

INDUSTRIAL PROCESS NEWS

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IPN

KABELSCHLEPP Metool supplies a complete range of drag chain

TOTALRAX systems are a turn-key solution for the drag chain and cable application any designer requires. This includes optimised components and guarantees to go with the whole assembly.

This expertise is based on the comprehensive range of cable chains.

The range suits every size requirements. Ranges allow modular design for sizing in mm increments. For most demanding use there is a wide range of (stainless) steel drag chains.

Metool also supplies flexible cable, meeting the highest quality standards to ensure the reliability of system and installations.

The TRAXLINE range includes Power,



System, Control, Data, Bus, Fibre Optic, and Coaxial cable. All tested to millions of cycles.

Contact
T +44 (0)115 951 8708
www.metool.com

Special offer at Light+Building 2018: robogonio alpha 8 – robot-based goniophotometer at unbeatable price

During this year's Light + Building, Frankfurt/Germany, 18-23 March 2018 at the opsira booth K60 in Hall 4.1, opsira presented a new model of the robogonio family. The robogonio alpha 8 – a robot goniophotometer was available at an unbeatable price. "We were happy to present to our clients at the Light + Building 2018 the robogonio alpha 8 for precise measurements of luminous intensity distribution at a very attractive price. The robogonio alpha 8 is especially suited for luminaire manufacturers who need to measure luminaires frequently but not daily and still value precision," explains Jürgen P Weißhaar, the general manager and owner of opsira GmbH.

The robogonio alpha 8 is a highly flexible goniophotometer, suited for measurements in the field of general lighting (SSL). Luminous intensity distributions (LID) measurements are possible with very small luminaires to luminaires of up to 1.20 metres in length. The measurement takes about 50 minutes. The maximum payload is eight kilogrammes and the work envelope radius is approximately 900 millimetres. Furthermore, the robogonio offers highest measurement resolutions of up to 0.01° and an angle repeatability of up



to plus/minus 0.005°.

opsira, the optics design expert, has been operating successfully in the market for about 20 years. Starting as an engineering service provider, opsira became a full-service provider including the design of optical systems, the development of customised optical measurement systems, as well as high-tech products in the fields of photometry, spectrometry, and goniometry. Opsira's in-house lightlabs measure optical characteristics of products and components to ensure high quality of luminaires and light sources. The company has about 20 employees and focuses on general lighting, automotive, signal, and medical lighting.

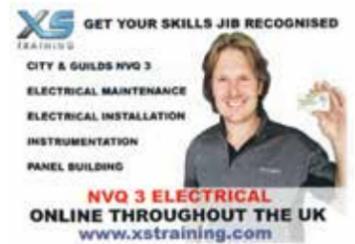
Contact
T +49 751 561 890
info@opsira.de
www.opsira.de

XS Training

XS Training Limited delivers the City & Guilds 2356-99 NVQ Level 3 in Electrical Maintenance, Electrical Installation, Panel Building, Instrumentation, Public Lighting, and Motor Rewind and Repair.

These NVQs allow those who successfully complete the qualification the chance to get their skills officially recognised by the JIB and gain their ECS/JIB Gold Card.

Candidates can successfully complete the qualification by gaining evidence of their day-to-day activities and uploading photo evidence to their e-Portfolio. The



e-Portfolio is very simple to use with full training provided by experienced and qualified training instructors.

David Alexis 07985 793094
Stuart Driver 07507 718465
www.xstraining.com

Queen's Award and expansion underpin next growth phase

Clintec, a global full service CRO, was presented with the Queen's Award for Enterprise 2017, in the category of International Trade, by Lord Provost, Eva Bolander, in her capacity as Lord Lieutenant. The award ceremony coincided with the official opening of an additional 4,327ft² floor at the company's Glasgow-based headquarters, forming a centre of excellence for clinical research and quality assurance capabilities.

Company founder and CEO, Dr Rabinder Buttar, said, "We are honoured to have received the Queen's Award for Enterprise for the second time – through which we celebrate 20 years of global success in clinical research. Furthermore, we are delighted to mark today with the expansion of our clinical operational capabilities and HQ office space for the next stage of company growth."

She added, "Clintec's high quality performance and service offering that we have consistently delivered to our customers over the past two decades, is well acknowledged. This includes our global footprint, with local expertise,



flexibility, agility, and high level of service, with senior management closely involved in the innovative clinical development programmes we expertly deliver."

During the same day, Sophie Totten, the company's first Master's Graduate in International Clinical Research & Technology, was recognised for her achievement obtaining her Master's Degree, which has been developed jointly by Clintec and Edinburgh Napier University.

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info@clintec.com
www.clintec.com

TCFM named as Tomorrow's FM awards 2018 finalist

TC Facilities Management (TCFM) has been named as a finalist in Tomorrow's FM awards for 2018, thanks to the Cleaning & Security Solutions provided across the country. TCFM is associated with some of the UK's best-known retailers as well as providing FM services to distribution, logistics & manufacturing centres throughout the UK.

Now in its seventh year, the Tomorrow's FM awards recognise the most innovative products and services introduced in the facilities management industry in the last 12 months, looking for initiatives that improve customer experiences and driving the industry forward.

By combining its proven facility services processes, the most current technology, and the right people on the ground, TCFM has been able to create an effective work environment to enable better quality and continued productivity gains and with it help clients achieve their promises to their customers.

Some of the key highlights of what TCFM has



been able to achieve in logistics centres sites it manages are:

- Upon contract commencement, immediately improve standards on cleaning
- TC Security Services' approach to innovation and technology to minimise risk and protect assets
- Greater cost efficiencies for our client

You can find out more by visiting our recently refreshed website and then if you think we're worthy of recognition, why not cast your vote in favour of Cleaning & Security Services – TC Facilities Management in the hope that it can take one of the top three slots in this award programme.

Contact
T +44 (0)1737 814016
info@tcfm.co.uk
www.tcfm.co.uk

Engineering innovation above and below the waterline

Industrial Process News is proud to present Kaymac Marine with our Marine Service Company of the Year award, in acknowledgment of their all-encompassing marine and civil engineering facilities.

Kaymac Diving Services was established over three decades ago in 1976, and traded for a number of years, primarily supplying underwater engineering services for a limited client base. The company was bought out by the present management in the late 80's, and continued to expand the client base with diving at its core. The increasing demands from clients for work other than diving, mostly marine engineering above water, led the management to change the company name to Kaymac Marine and Civil Engineering Ltd, and now, they are recognised as front-runners in the fields of specialist sub-sea Marine Engineering across Wales and England. Kaymac



Marine's specialist services include providing innovative Marine Civil Engineering solutions to meet with the needs of their customers, as it is their exceptional customer focus and deep

understanding of their requirements which has helped build strategic long-term relationships.

With their head offices based in Swansea, Bristol and Kent, Kaymac Marine supplies nation-wide specialist contractor services in commercial diving, marine and civil engineering, confined space services, ancillary floating plants, and rail engineering. Able to work for a wide range of industries, with clients in the environmental agencies, rail, water utilities, local authorities, housing and development companies, consultants, nuclear and port and harbour institutions, Kaymac can provide services to any company or organisation that requires construction in or around the water.

Kaymac are on the road to becoming the UK's first choice for water utility companies, having already worked with a vast number across the UK. In addition to strengthening ties with already established clients, Kaymac have exciting plans to expand their client base and venture into new markets. We spoke to Rhiannon Crees-Moore, from Kaymac Marine, about what makes them such a standout company.



She explained, "As specialists, Kaymac Marine is dedicated to sourcing and implementing new and innovative ways to ensure every project is completed successfully on time and to budget, and we always strive to exceed the expectations of our clients. We are fully committed to improvement and sustainability, investing in not just the company, but in our staff that provide the services.

"For the past seventeen years, Kaymac has been running a Commercial Diving Apprenticeship Scheme and we are one of the only companies in the UK of our kind to offer such a scheme. The course has seen numerous students excel and become fully trained commercial divers that are then employed by Kaymac. Kaymac are proud to have an extensive career progression programme that is fully funded by us, ensuring all of our staff are fully trained and qualified to the highest standards."

Excellent customer service is at the forefront of Kaymac Marine's priorities, as the team aim to exceed the expectations of clients, by doing things, faster, cheaper, safer, more efficiently, while at the same time

sustaining their staff, engaging with the local community and reducing health and safety risks.

This is why Industrial Process

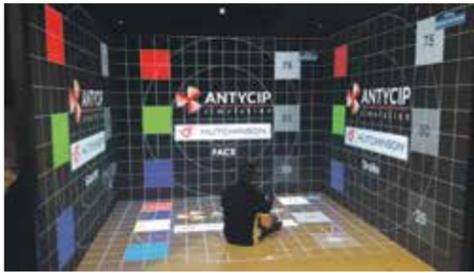
News have chosen Kaymac as our company of the year, because of their excellent customer service, highly proficient and helpful team and ground-breaking achievements made in the marine and civil engineering service industries.

So, if you require a one stop solution in marine construction or would like to find out more about their specialist services, then be sure to get in touch with the highly proficient team at Kaymac Marine today, using the contact information listed below.

T 01792 301818
www.kaymacmarine.co.uk



Improve what you do and how you do it with Antycip Simulation



Industrial Process News is extremely proud to present a profile of Antycip Simulation, our Virtual Reality & Display Software Services Company of the Month.

Founded in 1996 as a spin-off from Antycip, the company is now recognised as Europe's leading provider of professional-grade COTS simulation software, applications, projection and display systems, VR CAVE solutions, and related engineering services. Antycip Simulation has two core offerings: simulation,



analysis, and modelling software, which it sells into the defence, academic and space industries, and high end virtual reality and projection & display systems that it sells into the commercial world (automotive and aerospace engineering, retail), as well as the defence, space, oil and gas and academic worlds.

