep to success

UNISIG is the world's leading supplier of the complete deep hole drilling system, offering machines, tools and automation systems whilst working closely with each and every customer to ensure that their drilling project requirements are met. A complete dedication to support and customer satisfaction helps stand UNISIG out as the number one supplier worldwide.

Founded in 1981 by Swiss Industrial Group (SIG) and the US company United Technical, UNISIG provided deep hole drilling equipment technologies to the US market.

A company called Entrust (established in 1973 by John Korosec) acquired the UNISIG brand in 1995 as a product division of Entrust and this coupling helped UNISIG redefine performance expectations in the deep hole drilling market, worldwide. Ever since this merger, UNISIG has dominated the market with its industry leading technologies and continues to radically reduce lead times on projects through its innovations and expertise. I had chance to interview Philipp Steimle, Managing Director of UNISIG's European Sales branch to find out more about the company.

"UNISIG deep hole drilling systems consists of machines, durable tooling and automation, and are designed to meet the highest performance standards possible. Products are engineered and manufactured in the USA using metric hardware, and include the integration of premium components such as FAC, INA, Parker, Rexroth, Rohm, Schunk, SKF, Wittenstein Alpha and ZF. Products are designed following all applicable ISO, DIN and IEC standard, and are exported worldwide."



UNISIG supplies their products and services to a wide variety of clientele including automotive, defence, oil and gas, energy, aerospace and medical companies to name a few, but any sector that needs deep hole drilling will benefit from what UNISIG offers.

"UNISIG deep hole drilling machines are proven with industry leading manufacturers in all regions of the world. UNISIG is chosen for its ability to consistently meet vital demands of tolerance. UNISIG stands out among industry players for its skills in handling large, complex projects including multiple machines and

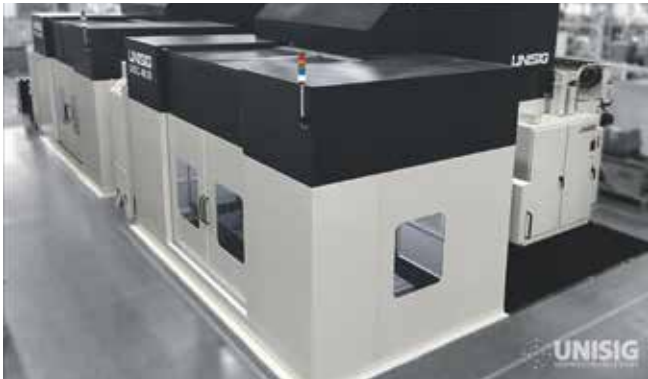
automation, process development and tooling testing, as well as custom engineering and turn-key projects."

UNISIG's latest line of machines, aimed at the mould industry, follow UNISIG's usual trend of creating solutions that are refined and efficient. Mould manufacturers are faced with the challenge of handling large workpieces that require deep hole drilling as well as machining with maximum precision. UNISIG's mould drilling and milling machines are specifically designed with market input to combine operations, reducing setup time and effort, increasing accuracy, and eliminating design restrictions of traditional machining centres.

"We are currently releasing a whole new line of machines targeted to the mould industry, models USC1, USC2, USC3 that can finish mould production in maximum 2 setups which cuts down production time dramatically while being extremely cost-effective."

If you would like to find out more regarding the deep hole drilling machinery, other products and services UNISIG offers follow the link below for their website, or alternatively speak to them directly regarding your requirements and UNISIG's professional and friendly team will support you every step of the way.

Contact  
T +49 (0)7125 9687590  
info@unisig.de  
www.unisig.com



## Medical Shops achieve surgical precision with Deep Hole Drilling Automation

Medically speaking, cutting people open is dangerous. Today, physicians get around this problem by using modern surgical instruments to perform minimally invasive procedures, which make major operations into simple outpatient appointments. But to accomplish these feats of surgical science, manufacturers in the medical industry have to drill small-diameter holes through the entire length of slightly larger instruments. Thin part walls, intricate features, high surface quality and concentricity requirements, and extreme depth-to-diameter (D:d) ratios make these parts a challenge in production.

A typical laparoscopic surgical instrument is designed to direct tools, cameras and other devices into the body through the instrument using a guide wire. And to ensure smooth, reliable and accurate performance during procedures, highly precise hole concentricity is required at D:d depth ratios well above 100:1, a challenge even for dedicated deep hole drilling equipment.

With these challenges, it's no surprise that many manufacturers try to skip the deep hole drilling process altogether by farming out the work, but going to outside suppliers brings its own problems. Pre-drilled blanks might solve the deep hole drilling problem, but they have to be fed into the machine one by one, defeating the whole purpose of using automation-ready Swiss-style machines. Meanwhile, cannulated bar stock allows shops to continue using their bar feeders, but it's very expensive - and the hole quality and O.D./I.D.



concentricity rarely meet the needs of medical manufacturers anyway.

To overcome these challenges, medical manufacturers are turning to dedicated deep hole drilling equipment to finish instruments started on the Swiss-style machines. With an experienced gundrill operator, careful setup and a bit of finesse, the hole quality can be excellent, and it allows the Swiss-style machines to remain fully automated. The only remaining problem is part handling and transfer, which introduces significant risks when the accuracy requirements are so high, and if the part has to be flipped to drill a stepped bore, that introduces more setup operations and more risk of human error.

