

INDUSTRIAL PROCESS NEWS

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Inside this issue:

KOSO

kentintrol

KOSO Kent Introl

See them on page.....13



Stainless Fittings

See them on page.....15



DD-Scientific

See them on page.....25

Contents:

Industrial Process Technologies News3

CHEMUK 2021 Review - Top Exhibitors5-10

Valve Manufacturing Company of the Year13

Electrical & Electronics News.....19-20

Print & Packaging News.....22-23

Handling, Storage & Logistics News.....27-28

IPN

Ecoclean UK at a new location in Alcester, UK

Efficient solutions to cleaning tasks of any kind

Whether it is precision cleaning for parts with particulate cleanliness specifications in the nanometer range and highest thin-film cleanliness levels, complex deburring and cleaning requirements, or application-specific degreasing and cleaning - Ecoclean provides the technically and economically optimal solution for every task.

The portfolio also includes innovative developments for automating and digitising the cleaning process as well as services tailored to customer requirements.



Ecoclean UK has recently moved to the brand-new business premises at Alcester Employment Park. On 2,000ft² the new location houses a test centre, service department and spare part store facilities. Trials can be carried out in different wet-chemical cleaning

technologies at no cost, using authentic contaminated parts off the customer's production line, at the test centre. For cleaning tests with water-based

media such as neutral, alkaline and acidic formulation an EcoCwave is available. Tests for solvent-based cleaning processes can be carried out using a future-oriented EcoCore with polar solvents. It can also be used with non-halogenated hydrocarbons.

With these diverse options for carrying out cleaning tests, Ecoclean UK covers a very wide range of degreasing and cleaning tasks in practically all industrial sectors as well as in remanufacturing. "It was also important for us to offer state of the art testing facilities for the specific requirements in medical engineering, which we have succeeded in doing thanks to the machine equipment in the test centre," adds Matt Cooper.

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ABLE announces alliance with Ex-Machinery

ABLE Instruments & Controls is delighted to announce a new alliance with Netherlands-based company Ex-Machinery.

Ex-Machinery is a specialist in the manufacture of industrial, certified explosion proof cameras, HVAC equipment and Wi-Fi Systems, and ABLE will be taking on the role of sole UK distributor for the high specification ARMADEX ATEX digital camera.

The ARMADEX Ex-M OZC is the only explosion proof camera that is equipped with a 5x optical zoom function. The ATEX Camera is suitable for use in ATEX Zone 2 (Gas). The compact yet rugged camera body is shockproof against drops up to 1.8m, waterproof up to 25m, freezeproof up to -10°C and dustproof.

The inclusion of a Zone 2 camera will add significant strength to ABLE's

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ATEX portfolio of inspection and communication equipment available from our eCommerce platform and represents a strategic supporting and complementary product to our industrial process control instrumentation.

Ex-Machinery's flair for innovation is evident in the many key features that put the ARMADEX ahead of the competition and ABLE looks forward to using its considerable experience of applying measurement solutions for hazardous areas to promote this excellent product.

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While absolutely necessary to protect employees, PPE create major problems for some biometric devices used to authenticate people's identity in line with the guidelines, when they enter restricted, dangerous or sensitive areas. Gloves for example, interfere with fingerprint readers and make it difficult to present access cards. In today's COVID-19 era, no one wants to remove gloves and place their hands on a reader or key-pad previously used by scores if not hundreds of other people.

There's no need for employers to make a choice between their employees' well-being and facility security and compliance. Learn more about our many solutions and how they are used for everything from access control to time and attendance and many other applications.

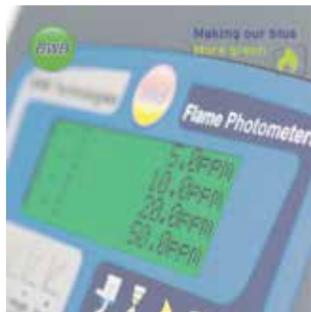
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Editor Recommends

Caring for the environment one flame photometer at a time

BWB Technologies, known for its industry leading blue flame photometers, is going green with environmental action. The company is proud to be the first flame photometer manufacturer



to be actively giving back to the environment, not only through a comprehensive environmental protection policy, but in addition to committing to plant at least 50 trees for every flame photometer they sell internationally, with a further commitment of planting 1,000 trees for every company employee by 2025.

Hozan Edwards, Managing Director, said, "The time has long passed for companies to start taking responsibility for their carbon footprint. Considered as industry leaders within the sector, we hope that others will now follow suit and take action to minimise their impact on our natural resources."

The announcement came on World Earth Day as the company rolled out its latest generation of Flame Photometers boasting a wide range of operational upgrades from previous systems, and building upon the award winning core platform that continues to push the boundaries of possibility from flame photometric analysis.

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New analysis: Mass robot potential



A huge range of robot technologies, that were considered experimental a few years ago, are now commercially viable for small & medium sized enterprises (SMEs) in the manufacturing sector, according to a recent analysis from global robot hub HowToRobot.com.

The study estimates that robots will be a feasible option for more than 50% of SMEs within the next three years due to a global trend towards 'proven robotics' which has reduced both the cost and complexity of implementing robots.

The analysis identified the three key factors driving the trend:

- A range of robot technologies have reached a mature stage – The global market for robots is expected to grow at a compound annual growth rate (CAGR) of around 26% to reach just under 210 billion US dollars by 2025.
- Prices of robot technology are falling – by 2025 prices are expected to have fallen by 76% since 2010.
- Global availability of suppliers and solutions has more than doubled in the last twenty years.

Examples of new robotic solutions entering the commercial stage include Autonomous Mobile Robots (AMRs) that can navigate freely in environments with people and handle a range of logistics tasks. Also, pick and place robots that used to handle only large volume production, can now handle small batches more commonly needed by SMEs. Additionally, the market for collaborative robots is expected to grow by 30% per year (CAGR) from 2020-25. Use cases with the biggest potential include where SMEs lack people or need to cut costs.

www.HowToRobot.com

Stuart Turner's Pulse range of High Efficiency circulators

Stuart Turner announces a new range of commercial circulators for HVAC applications. The Pulse range features High Efficiency ErP compliant pumps in a variety of sizes from with both single and twin head options for Rp1½ to DN80. The range also contains secondary hot water circulators of bronze construction.

The product release marks yet another move from the renowned domestic water boosting manufacturers to become a major player in the HVAC market having recently acquired Pressurisation and Hot Water Generation specialists Mikrofill.

Pulse circulators come loaded with energy saving features and provide Installers and Specifiers with versatile options whatever their requirement might be. The pumps are driven by high efficiency permanent magnet motors



with EEI ratings as low as <0.20 and are capable of self-modulating in order to only deliver what flow is required based on demand. This operating mode offers the greatest energy savings of up to 90% compared to old style fixed

speed pumps. Other operating modes include constant speed, night mode and fully automatic mode.

Dimensionally they compare well with products already in the market and in most cases will act as quick and easy replacements with no pipework modification required.

They feature a simple to install electrical connection with no need to remove any terminal box.

The range is set to build on the success of Stuart Turner's existing ST range of domestic circulators, offering solutions for single dwelling premises all the way up to larger commercial properties.

For more information on Pulse and all other Stuart Turner products, visit: www.stuart-turner.co.uk

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Ultrasonic flowmeter ideal for ultra-pure water applications

Designed primarily for ultra-pure water dispensing applications requiring a high degree of cleanliness, clean bore flow measurement devices such as Titan Enterprises' Metraflow® ultrasonic flowmeter, offer the ideal solution. Ultra-pure water is an important component for industries across specialist markets where impurities can cause product contamination or impact process efficiency.

The Metraflow® uses Titan's patented ultrasonic time of flight technology to accurately measure liquid travelling through the clear, single, clean bore measurement flow tube, which has been constructed from high performance Perfluoroalkoxy Alkane (PFA) polymer.

Neil Hannay, Senior R&D Engineer with Titan Enterprises, says, "Ultra-pure water can become easily contaminated. Metraflow's PFA polymer tubing offers excellent chemical inertness and an ultra-high grade of purity."

Titan's Metraflow® is non-intrusive with no internal moving parts, designed to precisely monitor process flows at temperatures from 10°C to 60°C (140°F) and pressures up to 27 bar.



In addition, Metraflow® gives an accuracy of ±0.5% FSD & repeatability across flow ranges from 20 to 5,000ml/min.

For further information on the Metraflow® ultrasonic flowmeter, please visit: www.metraflowmeter.com
To discuss an optimised flow measurement device for your pure liquid dispensing application, please contact Titan Enterprises on +44 (0)1935 812790 or email: sales@flowmeters.co.uk

Acoustic treatments for existing plants

Noise reduction strategies for your plant and facility

When your plant was originally built, it was likely relatively isolated, but with continued development of land close to industrial sites, there may be an issue of noise pollution. There are several options available to reduce the noise emitted.

Change noisy fans

Old fans and pumps are noisy; they are prone to collecting debris that means they grow noisier with age. Consequently, the first step to noise reduction is to replace loud fans and pumps throughout your plant.

Creating enclosures

Enclosures are made from acoustically treated metal and have multiple applications. They can



house a plant in a single unit, providing a means of controlling sound waves and protecting the plant from the external environment.

Acoustic lining

Bespoke silencers, acoustically lining of cowls and acoustically treated surfaces are all methods of noise reduction available.

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Additive Selector

A new digital service developed by plastship in co-operation with Kraton, Chemetal and Baerlocher provides an overview of the interaction between recyclates and additives. With the additives being offered, the properties of recycled plastics can be improved and thus be used for higher-value applications. With the new addition to plastship's offering, the Additive Selector on www.plastship.com, combines data on recyclates and additives to facilitate the use of recyclates.



plastship, a leading European platform for recyclate procurement, is expanding its offerings to facilitate plastics converters' use of recyclates in high-value applications by refining plastic recyclates with additives from selected partners. In addition to design for recycling and sortation technology, improving recyclate quality and performance is critical for increasing recyclate usage in the future. Performance enhancing additives designed for the circular economy help improve recyclate quality and processability, and preserve recyclability for multiple reuse cycles.

The Additive Selector on the plastship portal provides an overview of the effects of various additives, and offers producers & users of recycled plastics indications of potential performance improvements through the use of additives.

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T +49 (0) 6126/58 980-12
bastian@plastship.com
Additive Selector is now online at: www.plastship.com

SWEP fulfills strong range of All-Stainless heat exchangers for demanding applications

In this issue of Industrial Process News, we are pleased to announce SWEP International AB as our Heating & Cooling Solutions Company of the Month.

Established in 1983 by two Swedish entrepreneurs, SWEP International AB (SWEP) is a leading developer and manufacturer of brazed plate heat exchangers (BPHE). The company operates to optimise the use of energy, material and space in heating and cooling systems. Helene Brandi, Market Communication Specialist explained further, "We take pride in contributing to a comfortable and sustainable life for people around the world. We are here to lead the conversion to sustainable energy usage in heat transfer."

SWEP is headquartered in Landskrona, Sweden and has production facilities in five countries across three continents, offices in 20 countries, sales representatives in 50 countries and employ more than 1,000 employees worldwide.

We asked with Helene what benefits their products bring over competitors. "We offer the widest BPHE range on the market, from the smallest size to the highest capacity, for both sensitive and aggressive applications, and with third-party approvals for performance to trust. The BPHE technology offers high heat transfer efficiency but in a small envelope. Our heat exchangers provide a sustainable choice with low carbon footprint relative to capacity and with minimum maintenance requirement. At SWEP we always have our customers at heart, we offer a high service level and give the opportunity to adapt our products based on specific needs."

SWEP is extending their range of All-Stainless brazed plate heat exchangers for the most demanding applications. "The SWEP All-Stainless range is the ideal choice for a wide range of industrial and utility applications that impose high demands on corrosion resistance and have a low tolerance for contamination," stated Helene.

The robust and durable stainless-steel range is optimal for usage in applications with aggressive fluids that can cause copper corrosion or when cleanliness is needed and leaching of metals must be avoided. The range withstands high pressures, and the modular system allows for customised requirements.

Ammonia is one example of aggressive fluid that causes copper corrosion. SWEP All-Stainless BPHEs is perfect for these systems and avoiding system failure. Its robust construction is suitable for various ammonia applications, including demanding cascade applications.

Deionized water is another example and is known for being one of the most aggressive solvents and can corrode many metals including copper. SWEP All-Stainless BPHEs eliminate the risk of contamination and copper corrosion and prolongs the lifetime of the system.

Other applications where All-Stainless fits are systems with biogas, both biogas drying and biogas compressing as well as different oil applications where the choice of a 100% copper free product can reduce



costly and time-consuming oil changes.

The system embodies a construction with plates and brazing material in 100% stainless steel. As SWEP All-Stainless BPHEs have no gaskets or loose parts and have a self-cleaning effect it requires less maintenance over a longer period of time.

The All-Stainless product range comes in six models each with varying plate types, dimensions, port sizes, pressure levels, temperature ranges and number of plates. "The All-Stainless range address many different customers and many different applications. It is a problem solver when standard copper brazed units cannot be used due to high risk of corrosion, or when leaching of metals needs to be kept to a minimum. Some of these customers are found in the process industry working with refrigerants such as Ammonia. Electronics cooling with applications such as laser cooling or semiconductor cooling is another target area where de-ionised water is widely used. De-ionised water is also used in fuel cells where our compact but efficient All-Stainless products are ideal for stack cooling," said Helene.

Challenging efficiency every day, SWEP's vision to significantly lower energy usage in heat transfer solutions is what drives the company to work hard to make a difference.

Helene explained some recent changes at SWEP, "We are working hard to meet increasing customer demands. SWEP is working on expanding several of our production sites. We have also invested in automation processes to increase volume and quality but also to create safer conditions for employees. Several digitalisation projects are also being implemented to offer leaner handling services."

The effect of COVID-19 has been



astronomical to industries all over the world and SWEP know too well its products are critical for many processes where heat/cold is needed. Managing to only experience a small dip in sales throughout lockdown, SWEP has picked itself up again and has witnessed an extraordinary increase in demand for energy efficient heat transfer solutions. So much so, that its production sites are running five shifts to supply its customers.

SWEP take great pride in providing heat transfer solutions that have a resounding knock-on effect in lowering energy and refrigerant use globally. Its ambitious vision to further its work in sustainable working is part of its future plans.

"By 2030 SWEP will operate 100% carbon neutral. That means investments in solar panels, more efficient equipment, heat recovery solutions, strict travel policies, etc. The energy transition from fossil fuels to renewable energy sources in combination with a continuously increasing global energy demand requires more efficient energy usage. In this area we see opportunities to contribute to a more sustainable and cleaner world," stated Helene.

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The UK's chemical industries reunite at CHEMUK 2021

As one of the first post-lockdown national trade show events scheduled at NEC Birmingham, CHEMUK 2021, the UK's Chemical Industries Supply Chain Expo, opened its doors on 15-16 September.

Showcasing over 350 exhibiting companies, the 10,000m² expo floor welcomed some 2,400 visitors, and a further 1,000 from across exhibiting teams over the two days, creating a combined attendance of over 3,500.

Speakers and guest panelists were drawn from across the sector, contributing to some 40 hours of overall market intelligence, tech insight, best practice, case studies, solutions updates for attendee groups. The topics taking centre stage this year included sustainability/net-zero, post-Brexit and green chemistry/biobased.

On this year's attendance, Ian Stone, MD of event organisers UK Industry Events, said, "With strong pre-registration levels and a great buzz across industry and social channels, the industry's eagerness to engage again in a dynamic physical trade show environment was palpable and borne out as soon as the doors opened."



Stone added, "In the wake of unprecedented challenges and disruptions thrown up to all industries, with the outbreak of the global COVID-19 pandemic, the CHEMUK team were so delighted to see attendee groups from across all segments of the Chemical Industries, as well as representation from across all regions... it was so satisfying to bring the industry back together again."

CHEMUK 2022 will take place from 11-12 May at NEC Birmingham. This is our pick of the best exhibitors from this year's show. Further details can be found on this page and the next four and a half.

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To find out more information, please see the details below.

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KSB strives to continually improve the product range offered and invests 2% of current turnover (over €2



billion) back into R&D.

Recently, KSB invested in one of the largest, most advanced pump test facilities in the world at the factory in Halle, Germany, capable of testing pumps up to 10MW, with a maximum flow of 18,000m³/hr and heads up to 640m.

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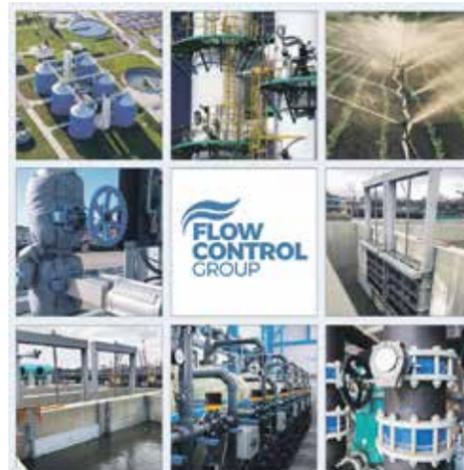
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This year, DESMI was among 350+ featured exhibitors at CHEMUK 2021 which took place at the NEC, Birmingham. The inaugural event saw attendees from across the UK's chemical, chemical products and chemical-using industries converge over the two days as the show established itself as THE Chemical Industries Event.