We spoke to Frank Reynolds, the European Marketing Manager at Antycip Simulation, and asked him what differentiates the company from other grade COTS simulation software and display systems providers, to which he explained, "The benefits that we bring are not so much our products, but more our expertise and experience of such high end and cutting-edge VR projects. There is only a small handful of companies in the UK that do what we do, and we like to think that we are one of the best, if not the best, in that small group. Ultimately, what we offer our customers are solutions that make what they do better – be that design and review, modelling and simulation, research and analysis, or communication and training. By working with us, the customer's results are improved. This, in turn, helps them save time, money and energy by being better at what they do."

Additionally, Antycip Simulation has over twenty years' experience as a supplier to governments, the military, universities, and a wide range of industries including defence, aerospace, security, transportation, automotive, and telecommunications. For instance, one of its most highly sought after virtual reality programmes is TechViz XL, which takes 3D designs and instantly converts them into VR models which can then be viewed in a head mounted VR display such as the HTC Vive or a VR CAVE. The benefits of this are that users become more immersed in their designs and



data than they could be with just a PC or flat screen monitor, and from this get better understanding and insight. This means that a 3D model can be looked at, reviewed, changed and re-reviewed almost instantly, simply by plugging it into TechViz XL. TechViz XL can accelerate design and validation processes, saving time and money. Within their software applications, Antycip Simulation also has a comprehensive portfolio of COTS based software applications and hardware systems, for simulation, training, modelling,



analysis and planning, across air, ground, sea, space, and cyber domains.

Excellent customer service is at the forefront of Antycip Simulation's priorities, as the company is not tied to one supplier or partner, so it has the freedom to recommend solutions that are best for the customer, rather than right for a particular manufacturer or supplier. As the UK's leading provider of COTS simulation software and display software programmes, Antycip Simulation can be found at numerous tradeshows throughout the year. It recently attended the Advanced Engineering show in November 2017, at the NEC in Birmingham, as it gave the company a great opportunity to network with new customers and partners.

If you would like to find out more about Antycip Simulation's wide range of specialist services, then don't hesitate to contact them today.

T 01869 343033
www.antycipsimulation.com



UK's place for advanced engineering professionals

Advanced Engineering 2017 took place at the NEC in Birmingham on the 1-2 November, and proved to be the most successful show to date!

With the UK's largest gathering of engineering and manufacturing professionals, the show saw over 700 exhibiting suppliers and partners and was packed with forums hosting popular industry experts from the likes of: ADS, Airbus, Alstom, Bentley, GKN, JLR, Magna, and more.

First launched back in 2009 with just 80 exhibitors and 1,200 attendees, Advanced Engineering has grown year on year to become the UK's largest annual meeting of advanced engineering professionals and supply chain organisations.

**ADVANCED
ENGINEERING 2017**
1 & 2 November, NEC, Birmingham

Celebrating its 10th edition this year, Advanced Engineering continues to build even further upon its position as the UK's largest annual gathering of OEMs and engineering supply chain professionals.

Since moving to the NEC, it has become one of the fastest-growing events and has launched several co-locating show zones reflecting key, inter-related

sectors driving the UK's manufacturing capabilities: Aero Engineering, Automotive Engineering, Composites Engineering, Performance Metals Engineering, and Enabling Innovation.

Growth is set to continue for 2018 as the UK continues to meet national and international requirements in the high value manufacturing sector.

This is our second pick of the best exhibitors from last year's show. The next show will take place on the 31 October to 1 November 2018 and is set to be even bigger.

Contact
www.advancedengineeringuk.com

BOXARR & Deloitte alliance to tackle complexity



BOXARR & Deloitte have formed an alliance to provide organisations with solutions to analyse and optimise their technical, operational, and organisational systems.

"Deloitte is always looking for new ways to solve problems and to speed up the innovation process both within the firm and working with clients," says John Buckley, Director at Deloitte. Deloitte will utilise BOXARR's software to help clients map the complexity of their business systems, providing greater visibility of their enterprise and the inter-dependency of their systems. Through this, organisations gain greater understanding of the consequences of potential decisions and scenarios, as well as the associated time, resources, and cost impacts.

"Complexity is the new elephant in the room," says Fraser Hamilton, BOXARR's VP for Global Alliances. "Organisations are realising that managing inter-dependency is crucial to achieving successful and sustainable outcomes."

Phil Sandford, Partner at Deloitte, adds, "When I was first introduced to BOXARR I knew it could be a game-changer. Now that I've seen how well this approach works in real client situations I am tremendously excited about this alliance."

The companies are collaborating on client engagements across the UK, USA, and Australia, and will continue to develop their solutions across new domains and global markets.

www.boxarr.com

Breton Machine Tools



Breton Machine Tools has been taking part in the Advanced Engineering Exhibition since its first edition as it is one of the best events to meet and connect with the leading professionals and experts of highly-technological sectors such as Aerospace and Automotive, those looking for the best performing manufacturing techniques on composite materials and metal parts.

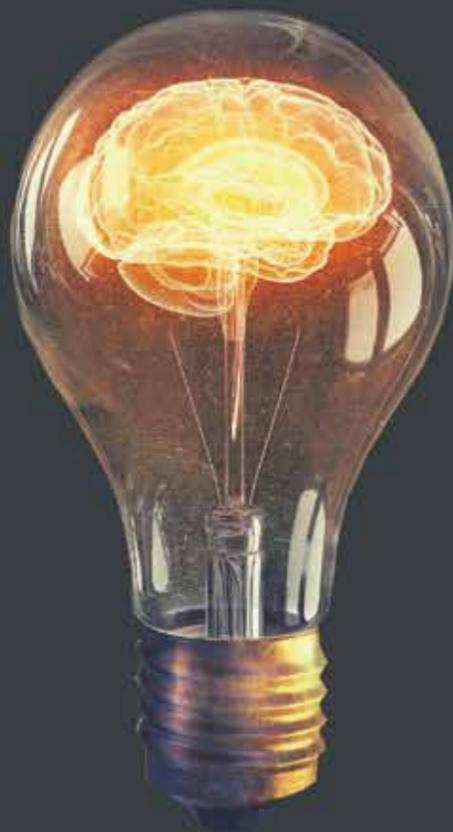
Advanced Engineering represents the chance to be closer to our valued customers, interact with them, and also to find new, potential end-users; it is also a great opportunity to launch the results of Breton's latest developments and patents.

In the 2017 edition, the leading Italian machine tools manufacturer displayed some of its cutting-edge technologies including 'Advanced Countersinking', the best performing solution now available on the market to create precise and reliable countersinks, the 'Ultrasonic cutting' technology with rotary blades and cutting knives for the best trimming and machining operations on core materials, and, last but not least, 'Breton Advanced Aero-skis milling', a complete hardware and software solution to replace problematic chemical milling and obtain the most accurate and reliable machining process for the reduction of metallic and composite panels used on latest aircraft series.

T +39 0423 7691
F +39 0423 769600
info@breton.it
www.breton.it



BOXARR



bring clarity to your complexity

As organisations, systems, and processes grow, they become increasingly interdependent. Within these webs of complexity, hidden risks start to evolve. Actions begin to have unforeseen consequences. Cascading networks of cause and effect can have critical impacts on your performance. This burgeoning complexity is increasingly difficult for humans to visualise; let alone analyse and manage. So what's the answer?

BOXARR enables people across your organisation to collaboratively combat this complexity. By stitching together your existing data, information systems, human knowledge and expertise, you can create Digital Twin models of your designs, operations and processes at 'real world scale'; identifying risk and simulating the impacts of change.

visualise | analyse | simulate | optimise

WWW.BOXARR.COM

Bringing integrated consultancy and service-based solutions to 3D technologies

Consilio3D Technologies provide integrated consultancy and service based solutions in the field of three-dimensional technologies. We operate in various sectors, some of which are aerospace, military & defence, automotive, mechanical and construction engineering. The company functions under agile process driven methodologies to deliver end-to-end business solutions to our clients. Our consultancy services range from rebuilding two-dimensional geometry to full conversion into three-dimensional harmonised component assemblies, leading onto full integration within augmented reality systems.

We specialise in a range services, some of which are digitisation and archiving of physical drawings, conversion of 2D to 3D CAD for components and assemblies, CAD design to utilise advanced manufacturing methods, 3D scanning and reverse engineering followed by analysis.

In addition, we have expertise in software development using augmented reality techniques.



We develop software solutions to support process digitisation of the production environment and operational management. We have developed solutions for commercial aircraft cabin maintenance and component assembly inspection.

The Advanced Engineering Show provided a great opportunity for us to showcase our services & products, network with a much wider audience and view all the advancements within the engineering industry.

T +44 (0)23 8151 1010
info@consilio3d.com
www.consilio3d.com

Over 100 years of quality British engineering and manufacturing

Industrial Process News is proud to feature the Carter Environmental Engineers, as one of Advanced Engineering's elected top 40 companies within the engineering supply chain professionals.

Based in the heart of Birmingham, England, Carter Environmental Engineers have been providing bespoke Water-Cooling and Dust Extraction solutions for over 100 years. Now renowned as one of the UK's leading providers of water-cooling towers and dust extraction systems, Carter Environmental Engineers' diverse range of products allows the team to find the perfect solution to suit your specific needs. From their purpose built manufacturing facilities & expert engineers to their dedicated on-site Water Treatment and LEV Test teams, the team at CEE offer the highest levels of efficiency, quality and customer satisfaction, as well as full turnkey installation services.

In addition to their wide range of successful Water Cooling and Dust Extraction systems, they have recently expanded their Manufacturing Facility to



accommodate outsourced sheet metal fabrication projects. Their systems are designed and engineered to suit your needs exactly. Furthermore, to the manufacture of water-cooling towers and dust extraction units, CEE also provides Water Treatment packages and Air Monitoring services to ensure that you can be 100% confident in the safety of your site.