What medical manufacturers need is a truly end-to-end automated process that allows for

an efficient single-piece workflow for surgical instruments - and some deep hole drilling OEMs, such as UNISIG, have engineered all the technology required to meet this goal. The result is a complete system that offers easily automatable, on-demand deep hole drilling processes for the most demanding surgical instrument applications: the UNE6-2i.

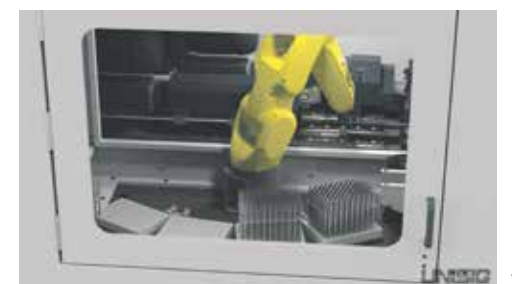
As a twin-spindle machine with two independent drilling axes, the UNE6-2i inherently has the capabilities manufacturers expect from a high-performance deep hole drilling machine. Counter-rotation, specialized workholding and superior alignment and precision allow shops to confidently hold concentricity tolerances and minimize mismatches, even at the extreme D:d ratios common in the medical industry. In addition, the UNISIG Smart Control Interface simplifies

operation, while an innovative flow-based coolant system automatically reacts to pressure changes for effective chip evacuation and high process security.

What allows the UNE6-2i to truly shine as a part of the surgical instrument production process, however, is the in-machine automation. After the front spindle drills the first hole, a robot takes it out of the spindle, puts the hole onto the second spindle, and loads another fresh blank into the first spindle. The robot's perfect repeatability ensures the highest hole quality - and the only human labor required for the process is loading bar stock into the Swiss-style machines, preparing the blanks for the UNE6-2i's robot, and sending the finished parts on for post-processing.

The UNE6-2i's capabilities also give manufacturers significant production flexibility. Two holes with two different diameters could be simultaneously drilled in a single part, or two parts could be in-process simultaneously to allow operators or robots to load and unload the machine without stopping. Alternately, this twin-spindle configuration can be used to drill halfway through a part from one end with the first spindle and allow the second spindle to finish the hole from the opposite end.

Further information on all machines of the UNE series and the complete UNISIG machine program is available at: [www.unisig.de](http://www.unisig.de) or follow the company on LinkedIn and Twitter (@UNISIG).



Photos: UNISIG



# Impact sucks your waste away. Automated waste packaging removal solution

With each passing year, the volume of waste plastic film, bags, cling pallet wrap, paper, and other flexible packaging materials, used by large ecommerce companies, fulfilment groups, supermarkets, mega warehouses, and distribution facilities, continues to rise. As consumer habits move away from the high street and towards online shopping and returns, this is only going to continue and contribute to a huge logistical challenge to manage unwanted flexible materials. In-house waste disposal is becoming increasingly important and more reliable

Think vacuum cleaner, just on a much larger scale and integrated into the building's structure. Waste is collected from the source of generation, transported through a ductwork system at a high level, freeing up valuable floor space. A fan provides the suction, moving material at high speeds to a central recycling area for compacting or baling.

Systems can be designed to collect material from multiple workstations simultaneously and transport it long distances to a

convenient point, even move the waste to the outside of the building. Each system can be built bespoke to each packing/unpacking scenario depending on the number of workstations, material quantity and space within the facility.

Impact Air Systems works within a wide range of industry sectors, providing air-based technologies to improve productivity, increase recycling rates, reduce manpower, and save money, all whilst fulfilling environmental responsibilities.



and effective solutions for removing, transporting, and recycling waste, are essential.

In many instances, the simple waste bin or cage is still widely used in these facilities to allow operators to dispose of unwanted mixed packaging during their daily duty. These are then manually moved to central waste collection points or compactors.

Impact Air System's solutions for large ecommerce and fulfilment giants are engineered to allow the operators to hand feed unwanted flexible material such as adhesive tape backing, garment bags, pallet wrapping, tissue paper or other similar waste products directly into a dedicated local suction point, located near the workstation.

No more bins clogging up the work area or wasted time walking to and from central compactors or waste cages. No more slip or trip hazards when waste collects on the floor, significantly reducing labour costs and time. There is also the added benefit of better recycling rates of this material if sorted at the source and bulk compacted or baled, resulting in a significant reduction in handling and transportation costs and treatment fees at the waste site.



SHIP AT YOUR OWN RISK    SHIP AT YOUR OWN RISK



CRATES BY DESIGN

Did you know that a damaged product can cost your business up to 17 times more than the original cost of shipping it?



This is extremely costly - and the impact goes beyond just financial loss.

Damaged items can mean discounting the product or refunding your customer completely. But more than that, it can often result in loss of repeat business.

With over 40 years experience, packaging expert 5 Star Cases has created a new range of packing crates that provide a versatile method of storing and transporting a vast range of products that have uses across multiple industries and applications, from engineering and motor racing, to medical and catering equipment.

In fact, with an optional foam lining for additional equipment protection, 5 Star crates can be used to transport almost anything, anywhere, safely and securely.

Why let goods 'travel at their own risk' when they can travel 5 Star?