With 150+ expert speakers contributing to 40+ hours of conference programming, attendees were able to access latest intelligence covering Process & Control, Chemicals Supply, Green/Bio, HSE & Regulatory, Logistics & Fulfillment, Digital & Automation, Lab and R&D, Skills & Training... and lots more! This gave DESMI a fantastic opportunity to showcase its latest products, liaise, and engage with fellow industry professionals and like-minded attendees.

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Steps to NetZERO: BioAsphalt is the way forward

Do you know almost anything can be made out of Lignin? Let it be roads then! Gautam ZEN UK introduces a Low Carbon, Zero PAH environment-friendly natural binder in the United Kingdom to address the concerns due to Carbon Emissions in the asphalt sector while construction of traditional asphalt road is based on fossil fuel. This has led to the development of the sustainable **BioLigninAsphalt** Road.

The climate change commitments set in the UK for cutting 78% of the carbon emissions by 2035 is a challenging task. Gautam Zen UK is committed to driving new alternative technology with renewable biomaterials in collaboration with Stora Enso, the world's largest producer of Kraft Lignin.

The BioAsphalt concept allows asphalt companies to partially replace Bitumen in the mix with Lignin, the most abundant renewable biopolymer found in nature. Hot Mix Asphalt (HMA) results in high carbon emissions and is a disaster to the environment. With the natural Lignin, it is possible to reduce the mix temperature and produce Warm Mix Asphalt (WMA).

Mr Ray Sandip, CEO of Gautam ZEN UK, said, "This is the beginning of a new era of sustainable development. It's time



to work with bio-based alternative materials. He welcomed association and active collaboration from industry sectors in select markets to develop and implement Kraft Lignin."

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Used & refurbished process plant & equipment specialists

As a trusted and well-known name in the process industry, Perry Process Equipment Ltd was once again present at the CHEMUK exhibition. After a successful show and the chance to meet with many familiar faces in the industry, Perry has already secured its place at CHEMUK 2022.

Perry Process Equipment Ltd has been buying and selling used process plant and equipment from its UK site for over 30 years. With equipment immediately available from stock and competitively priced, it is one of the leading dealers of used machinery worldwide.

Located in Newton Aycliffe in the North East of England, its site has a 20,000ft² warehouse and 6 acres of external space, where the majority of the equipment stock is secured. The warehouse includes a well-equipped workshop area. Here a team of experienced and qualified process equipment technicians carry out careful refurbishment work on the machines to meet the demands of customers.

Perry can save its customers time and money on their process equipment. It encourages anyone considering used machinery to get in touch to arrange a visit to the site. It has a wide range of process equipment in stock including



ribbon blenders, mixers, reactors, mills, centrifuges, heat exchangers, tanks and vessels.

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www.perryprocess.co.uk

Delivering real-time software solutions

Need to know how your business is performing at all times no matter where you are?

Real-time manufacturing data is central to the software solutions provided by Grotech Data Solutions. With a manufacturing background itself, GDS knows first-hand the benefits of being able to see, even remotely, whether production is on schedule.

Using digital and Cloud technology, its solutions can provide real-time output rate of production lines and the reason/length of individual line stoppages. Available to unlimited users, wherever they maybe, this information enables swift action to be taken if needed to get



performance back on track. "Being web-based and updating in real-time, our software is ideal for remote

or multi-location working, giving all users fingertip access to the latest data and enabling informed business decisions at all times," explained GDS's Mark Eland.

"We offer a modular approach, which is great for small- and medium-sized operations. You decide what you need to run your business and we provide the necessary software solutions to enable you to do it. As your business develops, so can the functionality of the software with extra modules, for instance for stock control or sales, purchase and work orders, added as required."

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www.grotechdatasolutions.co.uk

All Valves Online

A UK-based, valve and actuator specialist which provides equipment, support and technical services around the world to many different industry sectors. Despite our wide scope, the company has remained as one of the fastest growing valve and actuator distributors thanks to the tireless efforts of our skilled and experienced staff.

All Valves offers a complete range of actuated valves, manual valves, pipe fittings, pumps, and controls & can confidently supply products that meet all of your requirements and conform to even the most stringent specifications.

As an ISO 9001-2015 Quality Approved and certified company, All Valves guarantees a high quality of service from pre-sale sizing and specifying, all the way through to post-sale support. In accordance with our ISO quality management procedures, we test, wherever possible, all products and valve actuator assemblies in-house before shipping, to ensure that our electric ball valves, electric butterfly valves, air actuated ball valves and air actuated butterfly valves reach you in perfect condition, every time.

Shipping millions of pounds worth of, among others, ball valves, butterfly valves, gate valves, check valves, and



actuated valve assemblies all over the world since our formation.

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Balls that save you money!

Euro-Matic's croffles solution could really help save a heap of cash in manufacturing processes that use heat and chemical tanks. It's surprising how many people don't know about them or what a simple, cost-effective solution they are for the manufacturing environment.

For any factories or production plants with chemical processes or heat or cooling tanks, there will inevitably be a number of knock-on effects, such as maintaining tank temperature, nasty smells and toxins, or even just the damage evaporation can do to the work place environment. But this long-standing, simple solution that has been developed by Euro-Matic solves these issues simply by pouring a blanket of balls onto any open process tanks and creating a flexible cover.



A blanket of Euro-Matic croffles reduces heating costs by up to 75%, and evaporation by 90% & they last for years.

Euro-Matic balls come in a variety of plastics such as HDPE and most commonly PP dependent on the chemicals and in a variety of sizes from 6mm right up to 150mm.

The cool thing is that the balls move around any parts in machinery and by sitting on the top of the liquid, there is completely no maintenance.

How to get some balls
Balls can be ordered on line at: www.euro-matic.co.uk or by calling on 0330 311 0003 where the friendly staff will work out exactly how many you need. There is also a clever ball calculator that enables you to insert tank dimensions and it will do the maths for you at: www.euro-matic.co.uk/ball-calculator

Rain for Rent

Rain for Rent is a leading provider of temporary liquid handling solutions. With more than 80 years of engineering excellence in temporary liquid movement, filtration and storage in the United States, Rain for Rent International offers this Liquid Ingenuity® also in the United Kingdom, Germany, the Netherlands, and France. Products and services include newly designed storage tanks, filtration units and spill containment for use in petrochemical production and refining, construction, environmental remediation; in fact any industry that needs liquid handling solutions.

The safety-focused containment systems are designed with Liquid Ingenuity® in mind, so that we can handle your project needs. Our knowledge and experience help you to safely transfer & temporarily store liquids. Combining a 70,000L storage tank with the E-Contain®



Spillguards, filtration units and PipeStax® will provide a complete containment system protecting your workforce, project and the environment.

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www.RainForRent.co.uk

British Rema at CHEMUK 2021

British Rema is a global leader and partner with global chemical industry players and SME manufacturers to provide specialist technical and engineering knowhow in contract powder processing, powder processing equipment and rotary vessel engineering.

Since 1927, the company has been providing specialist technical and engineering expertise, for a variety of industries. Growing significantly over the decades, British Rema's team of world-class engineers and scientists apply their specialist knowledge to help solve technically ambitious process problems.

For customers looking to outsource their powder processing, British Rema provides a flexible, cost-effective

and efficient solution for milling, air classifying, mixing and blending of powders and resins in its ISO 9001:2015 accredited contract/toll processing facility.

Alternatively, the company can design & supply custom built powder processing equipment and systems.

British Rema is currently working on a variety of chemical industry applications including composites, resins, pigments, paints and herbicides and have a vast bank of knowledge on many other applications.

Its expert engineers have designed and project-managed major turnkey installations in the chemicals and associated industries worldwide.



Contact
T +44 (0)1246 269 955
www.britishrema.com

LAUDA

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.

LAUDA's new range of water chillers has been designed not only to comply with the new Eco-design directive, but to surpass it through the innovative use of variable speed modules that automatically reduce their duty cycle in line with the cooling demand hence reducing energy consumption & running costs, giving a tangible return on investment for the user, while ensuring full compliance with the latest regulations on refrigerant (fluorinated) gases.

Further portfolio expansion delivers the new LAUDA 'Versafreeze' ultra-freezers, (deep-freeze storage down to -85°C), and higher power 'Integral' process circulators, (process control from -90 to 320°C with >25kW of cooling @20°C), with pressure overlay options to increase the working range of water/glycol up to 140°C.

Beyond temperature control, LAUDA has a well-established suite of solutions for measuring viscosity and surface/interfacial tension aimed at the development of polymers, oils, and surfactants.

We look forward to hearing from you.

T +44 (0)1780 243118
info@lauda-technology.co.uk
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Need a safe pair of hands for your processing? British Rema know how.



Free Vacuum Guide for Chemical Applications



When you are working with vacuum, you should first understand the basics. This begins by exploring their foundations and developing an understanding of the core concepts and terminology used in the realm of vacuum. This is the starting point for our guide.

From there, relevant pump technologies, vacuum measurement and leak detection are discussed. Through pump sizing principles and insights into factors such as handling vapours, flammables & explosives, using gas ballast or condensers, you will get a deeper understanding of the essential principles, enabling you to make the right choices when using vacuum.

Finally, a number of example applications are highlighted, helping you to turn theory into practice and making this 80+ page guide a vacuum reference document which you do not want to miss out on. Download your free vacuum guide here: <http://content.edwardsvacuum.com/vacuum-guide-for-chemical-applications-free-download> or email us for a copy at: UKSales@edwardsvacuum.com

Edwards is a world leader in the design, technology and manufacture of (dry) vacuum pumps for process applications, tailoring solutions to our customers' needs. For more than 100 years, Edwards has been at the forefront of vacuum pump technology, helping make manufacturing cleaner, smarter, economical and environmentally friendly. Edwards' chemical and industrial vacuum pumps are integral to manufacturing processes for an increasingly diverse range of chemical & pharmaceutical industries.

www.edwardsvacuum.com

We Know How
Come and see us on Stand C20
CHEMUK2021
UK Chemical Industries Supply Chain Expo
15th & 16th September 2021, NEC, Birmingham, UK

In 1927 we began learning how and over the years we have developed our knowledge and expertise in powder processing and rotary engineering. Today, our knowledge is derived from our experience and determination...and if we don't know the answer...we'll do our very best to find it for you.

British Rema – A global player in contract powder processing, powder processing equipment and rotary vessel engineering.

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Powder processing | Process equipment | Rotary engineering

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Asynt Ltd

Providing world-leading technologies for scientific research, Asynt's unique range of innovative products and services is developed by chemists for chemists.

Our highly versatile DrySyn single and multi-position heating blocks provide brilliant thermal performance without the associated risks of using standard oil-based systems and, when teamed with the Asynt CondensSyn waterless air-condenser, will not only help save the environment but will also save you money.

Our other areas of expertise include sample preparation, pressure reactors, parallel synthesis, Flow Chemistry, Photochemistry, evaporation and purification, and scale-up.

Our fully-customisable ReactoMate jacketed reactor systems allow scale-up from 100mL up to 100L, providing a safe and simple solution to your process development needs. We offer a range of useful customisable kits for all scales in addition to fully bespoke systems, with options for training and installation available.



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enquiries@asynt.com
www.asynt.com

Assentech reduced the GWP of a 12" breather vent from 161 tonnes to 185kg

Assentech has been developing techniques to measure and reduce emissions from tank farms for over a decade. The key is keeping volatile compounds inside the tanks but allowing them to breathe when required such as filling/emptying and fluctuations in temperature. At all other times a breather valve should remain closed with minimal leakage. These valves have immense flow capacity so if not functioning or set correctly can leak hundreds of tons of invisible GWP emissions along with company profits into the atmosphere.

"We have a deep understanding of how breather vents work and how to optimise their

performance. As they are modulating pressure relief devices they can begin to open from as low as 75% of their set point. As many digesters run at 90% design pressure this overlap represents a large potential for mis-applied devices to leak excessively at standard operating pressures," says Cox.

Two international standards ISO28300 and API2000 specify maximum leak rates for all production vents, ie. 0.014m³/h for vents up to 6". The shame is that only 2 out of the 20 worldwide manufacturers test to this standard. Unfortunately, the majority of breather valves that are installed at facilities do not seal and will allow huge



volumes of vapour to release into the atmosphere. We are the only company which has the technology, knowledge and service capability to keep you safe, compliant and profitable.

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Solutions in treatment tanks



BEFORE



AFTER

Harnessing the power of algae, removing contaminants and locking away carbon

- **The Brief** – Treatment tanks required as part of the tertiary water process with specific requirements for correct mixing of effluent and algae.
- **The Solution** – 6,200 litre open top conical tank, modified in consultation with the I-Phyc Engineering team, to provide the ideal shape and through-flow for required volume.
- **The Result** – I-Phyc's Phosphorus removal plant at Broadwindsor

STW, using an algal treatment that is chemical-free.

Industrial Phycology (I-Phyc) is a green solutions company, harnessing the power of algae to remove phosphorus, ammonia and other contaminants from tertiary water while locking away carbon and creating sustainable products.

This chemical-free process is a relatively new development in tertiary wastewater treatment and Enduramaxx was very excited at the prospect of working with I-Phyc and its delivery partners.

The I-Phyc team says, "Chester and the team were really great to work with, mainly because they are very passionate about what I-Phyc are trying to achieve and nothing was too much trouble – we look forward to a long and collaborative partnership."

Because we design, engineer and manufacture entirely in the UK, our products can be custom made to client specifications.

View our treatment online at:
www.enduramaxx.co.uk
T 01778 562810

British Adhesives & Sealants Association



BRITISH ADHESIVES & SEALANTS ASSOCIATION

BASA is one of the most active technical adhesives and sealants associations in Europe, providing high value and contributing to business performance for its members.

With membership increasing each year, we provide an extensive library of information and advice on the importance of regulations and standards for the adhesives and sealants industry in the UK and Ireland. This is underpinned by active technical and business programmes and every year more than 600 staff from member companies participate in BASA activities and more than half the membership are involved with our working parties.

The aim of BASA is to be the umbrella organisation for adhesive and sealant manufacturers in the UK and Ireland, including the supply chain and service and equipment suppliers to the industry. BASA supports its members by representing and promoting the industry, offering guidance on technical and

compliance issues and providing networking opportunities for members. A free Croner business helpline, REACHReady discounted membership, insurance, finance, recruitment and testing benefits and FEICA affiliation are part of your subscription each year. Members can promote their business through the BASA website, with a free company profile listing in the online directory, at exhibitions and through sponsorship at events.

T 03302 233290
www.basa.uk.com

Carbon Activated Europe

Carbon Activated Europe is the European operations of Carbon Activated Corporation, one of the largest, global leaders in the manufacture, distribution, reactivation and service provision of activated carbon.



With a large amount of expertise backed by the company's over 50 years' of experience in activated carbon production, sales and services, Carbon Activated Europe is well positioned to be able to supply the highest quality activated carbon at competitive prices, to various industries and customers. Carbon Activated Europe have their own offices, operations and warehousing in Germany, Poland and the UK.

In terms of its range of services, Carbon Activated Europe manufactures and supplies: coconut shell activated carbon, coal activated carbon, wood activated carbon, catalytic activated carbon, impregnated activated carbon, granular activated carbon, powder activated carbon, pelletised activated carbon, site services, reactivation services and OEM manufacturing service.

The company places the utmost pride on providing high-quality, great-value products and services, ensuring it consistently meets the highest standards from manufacturing and distribution to change-outs and reactivation.

T +44 (0)1454 546547
info-europe@activatedcarbon.com
www.activatedcarbon.com

WHAT IS ACTIVATED CARBON?

Activated carbon (also called activated charcoal, activated coal or active carbon) is a very useful adsorbent. Due to its high surface area, pore structure (micro, meso and macro), and high degree of surface reactivity, activated carbon can be used to purify, dechlorinate, deodorise and decolourise both liquid and vapour applications.

Moreover, activated carbons are economical adsorbents for many industries such as water purification, food grade products, cosmetology, automotive applications, industrial gas purification, petroleum and precious metal recovery mainly for gold.

YOUR GLOBAL SOURCE FOR ACTIVATED CARBON & RELATED SERVICES

Carbon Activated Corporation is one of the largest activated carbon manufacturers and distributors in the world. We're proud of our high-quality, great-value products and services.



WWW.ACTIVATEDCARBON.COM

Visit the website to find out about the costs and benefits of joining the Association.



STRONGER BONDS MAKE BETTER BUSINESS

'BASA's members support efforts to improve product efficiency and circularity to help create a more sustainable society, promoting the concepts of energy saving, material efficiency, reparability, durability and recycling.'

24 Laurel Close
Ely, Cambridgeshire
CB6 2BN

03302 233290



www.basa.uk.com

ISS Projects UK at CHEMUK 2021

ISS Projects UK is a leading Systems Integrator based in the UK for providing tank gauging, overflow protection and control systems to the chemical, liquid and drinking water storage, bunded storage tanks, process vessels, and environmental systems industries.

As well as providing service and maintenance support, ISS Projects UK will provide the full turnkey solution for new systems. At CHEMUK 2021, ISS Projects UK showcased its Tank in Touch gauge to fellow industry experts and attendees of which it received vast amounts of interest over the two day event.