If you would like to get in contact with Carter Environmental Engineers to find out more about their many specialist services, then don't hesitate to pick up the phone today. More information can also be found by visiting the website below.

T 0121 250 1415
www.cee.co.uk

UK based manufacturers providing leading NDT Products and Services across the globe

Industrial Process News is pleased to present Baugh & Weedon, a leading manufacturer of Magnetic Particle Inspection (MPI) Benches and Liquid Penetrant Inspection (LPI) Penetrant Lines, as one of Advanced Engineering's elected top 40 OEMs and engineering supply chain professionals.

Established in 1967, Baugh & Weedon has a long history of supplying the NDT industry with high-quality products and services. Based in the UK and with a wealth of industry knowledge, the group strive to be client focused at all times, working closely with customers in order to find the right solution to meet with their NDT needs. Baugh & Weedon can also provide MPI accessories including UV Lamps, dual UV and white light Inspection Lamps (Lumazon), dual UV and White Light Meters (LumaCheck), as well as a full range of MPI and LPI chemicals available from Pfänder Chemie. The company have become renowned



for their 'one-stop-shop' solution for client's Magnetic Particle Inspection and Liquid Penetrant Inspection needs.

Additionally, the ETHER NDE group who also led a fantastic exhibition at

the Advanced Engineering tradeshow have become equally reputable due to their manufacturing of Eddy Current (ECT) non-destructive testing (NDT) equipment, probes and accessories. With a growing reputation in the Aerospace and Composites market, ETHER NDE provide leading portable Eddy Current NDT instrumentation and industry knowledge for all your eddy current NDT application challenges. The product range includes includes EC Flaw Detectors (AeroCheck+, AeroCheck, WeldCheck, ETI-200) ECT Conductivity Meters (SigmaCheck), ET Aircraft Wheel Inspection Systems (Veescan), ECT Probes, Weld Probes (including high temperature) and EC Rotary Drives, specialist Eddy Current Probe Design services and more.

If you would like to find out more then don't hesitate to contact them:
T +44 (0)1582 767912
www.bw-nde.com
www.ethernde.com

Laser systems for material processing

Industrial Process News is delighted to present ACSYS Lasertechnik UK Ltd, a leading supplier of laser systems for material processing, as one of Advanced Engineering's elected top 40 OEMs and engineering supply chain professionals.

Renowned for their standard and customised laser system machines, the ACSYS product range offers optimised systems for all tasks in material processing using a laser. Depending on the customer's requirements, the highly efficient and skilled team at ACSYS Lasertechnik UK Ltd will integrate various laser types such as the fiber laser or CO₂ laser with very different power ratings and wavelengths in the system. Extensions with multi-axis functionality for linear and rotary movements and the integration of special modules, such as camera programming via the LAS - Live Adjust System, ODC - Online Depth Control or OPR - Optical Part Recognition, allow the team to configure a production system that is perfectly tailored to their client's individual needs.



The solution portfolio by ACSYS is proof that technical limits are not written in stone. Their expert team of development engineers use state-of-the-art 3D design tools. With a wealth of experience behind them, ACSYS constructs unique technology and has a creativity pool for solving problems, which all other suppliers have so far shied away from.

From the planning stage to test runs, ACSYS Lasertechnik UK Ltd works closely with customers to develop tailored solutions and software applications. On that basis, they have developed and built hundreds of customised solutions, all of which perfectly fulfil client's needs. If you would like to find out more about their specialist services, then contact them today.

T +44 (0)1527 870820
www.acsyslaser.co.uk

Full 3D in-line X-Ray inspection

The Nordson Matrix range of in-line X-Ray systems incorporates technologies for 2D, 2.5D, and 3D inspection of boards and assemblies, at production line speeds. Using patented techniques, the systems can detect faults at different levels within the assembly and give the operator precise information on the fault and its location.

X-Ray analysis is fast becoming an essential on every production line to ensure the quality of hidden solder and components. Nordson Matrix is a world leader in both standard and custom in-line X-Ray with specialist software and systems for most production applications.

The series includes:

- X# series - Flexible system for PCB and assemblies, sealed (maintenance free) tube and flat panel detector
- X series - High speed inspection for PCB production
- XS series - Small footprint/high resolution, small PCB/hybrid and semiconductor applications

Contact
T 01962 832654
www.cupio.co.uk

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X-Ray and Optical Inspection

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- Failure Analysis
- Production Sampling
- In-line Product Inspection
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- CT
- Automotive
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01962 832654

Laser systems for material processing



ACSYS LASERTECHNIK

+44 (0)1527 870820 www.acsyslaser.co.uk

ZOTEK® N Nylon Foams: High temperature processing aids

ZOTEK® N Nylon foams have excellent high temperature performance and can be used for temperature spikes up to 200°C. They exhibit excellent hydrocarbon resistance, insulation properties and can be easily thermoformed into complex shapes making them suitable for many industrial processing applications. For example:

- 1. Paint/powder coating masking material** – This unique foam is a highly effective paint/powder coating masking material for metals and plastics (eg. sun roofs, floor masking and wheel turrets). Using thermoformed re-useable ZOTEK® N parts, that are resistant to the heat and paint applied, delivers a cost reduction versus conventional silicone tapes by reducing time and labour.
- 2. Dimensionally stable panel support material** – ZOTEK® N is an insulative and dimensionally stable foam which can be used as a manufacturing processing support for metals, plastic and composite panels.
- 3. Insulative durable and dimensionally stable material which can be inserted pre-high temperature process (eg. paint bake cycle)** – This faster process reduces the manufacturing time and lowers cost.
- 4. In process hot material handling aid (eg. in process packaging, early packaging of warm components; ullage, dunnage)** – The foam can also be used as an in process chemical resistant hot material handling



packaging aid in the production of metal parts and components where often hydrocarbons and lubricating agents are used. This results in time and space saving as the package parts don't require cooling time and therefore eliminate cooling storage and space requirement.

For further details, please contact the ZOTEK® team at: zotekneurope@zotefoams.com or: www.zotefoams.com

Hepworth: RIM Moulding specialist for the automotive sector

Hepworth's new RIM Moulding division specialises in (but is not limited to) manufacturing low volume automotive components for well-known premium brands of UK manufactured Motorsport, 4x4, and luxury vehicles; contracts won include 12 and 24 month production schedules, plus three ongoing long-term commitments.

Hepworth is producing large exterior mouldings up to 2m/10kg, and interior trim components (300mm to 1.2m), using specialist glass-filled resin which maintains strength throughout the entire moulding.

Recent investments include the installation of new moulding machinery, a new large post-curing box oven, the building of a second



temperature-controlled moulding room including extraction, and purpose-built racking fitted to house the increasing number of tool and jigs stored. This has

doubled the company's moulding capability as well as enabled an increase in size of parts produced.

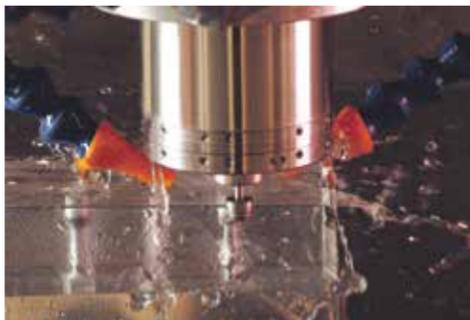
Since the launch of the RIM Moulding division in 2016, the equipment and work area has grown by over 300% with an ever-growing and skilled workforce headed up by Tom Dunkley, Hepworth's RIM Division Sales Manager. On target and with plans to expand the business further, the company is proud of its ability to produce large scale components, an area where customers are actively seeking Hepworth's expertise.

Contact
T 01527 61243
moulding@b-hepworth.com
www.b-hepworth.com

Westwind Air Bearings for precision in motion

Where oil-free, low friction, high speed, or precision motion is of ultimate importance, then air bearings should be the preferred choice. These bearings provide a cushion of air which allows the shaft to float without mechanical contact within the bearing, ensuring years of maintenance free operation, with zero contamination to the environment.

For nearly 60 years, Westwind Air Bearings has been supplying premium quality air bearing spindles to cutting edge industries including electronics and semiconductor manufacturing, as well as more traditional markets such as automotive and machine tool OEMs. With standard spindles ranging from 3,000rpm to 300,000rpm, Westwind is the largest rotary air bearing spindle manufacturer in the world, and can also supply bespoke solutions for linear motion too.



applications. In addition, high speed turbomachinery parts were on show for use in energy recovery applications. Westwind is a business unit of Novanta Technologies UK Ltd.

Contact: Simon Dack, European Sales Manager
T +44 (0)1202 627200
wwwinfo@westwind-airbearings.com
www.westwind-airbearings.com

At the recent Advanced Engineering show at the NEC, Westwind products exhibited included high speed machining spindles for glass, aluminium and composites, rotary atomisers for coating applications, polygons spinners for laser imaging, linear motion spindles for use in high vacuum chambers and high speed blowers for fuel cell

Lauda Technology Ltd

As part of LAUDA's ambitious expansion within the UK market, its UK subsidiary LAUDA Technology Ltd has been upgraded to become a fully authorised distributor, providing solutions directly into UK businesses. This expansion coincides with the restructuring of the UK distributor network in an attempt to provide an enhanced quality of service and after sales support to the end user.

This positive move, for LAUDA Technology to begin selling directly, is aimed at offering the end user a direct link to the manufacturer for technical sales and service support and an all-round improved LAUDA experience when working together. As part of this growth, LAUDA Technology is pleased to announce a doubling in the staff numbers including a new Managing Director, an



additional Sales Manager, and a new Service Engineer.

Further to this, as of February 2018, LAUDA Technology took up residence in its new headquarters based on the newly emerging Tinwell Business Park just outside Stamford. Our company contact details are below, so please do not hesitate to contact us further with any questions or queries you may have.