Speak to the 5 Star team!  
[sales@5star-cases.com](mailto:sales@5star-cases.com)  
 01945 427000  
[5star-cases.com/crates-by-design/](http://5star-cases.com/crates-by-design/)

SHIP AT YOUR OWN RISK    SHIP AT YOUR OWN RISK



# Swivel Joints Resolve Pipework Problems

Rotaflow solve, and resolve, engineering problems where fluids need to be transferred across rotating interfaces, without leakage. We are specialists in Swivel Joint manufacture. Rotaflow have produced Swivel Joints for many applications within most areas of engineering and all over the world: From Brewery, Dairy, Food & Drink, Process & Plant, Drilling & Mining, Oil, Gas and Subsea, Nuclear and Chemical.

Through design and in-house manufacture our swivels can allow one or more different flows through a single unit, enabling the pipework to rotate 360 degrees whilst carrying fluids (including hydraulic and pneumatic) of different pressures without cross-contamination or leakage.

Some applications require articulated pipe work or hoses to allow fluids, such as Hydraulic Power, Air (pneumatic) control lines, or mixed process fluids to be used on moving machinery. Swivel joints

will allow the movement on a slowly rotating drum or remove the damaging effect of twisting on hoses. By fitting a Swivel Joint you reduce the torsion in a hose/pipe so it can move more freely thus extending its life.

There are many different forms of Swivel Joint... from very straight forward designs of our F and FS series, Compact swivels or Heavy Duty to Articulated Pipework configurations, Floating Suction Arms, Jacketed, High-pressure. A Swivel Joint reduces costs by reducing the risk of leakage with its associated downtime. And by fitting a quality designed swivel you are improving your production capacity.

We are specialists in taking your bespoke requirements and being able to design a solution that can fit your budget, dimensions, materials, FAT/witness testing; hygienic and pressurised environments. We regularly test to Hyperbaric, Seal Life and conduct

Temperature/Pressure/Load Cycle Testing. We are ISO 9001:2015 certified.

We have off-the-shelf solutions that are ready to go, or we can redesign and in-house manufacture to enable a quick turn-around with minimal fuss and maximum design experience. Rotaflow have built up a reputation for providing reliable and quality designed products that resolve your engineering needs and we are proud to say many customers request our services over and over again.

To find out more please visit our website and/or give us a call.  
T +44 (0)1663 735003  
sales@rotaflow.com  
www.rotaflow.com



**LeeSan** 1989-2019  
Marine • Welfare • Leisure

Only LeeSan truly specialise in toilets  
Toilets, Tanks, Hoses, Clips, Gauges, Fittings, Vent Filters and everything you need plus Advice & Guidance  
A Sanitation that brings peace of mind ...  
Supported by our Worldwide Spares Delivery Service

sales@leesan.com  
T: 01295 770000

## Fluid Carrying Flexibility Swivel Joints

- Articulated Pipework
- Torsion In Hoses
- Rotating Cylinders

- Swivel joints allow pipework to rotate whilst carrying fluid under pressure 1/4" to 40" and beyond.
- Vacuum to over 20,000psi.
- Stock and bespoke production.
- Unique bearing/seal design for longer life.
- ISO 9001 CE marked where applicable.

**Rotaflow**  
the swivel joint specialists

Tel: +44(0)1663 735003  
E-mail: sales@rotaflow.com  
www.rotaflow.com

Rotaflow FV Limited | Rotec House  
Bingswood Trading Estate  
Whaley Bridge | High Peak | SK23 7LY | UK

## Anua Clean Air International sees new growth and developments



Anua Clean Air International manufactures and installs Mónafil, Mónashell, CrumRubber and Mónasorb - Carbon Filter Units, biofiltration systems which have gained a reputation as a reliable, proven system for the treatment of municipal and industrial odour and VOC air emissions.

We caught up with Ian Phillips, Director, about the latest developments for the company, he stated that, "We have had very positive developments over the past two years with new patents for our Dual Stage Monashell and our New CrumRubber process. This technology uses recovered waste tyres and a high performing catalytic Biotrickling process suitable for high H2S on air and biogas. Patents have been awarded in the UK, Europe, the US and China and the technologies tick the boxes for best in class performance in terms of removing pollutants, using minimum energy and water usage, no chemical usage and reuse of recovered material - a 'Hat Trick' for carbon footprint, the environment and life cycle cost. These offerings have global reach and we are very excited about this. We have reference plants in the UK, Europe, the US and China and we are well advanced, with developing worldwide Sales Channels with our Italian Partners Air Clean SRL."

Anua Clean Air International has been working with its Italian Partners Air Clean SRL, to offer the UK market its Patented Biological technologies, which offer the best in class performance at the lowest operating cost, coupled with benefits derived from reuse of recovered materials. In addition, Air Clean offered the full complement of Chemical Scrubbers, Carbon filters and Bag filters allowing Anua Clean Air International to be able to offer the full suite of Clean Air Technologies for low cold emissions.

Ian expanded, "Air Clean our Italian Sister Company has recently opened a US Office and we have licenced our technologies for the US to Air Clean. We have been awarded a number of new projects and are very excited about long term prospects."