Using its 20 years of experience in the field of Liquid Level management, ISS Projects UK designs, installs and upgrades all types of tank gauging systems. The Tank in Touch ATG (automatic tank gauging) system is designed for applications with up to 24 tanks and can be configured with level, top pressure and temperature for each tank.

ISS Projects UK designs and builds Independent Overflow Protection Systems which are able to form part of a SIS (Safety Integrated System) by controlling ROSOVs (remotely operated shutoff valves).

ISS Project UK also provides the service to carry out alarm and time to overflow calculations which can be used in system design, internal or external audits.

ISS Projects UK has Functional Safety experts able to carry out SIL (Safety Integrated Level) calculations using industry



standard software.

ISS Projects UK also provides services in the form of routine service and planned maintenance of existing gauging systems which include health checks and preventative maintenance. As well as providing a swift response for faults, ISS Projects UK also provides telephone and email support where contract customers can expect an engineer to be on site within 48 hours of making the call.

Contact
T 01765 606655
enquiries@issprojects.co.uk
www.issprojects.co.uk

Delivering flexibility for your contract synthesis projects

CHEMUK 2021 returned to the Birmingham NEC this year for what turned out to be another highly successful gathering. The show saw attendees from across the UK's chemicals, chemical products and chemical-using industries converging to see the very latest plant, equipment, supply chain materials and services driving operational performance, plant and process efficiency, futureproofing, safety, compliance and supply chain fulfilment.

Radleys was one of 350 leading exhibitors at the show, where it was able to interact with attendees and showcase some of its latest equipment such as the Mya 4 Reaction Station and the Reactor-Ready Lab Reactors + AVA Software.

Radleys is a trusted leading company by Contract Synthesis and pharmaceutical companies around the world. From research to process development chemistry, Radleys consistently deliver for CRO, CDMO and CMOs. Experts in specifying the right equipment for your contract synthesis, Radleys allows you to focus on great chemistry.

Its flexible, trusted and specialised services allow the company to quickly react to projects and with its precise temperature control equipment, users can scale up with confidence with precise temperature control every time.

Taking place on 15-16 September, CHEMUK 2021 was a jam-



packed two day event that included 150+ expert speakers, feature session and panels discussing the big trends, challenges, opportunities and innovations affecting the UK's chemical industries.

Save the date, Radleys will be exhibiting atACHEMA 2022 on 4-8 April.

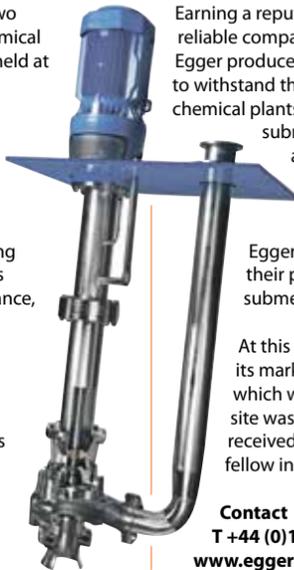
www.radleys.com/contract-synthesis

Egger Turo Pumps UK Ltd takes CHEMUK 2021 by storm

CHEMUK 2021 is a dedicated annual two day event for the UK's chemicals, chemical products and chemical-using industries held at the NEC in Birmingham.

Building on its hugely successful 2019 inaugural event held in Harrogate, CHEMUK 2021 featured 350+ exhibitors and attendees converging to see the very latest plant, equipment, supply chain materials and services driving operational performance, plant & process efficiency, futureproofing, safety, compliance, supply chain fulfilment and more.

A notable exhibitor at this year's expo was Egger Turo Pumps UK Ltd. Egger is a specialist pump manufacturer focusing on centrifugal pumps for handling liquids containing solids and/or gas, such as slurries or waste. Its pumps can be supplied in any castable metal and are frequently used in high temperature and/or high-pressure applications.



Earning a reputation over the years as a trustworthy, reliable company that manufactures superior products, Egger produce pumps in the most arduous materials to withstand the harshest conditions. Regularly used in chemical plants dry mounted, horizontal or vertical or submerged underwater, as well as offshore around the world, its strong design allows for a consistent performance over many years.

Egger offers a broad line of arrangements for their pumps including horizontal, vertical or submersible, long or close coupled.

At this year's CHEMUK 2021, Egger showcased its market leading Zone 0 vertical sump pump which was designed for installation on slops and site wash drop tanks and lagoons. The product received high appraisal and lots of interest from fellow industry professionals and attendees.

Contact
T +44 (0)1226 779903
www.eggerpumps.co.uk

Projex Solutions: Energy based in pig waste...

Projex Solutions is one of six partners (The Agricultural and Horticultural Development Board, Beta Technology, Duynie, the University of Leeds and a commercial unit in North Yorkshire) involved in an exciting new project which has been granted funding by Defra/UKRI. The partners have a combined expertise in multi-disciplined engineering design, livestock farming, sustainable animal feed and smart agricultural systems. The project, which launched on the 1st of October, looks to harness pig waste into a renewable energy source, reducing its environmental impact.

The agricultural industry is a large contributor to ammonia emissions entering the atmosphere and can negatively impact biodiversity through nitrogen accumulation on land and acidification of water courses. This project will create a more sustainable livestock industry within the UK, reducing



environmental impacts through the reduction of ammonia and using the ammonia which would have previously been discarded to create hydrogen a renewable energy resource. This generation of green ammonia and its subsequent conversion to hydrogen from agricultural waste streams, delivers valuable products used to decarbonise power and transportation.

Project Leader, Richard Cinderey, explains, "Harvesting ammonia from livestock waste not only reduces local environmental impacts but provides an exciting opportunity to contribute to reducing climate change."

Contact
T 01484 711333
sales@projexsolutions.co.uk
www.projexsolutions.co.uk

Solvents are key to modern life today, and the Solvents Industry Association exists to promote the safe, sustainable and responsible use of solvents throughout the supply chain.

SIA MEMBERS ARE ABLE TO:

- Make a contribution to raising standards in Health, Safety and the Environment
- Participate in the development of industry-leading Guidance Notes and Best Practice
- Gain direct access to technical advice and support from industry professionals
- Have a voice in shaping the future of the solvents industry
- Network with industry peers
- Attend training courses

CHEMICAL SOLUTIONS, COMMON RESPONSIBILITY

For more information, please contact Andrew Norman, SIA General Secretary:

T +44 7758 118675
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BRINGING
REAL VALUE
TO OUR
MEMBERS

Solvents Industry Association

Does your company provide products and services to the solvents and petrochemicals industry? Why not join our members in working together to improve safety and standards?



The Solvents Industry Association (SIA) exists to promote the safe, sustainable and responsible use of chemical solvents and to ensure that the regulatory framework relevant to the manufacture, storage, distribution and their use is based on sound science and best practice.

Through our solvent-specific focused activities, SIA members work together to produce expert advice and guidance to comply with the latest legislation and best practice.

In addition, becoming a member of the SIA Technical Committee means that your company can join a wealth of experience in the field, sharing specialist knowledge in the areas of manufacturing, packaging, storage, distribution and safe liquids handling to produce high quality information films and other publications.

Think that you can join us to help make a difference? Find out more about becoming a member of the SIA today. It could cost less than you think!

For more details, visit us at: www.solvents.org.uk or contact Andrew Norman, SIA General Secretary for an informal discussion on how we can be of assistance.
M +44 (0)7758 118675
info@solvents.org.uk

New suurGLASS unit

Suurmond UK Limited recently attended CHEMUK 2021 at the NEC in Birmingham. A main feature of our booth was our NEW suurGLASS unit. suurGLASS is a standardised, universal reactor system for process development, chemical synthesis, stirring, dissolving, mixing and extraction.

The custom design of the support frame means that the vessel can be changed easily while the top cover remains secure mounted to the support. The quick action clamp can be operated with one hand allowing the user to support the vessel for easy and safe vessel changes. With our system the top cover and all the accessories connected to it can remain in place. Because our system is designed specifically for basic chemistry, we are able to offer a highly engineered solution at a lower price point than might be expected.

Basic specification:

- Volume reactor vessel: 1-5 litres, using the same cover plate
- Vessel materials: Type I, Class A borosilicate glass
- Drip tray material: Standard in 316L
- Stirrers: Anchor, propeller, impeller, turbine
- Temperature: Up to 200°C



- Pressure: -1 to +1 bar
- Options: A wide range of glass accessories like burette, cooler, dropping funnel, various sensors

Contact us at 01386 423756 or at: www.suurmond.com/products/suurglass

DEC Group

The pioneering force in high containment powder transfer and handling technologies

Dec's unique concept of using vacuum and pressure to move powders through tubes formed the basis of the original PTS Powder Transfer System® that has provided the platform for worldwide success and innovation. Dec has been developing an extensive range of technologies over the last three decades which include solutions for handling and transforming powders, which are complementary to many types of industries.

From accurately transferring and dosing powders from mg to tons, milling materials from microns to mm or mastering high mixing and blending requirements, Dec provides innovative solutions for contained, sterile and safe

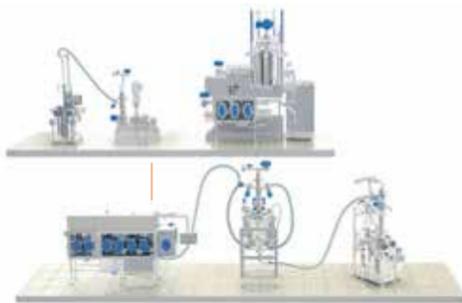
manufacturing conditions.

Areas of expertise we excel in are as follows:

- Dense Phase Vacuum Powder Conveying
- Isolation – Containment & Sterile
- Milling and Micronising
- Filling and Emptying of All Containers
- Dosing and Pack-Off
- Powder Blending
- Inline Powder Sampling

The industries we are working in are as follows:

- Primary and Secondary Pharmaceutical



- All Chemical Industries
- Animal Feed
- Battery Materials
- Waste Materials
- Food and Drinks Industry
- Cosmetics

Please contact us at our UK offices for a no obligation discussion of your powder handling requirements: Chris.Broadbent@dec-uk.co.uk

Enhanced heat transfer in a smaller package

The HRS C Series is suitable for applications with low to medium viscosities, as well as heating CIP fluids and general industrial applications.

Based on the established K Series of Industrial Multitube heat exchangers, the new C Series also features HRS's corrugated tube technology which increases heat transfer and thermal efficiency while also minimising the effects of fouling. The new standard option is expected to be popular for use with industrial hot water and steam applications.

The smaller tube diameter means that more tubes can be fitted into each unit, meaning that in the same model heat transfer is more efficient. This results in a more compact unit as the overall length of the heat exchanger can be reduced for a given capacity, meaning that C Series units with smaller tubes can be produced for areas where the available space for installation is restricted and a larger K Series may be unsuitable.

Matt Hale, International Sales & Marketing Director at HRS Heat Exchangers, explains, "In the past, where clients have



wanted a smaller tube diameter for a specific project, it was a special item. We are now able to offer the C Series with 12mm tubes as a standard option, meaning shorter production lead times and competitive pricing."

T 01923 232335
info@uk.hrs-he.com
www.hrs-heatexchangers.com

Don't throw your money down the drain

"sera technology can help Reduce, Re-use, Recover and treat your process water".

At this year's CHEMUK 2021 at the NEC Birmingham, sera UK became a focal point for hundreds of visitors.

Whether the standout feature was the 100 litres of baby oil in the chemical dosing pump display or the great selection of innovative products on show, either way the visitors left the stand with the confidence that sera ProDos UK can help them with any of their chemical dosing, transfer or make up solutions.

As a worldwide leader in dosing technology, sera ProDos is a system provider of high-quality products and services for the dosing and feeding of chemicals and fluids. Indeed, with over 75 years of experience, sera ProDos is renowned for its excellent customer service and leading German engineering, offering some of the most robust pumps available on the market.

We will look forward to welcoming future customers and partners at CHEMUK 2022 in our prominent position at the entrance, and will look forward to talking about our REDUCE,



RE-USE, RECOVER solutions including ways to reduce sewer discharge fees, cut environmental costs amongst others.

T 01283 753400
sales.uk@sera-web.com
www.sera-web.com

Glass Flake Products Company of the Month

Glass flake industry innovators

In this issue on Industrial Process News, we have selected Glassflake as our Glass Flake Products Company of the Month.

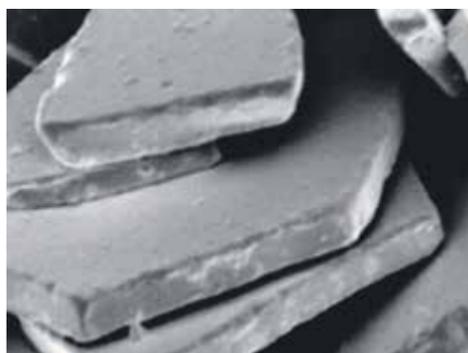
Glassflake is renowned as a pioneer in the glass flake industry, being the first to produce flakes utilising the advanced 'spun method', which is often referred to as rotary process technology. The company maintains its headquarters, main manufacturing facility and research and development in Leeds. In addition, Glassflake has a global presence with its production facility in Langfang, China and a sales office in Perth, Australia.

"Glassflake Ltd was founded as a company in 1987; however, our unique production process was invented a number of years prior to this when we identified that glass flakes, at the time, were somewhat crude in terms of the quality and thicknesses available," stated Simon Brigham, Director.

Glassflake is now a world leader in the manufacture of glass flake; an engineered, performance enhancing additive. After undertaking an initial research project in the early 1980s to manufacture glass flake for anti-corrosive coatings, the company developed the 'spun method' of production, which has enabled the material to expand into a broad range of applications.

Simon explained, "Glassflake produces unique innovative glass particles,

which are likened to irregular shaped pieces of flat glass on a micron scale. We offer the most diverse range of glass flake products, which are used in a wide range of applications, from increasing the durability and life of coatings and plastics to use as effect pigments in cosmetics and personal care products. They are used functionally to improve mechanical properties by reinforcing materials such as plastics, and used as a non-continuous barrier in coatings and paints. Glass flakes may also be used as effect pigments for decorative purposes with coatings on the flakes to enhance and add colour in cosmetics, automotive paint or within plastic articles."



As a company, Glassflake has built a reputation for its product innovations including glass flake as thin as 100nm in thickness. This market leading consistency, product quality and advanced range has positioned the company firmly at the forefront of the glass flake industry.

"Our unique production process allows us to tailor glass flake solutions for particular applications, whether that is changing the thickness or diameter, or as complex as looking at the glass chemistry itself. We offer excellent flexibility as a company," added Simon.

In terms of its most recent developments, Glassflake has added two new additions to its product portfolio; Puraflake and AgFlake.

Puraflake is a high purity glass flake that may be used as a replacement for Talc and mica in cosmetic formulations. Puraflake is based on ultra-thin borosilicate glass flakes which have an average thickness of 350nm and provide an alternative high purity synthetic filler, producing an improved skin feel.

AgFlake, is a functional silver coated glass flake with high conductivity

that may be used in electronic products. AgFlake is used for functional purposes as a conductive filler. Unlike other equivalent pure metal fillers, AgFlake provides conductivity at a lower cost, is lightweight and high conductivity can be achieved at low loading.

As the company looks toward the Future, Glassflake maintains its stance on innovation being an integral part of its DNA, whether this is product or process led. One of the most interesting projects the company has undertaken is a new form of glass melt technology, to improve its commitment to sustainability.

Simon explained, "As standard across our production sites, glass melting is achieved using electricity which is 15% more efficient than conventional natural gas glass melting, it has substantially less emissions. With our new glass melt technology we are able to reduce electrical consumption by a further 40%. This technology has the potential to be used across many glass melting processes, leading to more sustainable production with significantly less use of high emission generating energy."

For any further information on the company, please see the details below:
 T +44 (0)113 270 3615
www.glassflake.com



The right all-in-one device for prelocation, pinpointing and correlation

The **SeCorrPhon AC 200** combines the characteristics of a correlator with acoustic water leak detection. This makes it an all-in-one device for leak detection, which brings together the three important functions of prelocation, pinpointing and correlation in one single, functional system. Users can react to any location scenario, even in the most challenging of conditions. Switching between the different functions or processes is simple and fast.

The **SeCorrPhon AC 200** makes structure-borne and ground-borne noises caused by leaks from water pipes audible to the human ear. The frequency spectrum is traced and made visible on the device, and the current acoustic intensity is shown as both a graph and numeric readout. The user can also see the pre-calculated volume settings and the current frequency analysis of the device on the display at all times.

To then carry out the pinpointing of the leak, the user uses the **TS 200** carrying rod and **BM 200** (for paved surfaces) or **BM 230** (for unpaved surfaces) ground microphone on the section found during the preliminary detection stage.

The **SeCorrPhon AC 200** transmits the acoustic signals and shows the intensity as a graph on the screen, pinpointing the leak with sufficient accuracy to allow confident excavation.

The acoustic features of the piezo microphone are outstanding: even the faintest of leaks or leaks occurring in noisy environments can be identified and detected. At the touch of a button, the **SeCorrPhon AC 200** will apply tailored filters to the current noises and will automatically select the appropriate frequency ranges. Filter limits can also be adjusted to accentuate the leak noise and to permit improved comparability between recordings (e.g. for use in databases or teaching/presentation purposes).

The **SeCorrPhon AC 200** is ideal for use for leak detection across all sections, materials, diameters and lengths of pipelines. Numerous additional functions are also available for complex location scenarios – whatever your leak detection requirements, this system will fulfil all of them.