T 01780 243118
info@lauda-technology.co.uk

MAKA at Advanced Engineering

Next year, meet us in Hall 5, stand M8, 31st October & 1st November 2018

MAKA Systems looks forward to meeting new and existing customers at Advanced Engineering 2018, the UK's biggest and most complete exhibition for the composites industry.

Advanced Engineering is the ideal platform for all involved in the composites industry to learn about new trends and techniques. MAKA will present several key developments which enhance its broad range of solutions for CNC Machining, to provide faster processing with greater precision and reliability.

MAKA, the 5-Axis CNC specialist, will feature new multi-axis and multi-head solutions for high-volume manufacturing.



If you would like to come and meet the MAKA CNC experts, please contact us and we will send you an information pack.

Contact: Iain Young
T +44 (0)1952 607700
iy@makauk.com
www.MAKA.com

Advanced tool manufacturing

OSG operate the most advanced tool manufacturing facilities worldwide, totally dedicated to the precision manufacturing of taps, endmills, drills and thread making tools.



shaping your dreams

Our tools feature exclusive metallurgy, cutting geometries and unique surface treatments including our patented smooth diamond coating which is made from ultra-fine diamond crystals in an innovative new process. This coating can easily be distinguished from other diamond coatings by its shiny finish.

Designed for tooling used on composite materials it will increase productivity, reliability

and tool life while reducing machining time, scrap and down time. This coating technology is only available from OSG.

The company's advancements in cutting tool design and production have produced very high quality tools that are setting

new standards for productivity and performance in the cutting of special alloys, stainless steels, stacked materials CFRP/Ti and CFRP/Al.

OSG believe that by working in partnership with our customers we can further broaden their capabilities and find solutions to the most challenging of applications.

We are exhibiting at MACH 2018 at the NEC Birmingham on the 9th through to the 13th of April; visit our stand in Hall 6-680.

T 01268 567660
sales@osg-uk.com
<http://uk.osgeurope.com>

Eurotherm by Schneider Electric

Eurotherm by Schneider Electric latest precision controller focuses on a robust cybersecurity strategy combined with IIoT connectivity

Designed to aid optimization in thermal processing and process automation, the EPC3000 range helps deliver an efficient and secure process, maintaining high standards of production and helping ease cybersecurity concerns.

Data security in the industrial environment is paramount, and it all begins with system integrity at every level, from enterprise to device

Eurotherm has designed this new range around best practice for cybersecurity, and this is the first Eurotherm process controller tested to the highly demanding Achilles® CRT Level 1 qualification, a unique solution designed to enable device manufacturers to conduct comprehensive quality testing throughout the product development lifecycle.

Precise and repeatable control improves quality, increases yield and minimizes waste

With a high level of functionality and configurability, EPC3000 controllers are easy to install, commission and replace, and are built to last. Global certification to international standards allows EPC3000 to be adapted to a



wide spectrum of markets and applications with a robust design for high reliability in demanding environments.

Christopher Ashworth, VP & Managing Director, Eurotherm by Schneider Electric, said, "Whatever your process, the EPC3000 range easily achieves the required stability, accuracy and repeatability and provides real-time indicators for efficient monitoring of process equipment effectiveness."

For more information, visit:
www.eurotherm.co.uk/epc3000

British Automation and Robot Association



British Automation & Robot Association

BARA (British Automation and Robot Association) is part of the PPMA (Processing & Packaging Machinery Association) Group of Associations. BARA provides support for the Robot and Automation industries when dealing with the government, industry, financial and academic institutions. BARA joined the PPMA Group to become a more focused group and to influence the industry, gather more members and provide support to the automation community. BARA also specialise in Selective Compliance Assembly Robot Arms (SCARA) which are designed for a peg board type assembly electronics industry.

The PPMA Group own and organise the PPMA Show which will next take place at the NEC Birmingham, 25-27 September 2018. Boasting 350 exhibitors, representing 1,500 brands and over 8,000 visitors, the show is the UK's leading production line event for processing and packaging machinery.

BARA will host the Robot feature at the PPMA Show 2018 and will also be exhibiting at the UKIVA Machine Vision Conference and Exhibition at the Arena MK, Milton Keynes, on 16 May 2018.

For further information or general enquiries, please visit the BARA website. Alternatively, you can contact the association via telephone or email.

T 0208 773 8111
www.bara.org.uk

Testing for electrostatic charges

Hazardous area personal test meters are essential safety devices for screening personnel entering areas where electrostatic discharges must be avoided, as IDB Systems explains

Sensitive or hazardous areas may occur in the explosives, chemical, petrochemical and plastics industries in the handling of solvents and hydrocarbon fuels. In these environments all that is needed to trigger an explosion is an effective ignition source like an electrostatic charge. Protective measures can be challenging to implement, especially when you consider that workers can become charges merely by walking across the room.

It is essential for personnel to be effectively bonded to ground at all times to prevent electrostatic spark discharges

damaging sensitive electronic components or circuits, or causing ignition of flammable vapours or materials.

Bonding to earth may be conveniently achieved via conductive footwear, but it is necessary to know if this bonding remains effective in practice.

To find out if this is the case, IDB systems has launched a new hazardous area personal test meter (HAPTM) to screen personnel prior to them entering an area that may contain a potentially explosive atmosphere.

The ID-921B is a rugged battery powered HAPTM tester offering the latest in technology and certification. The device provides a simple and reliable means for screening personnel working within hazardous environments for the

effectiveness of their conductive footwear and wrist straps to avoid the potential accumulation of electrostatic charge.

The equipment holds an IP65 rating with an equipment protection level of Db, suitable for use in zones 21 and 22. The ID-921B HAPTM tester has been designed to meet the resistive limits described in MOD JSP482 for operation within a conductive regime.

The device has a TFT display indicating the resistance measurement. It is simple to operate



and includes a self-test feature to minimise expensive on-site maintenance and are pre-configured for the appropriate regime.

The ID-921B is supplied with an IP65 rating and ATEX certification.

For added reassurance, IDB Systems operates a calibration and maintenance support service that can be tailored to meet individual customer preferences.

www.idbsystems.co.uk

Raspberry Pi Compact Plug & Play Solution from Display Technology

Display Technology Ltd. introduces the Compact Raspberry Pi Plug & Play Solution to the Artista product family. The solution consists of an industrial TFT panel incorporating the industrial Pi CM3 module and carrier board. It has been designed for a range of TFT display sizes (7" to 27"). The Raspberry Pi-based TFT carrier board known as the Artista-IoT is mounted on the rear display in a rugged metal housing. The product solution can be integrated quickly & easily into customer applications, including Industry 4.0 projects or the Internet of Things. Applications requiring costly industrial monitors can also benefit from this concept too.

IoT Compact Panels benefits:

- High quality industrial TFT displays and components
- Plug & play solution, once connected no further set up is required
- The integrated passive cooling allows the IoT Compact Panels to be operated continuously under full load even at high ambient temperatures without reducing the performance

Using the Artista-IoT TFT controller allows the IoT Compact Panels to offer all the advantages of an ARM-PC as the front interfaces include single 12V power supply, LAN, HDMI-IN, 2xUSB, Line Out, and microSD. Additional options of internal interfaces including USB, LVDS, I²C, UART, and wide input DC/DC power supply



converters are also available.

The IoT compact panel is compatible with all Raspberry-supported operating systems, allowing you to program your applications based on the Raspberry Pi. For more information, please contact us.

T +44 (0)1634 672755
sales@displaytechnology.co.uk
www.displaytechnology.co.uk

Special connection method

Six new PCB terminal blocks from WAGO allow equipment designers and OEMs to free up space or use smaller PCBs and enclosures. Push-in connection reduces installation time, while a spring pressure mechanism protects wiring against vibration and temperature cycling, improving reliability.



The terminal blocks are rated for 4mm², 6mm², and 16mm² conductors, and can connect most solid and fine-stranded conductors up to the next larger cross-section size from their rated cross-section, saving space on the PCB. A rated voltage of up to 1,000V and 76A makes the terminal blocks ideal for demanding applications such as power supplies, frequency inverters or servo drives. The increasingly compact design of these devices for industries such as energy means that components must be more densely populated on the PCB while still retaining a high power rating.

T 01788 568008
www.global.wago.com/uk

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 Internet www.wago.com
 Search for "WAGO PFC100"



5 checklist criteria when qualifying your CEM

Why does it often take OEMs catastrophic disappointment with an existing contractor before they take action? Consider the following when qualifying your new CEM:



1. **Procurement** – The ability to purchase at low cost, from reliable sources, with consistent component availability, is key to offering the service you need.
2. **Quality Management** – Do they adhere to an appropriate quality management system (ISO9001, AS9100)? Do they work to recognised standards (IPC J-STD-001, IPC-A-610)?
3. **Business Relations** – Communication is fundamental to a successful working relationship. Do they offer a personal account manager, responsible for managing the whole process?
4. **Business Security** – Will you be in safe hands? Ask for a company history, or for testimonials from previous or existing customers.
5. **Technical Capabilities: Design and Production** – Do they have in-house engineering expertise? Do they invest in equipment to stay at the leading-edge of the industry?

Corintech is an industry-leading, electronics manufacturing specialist, with an impressive track record in all 5 of these criteria. Contact Corintech today to discover the benefits it could bring to your business.

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info@corintech.com
www.corintech.com

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Electrician's case

Wiha is launching its second generation Electrician's Competence XXL case. The case is now offered with contents precisely tailored to an electrician's needs.

Combining safety with functionality and ergonomic design, the Wiha case comprises 115 items, including a new torch, dowl racket and other tools introduced to the market as part of the case relaunch.