After facing new challenges following the COVID-19 pandemic, Anua Clean Air International has recovered and is starting to see projects come back to life. Ian continued, "We are seeing big Environmental Infrastructure projects starting to move, particularly in International markets where our International partners have full order books, so overall prospects are very strong. Pricing in current environment is challenging but we are very optimistic about future growth prospects."

To find out more information, please see the details below:  
T +353 45 579 783  
www.anuacleanair.com

202DS H Filter  
Longopac Vac Bundle

the preparation group

Offer Includes:

- 1x 202DS Longopac Vacuum
- 1x Floor Wand
- 1x Floor Nozzle
- 1x Ducting
- 1x 50-50mm Connector
- 1x Rubber Cone
- 1x 5kVa Transformer
- 1x 110 volt 32amp Extension
- 1x H Class Filter
- 1x Pack of Longopacs
- 12x Rolls of Tape

SAVE OVER £499

NOW ONLY £1866.66 +VAT

INC FREE DELIVERY

GET IN WITH OUR EXPERT TEAMS TOUCH TODAY  
sales@ppcgroup.co.uk +44 (0)1522 561460  
& QUOTE VAC-214 TO ORDER

**ANUA Clean Air UK** Tel: +44 1450 420017  
www.anuacleanair.co.uk

### Leader in Odour Control and Biogas Cleaning Units

"Anua Clean Air UK offer proven, patented clean air bio-technologies, which provide best-in-class process performance with the lowest utility and life cycle costs"

Mónashell - Mónafil - CrumRubber - Mónasorb  
- Skid Mounted Odour Control Units -  
Media Replacements - OCU Health Checks



**mtc** | Training


## DEMYSTIFYING DIGITALISATION FOR MANUFACTURING SMEs

INTRODUCING OUR LATEST CERTIFICATE  
**THE PRACTICAL STEPS TO DIGITALISING YOUR  
MANUFACTURING BUSINESS**

**ALL 3 COURSES JUST £100 (+VAT)**



**TAKE YOUR FIRST STEP – START THE COURSE TODAY!**  
VISIT [THE-AMTC.CO.UK/DIGITALISINGYOURBUSINESS](https://www.the-amtc.co.uk/digitalisingyourbusiness)  
TO GET STARTED.

 MTC Training and Development

 @\_MTCTraining



# Tio Fire Safety Delivers UK First with Revolutionary Digital Logbook

The paper fire logbook, a critical link in the safety of millions of UK buildings has been updated and made fit for modern safety, facilities and compliance professionals with the launch of the revolutionary digital fire logbook from Tio Fire Systems.

Cloud-based and permitted under BS5839-1, Tio's true Digital Fire Logbook is priced and designed to replace a range of paper logbooks, and is pre-configured to bring together a huge number of fire, safety and security topics in one place. It is quick to set up and as easy to use as paper, solves a multitude of issues and radically improves safety, relationships and compliance for all parties, including the building occupier, service provider, risk assessor, installer, commissioning engineers and emergency services.

Full of unique features, Tio's logbook includes a compliance task manager that automatically schedules and tracks tasks for service providers, building occupiers and risk assessors; a customisable guidance module that helps staff complete jobs, linked asset registers and maintenance, variances, false alarm and activation tracker, custom tasks creator; fire visitor logbook; and digital documents storage. All users get a performance and compliance dashboard, permitting oversight and management from a single site to vast portfolios of properties.

Instead of a paper document in a cabinet at the

building entrance, a QR code is displayed, giving either open access to the cloud-based records or, where security is a concern, access to all permitted individuals and organisations.

"Today, there is rightly much more focus on correct compliance, from a building occupier, and FM perspective right through to service providers and the logbook is central to this," said Jason Hill, sales manager for Tio Fire Safety. "Paper logbooks are too often, inaccurate, incomplete, duplicated, misplaced or lost, all serious issues that are removed in a click with Tio.

We call our product the only true digital fire logbook because, while other products do call themselves logbooks, they are in reality limited, one-way customer portals or engineer tools, not genuine improvements on the paper logbook that permit contributions from all stakeholders. Our Digital Fire Logbook delivers all of the required information, which can be accessed and entered on any web-connected device, ensuring 100% compliance and safeguarding the integrity of the information in any fire incident.

"At Tio, we believe that fire safety, compliance and maintenance are better achieved through clear communication and efficient management of tasks, assets and responsibilities across many teams and parties. A digital record is becoming essential for accountability and best practice. The logbook can be used independently, combined with our



own asset management suite, or integrated with a growing number of fire and safety software providers.'

Tio is a fast-growing fire and safety software provider, created and staffed by UK fire and safety industry experts from estates managers and OEMs to service and maintenance engineers, ensuring its products are fast, efficient and solve customer problems while improving building safety.

[www.tiofiresafety.com](http://www.tiofiresafety.com).

## Revolutionary new sprayer instantly turns salty water into powerful disinfectant

A unique handheld sprayer has been launched which turns mildly salty tap water into a powerful disinfectant that kills 99.99% of germs, bacteria and viruses, including Covid-19.

The easy-HC10 uses an electrochemical reaction to instantly convert tap water containing just 0.25% salt into hypochlorous acid, a powerful disinfectant which the human body itself produces to fight infection.

The easy-HC10 has been designed by Vapourtec, a leading manufacturer of flow chemistry equipment used throughout research and the chemicals industry.