Correlator and acoustic water leak detector combined

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Glass expert sees clear advantages with Kawasaki robots

Kawasaki Robotics has welcomed one of the UK's leading manufacturers of glass handling systems as a Preferred Integrator.

Based in Shrewsbury, GS-MR is recognised as a leader in automation for the glass and stone manufacturing and processing industries. The company designs and manufactures bespoke robotic and automation systems for the sector, using Kawasaki robots exclusively.

GS-MR is armed with more than 35 years of engineering



excellence, with 16 years of global high-end machinery experience in the glass processing industry.

Robert Owen, GS-MR director, comments, "The only robots we use are from Kawasaki. The wide range of models available and their durability is matched by the technical competence of their sales and integration teams."

"That back-up and knowledge has always proved pivotal and has given us a significant advantage when we're in project discussions with our customers."

For more information, visit: <https://robotics.kawasaki.com/en1>

KMF invests over £1m in new equipment

Precision Sheet Metal firm KMF has invested in two new Laser Profiling Machines which will increase cutting speeds, reduce operating costs and allow a greater range of materials to be processed.

KMF has ordered two 3030 (L95) New Generation machines. The machines are state of the art, fibre lasers from Trumpf and join a full array of high end Trumpf sheet metal processing equipment. The new lasers are estimated to improve average run times by up to 50% and potentially result in 60%+ reductions in the average machine running cost.

The £1.2m assets have been ordered to replace two existing older machines. The existing machines comprised of an early technology fibre machine and a traditional CO₂ laser, both of which have been operational in a 24/7 capacity since early 2012.

Commercial Director, Keith Nicholl, said, "Faster machines means that we can continue to offer a



competitive solution to our customers at a time when resource costs are rising. As well as being faster, the machines are more comprehensive and more accurate."

The new lasers also have more capacity to cut through heavier gauge and a larger range of sheet-based materials.

To find out more about the KMF Group visit: www.kmf.co.uk

Services for the sheet metal industry

PressCare UK Limited is a West Midlands based engineering company predominantly operating in the fields of power presses, coil handling equipment & automation systems. We offer a comprehensive range of services to the sheet metal industry including servicing, safety inspections, electrical & mechanical repairs, preventative maintenance programs, installations, commissioning, guarding solutions & CE marking. We offer a comprehensive range of ancillary equipment including tool protection (load monitors, component/misfeed detection, etc), strip lubrication, scrap removal & energy saving systems.

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In this issue of Industrial Process News, we are pleased to announce KOSO Kent Introl as our Valve Manufacturing Company of the Year.

"We are proud to be recognised for this award, but our thanks go to our excellent team here at KOSO Kent Introl and our customers and suppliers who have worked so hard to ensure minimal disruption in very uncertain and challenging times. We're not perfect but we are striving to continuously improve our performance, product and support of our customers whilst also consciously reducing our impact on our environment," said Stuart Billingham, Sales Director.

Since 1967, KOSO Kent Introl has been engineering and supplying high-quality valves to perform in some of the most severe service conditions throughout the world. Its last 50 years has proved how reliable, consistent and trusted the company is within the industry providing high-performance products that are backed by first-class technical expertise. Its engineering quality, customer focus and fast technical responses give its customers the peace of mind they need.

KOSO Kent Introl has a large portfolio which boasts products such as severe service valves, control valves, surface choke valves, subsea valves, and butterfly valves. "We specify, design, machine, assemble and test in a controlled environment using only the best quality suppliers and tools. Our aftermarket team can globally support the product in the field, from spares and service right through to upgrades or retrofit solutions for both surface and subsea products all engineered and produced at our UK Brighthouse site which boasts full design and manufacture and world class Machine, assembly, Service and R&D facilities. We can also offer Cradle to Grave care and support of our product," said Stuart.

The company offers an invaluable number of services from servicing and maintenance, diagnostics, overhaul and repairs, upgrades and spares, and asset life extension. Its highly skilled



aftermarket engineers can create technical engineered solutions that benefits not only the valve, but the efficiency of the whole application.



"Our products can be found in almost every major oil and gas producing region and are used across a wide range of applications, including the petrochemical, power and utilities industries globally. We have always prided ourselves on the quality of our product and the performance it provides linked to a high level of application/product knowledge that our sales and application engineers have. We have a broad range of solutions that we can utilise in our control and choke valves that mean the selected valve is the optimum solution rather than a close compromise forced by mass production limitations," stated Stuart.

With the effects of COVID-19 still looming, Stuart described how the last 12 months has fared for the company, "We continued to trade during lockdown as we are an essential supplier to the energy sector, so we had as many staff as possible working from home with machine and assembly shop and support staff at the office all operating under social distance and limited movement policies. One of the biggest challenges was managing the effect on the supply chain both UK and internationally as various countries were affected. Some of the systems and practices we adopted during lockdown have had a permanent effect on our working day. Tools such as Teams and virtual whiteboard/update meetings have greatly improved our efficiency."

Financially, COVID-19 has had some dramatic effects on businesses all around the world. Stuart explained how the company has adapted to these changes. "The last financial



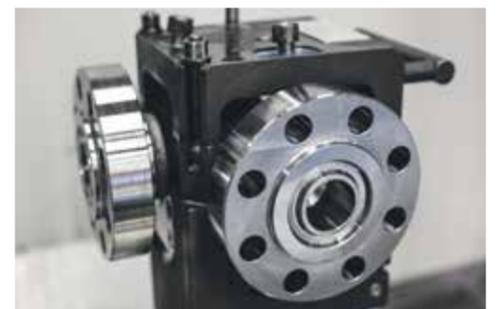
year ending March 2021 was a strong year for KKI on shipments despite all the challenges COVID-19 presented and we finished on target with a strong order book for the coming year. However, bookings were slow for the back half of the year and the first half of the new financial year as part of the carryover from COVID-19 uncertainty and lockdowns. The slow recovery was in line with our forecast, and we predicted a hockey stick profile to bookings favoured towards the third and fourth quarters as the projects we typically target would start to move ahead."

Recently, the company has been shifting into transition energy. Energy transition refers to the global energy sector's shift from fossil-based systems of energy production and consumption to renewable energy sources such as wind and solar as well as lithium-ion batteries.

"Transition energy has been one of the most recent developments. In practice the transition energy market place is fast evolving and new players are appearing almost daily. The challenge is to stay relevant and current with our products, but we are confident we are well positioned to meet the needs of the various sectors of transition/clean energy like CCUS, offshore electrification, offshore wind and hydrogen both blue and green. We've already seen a step change in the number of enquiries and requests for support in the Transition Energy sector and orders for one of the leading CCUS projects in the Norwegian sector," stated Stuart.

In the future the company will continue to support its customer base as well as supporting its global installed base with spares, service and new replacement equipment and upgrades. In the long term, it will continue to strengthen its product offering in the transition energy segment and invest heavily in Additive Manufacturing technology with a view to reduce lead times, material waste, CO₂ emissions and develop new and novel designs and solutions only possible with AM technology.

In closing Stuart added, "Change is nothing new to KOSO Kent Introl who through our 54 years have seen us supporting the emerging UK North Sea market and the burgeoning UK Petro chemical sector. Since we have broadened



into global offshore oil and gas developments, midstream and downstream global projects, as well as the power segment and combined cycle gas turbines. We will be there to develop, support and adapt to the future worlds process control challenges. Many of the skill sets and products we have are transferable in meeting future energy needs, for instance we provided our first hydrogen valves back in 1969 and since then we have supplied valves on cryogenic and high pressure and temperature hydrogen duties around the world. We supplied our first carbon capture subsea choke over 18 years ago for a major Norwegian operator that is still performing today and more recently we have secured orders for valves for a new flagship CO₂ storage project that draw heavily on our experience on similar pressure and flow duties seen in oil and gas production Meg injection."

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www.kentintrol.com



Across every industry, manufacturers are working to meet growing customer demand in a globally competitive market

Despite a widening skills gap, by organising advanced technology into highly optimised work cells, manufacturers are maximising productivity through automation.

Specialised equipment, like a deep-hole drilling system, often is challenging to integrate, which quickly can create production schedule bottlenecks. To eliminate the risk, shops that perform deep-hole drilling should seek out OEMs that understand the needs of high-production manufacturers and have the capabilities to bring technology into the factories and work cells of the future.

Deep-hole drilling systems, which can produce holes that exceed a 20-1 depth-to-diameter ratio, are a unique class of manufacturing equipment because of the focused tasks they conduct. An increasing number of machining centres boast deep-hole drilling capabilities, but these machines simply cannot operate at needed speeds, particularly for parts that require exceptionally high accuracy. Manufacturers that must perform deep-hole drilling capable of rapid production and high throughput should instead select machines designed for the task.

Automating holemaking

These shops increasingly opt for deep-hole drilling systems that also work with automation.



In a typical deep-hole drilling work cell configuration, such as one for producing rifle receivers or automotive shafts, the equipment can use automation to time its cycle completion to mesh with other production processes. For straightforward automation, conveyors and pick-and-place robots move and position parts for deep-hole drilling with exacting repeatability and accuracy while automatic toolchangers, doors and inspection stations keep parts moving swiftly into, out of and around the cell.

Because deep-hole drilling tends to apply to long, cylindrically shaped parts, workpiece configuration eases or complicates some aspects of automating load-in and load-out cycles tied to drilling operations. Workholding axes, for example, can provide automatic part gripping with pneumatic or hydraulic chucks operated through advanced controls for deep-hole drilling systems. In this configuration, machines can pick up a part, drill it and set it back down on a conveyor or part collection area. In deep-hole drilling systems themselves, specialised designs also offer automatic chucking, while robot-tending systems can add further flexibility with end-of-arm tooling, workholding and measuring systems.

As the automation configuration grows more complicated, however, manufacturers require an OEM that can act



as a collaborative partner to find available solutions or engineer individualised products for unique applications or production lines. Shops that depend on deep-hole drilling as part of a high-production environment should seek a partner that has a demonstrated record of working directly with manufacturers to modernise processes and create robust automated work cells.

Gundrilling application

UNISIG, for instance, worked with a manufacturer of rifle barrel receivers to help it accommodate growing demand and relieve production bottlenecks. The manufacturer's older gundrilling machines were replaced by a multiple-spindle machine, the UNI25HD. It had the power and controls necessary to apply indexable gundrilling tools, significantly improving feed rates.

To enable fast one-piece-flow manufacturing, UNISIG integrated the system via automation for in-feed, pick-and-place, conveyor loading and automatic clamping, which fed two lathes that turned the parts. The result was an effective work cell that produced more than 100 parts an hour, a dramatic financial and process improvement.

The viability of automated deep-hole drilling production can depend on tool life and part length. At extreme depths, for example, some parts require more than one set of inserts to produce a completed hole, and the high level of hardness of some workpiece materials causes rapid

tool wear. To overcome this challenge, UNISIG programs its machines to detect wear and predict when a tool will reach its breaking point, allowing operators to prevent a failure that could stop the line.

For further process efficiency, deep-hole drilling machines should have either a CNC or programmable logic controller. Both can integrate with other control systems and interface with a controller in the work cell. Systems such as a fully automated barrel cell are capable of unmanned, lights-out production with efficient programming.

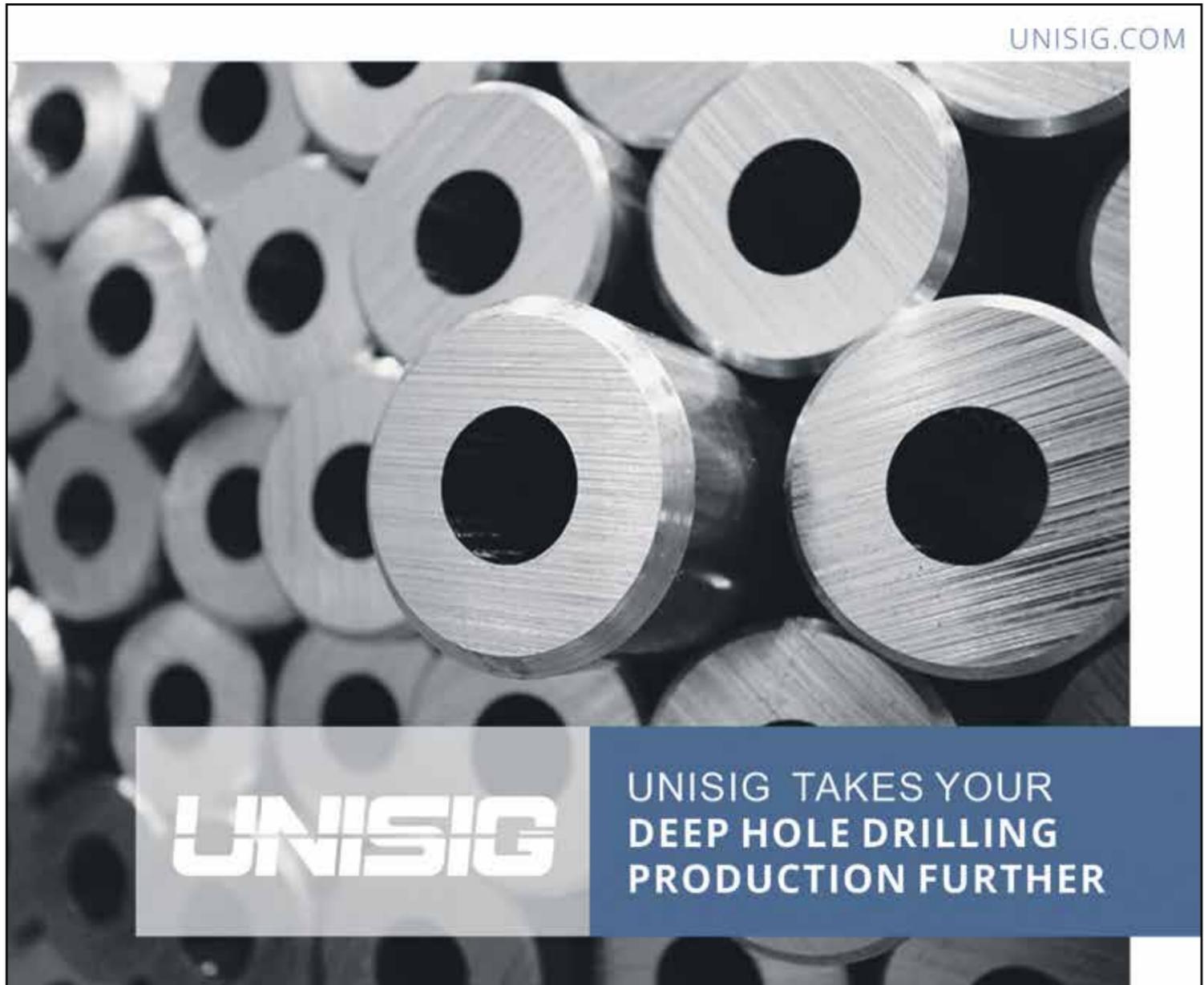
Deep-hole drilling equipment's application-specific configurations suit the production of parts that necessitate techniques and processes that go beyond the easy capabilities of general-purpose equipment. In years past, many manufacturers



thought of this kind of specialized equipment as old-fashioned and a drag on production. But with the right engineering and applications expertise – deep-hole drilling in work cells can keep up with the productive factory environment that manufacturers need to succeed.

Further information on all machines of the B Series and the complete UNISIG machine program is available at: www.unisig.de or follow the company on LinkedIn and Twitter (@UNISIG).

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Stainless Fittings Ltd creates the world's first Coolant Distribution Unit



In this issue of Industrial Process News, we are pleased to announce Stainless Fittings Ltd as our Pharmaceutical Engineering Manufacturer of the Month.

Stainless Fittings Ltd (SFL) is the UK's largest manufacturer and distributor of its own range of BIOBORE High Purity 316L Stainless Steel ASME BPE Tube and Fittings for the pharmaceutical industry. For over 60 years, its main role has been to provide its customers with the solutions needed for process flow needs. Typically SFL specialise in providing products for Water for Injection (WFI) applications, however, recently the company has been involved in supporting the ongoing manufacture of vaccines as the UK continue to roll out its vaccination programme. "The most recent example is the supply of fabricated solutions into the research and development of vaccines in response to COVID-19 (ie. the Oxford vaccine). We have also supported vaccine development overseas," stated Lynda Lawrence, Business Co-Ordinator.



SFL has been a strategic business unit of a number of PLCs and was taken under private ownership in November 2007. DPL (Dairy Pipe Lines) is the sister company of SFL and operates on the same site. It manufactures and supplies the Diamond Range of hygienic valves, tube and fittings for the food, dairy brewing, soft drink, and cosmetic industries, and was a privately owned until acquired by a PLC in the mid 1990s. Today, both DPL and SFL continue to trade as part of the privately owned Stainless Technologies Group of Companies (STL).



BIOBORE is SFL's own brand of BPE fittings which carries the full range of tubes, bends, tees and crosses, reducers, ferrules, caps and blanks, and other products. All products meet the stringent requirements of the BPE specification and carry a full material certification to allow complete traceability at all times. "We are able to supply industry specified (BPE/Bio Pharmaceutical Engineering) standard products in addition to our own manufacture of high purity bespoke solutions. This gives our customers a 'one stop shop' that has the technical and manufacturing capability to meet their bespoke needs. Manufacturing staff are trained to meet externally set quality standards ensuring customers can rely on the products and services we supply. What distinguishes us from our competitors is that we are the only UK owned manufacturer of BPE fittings alongside our bespoke manufacturing capabilities," stated Lynda.