Established Wiha classics, such as its all-round, 3-in-1 TriCut installation pliers, VDE screwdriver and torque solutions from the Wiha slim family, remain part of the

equipment set.

They are joined by new items such as: A 10cm Stubby VDE screwdriver bit holder with slim bits; automatic stripping pliers that can be used for a wide range of cables between 0.03 and 16mm², and automatic crimping pliers that simplify crimping wire-end sleeves.

Wiha offers its new dowl racket as an alternative solution to conventional power drills for inserting dowels into soft construction materials.

T 01527 910987



World's first 8K 25,000 lumen DLP® projector



Delta, a global leader in power and thermal management solutions and a pioneer in display technologies, announced, at ISE 2018, the launch of the world's first 8K 25,000 lumen DLP® projector, along with Digital Projection International Ltd (hereinafter referred to as 'Digital Projection'), an associate of Delta Group and a leading provider of high-calibre display solutions. The first-of-its-kind Digital Projection INSIGHT Laser 8K leverages Delta's cutting-edge display, power supply, and thermal management solutions, such as its laser light source, signal processor, and unique algorithm to provide a seamless, industry-leading 33-megapixel resolution image.

In line with Delta's corporate mission, 'To provide innovative, clean, and energy-efficient solutions for a better tomorrow', the INSIGHT Laser 8K also leverages Delta's eco-friendly laser light source, thermal management, and high-efficiency power supply technologies. Utilisation of laser light source enables an extended lifespan up to 20,000 hours. In the future, the adoption of new RGB laser light source technology shall further improve colour gamut to meet BT2020 specifications allowing extreme wide colour fidelity in the future generation of the INSIGHT Laser 8K Series.

Delta has collaborated with Digital Projection to design and manufacture the world's first 8K projector. Thus, Delta's advanced technology development and Digital Projection's professional skills in sales, marketing, and customer service shall complement each other to continuously enhance their leading position in display products and solutions.

www.delta-emea.com

DLP® and the DLP logo are registered trademarks of Texas Instruments Inc.

Desktop Metal Studio Printer



Laser Lines recently announced that it will be the first reseller outside of the USA to exhibit the new Desktop Metal Studio Printer. Laser Lines, a total solutions provider of 3D printers, 3D scanners, and laser equipment, announced last year it was to become a UK reseller of Desktop Metal's range of metal 3D printing systems. Following on from the hugely successful UK launch at TCT last year, Laser Lines exhibited the Desktop Metal Studio Printer at this year's Southern Manufacturing show on Stand No. E150.

The Desktop Metal Studio system is perfect for engineers looking for an in-house unit suitable for prototyping and creating sample parts. With a build area of 300 x 200 x 200mm it can print at 16cm³/hr using a wide variety of metal alloys, including copper, stainless steels, aluminium, Titanium, and Inconel.

With fast material changes, web-based software, and the hand removal of supports, the Studio system has been designed for simple installation and use. Every stage of the process is fully automated and managed by sophisticated software making it simple to go from CAD to part without the requirement of 3rd party software.

Contact us to find out more about the Desktop Metal range of products available from Laser Lines.

T 01295 672588
F 01295 672550
info@laserlines.co.uk
www.laserlines.co.uk
www.3dprinting.co.uk

EECO

Unit 5, Hazlewell Court
Bar Road, Lolworth, Cambridgeshire, CB23 8DS, England
Tel: +44 (0) 1954 781818 Fax: +44 (0) 01954 789305
Email: sales@eecoswitch.co.uk Web: www.eecoswitch.co.uk

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Membrane switches
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A wide range of thumbwheel, Rotary DIP and Strip Switches these are still one of the bestman/machine interface components available.

Elastomer Keypads are made to your own design, any size, shape and colour with legend protection enhancements.

Membrane Switches are a self contained printed keyboard which offers low cost and high reliability. They are custom designed, thin and flexible. they are available with tactile/non tactile feedback, surface embossing, backlit legends, silver or carbon tracking and RFI or EMC shielding if required.

Elastomeric connectors made from silicon rubber offer an economic and reliable solderless connection. they are widely used on digital screens, home electrical goods and communication equipment.

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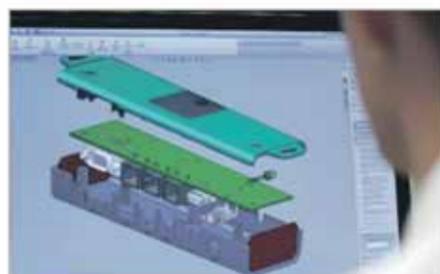
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www.fermionx.com



Big hit with visitors & exhibitors

The Engineering Design Shows 2017 drew to a close on Thursday 19th October with positive feedback from exhibitors and visitors. Running from 18-19 October at the Ricoh Arena, Coventry, the shows brought together more than 4,000 design engineering professionals to the showcase of British design innovation.

Ed Tranter, managing director at show organiser, MA Exhibitions, commented, "This year's Engineering Design Shows were an outstanding success. Over two days we witnessed some fantastic conference sessions delivering inspiring content. The exhibition housed 220 exhibitors, a record for EDS, and hosted three workshop theatres bringing practical advice and real design guidance to our visitors."

"We are delighted that EDS continues to be hugely successful; over 85% of exhibitors have already rebooked their stand space again for next year, and we have a waiting list for the remaining exhibition space at the 2018 event. The planning for 2018 starts now when we look forward to creating an even bigger and better experience for our visitors."

This exciting two-day event played host to 23 thought-provoking conference sessions and panel discussions with world-class engineering design experts, including, Williams Advanced Engineering, Lenovo, RS Components, BAE



Systems, Cambridge Consultants and the UK Space Agency. Many of the sessions were standing room only. In addition, the exhibition housed three workshop theatres open to visitors wanting to learn new skills or take away practical design tips and expert advice.

The Engineering Design Shows will return to the Ericsson Exhibition Halls, Ricoh Arena, Coventry, from 17-18 October 2018. This is our pick of the best exhibitors from last year's shows, listed here in alphabetical order: Blue Chip Technology, FARO, Lascar Electronics, LDD Technology, Lumberg & Soumac. Further details can be found below.

www.engineering-design-show.co.uk

Blue Chip Technology shows expanded HMI range at EDS

Blue Chip Technology has been designing and manufacturing embedded electronics solutions for over 30 years, right here in the UK. We offer configurable boards and systems; from single board computers and computer-on-modules to touch screen HMIs and Panel PCs. We also develop and deliver bespoke solutions, making use of our expertise in electronics, embedded software and mechanical design.

At EDS 2018, we will be showcasing our expanded range of embedded touch screen modules; low-cost HMIs with a touch screen and integrated electronics that are typically used as easily-integrated, drop-in control panels for larger systems. With the new options developed for our modular BETA platform there are now even more possibilities, meaning there's sure to be a BETA to match with your requirements. With the BETA platform you can just as easily have a mobile, ARM-based, 4.3" touch screen computer running Android as you can a 9.7", IP65 sealed, panel-mounted PC running Windows 10. Making use of shared technologies, the BETA platform benefits from reduced costs



and complexity; benefits that are passed on to you with your chosen configuration.

T +44 (0)1829 772000
sales@bluechiptechnology.com
www.bluechiptechnology.com

PanelPilotACE from Lascar

Lascar Electronics, a specialist in panel meters and data loggers, attended EDS 2017 and will be there again in 2018 to demonstrate its PanelPilotACE touchscreen machine interfaces and control monitoring displays. Available in 4.3" and 7" versions, these capacitive colour touchscreen devices are available with a wealth of hardware interfaces, and Design Studio software that allows rapid development of industrial display and panel applications using a drag and drop interface. Absolutely no coding is required.



any hardware. A recent software update has added PID control, Ethernet FTP for logged data, multi-channel data logging, and trend graphs. These join the already popular protocols of RS485 and MODBUS. Hardware interfaces on the device include bipolar analogue inputs, eight digital input/output pins, alarm outputs and PWM outputs, making it a very capable display across a range of applications. Development kits including a display and development board for testing all the input/output functionality are also available.

The Design Studio software is available as a free download at: www.lascarelectronics.com/software/panelpilotace and offers an emulator, so you can design and test your interface for free before buying

T +44 (0)1794 884567
sales@lascar.co.uk
http://panelpilot.com

Soumac: High quality, low-to-mid volume PCB assembly services

Having exhibited at the Engineering Design Show for the last 3 years, we are delighted to have been chosen as one of the top 40 exhibitors for 2018. Soumac Assembly Services is one of the UK's leading PCB assembly companies, specialising in high quality, high mix, low-to-mid volume PCB assembly, from prototype, to full production, test, and repair.

Based in Hampshire, covering the UK and European markets, the company operates out of our 8,159ft² hi-tech factory facility in Portsmouth. Working with fast-growing start-ups to some of the electronics industry's biggest names, our team are committed to delivering a high quality service, rooted in outstanding customer care and attention to detail.

We are so confident in the quality of our service that we offer a no quibble 2 year warranty on all our assembly work. We are ISO 9001:2008 and ISO 14001:2004 accredited and work to IPC-A-610 (Class 2) Workmanship standards. Alongside PCB assembly, we also have long-established test and repair departments, enabling us to provide you with a complete



PCB service.

To discuss your project or to receive a free no obligation quote, please email: sales@soumac.co.uk or call 023 9267 9200. For more info, please visit: www.soumac.co.uk

New FARO® Design ScanArm® 2.0 improves product design workflow

Upgraded functionality enables better efficiency across entire design process

FARO®, the world's most trusted source for 3D measurement and imaging solutions for factory metrology, product design, construction BIM/CIM, public safety forensics and 3D machine vision applications, introduces the next generation FARO® Design ScanArm® 2.0, designed to address the most demanding challenges and requirements faced by product design and product engineering professionals.