"Hypochlorous acid is a powerful disinfectant which our bodies already use to kill germs. The easy-HC10 instantly produces it from nothing more than tap water and salt, eradicating the need for costly disinfectant" says Duncan Guthrie, Vapourtec's founder and Managing Director.

Hypochlorous acid is a disinfectant which occurs naturally in the blood stream of all mammals. Highly effective at killing bacteria, fungi and viruses, and neutralising odours, it is also one of the only disinfectant

agents which is non-toxic to humans.

It is used commercially as a powerful disinfectant but has a relatively short shelf life when stored.

The new easy-HC10 is a handheld sprayer powered by a rechargeable lithium battery and features a 2-litre reservoir which is filled with tap water and just 5 grams of salt.

Pulling the trigger produces an instant spray of hypochlorous acid solution, the concentration of which can be controlled depending on the intensity of disinfection needed, making it suitable for a wide range of applications.

The spray rapidly kills germs and viruses, yet is safe to use on solid and fabric surfaces and around people and pets.

The battery has a 90-minute run time



and each 2 litres of water produces around 25 minutes of continuous spraying, making the device ideal for disinfecting larger areas like offices, schools, health settings and public transport.

However, it's the cost saving and convenience which the creators believe will appeal most to potential users.



"The easy-HC10 means there is no need to buy, store and carry around traditional disinfectant or bleach. It can cost up to 96% less to use than NHS-grade disinfectants and helps cleaning and facilities management businesses transition to a zero carbon future," explained Vapourtec MD Duncan Guthrie.

With commercial disinfectant costing between £0.75 and £4 per



litre, the easy-HC10 requires just a few pence worth of tap water and 5 grams of salt each time it is refilled.

The device weighs just 3kg when empty and features a shoulder strap for carrying and operation. It dispenses the fine disinfectant spray at a rate of around 5 litres per hour for commercial and professional use.

"The device has some sound environmental benefits too as the disinfectant leaves no harmful residue and it eradicates the need for single-use plastic disinfectant bottles" adds Duncan.

The unique micro-Ion flow reactor within the device is protected by a patent and the easy-HC10 is now available to buy through Vapourtec and online.

Contact  
[www.easy-hc10.com](http://www.easy-hc10.com)





# screwSHOP.co.uk

Screws • Fixings • Fasteners



- ✚ Screws & Fixings
- ✚ Builders Metalwork
- ✚ Ironmongery
- ✚ Silicones
- ✚ Sealants
- ✚ Specialist kitting and coating services



“My Dad says his fixings are the best and probably the UK's cheapest”



## NEXT DAY DELIVERY

0121 559 8866  
sales@screwshop.co.uk



NE Fasteners Ltd  
Waterfall Lane  
Trading Estate  
Cradley Heath B64 6PU



# Christeyns Food Hygiene introduces Leadership Training Programme

Specialist hygiene company, Christeyns Food Hygiene, has launched a new Leadership and Management training programme aimed at the manufacturing industry. Already an accredited Hygiene Training provider with courses online and on site, Warrington based specialist, Christeyns Food Hygiene, has this month launched its First Steps to Successful Leadership programme designed to support companies in developing their staff throughout the business and to equip them with the necessary skills to successfully lead and manage their teams.

The course is made up of 6 modules that can be studied individually or on a pick and mix basis,

with certification for each module.

The training has been designed specifically with manufacturing personnel in mind and the content reflects the challenges faced by those working in a manufacturing environment. The course has been put together by ILM accredited tutor Tina Brown specifically for Christeyns Food Hygiene and Tina and her team will deliver the training and provide assessment.

"We are very excited to be introducing this innovative and versatile learning programme," says Elaine Hankinson, Training Academy Manager at CFH. "It offers flexible options to suit

all types of business and can be run as an open course in a virtual classroom setting or as a series of specific scheduled sessions for individual companies and teams."

A bespoke version of the training can also be created with modules that incorporate a companies' own processes or practices. In addition, the complete programme can be adopted as a company's own Leadership Programme.

Open courses are now available online.

[www.christeynsfoodhygiene.co.uk](http://www.christeynsfoodhygiene.co.uk)