SFL serve a diverse sector, manufacturing stainless steel fabrication, pipework, fittings and valves for the process flow industries, while simultaneously focusing specifically on the



pharmaceutical, food, dairy brewing, and cosmetic industries. Its main customer base serves well for installers, OEMs, main contractors, and end users. Based in the Black Country means its manufacturing base in Dudley, West Midlands, is well situated for a fast and reliable service around the UK. SFL takes confidentiality seriously so when working alongside end users such as major pharmaceutical companies and food producers SFL are often required to sign a non-disclosure agreement.

In recent news, SFL has helped create the world's first stainless steel Coolant Distribution Unit (CDU) for high performance cooling for use within major data centres. With the company's extensive knowledge and experience in stainless steel pipework, SFL was offered the opportunity to advise and guide a CDU manufacturer who was looking to swap from the traditional brass or copper unit to a stainless-steel pipework unit.

It took four years to complete and over that time SFL assisted its client in the design of the stainless steel pipework that was to be installed into the CDU. SFL's years of experience, unique to the industry, meant its client had complete trust in the company while working alongside them on such an exciting innovative project. SFL helped create a series of 2D CAD drawings and 3D models through its meticulous and methodical approach. The main reason to make the switch from brass or copper to stainless steel is that stainless steel offers an increased quality and purity over any other product on the market. Stainless steel also provides lower maintenance costs as the coolant fluid doesn't need to be filtered or changed as frequently, as it is resistant to corrosion and leaks.



Since the unit was launched into the



market, it is now used around the world and has received orders from companies based in Australia, Japan, and the USA. SFL offer many benefits through its measured approach allowing every stage of the design process to be carefully thought out and every problem that might occur to be solved before each project begins. Through the company's full scale manufacturing ability, it is able to set up a bespoke manufacturing cell to ensure it was able to manufacture two CDU kits a month to keep up with the demand of the market. When working alongside SFL each project is appointed a dedicated account manager which becomes

the client's daily one-to-one contact. Catering to companies around the world, the account managers work across varying time zones and provide a superior level of customer service. The company's professional understanding of HVAC and data centre cooling ensure every deadline and requirement is met in a timely manner.

Lynda went on to explain the ethos of the company, "The company is committed to a policy of internal recognition and promotion, with five of the six Senior Managers being promoted from within. The company has a very long serving staff base which provides our customers with a vastly experienced team of people and the company with a significant pool of resource and knowledge from which to promote internally."

Echoing its 'in-house' culture where 'No Surprises' is its motto, its hard work and well-established relationships with its clients have resulted in a significant growth despite the uncertainty of COVID-19. "We have had the pleasure of working with the vaccine producers and hand gel manufacturers, which continues to be a target sector for the group," said Lynda. Currently, SFL is involved in a number of digital marketing campaigns and has just embarked on a project to update its website. Feedback from its recent marketing initiatives has proved extremely positive and it will look to carry its success into all future projects.

For more information, see below:
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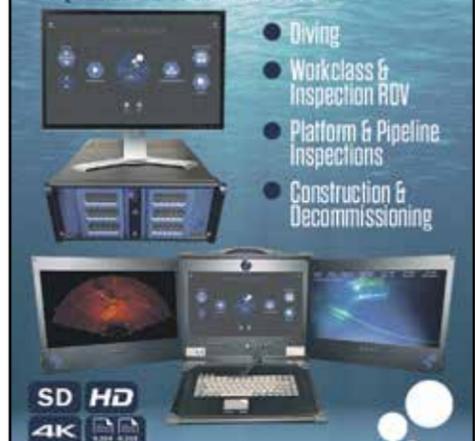


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Automate your process with Orion



In this issue of Industrial Process News, we are pleased to announce Orion MIS Ltd as our Automation, Integration & Engineering Company of the Month.

Orion is a market leader offering effective, efficient solutions for warehouse and distribution centres.

Established in December 2018, this year sees its third consecutive year in operation and already Orion is on track to turn over 10 million pounds. Believing in the power of people, the company was created by its two Directors Chris and Danny, who combined have over 15 years of experience. Under their management, the Orion team has the skills and understanding to design, install, integrate and maintain automation within warehouses and distribution centres.

Orion is an expert in system integration and automating processes from solution design to installation and support. Each member of Orion's leadership team has extensive experience as engineers in a variety of industries. Therefore, Orion understands the quality, knowledge and understanding needed to make an automation project successful.

As the fastest growing independent integrator in the UK, Orion has access to the whole market, enabling them to provide the best solutions and processes for each customer, whilst making sure operational efficiency is at the heart of every design. By always going the extra mile to make the customer



happy, Orion regularly embarks on on-site visits to customers and spends time analysing and gaining a full scope of its customer's wants and needs. This focus is paramount in allowing Orion to deliver fast lead times, a modular design approach and clear, honest pricing. Transparency is key to Orion's



customer service; no job is worth rushing and every customer is always given the utmost respect and appreciation.

Based in Chichester, initially, Orion started as a software house offering improvement services. Significantly adapting since its inception over the three years, Orion has merged to become an independent integrator and deals with anything from retrofit upgrades to providing a full turnkey solution for blue-chip companies. As a market leader in the logistics industry, Orion works closely with household name brands and end-users within the food and pharmaceutical industries. There is no end to which industry Orion can provide solutions for. Its multifaceted approach and abilities allow the company to work across a plethora of sectors and cater to each client specifically.

Recently, Orion has directed its focus towards new markets by designing and testing a large number of solutions and conveyor products to help improve overall efficiency and promote best practice in the workplace. From low-voltage roller conveyors to belt conveyors, Orion offers a full range of suitable conveyor systems for the transport of containers, cardboard boxes and other heavier items up to 50kg.

But why choose Orion?

Renowned as independent automation experts, Orion assists its customers in finding the best solution to fit specific company needs. They pride themselves on offering tailored solutions to fit a variety of industries from automotive,



pharmaceutical, consumer goods, eCommerce, manufacturing and logistics. Orion understand the process can be frustrating and time consuming let alone expensive. Therefore to keep ideas fresh, they develop the best plan of action with each client to ensure every aspect of the process is individually taken care of in the best way possible. Turning the initial design over quickly benefits both the client and Orion as changes can be made while the solution is fresh in mind.

In product development news, Orion is looking to launch within the UK its new Cross Belt Sorter. This system provides the ability to handle a wide range of products, from very small envelopes to large parcels that are as heavy as 30kg. The high speed of 2.5m/s and accurate parcel orientation results in a system that is designed to handle up to 24,000 units per hour. With a error rate of around 0.01% and a modular construction, it can easily and perfectly match all the building environments of even the most demanding of sortation centres.

Since COVID-19, many companies have been forced to utilise automated processes as there has been a reduction in man hours and staff shortages on site. Working alongside their blue-chip clients, Orion didn't stop work over the pandemic, and in fact, were busier than ever.

While many competitors have been struggling with lead times of automated equipment in recent months, Orion have been able to utilise their extensive network of suppliers to ensure that they can offer the very best lead times in order to keep integrating sites and keep processes running smoothly. In the future Orion will continue its aggressive growth as it looks to support new markets in new ways whilst also maintaining its high level of service to existing customers.

In closing Nick Walkiden, Customer Account Manager mentioned, "We ultimately operate to serve our customers. Delivering a high level of quality customer service is our main focus and we keep our promises. When we agree to do something for a client, even if it adds additional cost that we cannot pass on, we will always ensure the customer is happy and make them our number one priority at any stage of a project. We put a huge emphasis on customer service, after all we wouldn't be here without them."

For more information, see below.

T 0333 335 5269
info@orionmis.co.uk
www.orionmis.co.uk



PanelPilotACE display: Scientific Air Management

Hospital air disinfection system

Compromised air quality in hospitals can increase the severity of infections in patients and negatively impact staff. There is no overstating the importance of air quality in hospitals and medical centres as these facilities need to be sterile and clean to allow patients to recover and employees to work safely.

Scientific Air Management, a Florida-based company, created the S400 to reduce transmissions in critical areas. The S400 is

a mobile air disinfection unit designed to remove airborne contaminants, pathogens, and odours of all types. The S400 unit utilises Lascar Electronics' SGD 43-A programmable TFT panel meter. Scientific Air Management chose the SGD 43-A display primarily for its programmable interface and ease of use. The free configuration software supplied with the panel meter enabled Scientific Air Management to design and create a multi-page user interface. The design utilised two PWM outputs to control fan speed and illumination of the UV bulbs. The SGD 43-A also displays the HEPA filter runtime to ease

maintenance and ensure efficient operation.

Lascar recently designed and manufactured a PCB that eases the assembly process and greatly speeds up the production time of the completed assembly. Lascar Electronics was proud to help Scientific Air Management meet the high demand and supply hospitals with the S400 during the COVID-19 crisis.

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Is it luck or good judgement?



Metrel warehouse manager, Alex Biddiscombe, can fulfil multi-function testers on next-day delivery

"Business, as we all recover from the COVID chaos, is difficult," said Brendan Beaver, UK manager of Metrel, the innovative electrical solutions provider.

"Planning work is more a lottery than ever, while supplies and deliveries cannot be reliably scheduled apparently due to the aftermath of COVID, the lack of drivers and for some, a fire at a key supplier.

"It is even harder when the company is going through the unprecedented growth we are experiencing. But excuses are no use to customers who need their new test equipment now to earn their bread. Fortunately Metrel stocks are good, our channels are well primed, and we can fulfil your needs today."

Metrel is one of the oldest manufacturers of electrical test equipment, having been established over 60 years ago. An innovation leader, it produces test equipment for HV and LV applications, including power quality, earth analysis and transformer analysis.

For more information, contact Brendan Beaver on 01924 245000 or email: brendan.beaver@metrel.co.uk

Yeebo Display Europe

Yeebo Europe
 Office 105, Devonshire House,
 Aviary Court, Basingstoke, RG24 8PE,
 Tel: +44 (0) 203 287 6886

IPS TFT Modules from Yeebo Display Ltd



Size	Part Number	Resolution	Luminosity CD/m ²	Operation Temp
1.3"	YB-TG240240C02A-N-A1	240 x 240	320	-20-70
2.0"	YB-TG240320C170A-N-A0	240 x 320	500	-20-70
2.4"	YB-TG240320C277A-N-A	240 x 320	800	-20-70
2.8"	YB-TG240320S27A-N-A0	240 x 320	350	-20-70
3.5"	YB-TG320240S22A-N-A0	320 x 240	500	-20-70
3.9"	YB-TG480128S01A-N-A0	480 x 800	280	-20-70
4.3"	YB-TG480272S17A-N-A1	480 x 272	550	-20-70
5.0"	YB-TG800480S33B-N-A0	800 x 480	350	-30-85
5.5"	YB-TG7201280C12A-N-A0	720 x 1280	550	-20-70
7.0"	YB-TG1024600S11A-N-A0	1024 x 600	710	-20-70
10.1"	YB-TG1280800S07A-N-A0	1280 x 800	800	-20-70



All modules are available with or without touch panel

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Born2Bond™ range extended

Bostik, an Arkema Company, has extended its Born2Bond™ engineering adhesive range designed to support the electronics manufacturing sector in the assembling, waterproofing, dustproofing and serviceability of miniaturised electronics such as wearables and handheld devices and larger applications such as smart meters and LED lights.



Born2Bond™ MECA-based cyanoacrylates and innovative dual-cure Light Lock adhesives (patented in multiple countries) are already available for electronics OEMs for high-precision instant bonding, encapsulation and potting applications. Coupled with automatic dispensing solutions, they provide high performing and convenient options for designers and engineers.

The new versatile and single-component High Performance HMPUR (Hotmelt Polyurethane Reactive) range has been designed specifically for the manufacture of miniaturised handheld and wearable electronic devices such as mobile phones, smart watches and headphones. High Performance HMPUR products are available with a range of viscosities and open times to suit different applications and assembly processes.

Born2Bond™ new UV-CIPG (UV Cure-in-place Gasket) range provides single-component, precise gasketing solutions with typically 0.5-2mm high gaskets for waterproofing, dustproofing and serviceability of mobile phones, tablets, smart watches, digital cameras, and automotive applications such as battery management systems (BMS), electronic control units (ECU) and advanced driver-assistance systems (ADAS).

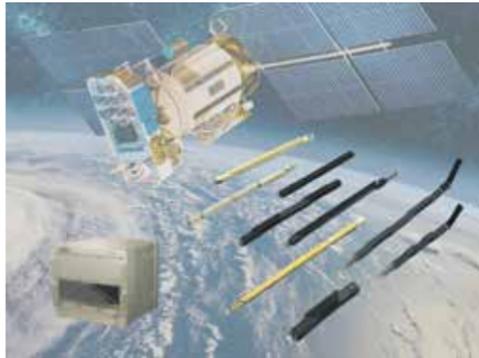
For larger applications such as smart meters and LED lights where 2-5mm-high gaskets are required for dust and water proofing, Bostik's UV-FG (UV Foam Gasket) range provides a fast-curing alternative to moulded gaskets that can easily be integrated into manufacturing lines. Its single-component design means mixing is not required and a high-foam expansion enhances resilience during the assembly process.

<https://born2bond.bostik.com/en/industries/electronics>

nVent/Schroff Card-Lok High Clamp Force PCB Retainers

Foremost Electronics, the engineering-led, Essex-based importer and specialist distributor of electromechanical components, can now supply the nVent/Schroff Card-Lok range of innovative high thermal performance and high clamp force PCB retainers for use in rugged environments. The new Card-Lok retainers have been designed to be drop-in replacements for most applications currently using standard Card-Loks and provide on average more than 3x the amount of clamp force compared to similarly sized Card-Loks.

Standard COTS & modified Card-Loks are available to meet a wide range of requirements and include designs for second level maintenance including torque limiting and tool-less card locks. With their small and lightweight designs typical applications include industrial systems, defence, space flight, communications, computers and intelligence surveillance.



As more systems are being exposed to increased shock and vibration sufficient printed circuit board retention is critical as are the requirements of SWaP (reducing size and weight while effectively handling increasing power). SWaP is a continuing challenge for defence and aerospace designers and manufacturers and is especially important in airborne applications where weight equates to cost, or for unmanned vehicles where space is a premium.

The need to miniaturise the size of electronics has also been driven by the growing need for devices that can easily be carried over long distances by operators.

For more information on nVent/Schroff Card-Lok High Clamp Force PCB Retainers, call +44 (0)1371 811171 or email: sales@4most.co.uk or visit: www.4most.co.uk

ESAB Rogue ET TIG/MMA inverters



The new ESAB Rogue ET 200iP PRO inverter features full-featured digital TIG controls, including those for pulsing, gas pre-flow, start current, end current, gas post-flow, HF (non-contact) or Lift-TIG arc starts

ESAB Welding & Cutting Products recently launched Rogue ET 180i and 200iP PRO, its new series of portable, powerful TIG/MMA inverters that feature ESAB's next-level control technology to deliver professional arc performance. Its full-featured digital TIG controls include those for gas pre-flow, arc start current, end current, gas post-flow and HF (non-contact) or Lift-TIG arc starts.

Tipping the scales at 8.7kg and 9.6kg, respectively, Rogue ET 180i and 200iP PRO units are one-third lighter than competitive inverters in its class. Both units measure only 403 x 153 x 264mm but deliver a maximum TIG output of 180A (180i) and 200A (200iP PRO) at 25% duty cycle and a stable TIG arc down to 10 amps.

"Rogue will cause the industry to re-think its perception of lightweight power, performance and price. Inverters with Rogue's TIG capabilities often cost twice as much," says Bartosz Kutarba, Global Product Manager – Light Industry Equipment, ESAB. Rogue ET users include mechanical contractors and those in general fabrication, maintenance and repair, rental, process pipe, food/beverage and agriculture.

Professional features

The 200iP PRO version has a pulsing feature with frequency adjustable from 0.2Hz to 500Hz. Stainless steel fabricators and those working with thin metals or heat-sensitive applications use pulsed DC TIG to control heat input, narrow the weld bead profile and increase travel speed. A slow frequency helps welders establish a good rhythm for adding filler rod.

PRO models feature Power Factor Correction (PFC), so they draw less than 16A of current. Thus, users can use a smaller circuit breaker and reduce the worry of nuisance trips when welding at full output. Using the latest technology PFC circuit also enables welding with up to 100m of cable extensions.

Rogue PRO models run on 90-270VAC 1-ph, 50/60 Hz main power, enabling users to work in a wide variety of locations. Flexible automatic input voltage compensation ensures a steady welding arc throughout the entire input power range, which makes them ideal for situations with fluctuating dirty power and generator power. The Rogue 180i connects to 230VAC ±15% 1-ph main power.

To learn more, visit: www.esab.com



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Schmersal launches respiratory protection mask to FFP2 standard

The Schmersal Group has developed a particle-filtering half-face mask without exhalation valve. The reusable SPM100 respiratory protection mask satisfies the requirements of EN 149:2001+A1+2009 FFP2 and is available for delivery as of now. The mask is designed to reliably protect medical staff and employees at other exposed work locations, for example dusty work environments, from solid and liquid aerosols.