The new Design ScanArm® 2.0 delivers up to 25% improved system accuracy compared to the previous generation. Furthermore, productivity is enhanced with the addition of FAROBlu™ Laser Line Probe HD that incorporates advanced blue laser technology and rapid scanning of up to 600,000 points per second.

The FARO Design ScanArm® 2.0 is now available in three highly manoeuvrable arm lengths – 2.5m, 3.5m and 4m, including the option of dual, hot swappable batteries that enable continuous operation wherever needed.



Enhanced ergonomics and a 25% overall weight reduction enables less operator fatigue. This leap forward in comfort, combined with improved manoeuvrability, significantly increases productivity by facilitating continuous use over extended periods during the workday.

www.faro.com

Lumberg: Passion for connections

The Lumberg group, a global leading provider of connector and interconnect systems, recently led a fantastic exhibition at the Engineering Design Show in Coventry. During their exhibition, they unveiled to visitors their new 360° shielded screw-type M16 circular connector, which is Lumberg's response to assembly requirements in the field as well as of manufacturers targeting high volumes for pre-assembly. Less individual piece parts and a highly innovative shielding connection mechanism on the inside of the casing facilitate a much faster assembly process. The highly time-consuming and elaborate process steps of stripping, expanding, shortening and applying the shielding braid known for comparable connectors becomes completely redundant here. In addition, the quality of the assembly is significantly raised by eliminating frequent assembly errors which would impact the tightness immensely. M16 series connectors comply with the latest AISG specification C485 for 4G/5G antenna applications and suits many applications in measurement, instrumentation, industrial, security, medical, automotive,



metrology and control engineering.

Additionally, during the show, Lumberg's sister company Lutronic, which has been set-up for international operations, also debuted their wide-range of actuator and sensor wiring solutions for automation solutions. Lutronic focuses on producing quality M8 and M12 circular connectors for customised signal, data and power applications.

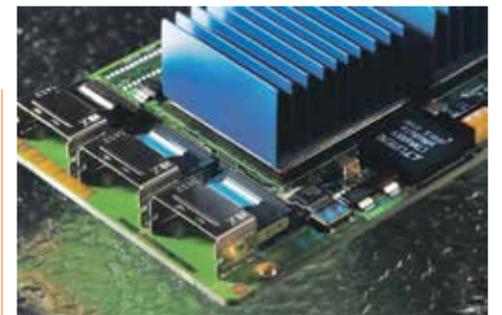
For more than 85 years the Lumberg group have broadened from manufacturing connectors and challenging micro-contact elements to developing complex mechatronic assemblies to customer-specific engineering and technical design services for all industries. So, if you would like to find out more about their varied range of connector and interconnect systems, then don't hesitate to contact them today.

T 01635 255804
www.lumberg.com/en

High quality electronic design house

Specialising in the design of advanced digital electronics systems, Dorset based LDD Technology provides a full range of electronic design services including the specification, design, prototyping, and production of electronic products. LDD is an expert in the design of electronics systems including the use of FPGAs, embedded processors, and software. LDD ensures that it delivers the most suitable designs to meet their clients' requirements, including using the very latest technologies where appropriate.

LDD can provide high complexity designs for customers and has the experience and capability to undertake designs from a simple stand-alone board to complex multi-board, mixed signal, multi-technology projects for harsh environments. Its goal is to become an integrated part of customers' own design teams and it has many such long term relationships in



both commercial and defence markets.

For more information on the design services offered by LDD Technology or to discuss a forthcoming project, call 01258 821222, email: info@ldd.technology or visit: www.ldd.technology



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Accelerate Design | Contact us and accelerate your design: www.faro.com/faro-design-scanarm | Free Hotline: 00800-3276-7253

The Manufacturing Management Show

From 22-23 November 2017, senior management teams from UK manufacturing sites descended on Coventry's Ricoh Arena for a free comprehensive hit of manufacturing best practice across all areas of factory management at the Manufacturing Management Show – brought to you by MA Exhibitions and Manufacturing Management magazine.

From employee engagement, 5S and lean strategy, to Industry 4.0, health & safety, visual tools and asset

care – the Manufacturing Management Show is the only UK show to bring visitors everything they need to know about running a successful manufacturing site, all under one roof.

What could visitors learn at the Manufacturing Management Show?

- Drive workforce engagement
- Create your visual workplace
- Develop the skills for Industry 4.0
- Join the jury of a mock health & safety trial

- Meet materials handling experts
- Get the right tools for reducing downtime
- Inspire your future talent
- Check out the latest cutting-edge kit
- Make a business-boosting connection

This is our pick of the best exhibitors from last year's show, listed here in alphabetical order: Entadata, IBC



Tipppers, Prodware & 26 Steps. Further details can be found below.

www.manufacturingmanagementshow.co.uk

26 Steps to manufacturing management capability

26 Steps are a company that help assist all types of managers in their job role. Their ground-breaking toolkits give production and operations supervisors and managers the opportunity to gain control of workflow and engage employees in the process. Approved by the Institute of Leadership and Management, 26 Steps is a programme of learning which does not take you away from the workplace.

26 Steps toolkits allow managers from supervisor and team leader through to executive level to learn the essentials of their role and develop consistency of practice within their organisation. The benefits the toolkits bring to the business are a direct impact on performance adding value to the bottom-line, strong performance management, identifying issues such as bullying, harassment and absenteeism, fulfilling employer requirements with disciplinary procedures and excellent coaching habits for one-to-one interaction.

In use in a range of manufacturing and maintenance facilities, 26 Steps attracted a Manufacturing Innovation Award. The bespoke software platform it runs on enables scalability and visibility of reporting enabling it to be used for a company-wide improvement programme. Hard copy versions are also available.

Profits from the sale of the toolkits are used to fund the company's entrepreneurial programme for young vulnerable



adults in conjunction with the Peter Jones Foundation for Enterprise.

For further information or general enquiries, please visit the 26 Steps website. Alternatively, you can contact the company via telephone or email.

Contact
T 01684 562169
info@26steps.co.uk
www.26steps.co.uk

IBC Tipppers

Our IBC Tipper is a mechanism to maximise the dispensing of your IBC while avoiding waste, environmental and safety hazards. It requires no power and will work without any monitoring to tilt the container as it empties.

In the past, it has been difficult to access the final few litres of liquid in a container as pressure at the outlet decreases. Often, the rear of the container would be manually lifted, posing a hazard. The IBC Tipper provides safety by automatically adjusting the angle of the IBC as the liquid empties, ensuring that all liquid drains and health and safety practices are

upheld.

Our IBC Tipppers are produced to the highest standards, and we are constantly improving the design to ensure strength and durability. Available in painted, powder coated, galvanised, and stainless finishes, the Tipper is suitable for use in all areas of manufacturing. A matching bund tank and drip tray can be provided to further improve safety and loss of materials.

Calculate how much you could save, and the payback period of an IBC Tipper, using the calculator on our website.



Contact
T 01706 213100
contact@ibctippers.co.uk
http://ibctippers.co.uk

Prodware: Your local and international dynamics partner



As an international leader and the largest Microsoft Dynamics partner in the EMEA region, Prodware can help your company on its way to national and international expansion. Prodware develops, deploys, integrates and hosts IT solutions for businesses.

Prodware has over 1,200 employees with offices in 15 countries. With experience in both the SMB and enterprise sectors & a Microsoft Tier 1 Cloud Solution Provider, Prodware can help you with your initial Dynamics 365 or Microsoft Dynamics NAV deployment, easy billing and ongoing application support.

Prodware specialises in providing manufacturing and supply chain solutions for process, discrete, made to

order, build to order manufacturing organisations. To compete with overseas suppliers, UK manufacturers are looking to swiftly adopt the latest technologies in order to seize the operational advantage, while keeping processes up and running. Microsoft Dynamics solutions provide the tools to maintain margins, optimise business process and production, and manage operations from conception through to delivery of orders, to ensure commitments of time, quality, and cost are met.

Prodware is here to support your digital transformation.

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See the whole story in your manufacturing journey

Reduce inventory holding and free up working capital with a Qlik solution – Welcome to Entadata

Just imagine that you could collate all of your business data from your multiple data sources into one place for easy, interactive & intuitive analysis. The outcome being faster, efficient and more informed data driven business decisions based on fact.

Your business is growing and with this growth comes even more need to stay ahead of the competition and have full visualisation on all aspects of how your business is functioning in every department. The team at Entadata can help you to harness the collective intelligence of people across your organisation and turn your business data into actionable insights that transform businesses and give you the confidence to make the most informed business decisions.

Entadata has successfully implemented Qlik with premier retailer and manufacturer, Carriag Donn,



allowing the business to reduce their inventory holding by 20% freeing up over €0.5m in working capital in its first year. "Qlik's visualisations make sharing business insights across departments easy and can allow colleagues to harness and understand the data, empowering them to confidently drive profitable decisions on sourcing, procurement and production," comments Michael Callaghan, Head of Commercial Finance.

Entadata is able to show you the power of your data, by using your data to build a dashboard complete with visualisation in just a few hours. To see how your business could benefit please visit our website at: <http://entadata.com> for more information.

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"26 Steps enabled supervisors to introduce a more collaborative approach to their work leading to immediate business improvements"

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Reduce your cooling costs by 90% with EcoCooling's direct evaporative cooling, ventilation, and control systems

With over 3,500 installations worldwide, UK based EcoCooling is an innovator in low energy, direct evaporative cooling, and ventilation technologies. It has developed energy-efficient cooling solutions to suit all types of buildings including warehouses, factories, data centres, comms rooms, retail, and commercial.

Founded in 2002 EcoCooling provides energy efficient and low carbon alternatives to air conditioning. Developed from one of the oldest and simplest technologies known to man, EcoCooling has taken the concept of direct evaporative cooling and re-engineered it to provide a sophisticated cooling and ventilation system that can outperform the alternatives on most counts.