## CAMB MACHINE KNIVES

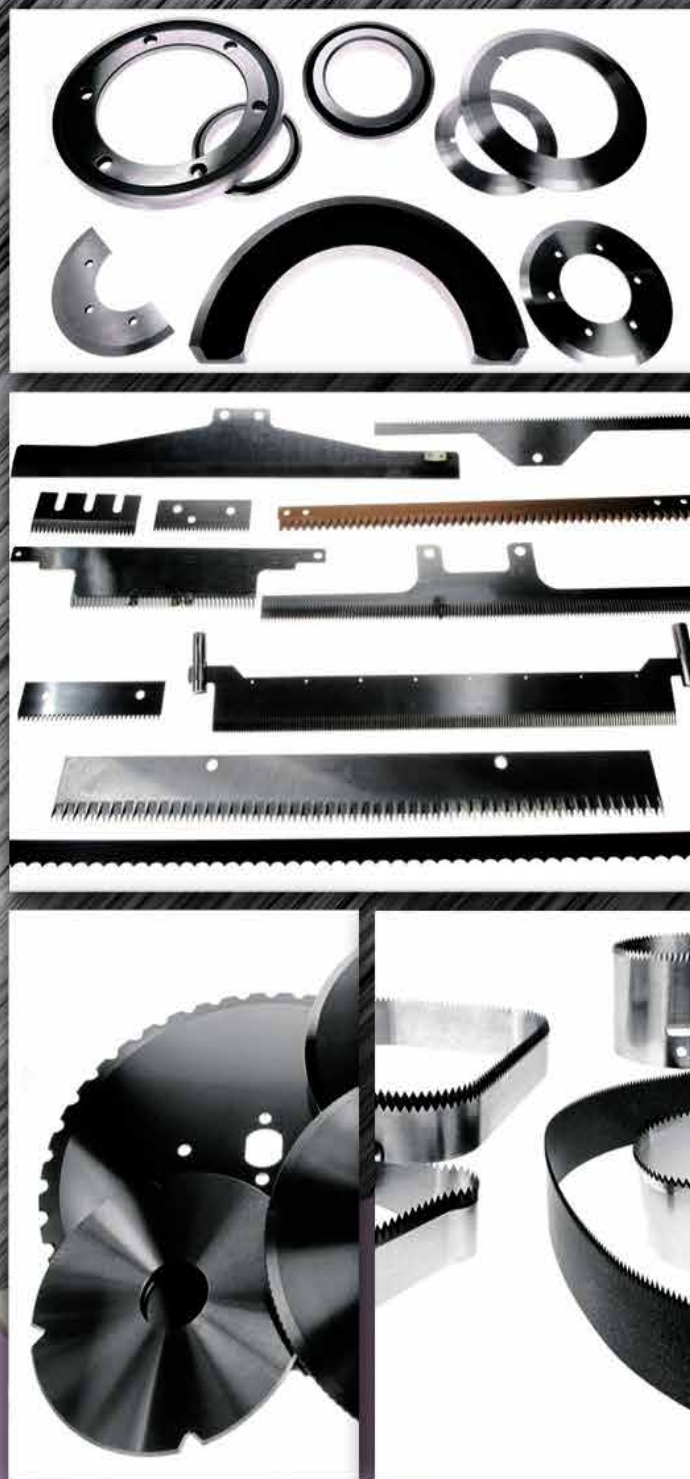
*"A Cut Above the Rest"*

Our range includes many types of blades, but not limited to:

- ANVIL
- BAGGING KNIVES
- BOTTOM KNIVES
- CARPET KNIVES
- CIRCULAR KNIVES
- CONFECTIONARY KNIVES
- GRANULATOR KNIVES
- POULTRY PROCESSING KNIVES
- POULTRY UTILITY BLADES
- STRAIGHT KNIVES
- TOBACCO KNIVES
- TOOTHED KNIVES
- TOP DISHED KNIVES
- TRAY FORM KNIVES
- COFFEE GRINDER BLADES (INSTANT COFFEE)

We have been supplying our knives worldwide for over 30 years.

We deal with carrier and freight companies so we always remain competitive for price on any destination.



### CAMB MACHINE KNIVES INTERNATIONAL LTD

Tel: 01454 322178 | Fax: 01454 321172  
 Email: [sales@camb-knives.co.uk](mailto:sales@camb-knives.co.uk)  
[www.camb-knives.co.uk](http://www.camb-knives.co.uk)

MANUFACTURERS AND DISTRIBUTORS OF MACHINE KNIVES TO ALL INDUSTRIES



## New modules for efficient, fail-safe signal evaluation



Space-saving: Safety relay module SRB-E-302ST and output expansion SRB-E-402EM

Schmersal launches two new safety modules: the safety relay module SRB-E-302ST and the output expansion SRB-E-402EM are efficient and space-saving solutions for safe signal evaluation.

One evaluation unit for two safety sensors: the most striking feature of the SRB-E-302ST safety relay module, with which Schmersal will replace several modules in the outdated AES series. The module enables monitoring of all common electromechanical and electronic safety switches and safety sensors, as well as active opto-electronic protective devices (AOPDs). Depending on the application, the module switches with the fail-safe relay contacts or wear-free with a fail-safe semiconductor output. The module allows the realisation of applications up to category 4/PL e (EN ISO 13849-1) as well as SIL 3 (IEC 61508).

The new series gives the electrical designer scope to save space in the switch cabinet and reduce costs, while at the same time utilising the full functionality of a state-of-the-art safety module twice over. Control is either single-channel or dual-channel and the module comes with functions including stop 0, autostart and reset with edge monitoring, plus the option to select from 24 pre-configured applications with a rotary switch. The user can select the start function with a second rotary switch.

Also new is the SRB-E-402EM output expansion, which, like the SRB-E-302ST, is accommodated in a modern and compact housing from the SRB-E series. The output expansion allows designers to duplicate and reinforce the contacts of fail-safe relays and semiconductor outputs. Four safety contacts, two signalling contacts and feedback contacts are available. The new safety module can be used as an expansion module for all safety modules and safety controllers with feedback loop monitoring. When compared to the predecessor series, the new module is characterised by more compact dimensions and an increased temperature range (-25°C to +60°C).