The mask body in the SPM100 (Schmersal Protection Mask) is made from medical-grade, biocompatible polypropylene (PP) and is reusable. The mask seal is created with a silicone profile that can be removed easily for regular disinfection and then quickly be reinserted into the mask. The filter caps can be removed with ease, thus offering easy filter changes. All reusable parts of the mask are made from resistant materials that are suitable for cleaning and disinfection.

The SPM100 respiratory protection mask is used with an FFP2 filter insert, PPE category III, in order to prevent the inhalation and/or transfer of particles, droplets and aerosols. This filter unit filters certain particles from the air inhaled by the wearer within the specified limit values of the filter used.

The SPM100 is a respiratory protection mask with no exhalation valve. Respiratory protection masks without an exhalation valve protect the wearer and prevent the wearer from contaminating his or her surroundings with exhaled droplets. In addition, the mask also comprises skin-compatible components and offers maximum comfort for the wearer.

"In developing the SPM100 respiratory protection mask, we made full use of our many years of experience in safety technology & occupational safety. We want to help ensure that even in this difficult time of the coronavirus people can work safely and stay healthy," explains Matthias Banaszek, Project Manager for Strategic Organisation Development.



Other products & services for infection prevention

In addition to the SPM100 respiratory protection mask, the Schmersal Group offers other products and services to help protect employees from coronavirus infection in the working environment. This includes 'Schmersal Access Control' (SAC-IO-20), which enables digital organisation of access management by limiting visitors, eg. in retail settings. The system is an intuitive traffic light system with integrated counter that automatically counts the number of visitors entering a shop or other facility.

In addition, tec.nicum, Schmersal's service division, offers execution and documentation of 'Risk assessments for infection prevention' for businesses in all industries – a legal requirement for employers under industrial health and safety regulation and fully independent of a current coronavirus pandemic.

Contact: Steve Watkins, Marketing & Business Development
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www.schmersal.co.uk

Plastic bottles used in ENGEL high-vis workwear

Recycled plastic bottles make up 50% of the material used for the latest high visibility protective safety clothing from ENGEL Workwear. Each item of 'Safety Light' clothing can be verified to consist of regenerated polyester fibres ultimately spun from a specific number of plastic bottles to make up 50% of its content. This is combined with 40% cotton and 10% standard polyester (245 g/m²) to produce a cool-to-wear, durable fabric. By using regenerated polyester which is equally as efficient as new, there are significant consumption savings on energy, water and CO₂.

The Danish firm has worked closely with Unifi, one of the world's most advanced recycling centres, which transforms the recycled bottles into a

polyester yarn called 'REPPEVE'. The smart, mix-and-match range includes boiler suits (containing 37 plastic bottles), work-jackets (20 bottles), trousers (19 bottles) with Cordura kneepad pockets and elasticated waistband, bib-overalls (23 bottles) and shorts (14 bottles). All have many practical pockets and comfort-design features. There is also a specific selection for women called 'Ladies Light' – with the same benefits.

John Engel, CEO of ENGEL Workwear, comments, "We are delighted to be able to make a positive contribution in helping to reduce the impact of the single-use global plastic waste crisis by putting many thousands of otherwise discarded bottles to further practical purpose. By doing



so, we are able to do our bit to help improve the environment and use this versatile fabric to produce a unique range of lightweight, hardwearing and comfortable high-visibility clothing which will keep our customers safe."

Contact: Gareth Bladen
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gbl@engel.com
www.engel.eu/en
https://youtu.be/nc2se7xKKIE

New report highlights sign blindness threat

Leading health and safety experts are warning that the UK faces a 'sign blindness' epidemic as people continue to return to the workplace.

Recent research from the Office of National Statistics showed that 60% of adults expect to be back in their normal place of work before the end of autumn. Now, health and safety solutions provider Seton has joined forces with top academics and psychologists to review the risk that sign blindness poses with many offices reopen and manufacturing teams returning to full strength following the end of furlough. Together, they are advising that overexposure to

signage, rules & safety warnings during the pandemic is likely to lead to complacency amongst employees & a failure to register the standard safety signs in front of them. The new report highlights that sign blindness potentially poses one of the biggest risks to workplace health and safety in decades.

As Ed Barnes, Product Innovation Manager at Seton explains, sign blindness is such a threat because we are all susceptible to it. "The human mind has a remarkable ability to interpret abstract symbols, shapes and colours quickly – but we can soon become desensitised to something,

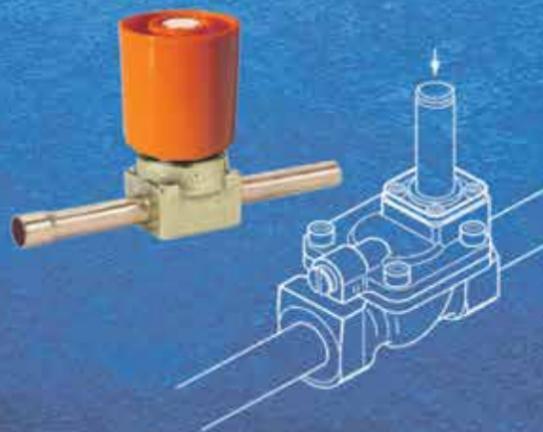


even though the hazard is the same."

You can read the full free report Sign Blindness: A big risk to health and safety at: www.seton.co.uk/sign-blindness-form.html

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WP launches 1st 100% recyclable valve for Dispensing Closures



Sustainability is an integral part of Weener Plastics' (WP) strategy. WP also recognises that convenience and quality are fundamental and should not be compromised. Respecting sustainability as well as functionality, WP's Innovation & Development team has developed an unprecedented solution: the world's first 100% recyclable valve for Dispensing Closures.

100% recyclable

WP's Innovation & Development team has created the perfect solution: a 100% recyclable valve that offers fully controlled, clean dispensing. The valve is made of a specially developed material. This enables full recycling with polyolefin waste streams – regardless of the bottle material.

Uncompromised functionality

This recyclable valve offers a fully controlled and clean dispense of any quantity the consumer may require. The dosing behaviour can also be adjusted, depending on preference. Valve dimensions are exactly the same as those of WP's familiar silicone valve. The valve is suitable for WP's standard closures as well as for customised designs.

Widely applicable

WP's new valve is highly versatile and compatible with a wide range of applications such as food, home care and personal care. When used to dispense oily or fatty formulations, this recyclable valve also performs better than any other solution.

norwich@wppg.com
www.wppg.com

Packaging firm joins world first recycling project

A Yorkshire food packaging company has signed up to help deliver a world first – the production of food grade mechanically recycled polypropylene. Keighley-based PFF has joined



the NEXTLOOPP project – a global initiative launched by sustainability consultant Nextek. The project aims to produce the first commercially available high quality food grade PP (FGrPP) which could be available in the UK by 2022, boosting sustainability and environmental targets.

Primarily used in food packaging, non-food household and personal care products, PP accounts for around 20% of the world's plastic. It currently goes to waste-to-energy, landfill or is down-cycled into low-performance applications, wasting precious resources. The absence of FGrPP means that PP food packaging is currently made from virgin plastics. PFF Group processes polypropylene at its Washington, Tyne and Wear site, where it manufactures film for food packaging. As a NEXTLOOPP member, PFF will collaborate on the pilot production of FGrPP, taking part in manufacturing trials and product demonstrations.

Lee Wilkinson (pictured), Group Supply Chain Manager at PFF Group, said the company's participation in the project underlines its ongoing commitment to being at the forefront of developing a sustainable, circular plastics economy. He added, "PFF supplies customers with sustainable, food approved food packaging containing high levels of post-consumer PET. PP is a versatile polymer useful in many different packaging applications and we are excited to collaborate on the NEXTLOOPP project."

sales@pff.uk.com
www.pff.uk.com/packaging

Adhesives & glue guns

AdCo UK is one of the largest manufacturers of shaped hotmelt adhesives and water-based adhesives for use in packaging and product assembly markets for over 21 years, from its Head Office and manufacturing facility in Liphook, Hampshire, with additional distribution facilities based in Leeds UK and a network of approved distributors based throughout the UK.

As well as supplying adhesives for all requirements, AdCo supplies a wide range of specialist applicators – from ProFlex industrial, heavy duty and professional glue guns to total melt, cartridge and bulk systems, we also manufacture and supply UF resins, PVA

Adhesives, PU Adhesives, Tapes and much more

As part of our commitment to offer our customers the correct solution for their needs AdCo are continually investing in research and development along with new state of the art manufacturing equipment to ensure we continue to meet the ever changing needs of all types of industry.

Thanks to our unrivalled knowledge of adhesives and application techniques, our highly skilled technicians can offer a 'find and supply' service to all



our customers. With a combined industry experience of over 120 years, our technicians can ensure that any bonding problem can be solved quickly and efficiently.

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AdCo's HD 250 NV is a true standout among industrial-grade hot melt glue guns, and a go-to tool for contractors and tradesmen in many fields of work.

The "NV" stands for "needle valve," an exclusive AdCo design feature which allows the user to lay down precise, uniform glue lines, with perfect cut-offs and no more dripping and stringing!

This exceptional quality tool sports cushion-padded grips, an easy-squeeze trigger, and a removable wire base stand which makes it easy to use in any work environment.

The 225 watt PTC heating system allows for quick heat-up times to its preset temperature of 210°C, and the ability to dispense upto 1.5 kilos of glue per hour.



Full-size 11/12mm Sticks

3 Second Set Time

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Rotech approaches its 25th year anniversary

Rotech was established in 1997 and has seen significant growth since, especially in the last 6 years, which has led the company to become one of the most respected coding and marking specialists in the UK.

"We provide coding and marking solutions for the packaging industry, working with sectors like pharmaceutical, food processing and general industrial industries. We are a one-stop-shop for coding and marking. We take customers from an initial inquiry, where they approach us with a need, and then we look and find a solution. Its more than just providing them with something from our range, as we have the building blocks in place to be able to provide a full service, from design and manufacturing to testing, delivery, implementation and ongoing support," said Richard Pether, Director.

The company's expertise and comprehensive service has enabled them to provide solutions to even the most difficult problems. Regardless of the size and complexity, Rotech is committed to always delivering the right solution with an importance placed on efficiency, sustainability and quality engineering.



Rotech provides an innovative range of coding and labelling equipment, designed to offer the ideal solution for printing and applying variable data onto products or packaging, quickly, reliably and at the right price.

Rotech also maintains a vast range of feeding systems, which are ideal for coding a wide range of packaging. Offering a broad range, from the low cost RF Lite, which is ideal for start-up companies who are looking to automate their date coding, to Rotech's more complex RF Compliance, which has been specifically designed to help pharmaceutical manufacturers comply with legislations.

"We offer a wide range of technology, in terms of our feeding systems; our range is unique and has been designed and manufactured by us in the UK. We can offer a system to suit a vast selection of packaging needs. On the coding side, we offer a unique selection of technology," added Richard.

In regards to the company's latest news, Rotech has recently grown its online presence by launching an online shop, Buy Rotech. Richard noted, "This development has provided us with a wider audience,

making it now easier than ever before for people to buy from us."

With constant development being a pivotal point of focus for the company, Rotech has continued to expand its range of equipment and provide new applications to meet its customers changing needs.

One of its notable developments in the past few years has been Rotech's offering of Thermal Inkjet technology, a cost-effective, maintenance free product coding solution. Thermal inkjet printers (TIJ) are an ideal replacement for thermal transfer (TTO) and continuous inkjet (CIJ) printers for printing variable information, such as date codes, batch numbers and barcodes onto labels, films, cartons and sleeves.

"We always strive to have an edge, you could say that in some respects we have products that challenge the way things are currently being done, like CIJ, where we came along with different, alternative technologies. We like to feel that we have an



innovative range, that is not the same as others," said Richard.

As the company plans for its future, innovation, constant development and further growth, remain Rotech's main ambitions.

"We are pleased to be approaching our 25th year anniversary and we will be marking the occasion," Richard continued, "As a company we continue to grow and we always invest in new technologies. 3D printers now form a pivotal part of our production. We now have seven 3D printers, some are better suited to certain processes than others. This has been a big change within the company in embracing new technologies and growing our staff and sales. We're always changing and going forward. We plan to further our growth and increase our ability to meet customer's needs. We are committed to investing in new technologies, people and the development of our products."

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The one stop shop for all of your labelling needs

Experts in labels, labelling and label printing, Datamark supply and manufacture a varied range of labelling solutions to a wide range of customers spread across various industries. Enlisting in the services of Datamark, customers can enjoy numerous benefits, for example gaining from the years of knowledge and experience amassed by Datamark.

Constantly innovating and seeking to add new products to their already extensive range, Datamark truly are the one stop shop for all of your labelling needs. Moving from strength to strength since its inception in 1995, Datamark offers customers competitive pricing, unparalleled customer service, reliable deliveries, rapid quote turnaround, and an extensive product range. Datamark's product range includes: Plain and Colourwashed Labels, Flexographic Printed Labels, A4 Sheeted Labels, Fanfolded Labels & Tags, Own Brand Thermal Transfer Ribbons, Thermal Transfer Ribbons, Thermal Transfer Bureau Print Solutions, GoDex and other brand Thermal Transfer Printers, Thermal Transfer and Direct Thermal Print Solutions, and TT Printers Service and Maintenance.

Driving the company forward, aside from its extensive product range, is its continued emphasis on providing the best customer service possible. It is no wonder that Datamark supplies such a wide variety of industries, including; food, distribution & logistics, storage & contract packers, electronics, homecare, automotive and industrial.

sales@datamarkuk.com
www.datamarkuk.com

Engineering the future



Imperial College Carbon Capture pilot plant

In this issue of Industrial Process News, we are pleased to announce Strata Technology as our Quality Engineering Solutions Company of the Month.

Operating in the UK and overseas, Strata Technology is trusted to design, manufacture, commission, inspect and maintain bespoke laboratory equipment, skid-mounted rigs and pilot plants in the petroleum, petrochemical, pharmaceutical, fine chemical, new green technologies and nuclear industries. Working alongside some of the world's leading Universities, Strata Technology also work in the development of their state-of-the-art research equipment.

"Our highly qualified and multi-disciplined project teams of electrical, mechanical, chemical and process engineers work alongside skilled mechanical and electrical technicians to provide our clients with innovative and cost-effective installations for the generation of reliable test data or the manufacture of products," stated Mira Jangra, Head of Products, Sales & Marketing.

Strata Technology was formed in 1998, with its founding directors, shareholders and employees former members of BP's Technical Services Division.

Since its foundation, Strata Technology has widened both its customer base and its skills but has retained BP as one of its customers. Its collaborative approach enables the creation of partnerships with a variety of clients from both the commercial and educational sectors. Previous clients include Siemens, BP, Equinor, Halliburton, The University of Nottingham, Imperial College London, Cardiff University, The University of Cambridge and many more to which Strata Technology is trusted to deliver an engineering solution to aid their research and deliver credible results. Based in Sunbury-on-Thames, Strata Technology's clients are based all over the world in the United States, Latin America, Continental Europe, Asia, the Middle East and Australasia.

From the design and maintenance of its bespoke laboratory equipment, Strata Technology is passionate about nurturing its customers. In support of this it offers a problem-solving consultancy service to which Mira explained further, "Strata excels at providing consultancy-based support to customers seeking to make into reality their concept of design, providing a full project management service to commercialise their ideas into reality. Strata's end to end consultancy and project management ability ensures the customer has a one stop supplier from proof of concept to actual manufacturing, build and commissioning of high-end specialised pilot



Nottingham University Carbon Capture pilot plant



plants and equipment, meeting the customer's exact requirements."

In recent acclamations, Strata Technology has successfully achieved the BEIS Award for the development of a Direct Air Capture project as part of the UK-led Consortium with Sizewell C and Nottingham University. As part of the Government's Greenhouse Gas Removal (GGR) competition, Strata Technology was delighted to showcase and put to use its extensive carbon capture utilisation and storage (CCUS) knowledge and process development experience to the consortium. The project was aimed at accelerating the development of carbon capture systems, and because GGR is vital to reducing the levels of Carbon Dioxide produced by industries that are difficult to decarbonise such as agriculture and aviation, the unique heat powered Direct Air Capture design received high amounts of praise. A DAC involves the removal of Carbon Dioxide from the atmosphere which is then stored permanently so that it cannot contribute to climate change. Where Strata Technology's design differs from existing DAC

technologies is that it offers an increased efficiency with less reliance on electricity.

As one of the industries leading companies its accreditations echo the efforts of the people behind the power. Such accreditations include ISO 9001:2015 for quality management, ISO 14001:2015 for environmental management, ISO 45001:2018 for occupational health and safety management systems, ISO 17020:2012 for inspection services, and Fit for Nuclear (F4N) for the civil nuclear industry.

In closing, Mira explained Strata Technology's future ambitions, "We are about to launch our new website. We have expanded our capabilities into new green technologies bringing with us our expertise and knowledge of carbon capture plants and wastewater treatment plants. Our aim is to support the UK Government with achieving its net zero ambitions by supporting new innovative technologies and applying our expertise to commercialise those ideas."

T 01932 732340
www.stratatec.co.uk



UKCRIC - Cranfield University water treatment pilot plant

Delivering the 4th Dimension



In this issue of Industrial Process News, we are pleased to announce Hazel 4D as our Packaging Solutions Company of the Month.