Fresh air cooling with EcoCooling can provide a 3m³/s or cool a 30kW load from 1kW of power at a cost of under 14p per hour. Energy use can further be reduced by the use of EC (Electrically Commutated) fans in IT environments.

EcoCooling's 1,500m² of warehousing provides a manufacturing and R&D facility, as well as a storage base for all spares and coolers. This ensures that short lead times and adequate supply of spares are guaranteed.

Simple ventilation can provide a perfectly satisfactory solution to cooling many industrial and commercial premises. However recent advances in fan technology, controls, and evaporative cooling have now taken this principle to a new level of performance, which has proven to be very popular for industrial purposes.

EcoCoolers can either be used for blanket cooling



a building or for spot cooling of workstations and production lines. The solution is perfect for factories, warehouses, and mezzanine floors. Clients include: TKMaxx, Cummins Diesel, Net-a Porter, and Matalan.

The EcoCooler is highly cost-effective in comparison to traditional refrigerant air conditioning, and can operate on less than 10% of the running cost.

Cummins Diesel Engines recently invested in 42 EcoCoolers, due to very hot uncomfortable temperatures on its main shop floor. These units introduce fresh, chilled, and filtered air to the various workstations throughout its production facility. They are all controlled from two floor mounted centralised control panels. The system reduces summertime temperatures from over 30°C to a far more

comfortable 21°C.

Many locations can maintain compliant conditions by using only 'free cooling' (fresh air). Multiple EC fans can be connected directly to simple temperature controllers giving the simplest of automated solutions. PLCs can be used where more stringent conditions have to be met or when heating and cooling systems need to be integrated.

Ventilation coupled with evaporative cooling and modern controls can provide industrial and commercial premises with a sophisticated air handling system that can compare with any air cooling refrigeration system at a fraction of the energy cost and provide a high level of control of the environment.

The EcoCooler is also available in several different configurations, meaning they are suitable for any location and are easy to install and come with minimal maintenance.

Our complementary in-house design consultancy service capitalises on our vast industry experience to work closely with consultants and clients to design the most efficient systems possible.

If you are having temperature problems in your warehouse or factory, please contact us on the number below. More information and case studies are available on our website.

T 01284 810586
sales@ecocooling.org
www.ecocooling.org
www.ecocooling.org/casestudy/cummins.php

Advanced Valve Solutions 2018 workshop/course dates

The feedback from the last workshop delivered by Advanced Valve Solutions UK Ltd (AVS) was excellent and new courses and workshop material have been created to assist maintenance engineers in solving process issues caused by the changing demands of power generation in the UK. Many of the courses are offered free of charge with the support of industry sponsors.

Advanced Valves Solutions (AVS), based in Crewe, Cheshire, was established in 1998 to provide solutions to the Power Generation Industry when excessive wear, thermal cracking, and stressing became a major problem – resulting in millions of pounds in lost revenue. AVS will consult with UK sites and offer advice and guidance for the whole process. It was

for this reason that courses we established as they take the process into a learning environment and the workshop format allows engineers to share ideas and examine 'real life' situations.

The programme for 2018 starts in February:

- **February 13th** – Desuperheater/Attemperator/PRDS workshop
- **March 13th** – Stop Valve and Check Valve Workshop
- **April 3rd** – OTC (Once Through Cooler) Workshop
- **May 15th** – Graduates' workshop. Specifically, for Mechanical Engineering students. Cost: £50 per student and free of charge for lecturers
- **June 12th** – EFW (Energy from Waste) workshop

- **July 10th** – Site Maintenance/Evaluation Workshop
- **7th August** – IP and HP Workshop (a re-run of the successful Nov 2017 event)
- **25th September** – FCC workshop, specialising in Fluid Catalytic Cracking
- **30th October** – Control Valves workshop for the Gas Storage and Distribution industry.
- **November 13th** – Desuperheater/Attemperator/PRDS workshop for those unable to attend in February
- **December 11th** – An Introduction to Control Valves

Contact: Sadie Beavis
T 01270 586944
sadie.beavis@advancedvalvesolutions.co.uk



Green-Door gets a warm welcome

A new innovation which could spell the end of the unwieldy 'night door' for food retailers has been warmly welcomed by top supermarkets. The Green-Door – which is actually blue! – is available for both freezers and chillers, and is the latest innovation from the thermal insulation specialists at Seymour Manufacturing International (SMI).

After years of painstaking research and nearly a decade of stringent tests at sites across England, Scotland, and Northern Ireland, it is now opening the door to significant financial savings for major retailers.

Green-Door is a more lightweight and user-



friendly replacement for the heavy sliding 'night door', with the potential to save a considerable amount of energy and physical effort for users. It uses SMI's acclaimed Tempro, which remains unchanged as the world's thinnest and most

thermally-efficient material of its kind.

Andrew Watson, store manager at ASDA Glasshoughton, Castleford, said, "The Green-Door has brought lots of benefits since installing it in place of the old night door. It is much lighter to use – reducing the risk of injury – much easier to clean, and saves us energy and money too. I would have no hesitation in recommending it, particularly in an area where there is a great deal of footfall."

Contact
T +44 (0)1952 730630
www.seymour-mi.com

Shut-off valve solution for smart meter suppliers

Delivering a more compact, cost-effective shut-off valve solution for smart meter suppliers, NSF Controls has produced a shut-off valve that can be engineered to exact requirements and applied across a diverse range of utilities meter applications as well as for other positional locking device uses.

With growing demand for gas meters, the leading UK designer and manufacturer of solenoids, switches, and a specialist provider of customised electro-mechanical assembly services, developed the innovative solution to meet a new requirement for a shut-off valve to regulate the gas usage.

Offering an exceptional sealing pressure, flow rate, compact size and proven track record with over seven million installed, the success of this gas

valve project has positioned NSF Controls as an authority within the energy and utilities sector.

UK-manufactured and in compliance with BS EN 1359:2007 and BS EN 14236:2007 for resistance to gas vapour, electrical safety and thermal class standards, NSF Controls ensures a 20-year or 10,000 life cycle.

Solenoid and motorised versions

There are two successful valves in operation for smart meter applications suitable for installation to either the outlet or inlet port with a customer specific interface.

The MGV Series is a motorised gas shut-off valve whilst the SGV Series is a bi-stable solenoid-operated gas shut-off valve. Accredited and approved to ISO9001 & 14001, it's the simplicity



of the valve's design that reduces the number of failure modes, making it an extremely reliable product. Furthermore, the valves undergo 100% testing once assembled ensuring performance to the required specification.

Find out more about NSF Controls Shut-Off Valves at: www.nsfcontrols.co.uk/our-products/shut-off-valve

T 01535 661144
www.nsfcontrols.co.uk

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www.oakwood-environmental.co.uk

New flow modulator for routine GCxGC analyses announced

SepSolve Analytical Ltd has announced the launch of a flow modulator, INSIGHT™, for routine comprehensive two-dimensional gas chromatography (GCxGC).

The new modulator will substantially broaden the uptake and appeal of GCxGC, thanks to simplified technology, which offers high performance while avoiding use of liquid nitrogen. This approach means a greatly reduced cost of ownership for laboratories wishing to utilise the power of GCxGC; cost has previously been considered a major barrier for the technique to all but the largest laboratories.

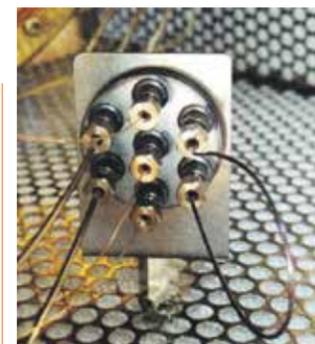
INSIGHT used precise control of gas flows to simply fill and flush a sample loop to fractionate the first-column effluent and deliver it to the second column. The pared-down design fits easily inside standard GC ovens, and used reverse fill/flush dynamics to provide improved peak shape and increased peak capacity for GCxGC compared to first-generation flow modulators.

INSIGHT provides separation of volatiles from C1 to C40 and above without using liquid nitrogen, and eliminates modulation breakthrough for improved characterisation of

both high-loading and trace components. It is also highly versatile, and is compatible with heart-cutting, splitting for parallel detection, and back-flushing.

SepSolve's applications laboratory has shown the effectiveness of INSIGHT for a range of challenging applications, including aroma-profiling of whisky, high-throughput screening of contaminated soils, and identification of fragrance allergens.

T 01733 669222



Energy Efficiency & Power News

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Energy Efficient Cooling



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Industrial and Commercial Cooling

Utilises free cooling up to 90% | Energy efficient natural cooling | No refrigerants | 3500 installations worldwide | Warehouses | Stores | Bakeries | Production Lines | Print Lines | Manufacturing | Telecoms

Client List Includes

Cummins Diesel | Machine Mart | Print Direct | Matalan | M&S | BT | TK Maxx | Nestle

Low Cost, Resilient Control Systems

Remote monitoring | Versatile connections to BMS and fire systems | In-built resilience | Touch screen interface | Energy monitoring | Email alarm options

Proven Savings

Energy savings calculator available | Relevant case studies and testimonials can be found on our website.



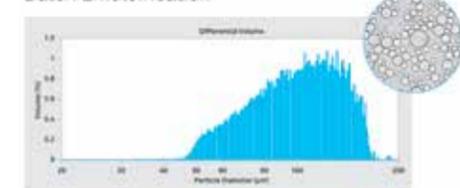
CONTACT US FOR MORE INFORMATION
01284 810586 | sales@ecocooling.org | ecocooling.org

Purolite is pleased to announce its Jetting process for particle size chromatographic resins in the Chromalite® range

For liquid chromatography (ion exchange, hydrophobic interaction, reverse-phase RP or solid phase extraction SPE) uniform particle size provides improved kinetics, resolution, performance consistency and superior packing properties.