Contact Steve Watkins,  
 T 01684 571980  
[swatkins@schmersal.com](mailto:swatkins@schmersal.com)  
[www.schmersal.co.uk](http://www.schmersal.co.uk)



**BÖRGER**<sup>®</sup>  
EXCELLENCE – MADE TO LAST

# FLOW OPTIMIZATION SECOND TO NONE



## THE NEW BLUELINE NOVA ROTARY LOBE PUMP

The BLUEline Nova sets new standards in pump technology. With or completely without casing protection – the BLUEline Nova achieves unrivaled volumetric efficiencies.

**Made for one another** – the newly developed DIUS rotors in combination with the flow-optimized pump chamber ensure perfectly smooth running at pressures of up to 12 bar.



The logo features a stylized orange and blue 'N' shape to the left of the text 'BLUEline NOVA'.

[www.newblueline.com](http://www.newblueline.com)



## Experts in Thermal Control and Measurement

**LAUDA: Experts In Thermal Control and Measurement Providing Innovative Solutions For Thermal Process Control, Chilled Water Applications, Water Baths, Freezers, Incubators, Shakers, Stills, Tensiometers, Viscometers and Contact Angle Measurement.**

LAUDA continues to provide an expanding range of feature-rich, future proof solutions with energy efficiency and connectivity front of mind, serving a diverse range of industries including chemical, pharmaceutical, biotechnology, oil and gas, composites, automotive, aerospace food & beverage, brewing, digital printing, laser and beyond.

Since 1967, LAUDA has been developing, manufacturing, and supplying reliable precision measuring instruments that have become firmly established worldwide in research, teaching and quality assurance. We are here to assist with your application needs, from measuring instruments for determining the viscosity of polymer solutions, to optical contact angle measuring instruments for measuring the free surface energy and the wetting behaviour, through to classic tensiometers for

determining the surface and interfacial tension of oils and surfactants.

For decades, well-known clients from all over the world have come to rely on LAUDA measuring instruments, which bring together precision, reliability, and longevity, along with extensive experience in sales and service to provide the very best levels of product support.

Beyond measurement, LAUDA retains a core competency in temperature control for applications in research & design, pilot plant or full-scale production.

T +44 (0)1780 243118  
[info@lauda-technology.co.uk](mailto:info@lauda-technology.co.uk)  
[www.lauda-technology.co.uk](http://www.lauda-technology.co.uk)



LAUDA

## RMIG Solutions

Industrial Processing includes a vast range of potential applications for perforated products. RMIG Solutions has extensive experience in the chemical, pharmaceutical, paper, and offshore industries, to name a few. From small, high precision perforation in thin materials to large holes in thick sheets used in the mining industry, RMIG Solutions has the knowledge, versatility, and tooling to deliver products according to customers' requirements.



One particular area of Industrial Processing is dealing with waste water. The water industry presents a number of unique challenges in the use of perforated products. A key consideration here is the aggressive nature of the water towards the materials being used. RMIG Solutions has vast experience in servicing the waste water industry, and produces high flow, burr-free perforated waste water screens, offering accurate screen tolerances and effective separation.

Another area of Industrial Processing is medical and pharmaceutical, where RMIG Solutions perforated materials are able to give firm tolerances during their manufacture, and are well suited for use in sterile environments. RMIG Solutions perforated products also have numerous uses in the petrochemical sector, from industry specific applications such as filtration, to oil and gas exploration, as well as more general applications such as walkways in processing plants.

Additionally, RMIG Solutions works with biomass drying applications. The demand for alternative sources of sustainable and renewable energy is always growing. RMIG Bridge Slot sheets are the most effective way of drying woodchip to an optimum moisture content, ensuring boilers operate efficiently to benefit farming and agriculture.

**Bridge Slot**  
 The RMIG Solutions Bridge Slot sheets play an essential role when it comes to the design and manufacture of biomass drying floors. The combination of sheet thickness and opening size allows the sheets to be used either as a suspended floor in wood chip drying containers and trailers, or as drive-on drying floors in outdoor buildings.

The bridge slot opening size determines the products that can be dried, which range from fine oilseed rape through to larger grains and cereals, as well as logs and wood chip drying.

**Food Processing**  
 RMIG Solutions Food Processing market sector meets the high levels of hygiene demanded by the food processing industry. Perforated screens are also strong with important thermal capabilities, making them useful for a wide range of food processing applications. RMIG Solutions tailor made perforated screens are ideal for cleaning, heating and steaming in food production environments. Whether it's baking trays, cereal cleaning or ingredient conveyors, all of RMIG Solutions perforated materials can be customised for each application.

[www.rmig.com](http://www.rmig.com)



## Manage Your Assets with RFID

Major operations involve hundreds or thousands of different assets and it's easy for valuable equipment to be misplaced or lost. Taking inventory of your assets is a time-consuming and sometimes inaccurate process. That's where RFID Asset Management comes in. With all of your assets monitored by RFID tags and readers, you can know exactly what equipment you have available in real-time. That information helps prevent losses and helps you make informed business decisions. But the benefits don't stop there.

With RFID, you can track not only the location of the asset, but also its condition. RFID tags enable you to instantly see when equipment was last inspected and when it's due another inspection or to be replaced. This reduces downtime because you can repair or replace important equipment at the right time. It also streamlines your maintenance process.

You can also track the movement of assets, so you get alerts when a piece of equipment has left its designated area. People can also be tagged with RFID wristbands, which can be vital when moving heavy equipment, to improve safety by ensuring each worker is out of the way.