Hazel 4D is a leader in packaging consultancy services, solutions and machinery, and has improved the packaging performance of some of the world's most recognised brands. Its expert team of technical consultants, packaging technologists, and procurement managers channels many years of specialist experience, knowledge and understanding into providing a customer-centric approach that delivers real value.

Established in 1979 by Garth Christie, the company

originally started out selling retail packaging consumables. 40 years later Garth remains the CEO and Chairman of Hazel 4D and still has a strong influence on both strategy and the day to day running of the company. Based in Leeds, Hazel 4D also has a distribution centre in Sherburn in Elmet and works with customers all over Europe.

The Hazel 4D way

Hazel 4D is guided by four main principles, which set it apart from competitors. Delivering exceptional levels of service and enjoying excellent relationships with its customers, Hazel 4D prides itself on a personal approach. Always taking the time to listen carefully to customers' needs and responding with smart solutions that are perfectly tailored to meet them. Recognising the potential of leading-edge technologies to improve packaging processes and performance, Hazel 4D uses its global network of trusted partners to bring its customers the latest packaging innovations. With sustainability now critical to both the industry and the planet, Hazel 4D is continually developing process improvements to reduce consumption, and introducing innovative sustainable alternatives that don't cost the earth. Committed to making its customers' lives easier, Hazel 4D prides itself on its flawless delivery, with everyone in the team going the extra mile to get things right for its customers every single time.

We spoke with Lee Armstrong, Packaging Consultant & Marketing Director, who explained what the '4D' in the company's name represents. "4D is the fourth dimension, this is our way of describing the added value that we give our clients, it's the reason our service is unrivalled. We spend time with our customers really getting under the skin of their operations, understanding their processes, and



coming up with solutions and ideas to save them time, materials and money. With new challenges such as the Plastic Packaging Tax that comes into play in April 2022, and the new Extended Producer Responsibilities that are due to become law in 2023, it's vital that our customers are planning ahead now. It's so important that they don't delay in finding new ways of working and mapping out the changes they'll need to implement to ensure that they

are prepared for these new regulations. This is an area where delivering our 4th Dimension can really make a difference – enlightening, even educating, our customers in more sustainable practices and methods, to ensure they are ready in good time to ship product safely and sustainably. To this end, Hazel 4D has employed an environmental specialist to work with clients and suppliers alike – helping them to really drill down into their products and ensure that they are as environmentally responsible as possible – she can be contacted at cayla.payne@hazel4d.com or by calling her on 0113 242 6999.

Another key area of focus for Hazel 4D is pallet wrapping. They have created a winning combination by bringing together the Atlanta range of automatic and semi-automatic pallet wrapping machines and the extensive range of nanotech Extremus machine and hand applied stretch films, which are capable of stretching by over 300%. No other company on the market can offer this combination, which enables users of pallet wrap to dramatically reduce the quantity of plastic used to wrap a pallet, while reducing the cost per pallet wrapped, and increasing pallet load stability all at the same time. Combine that with the new range of recycled and part recycled films within their range & it is easy to see why Hazel 4D are so confident that they have a winning line up.



In the future Hazel will continue to accelerate its efforts in providing sustainable products and ways of working in order to reduce its overall carbon footprint. Its efforts to connect with forward thinking global manufacturers and suppliers has been a roaring success over the past 12 months and has certainly not gone unnoticed in the industry. Watch this space for more exciting developments

For more information, see below:
T 0113 242 6999
wecare@hazel4d.com
www.hazel4d.com



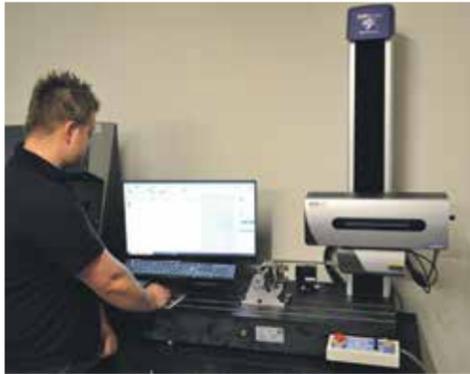
Accretech: The RDS Precision decision

Given the intense competition between engineering subcontractors it is often the businesses with unique selling points that stand out from the crowd. One such successful company is Washington, Tyne and Wear based RDS Precision Engineering. In addition to establishing a reputation for delivering on time and on budget, the busy company's main differentiator is its highly developed quality ethos. To help ensure the premium quality of the company's output, regular investments are made in high-precision inspection equipment.

The latest addition to RDS Precision Engineering's impressive quality control department is an Accretech SURFCOM NEX 041 CNC measuring station that provides the company with high-precision, two-dimensional contour and surface roughness measurement capabilities.

RDS Precision Engineering was established in 1991 by brothers Robert and David Bone with the aim of becoming a successful independent supplier of precision engineered components. Due to the quality of the company's output and the efficiency of its services, the business soon achieved its founders' ambitions. To enable RDS to increase its capacity and expand its range of precision manufacturing services, over the past three decades regular investments have been made in a range of CNC machine tools and advanced inspection equipment.

Explaining the recent Accretech purchase, RDS Precision



Engineering Director, Rob Bone, said, "A policy of regular investments has resulted in our skilled staff now having access to a wide range of first-class inspection equipment. As a BS EN ISO 9001 certified business that counts many companies involved in technically demanding industries as customers, quality has always been, and will continue to be, our number one priority.

"We use a selection of standard inspection equipment, such as CMMs and vision measuring systems. Also, given the demanding specifications and challenging dimensional tolerances of many of our components, we also use

highly-precise specialised metrology equipment, such as our recently purchased advanced Accretech CNC contour and roughness measuring system.

"The decision to purchase the Accretech system was a simple one. Some time ago, a major customer of ours searched the market for an easy to use CNC measuring station that could deliver high-precision, two-dimensional contour measurements, although several alternative systems failed to match the business' exacting standards, a SURFCOM NEX 041 proved to be the ideal solution.

"As we were recently looking to upgrade our inspection capabilities in this area, given our

customer's exceptionally high precision standards, the in-depth research they had undertaken before their Accretech purchase, and as a result of their recommendation, we also recently invested in a SURFCOM NEX 041."

The SURFCOM NEX 041 is an advanced, CNC measuring station that delivers high-precision, two-dimensional, physical contour measurement. Ideal for the manual or CNC, high-precision measurement of contour geometries on demanding applications, such as ball screws and large bearings, the advanced Accretech system has an impressive contour measuring accuracy of $\pm(0.8+2H/100)$.

In accordance with Accretech's philosophy of providing the highest standards of precision with trouble-free operation, thanks to the use of kinematic magnetic holders, the SURFCOM NEX 041's contour styli can be swapped out effortlessly and with high positioning accuracy. Also, to enable even the most difficult to reach workpiece positions to be inspected a wide range of contour measuring styli are available.

Ideal for use by both novices and experienced quality control personnel, user-friendly SURFCOM NEX 041's ACCTe operating software is extremely intuitive. In addition to measurements being fully automated, the system's calibration and adjustment procedures are also simple procedures.

Rob Bone continued, "Following a trouble free installation and operator training, as the SURFCOM NEX 041's operation is so straightforward our staff soon mastered its operation. Now in regular use, our new Accretech machine is proving invaluable. For instance, we were previously using a shadowgraph to measure a regularly manufactured family of parts with demanding angular contour specifications and struggling to achieve the required levels of precision. Now, we are able to load each of these parts onto the SURFCOM NEX 041, recall the relevant program and instigate a precise, fully automatic CNC measuring routine. Not only has the Accretech machine improved our precision standards related to these challenging components, it has also slashed the time taken to inspect them. In fact, as our contour inspection routines have been automated, now, after the operator has loaded each part onto the machine, he is able to perform other duties whilst waiting for inspection cycles to be completed.

"So successful has our use of our SURFCOM NEX 041 been, soon after its installation, we returned to Accretech UK to purchase an additional T-stylus set that now allows us to make very accurate contour measurements inside small bores in both downwards and upwards directions. This allows us to measure complex geometries and diameters deep inside bores that were previously very difficult or impossible to measure."

Accretech designs and manufactures a wide range of high-precision, cost-effective instruments for the accurate and



efficient measurement of workpiece surfaces, forms and contours. Used throughout the world by quality conscious businesses involved in some of the most demanding industries, such as the automotive, aerospace and medical sectors, Accretech products are found in both quality departments and in serial production situations on assembly lines.

Accretech's extensive range of contour measuring devices allow workpieces features, such as angles, radii, distances and coordinates to be quickly inspected with high levels of precision. Rather than using the ball screw and nut arrangement, employed in less capable systems, Accretech's products benefit from the use of advanced linear technology.

This superior arrangement results in significant reductions in mechanical wear and ensures that all products retain their accuracy specification and remain maintenance free. These advantages provide users with considerable cost savings over the life of each system.

As all users' contour measuring needs differ, SURFCOM NEX machines can be specified with the addition of a wide range of modular accessories and sensors, guaranteeing the delivery of systems that exactly matches their intended use. The availability of these accessories and sensors means that Accretech systems remain 'future-proof' as they can be modified as users' inspection needs change.

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DD-Scientific launches new miniature industrial gas sensors

DD-Scientific is very pleased to announce our newest range of high performance electrochemical gas sensors. The Dcel series provides gas detector manufacturers the same reliability and robustness of bigger sensors in a miniature package, facilitating the design of compact instruments with greater functionality. All of the most commonly measured toxic gases are included in the range and for oxygen there is a choice of lead based for reverse compatibility or long life, lead free technology.



For more information about this exciting development, please contact: sales@ddscientific.com

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MACHERY-NAGEL's renowned and proven powder pillow reagents and their PF-12Plus photometer form the perfect partnership for reliable and precise water analysis. The combination is flexible, durable and easy-to-use for optimal results in mobile and laboratory-based water and wastewater analysis.

The compact PF-12Plus photometer is tailor-made for mobile water analysis. It can evaluate MACHERY NAGEL's proven VISOCOLOR® Powder Pillow tests, NANOCOLOR® tube tests and their new NANOCOLOR® ECO test kits. The PF-12Plus is already equipped with more than 100 pre-programmed methods and additional functions. Thanks to its ease of use, measurement results can be produced within seconds. On the technical side, the compact PF-12Plus photometer impresses with its long

battery life and flexible power supply.

VISOCOLOR® Powder Pillows for chlorine and other parameters combine easy dosing of reagents with long-term stability. Every powder pillow contains the exact amount of reagent needed for a single determination. Contamination of reagents is impossible therefore the shelf life of reagent kits is up to five years. All necessary information for quality assurance, such as test name, LOT and expiry date is printed on every powder pillow to ensure to maximise measurement integrity. No scissors or spoon is required for opening and dosing the powder pillow reagents directly into the test tubes which facilitates maximum measurement-convenience for mobile and laboratory-based water analysis.

www.mn-net.com



A500f/A700f cameras for fire detection & condition monitoring

The FLIR A500f and A700f Advanced Smart Sensor ruggedised thermal cameras feature high-temperature detection for extreme environments paired with on-camera analytics and alarm capabilities – ideal for industrial early fire detection or outdoor condition monitoring applications. Along with enhanced spot, area, line, polygon, and polyline analytic functions that improve the definition of areas of interest and object curvatures, the A500f/A700f can help commercial and industrial organisations protect assets, improve safety, maximise uptime, and minimise maintenance costs.

For early fire detection, the A500f and A700f thermal cameras can quickly identify increased temperatures related to potentially dangerous conditions.

If smoke is present, the cameras can help provide increased awareness for decision makers to properly assess and address incidents. Both cameras feature Flexible Scene Enhancement (FSX) technology, found on Teledyne FLIR K-Series handheld firefighting devices. The result is an ultra-



sharp, finer-textured image that shows subtler edge details supplied by the embedded visible camera onto the thermal image, enabling operators to recognise objects and people more easily.

The A500f/A700f are also effective tools for pile-burn monitoring, providing automated early warnings for potential issues in waste management facilities or coal collection areas that operate around the clock.

Manufacturing facilities, chemical processing locations, or power substations that use common communications and control language can also benefit from the A500f and A700f beyond fire detection. These cameras empower those organisations to reduce maintenance costs by identifying heat anomalies from mechanical problems early, thereby extending the life of plant components while maximising uptime.

The FLIR A500f and the A700f are available now through Teledyne FLIR distributors. For more information, please visit: www.teledyneflir.com/products/a500f_a700f-environmental-housing-camera

Safety and convenience for contact angle measurements

With the new KRÜSS Absorber Pen, drops of the standard measuring liquid diiodomethane can be rapidly removed

Dose and dab: The new Absorber Pen for diiodomethane quickly removes drops that have been dosed for contact angle measurements from the sample, simplifying safe handling of the liquid. With the absorbent material inside, the pen holds at least 1,000µL & can be transported and stored safely and odourlessly throughout its useful life.

Diiodomethane is a standard liquid for contact angle measurements to determine surface free energy. The substance is used, for example, in the quality assurance of activated materials prior to bonding or coating. The otherwise rarely used chemical is used as a non-polar liquid in combination with polar water and is particularly suitable for this purpose because it forms quite high, easily



measurable contact angles and is inert to most materials. It is easy to handle if safety regulations are observed, but it must be disposed of properly. This step is much safer and easier with an Absorber Pen than, for example, with a collection of paper towels or cotton swabs.

The Absorber Pen for diiodomethane is now available exclusively from KRÜSS.

www.kruss-scientific.com

Largest-ever FMS installation helps Validair achieve special TSI award status

Notable among Validair's recent business successes is the largest Environmental Monitoring System installation in the history of TSI Inc, the world leader in particle counters and monitoring software. Validair is a Gold Standard Channel Partner to TSI. With over 1,000 sample point capacity, the TSI FMS5 installation at Oxford Biomedica's Oxbox facility was delivered, installed and commissioned by the Validair team late in 2019 and during the first coronavirus lockdown in 2020. Coincidentally, the Oxbox FMS solution continues to play a prominent role in the production of one of the COVID-19 vaccines.



Oxford Biomedica's Oxbox facility that features the world's largest TSI FMS installation

This prestigious installation was one of many that contributed towards Validair receiving special recognition by TSI, elevating the company to TSI Directors Club status – an accolade only presented to top-performing contamination control channel partners that achieve three consecutive years of outstanding success.

"Naturally, we were delighted to provide the environmental monitoring and critical alarm system to Oxford Biomedica last year, and rewarding to know that the expertise of our team is contributing to the highly acclaimed national vaccine programme," says Deborah

Haisman, Commercial Director at Validair Monitoring Solutions Ltd. "It is also pleasing to gain a further endorsement from TSI with induction into the Directors Club that clearly signals successive years of achievement, and recognition of that achievement, to the industry. Validair team members will wear that badge with pride," she adds.

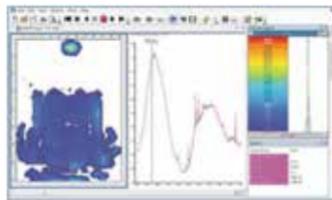
TSI EMEA Sales Manager, Simon Tebb, cited the Oxbox installation when presenting the new award, "Validair has doubled its sales turnover in the last three years. This incredible growth is built on

leveraging the company's technical prowess with monitoring systems, which led the Validair team to win multiple systems opportunities. This includes the flagship installation at Oxford Biomedica, which is the single largest FMS system installed by a TSI channel partner we have ever seen."

Validair is a TSI Gold Sales Partner – and now a TSI Directors Club member.

Contact: Michelle Bourne
T +44 (0)1684 576452
michelle-bourne@validair.com
<https://validair.com/vms/>

Advanced force measurement



AMTI, XSENSOR and GP:50.

As an internationally recognised brand, Interface Force has a range of products from multi axis

For over 25 years Interface Force has been supplying businesses with single axis, multi axis, force, torque and pressure measurement sensors. Commemorated as load cell, torque transducer and pressure sensor specialists, Interface Force has an extensive range of products to meet all customer requirements.

Established in 1996 by Neil J Johnstone, Managing Director, Interface Force is based in Crowthorne, Berkshire and works throughout the UK. There is a wide range of industry sectors and businesses that benefit from the vast amount of expertise and experience Interface Force has at its disposal. Some of these sectors include automotive, aerospace, oil and gas, defence, education, renewable energy research, pharmaceutical, food and drink and many more.

Its extensive product and service solutions helps to guide clients through what can be a difficult decision-making process, ensuring all requirements are met. All sensors and instrumentation products supplied by Interface Force are benchmark industry standard, manufactured by leading brands such as Interface,



load cells, load buttons, load pins and supporting products that enable them to offer the client a complete solution. These can include single and multi-channel signal amplifiers, a wide range of displays, data loggers and data logging software, Bluetooth and wireless telemetry systems for remote data collection and evaluation, repair and calibration services.

"We supply very high-quality products and have vast expertise in giving advice for load cell proving devices. Our load cells have very high accuracy and come in many different configurations such as our latest series, the 2200 calibration column. It is available in 100K-lb and 200K-lb capacities and each load cell is supplied with an ASTM E74 calibration with ISO-376 available if required," stated Tony Rokins, Business and Development Manager.