RFID Asset Management is a solid investment for any business that



has a lot of valuable assets to track. Benefits of RFID Asset Management include:



- ▲ Gaining real-time visibility of your assets
- ▲ Saving time over manual stocktakes
- ▲ The ability to locate assets using RFID
- ▲ Tracking the movement of assets
- ▲ Improving maintenance
- ▲ Improving compliance

If you have valuable fixed assets and are having trouble keeping track of them, an RFID asset management solution can not only save you time with manual tracking, but also save you money by reducing lost assets and improving maintenance.

RFID Asset Management is suitable for large or small businesses, with flexible monthly plans available.

Ready to get started with RFID asset management? Contact TEC-RFID for a free consultation and online demo.

TEC-RFID  
 T 0844 870 7873  
[info@tec-rfid.co.uk](mailto:info@tec-rfid.co.uk)

**Everything RFID in One Place**

We are experts in helping businesses improve efficiency through RFID solutions. RFID, which stands for Radio Frequency Identification, is a technology system that can identify an object using radio waves. At TEC-RFID, we believe RFID will bring big advances to retail, warehousing, manufacturing, construction and more. We make it as simple as possible.

Contact us for more information by emailing [info@tec-rfid.co.uk](mailto:info@tec-rfid.co.uk) or visit [www.tec-rfid.co.uk](http://www.tec-rfid.co.uk)



we make ideas come to life





RMIG is the world's largest manufacturer and supplier of perforated metal and its related products.

We know our customers' requirements for price and quality and meet their demands with uncompromising service.

Not only do we offer standard and bespoke perforated metal sheets, we are able to offer you a range of secondary operations as detailed below.

For more information please contact us tel: 01925 839610 | email: [info.uk@rmig.com](mailto:info.uk@rmig.com) | [www.rmig.com](http://www.rmig.com)

**Complete solutions**  
 With a continued investment in the latest equipment and a network of professional partners we are able to produce prime quality products and solutions – from a simple perforated sheet to the fully formed and coated custom made part.

**Cutting**  
 We can cut and shape perforated sheet to meet the needs of your final application.

**Levelling**  
 For some applications a high degree of flatness is required, we have processes in place to ensure our perforated coils and sheets meet with your most demanding requirements.

**Rolling and forming**  
 We can roll, bend and form perforated sheets to match your design.

**Aesthetic finishes and protective coating**  
 We can offer powder coating and hot dip galvanizing solutions to meet your specifications.





**Fluregiene 200™ provides protection for hygiene conscious parts and surfaces**

- Excellent corrosion resistance
- Low friction anti-fouling and anti-stick properties
- Durable and easy to clean/wipe down
- Permanently applied to metals, alloys and plastics
- Built-in antimicrobial technology actively reduces microbes on the surface of the coating.
- Reduces fungal growth and surfaces stay fresh longer

For more information about **Fluregiene 200™** call us now on **+44 01386 425755** or email **info@cwst.co.uk**



Easy cleaning of hygiene conscious parts



Reduces microbial growth



Permanent coating protection

**CURTISS - WRIGHT**

**Everlube® Products**






## Hydraulic & Pneumatic Presses and Sheet Metal Clinching Machines

BTM Automation Products (UK) Ltd are specialist providers of sheet metal clinching machines, hydraulic press machines and pneumatic press machines.

At BTM we present our flagship technology "Tog-L-Loc", the sheet metal clinching technology that is simple, economical and an efficient solution to your metal joining needs.

This patented clinching system is: –

- consistent – Non-destructive testing & repeatable joints
- economic – Long tool life 300,000 joints common
- versatile – Dissimilar metals can be joined
- simple- Simple Punch & Die arrangement

With todays complex designs, high quality standards and global markets our expertise in clinching sheet metal enables the customer to benefit from over 40 years' experience.

BTM offer a full and complete package from initial enquiry to commissioning. Our expert specialist engineers have served the Automotive, Lighting, Heating, White Goods and many other industries. Whether it is a simple hand held unit, robot cell or special purpose machine BTM Tog-L-Loc has a solution for you.

For detailed information on the Tog-L-Loc process please see our Tog-L-Loc product page.

In addition to Tog-L-Loc, we also provide aluminium clinching technology "V-Loc", a harder rotation resistant version of Tog-L-Loc called "Lance-N-Loc" and our leak proof version "Oval-Loc". Please see our Products section for more details and product information download sheets.

**Telephone: +44 (0)1767 677001**

**Email: [sales@btm-uk.co.uk](mailto:sales@btm-uk.co.uk)**

**Visit: [www.clinching.co.uk](http://www.clinching.co.uk)**





# Make your warehouse work smarter

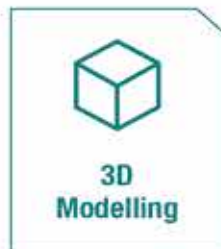
with an optimised solution from BITO



## WE OFFER



Innovative solutions



3D Modelling



Installation service

## YOU GET



More storage



More pick locations



Less pick time

## BITO BECAUSE:

- ✓ You'll get the most out of your space
- ✓ You can trial prototypes
- ✓ You're buying from the manufacturer
- ✓ You can visit our Experience Centre to see the products
- ✓ You can buy popular products from UK stock

02476 388 852  
info.uk@bito.com  
www.bitocom