Interface Force offers bespoke, flexible services individual to each client's requirements. The company work with the client offering advice on pre-sales, on and off-site and develop bespoke custom solutions or devices to meet necessary needs.

In recent developments, Interface Force now distribute XSENSOR's high speed pressure mapping system. It is the first system to design and allow product



designers and safety testing engineers to see, record and evaluate the distribution of force from high-speed impacts on safety equipment such as helmets and body armour. Perfect for the automation sector, the mapping system can be used for collecting crash testing data I away not seen before. It can also record the force or pressure that is distributed during the impact from whiplash, seat belt and airbag testing.

Furthermore, Tony explained, "We are moving into a new direction, working with customers and businesses who need remote monitoring systems. A good example of this would be remote monitoring of airport luggage systems and conveyor belts. Our R&D team have been busy developing a wireless multi axis vibration sensor that has been specifically developed for a single customer, however, this product has multiple applications that can serve any business requiring help monitoring its conveyor systems. Alongside this, we also offer



custom designed wireless load cells so the customer can monitor and be alerted of any unexpected loads or changes on the conveyor system. They can then schedule maintenance for the system when it's not in use, rather than respond to a breakdown."

Interface Force has recently purchased several force calibration machines and is waiting for them to be tested and approved. Interface Force's established expertise in load cell calibrations, means it is an area the company is keen to explore.

Tony described how he felt receiving our award, "We are very excited. We work very hard for our customers, so it's always nice to receive some recognition."

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www.interfaceforce.co.uk



ZARGES gears up for Beryl e-bike partnership

Powering e-bike and e-scooter hire schemes to keep cities moving is an increasingly important consideration, with more and more local authorities nationwide considering more sustainable means of transportation.

That's why when the UK's biggest e-scooter and bike share company calls for a partnership for the safe transportation of lithium-ion batteries, ZARGES answers.

Under the Department of Transportation's Hazardous Materials Regulations, the transporting and storage of lithium batteries

is subject to strict safety regulations.

ZARGES, Europe's leading provider of packaging solutions for hazardous goods, provide Beryl with its UN-certified aluminium safety container to guarantee safe storage during transport of the lithium-ion batteries that keep Beryl e-bikes and e-scooters powered, even when defective or damaged.

As the demand for sustainable, more socially distanced travel methods increase across the UK, Beryl's platforms are at the heart of a more eco-friendly alternative to cars.

Philip Ellis, Beryl CEO and Co-founder, said, "ZARGES is the perfect partner to help us further our exciting roll-out plans nationwide.

"The reliability and stringently-tested nature of their cases, not to mention the expertise and know-how of the ZARGES team, gives us ultimate confidence that we're transporting crucial lithium-ion batteries in ultimate safety."

For more information on the full range of products and services offered by ZARGES, please visit: www.zarges.com/en/



Photo © Jake Baggaley

Transform your ageing WMS



Your ageing Warehouse Management System (WMS) could be costing your business. Inefficient warehouse practices can result in higher costs and reduced customer satisfaction. Technology upgrades usually involve system downtime, expensive modifications and lengthy training – not so with FulfillmentEdge from Zebra Technologies. This WMS add-on will enhance your existing system and can be implemented with minimal disruption.

FulfillmentEdge's dynamic workflows will allow you to pick up to 24% more orders because your employees' workflows will be contingent on their location, taking into account any task which can be performed in that locality, and the priority of the incoming orders. So, instead of picking one order at a time, your warehouse workers can pick multiple orders simultaneously, and even put away any new items that have just arrived, all during one single trip through the warehouse.

With FulfillmentEdge, you can cut time spent on new staff training and onboarding significantly, saving you up to 90% of normal 'bedding in' costs by creating intuitive Android interfaces for your devices, replacing the clunky old green screen interface.

Reconfigure your legacy WMS with FulfillmentEdge and reap the benefits of a modern system, gain real-time insights into your operations and improve overall business efficiency. Modernise your devices' interfaces and benefit from quicker onboarding and a more productive workforce.

For more information, speak to one of our experts on 03333 660842. Want to see it in action? Watch this video at: www.youtube.com/watch?v=VN0UIjobYc0

How barcoding can help



Why is there a labour and staffing crisis in warehouses?
 ■ Coronavirus Pandemic ■ Brexit ■ Increased Hiring

How has the warehouse labour and staffing crisis affected the industry and the outside world?
 ■ Delivery Delays ■ Empty Shelves ■ Panic Buying

How can technology assist in solving these issues?
 Let's look at some of the benefits of choosing warehouse technology from GSM Barcoding:

- **Efficiency** – The main reason for implementing technology, such as barcoding systems for warehouses, is that they speed up productivity and make for a more efficient working day.
- **Easy staff training** – Using one of our simple barcoding systems means that less time will be spent training staff. They are easy to use, and the technologies can be picked up quickly, no matter your previous experience with tech.
- **Stock-control systems** – Don't waste time manually keeping track of stock. Minimise the risk of human error and speed up the process by taking advantage of the stock-control systems such as a Sage Barcode Warehouse Management System.

- Are smart technologies the future?**
- **Wearables** – These small computers can be worn on a worker's body or as a piece of clothing and are a great, convenient way to implement technology into your warehouse.
 - **Robotics** – Zebra technologies have recently implemented Fetch Robots, which bring stock items directly to the pickers and packets – reducing travel time and creating a more efficient process.

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BVC: UK manufactured multistage centrifugal blowers, vacuum pumps and industrial vacuum cleaners from Quirepace

BVC, originally the British Vacuum Cleaner Company, and now a brand within the Quirepace portfolio of products, have been manufacturing blowers, vacuum pumps and industrial vacuum cleaners for over 100 years. The range has developed over the years into the equipment we currently manufacture at our factory in Hampshire. We also supply a range of side-channel blowers and vacuum pumps manufactured in Europe to our specifications.

Our ability to manufacture close to our markets means that we are a nimble supplier to both our end-users and our customers where we are an OEM; it means that we have fast access to spare parts and replacement units, and our in-house manufacturing means we can quickly adapt to the ebbs and flows in the ordering cycles of our OEM customers.

Multistage centrifugal blowers and vacuum pumps are ideally suited for those applications where a constant pressure is required and where the power consumption and flow rate varies with demand. Our

range of units broadly covers equipment requiring a 1kW to 15kW motor. Flow rates and pressures will be determined by the demands of the application, and our specialist sales team can guide the customer towards the appropriate unit.

BVC multistage blowers and exhausters manufactured by Quirepace have an advantage over many other solutions in addition to outright performance and availability, and that is reliability and durability. All BVC units are the result of many years continuous development, and when supplied to end-user applications all come with a 5 year parts warranty (subject to Ts & Cs).

The performance and reliability of BVC multistage vacuum pumps means they are ideally suited to provide the motive power for the range of BVC industrial vacuum cleaners.

Like the blower and vacuum pumps, the range of industrial vacuum cleaners extends from 1kW to 15kW machines, with each machine in the range available with a wide variety of filters, hoses and tools allowing the units to be configured to match the customers' particular requirements.



The hazards of dust created by many industrial processes are well recognised. These hazards include the harmful nature of the dust directly to the health of workers, and the hazards caused by the potential flammability of some types of dusts.

The different hazards are not mutually exclusive; therefore the industrial vacuum cleaner used for particular cleaning jobs must be carefully selected to ensure maximum mitigation of risks. For example, dusts hazardous to health must be comprehensively filtered to ensure that they do not pass through the vacuum cleaner and back in to the environment. Hence, machines must be fitted with HEPA filtration, and may also be designated as M-Class or H-Class depending on the configuration of the unit.

Similarly, if the potential dusts create an ATEX rated environment, the vacuum cleaners chosen to operate in these areas must be suitably certified for use within the ATEX rated environments. The BVC range of industrial vacuum cleaners from Quirepace, includes machines that meet either or both of these specific requirements.

Not all materials are hazardous but may still require particular consideration. Some



materials, for example, require aeration tools for successful pick-up to ensure the material continues to flow in the machine hose.

Quirepace have many years of direct experience matching customers' requirements to the blower, vacuum pump, or industrial vacuum cleaner suitable for each particular application. Sometimes, an application requires special components or configurations, and again Quirepace are able to manufacture bespoke equipment for these special applications.

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Digital Edge Subsea

Digital Edge Subsea supplies the oil and gas industry with its digital video recording system.

The company, established more than 10 years ago, has nurtured strong customer relationships that has allowed for honest customer feedback, and this has been incorporated into the development of the Version 5 Edge DVR.

Conversations continue and now Digital Edge are pleased to be able to offer further software that will help their customers to serve their clients better.

Data Archive App

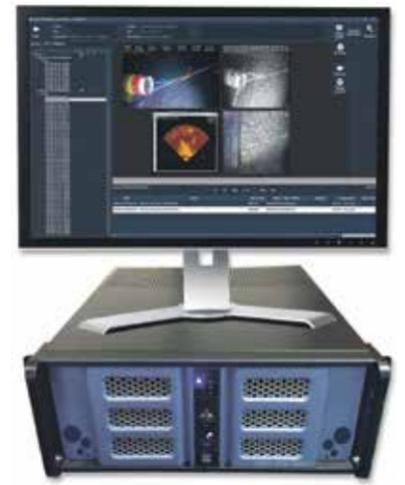
Digital Edge will soon release a data storage and back-up solution that uses an integral app within Edge architecture, to avoid needing a 3rd party app. Edge Archive handles the transfer of data

from the internal DVR drives to Client storage, either on a NAS, a Raid, or a phased delivery to multiple external hard drives.

Being a Native app, the data transfer ensures that the quality of Live recordings are not impacted by a 3rd party program trying to access the same file that the DVR app is currently using. Ensuring recorded data integrity and quality is of the highest importance.

Archive can act as a Simple data mirror of the correct internal drive data folders, or can be used to create multiple simultaneous backups of Client Deliverables. This can be done in continuous backup or a phased approach, ie. after each dive.

For more information or a demonstration of the system, contact: info@digitaledgesubsea.com or visit: www.digitaledgesubsea.com



New Frederikshavn office expands Inchcape presence

Inchcape Shipping Services has opened a new office in Frederikshavn that will enable it to offer a comprehensive package of services to ships calling in Denmark.

The opening of the office, staffed by an experienced and knowledgeable team with strong expertise in optimising operational performance for clients, means the company now operates in all Danish ports either with its own personnel or through carefully selected and vetted partner agencies. It marks the latest expansion by Inchcape as part of its strategic goal to be physically present in all key locations in Europe and it now has 44 owned offices across

17 countries on the continent.

Among Inchcape's key services now available from the new local office are pilotage to meet Danish Straits Passage requirements together with other passage services such as crew change and bunkering, and operations services such as port agency and dry-docking.

Frederikshavn is the largest ferry harbour linking continental Europe to Scandinavia with calls by about 4,500 ships annually, including 3,900 ferries carrying 1.8 million passengers, 350,000 cars, 168,000 lorry units, 2,500 buses and cargo, totalling 2.45 million tons.



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Test, Measurement & Calibration News

Chamois Metrology

Chamois Metrology introduces the new Additel ADT686 Advanced Digital Pressure Gauge which includes a smartphone like touchscreen and graphical interface for a completely new way of interfacing the menus and features.

The ADT686 Advanced Digital Pressure Gauge comes with a built-in barometer and is available in pressure ranges from ± 2.5 mbar to 4,200 bar and comes standard with Wi-Fi and Bluetooth wireless communications, as well as a type-C



USB port and cable (RS-232 and 4-20mA output communications are optional).

Additel 686 gauges cover, gauge, absolute, differential and compound pressure ranges.

Each gauge contains a built-in barometer sensor which allows for the pressure reading to display in gauge pressure or absolute pressure with a simple menu selection.

These new gauges can also be configured with an optional data logging capability which allows users to store up to 10,000,000 readings.

Each gauge comes with an ISO-17025 accredited certificate of calibration.

It is compatible with Additel's Link mobile app and 9502 Additel/Log II software, which enables the ability to monitor and display the real-time pressure measurements in a table or a graphic presentation.

For a demo in person or virtually, get in touch via: info@chamois.net or call 01926 812066.

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30 years of excellence

Sentek started manufacturing conductivity electrodes in Scotland in 1991, before heading south the following year to be located nearer to the universities in Oxford, Cambridge, and London where they could collaborate in research.



Sentek then started to make pH electrodes which would be high in quality but low in price, a successful formula which they continue to follow to present day. The Sentek range now includes dissolved oxygen and ion selective electrodes as well as electrodes specifically created for use in labs and the food and beverage and swimming pool markets.

After 3 decades, Sentek are now the UK's largest electrochemical sensor company with over 50,000 units produced monthly. They are still supplying instruments to their first customers from 30 years ago, a true testimony to the quality of their products and the reliability of their service.

Founder, Kenneth Petrie, said, "We have become an established player in the market and over the last 30 years, have acquired the experience and in-depth know-how to ensure our clients reliable and versatile solutions. We have gathered a strong team, who together, deliver the highest standards and services at all times."

Sentek intends to introduce a range of state-of-the-art new sensors for their customers in the near future as well as launching a new, highly user-friendly website.

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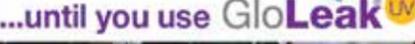
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Trust in Treston for your industrial furniture and workstations

In this issue of Industrial Process News, we are proud to announce that we have selected Treston as our Industrial Workplace Furniture Company of the Month.

Treston is one of the world's leading suppliers of industrial furniture and workstations. The company is a combination of the traditions and resources of two powerful companies; Treston Oy, which was founded in 1969, and Sovella Oy, which has roots dating back to 1876 & the family-owned company GW Sohlberg. Since 2011, the companies have worked together in Treston Group & became Treston through a merger in 2015.

Treston maintains its operations on a global scale with its extensive sales network & expert retailers offering assistance & services worldwide. The company's UK Office is based in Newbury, Berkshire, and its head office and factories of Treston Group are located in Finland with additional subsidiaries, situated in six countries: Sweden, the UK, Germany, France, the United States, and Russia. Furthermore, the company provides a network of retail partners that covers more than 30 countries.

Treston design, manufacture, and sell high quality workstation solutions for industrial and technical work environments. Treston workstation solutions are designed around the philosophy of LEAN manufacturing, and its impressive portfolio of products with ESD protection.

ESD damage affects electronic components and is typically non-visible meaning it may even pass through final product testing. As many electronic components are handled in working environments, it is of the utmost important to ensure they maintain ESD protection, which saves money, time and creates a positive effect on product quality. Treston's products are developed with ESD protection, making them suitable for use in ESD protected areas (EPA).

"Our range of products covers workbenches, workbench accessories, storage systems, trolleys, chairs, light fixtures, cabinets, shelves, assembly and production lines, and packing solutions. In addition to the product families optimised for industrial use, Treston manufactures storage solutions for households and public spaces under the brand name Sovella," mentioned Jemma Fowler, Marketing Executive.



Treston's workstation design and implementation process is always started by gaining a full scope and understanding of the needs of the person performing the work. Treston is dedicated to its customers, and as such ensures that its operations offer reliability, high quality and continuity, throughout.

"Our customers can rely on us to provide them with expert services for building quality ergonomic work environments. Ergonomics and the factors affecting functions and efficiency are all taken into account in the end product. Besides modular and adaptable standard solutions, our design department serves corporate customers with customer-specific and customised solutions," stated Jemma.

The company maintains a strong stance and attention to ergonomics, functionality and efficiency. Each design is created with durability being an integral part and objective, and by using optimal design, Treston ensures that its products provide high quality, for a long time to come, lasting from one generation to the next.

"Our operations are based on manufacturing high-quality products and doing high-quality work. We want to offer the best possible services to our customers, and our actions are open and compliant with the certification for our quality management system (ISO 9001 : 2015 and ISO 14001 : 2015)." Jemma continued, "Ensuring the quality of operations by consulting and understanding the needs of both internal and external customers is part of each employee's daily work. Added value is also created for our customers around the world through continuous improvement of operations, development of personnel, and responsible environmental and quality work."

Another important aspect of the company's operations, Treston ensures that full consideration of the environment is undertaken in all of its operations. The company is committed to minimising its impact on the environment and lessening the environmental strain of its operations, as part of a continuous improvement model. Treston maintains its environmental responsibility ethos throughout its operations and also seeks to promote environmental thinking within the Group, to increase the consideration of environmental aspects in all decision-making and actions.

Jemma explained, "The energy and water consumption of our factories is constantly monitored, and adverse effects on the environment reduced through operational optimisation. The heat generated by our machinery is used for heating factory premises. Also our water consumption has decreased considerably over the last few years. The plastic and steel waste generated by us is recycled 100%, and we favour environmentally friendly alternatives when purchasing machinery.



Additionally, the metal, plastic, and aluminium parts of our products can be recycled at the end of their useful life."

Showcasing its clear dedication to improving its environmental impact and constantly improving upon and expanding its services and product range, the outlook looks bright for Treston, and the company is not stopping there. Treston has recently launched its new TED (Treston Electric Desk), its latest innovation.

"The Treston Electric Desk TED comes with quick, silent and wide height adjustment. This ergonomic sit-stand desk perfectly suits light-duty assembly work, packing applications, R&D and industrial offices. The desk can be customized with accessories which further enhance ergonomics, free desk space and provide order. The table withstands high loads and is stable at all heights," noted Jemma.

If you would like any further information, or to speak to the company directly, please contact them using the details featured below.

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