Classic batch emulsion polymerisation is a robust, proven technology which results in a relatively broad (Gaussian) particle size distribution. Jetting is an alternative continuous efficient manufacturing process for chromatographic resin beads with a narrow particle size distribution resulting in higher yields and no need for screening, thus better economically. Jetting technology allows production of even larger batches (>1,000kg) in a very short time. The availability of consistent supplies of large volumes of chromatographic resin beads also open up the possibility of new potential larger scale applications.

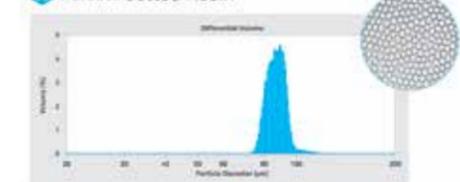
Batch Emulsification



Standard batch emulsification particle size distribution

Jetting technology operates with two different processes, depending on the particle size needed. The first Purolite jetting process – membrane or 'can' jetting – entails using a membrane with very small, discrete orifices, through which the polymer is passed. This device is capable of producing uniform particle size chromatographic resins from ~15 to 250 micron.

Purolite Jetted Resin



Uniform resin beads produced via Purolite's Jetting technology

The second process, plate jetting, utilises a plate with many precisely engineered holes, through which the resin polymer is passed. Uniform particle size chromatographic resins of ~150 to >1,000 micron can be produced using this method.

Purolite is a leading manufacturer of ion exchange, catalyst, adsorbent and specialty resins. Headquartered in Bala Cynwyd, PA, the company has ISO9001 certified manufacturing facilities in the USA, China and Romania and operates dedicated R&D centers in the USA, China, Romania, Russia and the UK. Purolite, the only company focused exclusively on resin technology, has 40 sales offices in more than 30 countries.

To learn more about our products, please contact us: lifesciences@purolite.com www.purolitelifesciences.com



A must-attend event

Aviation Week Network's MRO Europe Conference and Exhibition was held at London's ExCeL from 3-5 October 2017. The conference and exhibition brought in more than 8,000 registered industry professionals. The event drew representatives from 86 countries and hosted a sold-out exhibition hall featuring 400+ exhibitors.

The Conference featured 88 speakers representing the airlines and industry including the keynote address from Laurent Martinez, Head of Services at Airbus. Sessions included discussions on topics such as Line Maintenance, Managing Costs, Future Workforce Challenge and MRO Europe Market Forecast and Key Trends. The Closing



Forum, the 'Voice of the People', featured speakers from WestJet, Qatar Airways, and Norwegian Air Shuttle.

The Exhibition hosted 400+ companies including pavilions representing France and Enterprise Florida. Attendees conducted business, signed contracts and networked. Also new on the exhibition floor in 2017 was

the Heli Zone and 'Go-Live' Demo Theatre. Providers and attendees came together on the trade-show floor for interactive content, live demos and new ideas to improve efficiency. Content included sessions on line maintenance, drones, digitalisation, mobile MRO, helicopter trends, and a forecast from the Aviation Week Intelligence Network team.

The 2018 show returns to RAI Amsterdam, Netherlands, from 16-18 October 2018. This is our pick of the best exhibitors from last year's show, listed here in alphabetical order: PDQ Airspares. Further details can be found on the right.

<http://mroeurope.aviationweek.com>

PDQ Airspares

PDQ Airspares is established as the worldwide leader in consumable/expendable solutions to the airline and MRO industry. Headquartered in the UK with offices in Singapore, Dubai, and China, our next generation ConsumableCare support packages offer proven tailored programs guaranteed to generate significant savings in time and operational costs and help companies to recoup losses on surplus inventory. Our proven ConsumableCare programs simplify procurement procedures by streamlining the supply chain from requisition to acquisition, easing the burdens across multiple departments.



- Services include:
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 - Surplus2Revenue Asset Disposal – Converting Surplus Stock back to Cash
 - JIT – Guaranteed Supply
 - Kitting Programs – For any Application
 - Asset Disposal Management
 - AOG 24/7 desks
 - Worldwide Coverage

UK +44 (0)1425 652200
sales@pdq-airspares.com
 Asia +65 6323 1102
pdqasia@pdq-airspares.com
<http://pdq-airspares.aero>

Lab Innovations 2017 Review Top 20

Lab Innovations: Back for 2017!

Lab Innovations – the UK's only dedicated showcase for laboratory technology, analytical and biotech equipment – returned for its sixth consecutive year on 1 & 2 November 2017 at the NEC, Birmingham. With the largest gathering of laboratory suppliers in the UK, this free-to-attend show had lots on offer for professionals across a wide range of sectors, from pharmaceuticals to food and drink.

Lab Innovations continued its strong links with the scientific community, with partners including GAMBICA, the Science Council, the Royal Society of Chemistry, Innovation DB and UKSPA for 2017. The packed schedule covered the latest trends in laboratory science across three live theatres, including the all new Insights and Innovations theatre, which featured debates about the latest advances in food and drink technology, life sciences, and pharma. The Royal Society of Chemistry theatre focused on the analysis of illicit substances – including cannabis and so-called 'legal highs' and counterfeit pharmaceuticals – as well as laboratory automation, in-process analysis and, new for this year, sessions from the Royal Society of Chemistry's careers service.

Speaking about last year's show, Leo Daly, Laboratory Supervisor at Lagan Cement, said, "It's great to see so



many exhibitors that are experts in the field, and to have them all in one place." Tim Daniels, Marketing Manager at Autoscribe Informatics, agreed, "It's a must attend event in the UK calendar."

The 2018 show returns to Birmingham's NEC from 31 October-1 November 2018. This is our 2nd pick of the best exhibitors from last year's show, listed here in alphabetical order: Air Products, Cool Repair, Haier Biomedical, InterFocus & Tutela Systems. Details can be found below.

www.easyfairs.com/lab-innovations

Ultra-high purity gases giving laboratory analytics the edge

From food sample analysis, to air quality testing and the development of the very latest pharmaceutical and chemical products, laboratories play a critical part in our day to day lives. Whatever the industry, legislation and tough competition have resulted in increased demand for ever more accurate, reliable and safe analyses of a wide range of complex chemical compounds.

As one of the global leaders in the supply of ultra-high purity gases, Air Products works together with its customers to select the right speciality gas for the application, at optimum purity level or mixture composition. This process is key – impurities in gas can not only compromise the accuracy of analysis, they can also cause major problems with analytical equipment



such as increasing baseline noise in Gas Chromatography.

Specifically designed for analytical users, Air Products' Experis® speciality gases range includes the widest variety of ultra-high purity gases, gas mixtures & gas-handling equipment. This range, combined with expert support and advice offers analytical chemists and their laboratories a 'one stop shop' service that can meet the requirements of even the most demanding of analytical applications.

Containing a high-tech purification system and unique valve design, Air Products BIP® cylinders have been specifically designed for applications where gas purity is essential, delivering ultra-high purity levels in Argon, Nitrogen, Helium and Hydrogen gas. This is critical in areas such as gas chromatography where these carrier gases can improve analytical accuracy, reduce baseline noise and lower limits of detection.

With analytical chemists under pressure to continually improve their processes, ensuring reliability and quality of gas supply is a key opportunity to maintain accuracy and provide analytics in a faster, safer and more cost-effective way.

T 01270 612708
apukinfo@airproducts.com
www.airproducts.co.uk

Laboratory furniture solutions

InterFocus is one of the UK's leading manufacturers, suppliers, and installers of laboratory furniture systems, including associated services and products – providing the complete turnkey solution nationwide. From concept to completion, our experienced team of designers, manufacturers, and installers are fully trained and qualified and adhere to all current legislation. By combining our skills and experience, we take pride in the work we do and the legacy we leave behind.

InterFocus offers an array of in-house services, designed to give you confidence and peace of mind. Whether your refurbishment project is large or small, we appreciate that every customer is unique and we will support you in delivering a timely, quality result.

You might be looking for a fresh, modern lab design or need support in working out how to lay out your laboratory across several rooms. Our planning team will set the wheels in motion, and our design team



is here to make your ideas happen. If you are unsure of how best to use your existing or new site, our team can plan a laboratory that meets your specific requirements, including all associated building works and services, including installation.

T 01223 894833
www.mynewlab.com

Intelligent Protection of Life Science

Haier Biomedical Intelligent Protection of Life Science

Haier Biomedical is one of the world's leading suppliers of life science equipment, and part of the \$32 billion Haier Group. Established in 1998, it designs, manufactures and sells laboratory equipment for the global market to enable scientific researchers and clinicians across the globe to perform research projects, produce medicines and treatments.

Haier Biomedical has been developing and pioneering smarter, greener and cleaner technologies to reduce the energy and impact of life science equipment, in particular ultra-low temperature freezers. This year saw the launch

of the Salvum Ultimate range of ULT freezers with smart frequency conversion technology, hydrocarbon refrigerants and an innovative cabinet design which combine to make a freezer with an energy consumption of just 8.2kwh/24hr.

Haier Biomedical has a wide portfolio of pharmacy refrigeration, from 68 litre to 1,378 litre capacities. This range was recently expanded to include ATEX accredited sparkfree

models.

Haier Biomedical is committed to developing strong relationships with UK customers, supporting and listening to them to identify future requirements which can be engineered into the products by its R&D and engineering teams.

T +44 (0)1435 517003
uksales@haierbiomedical.co.uk
www.haierbiomedical.co.uk

Cool Repair's one stop shop

Cool Repair and MTS Cryostores have teamed up to offer a 'one stop shop' for all your cryostorage and ultra-low temperature (ULT) requirements.

We supply, service, repair, and calibrate ultra-low temperature freezers, all at competitive prices.

Our disaster recovery programme will ensure that should any disaster compromising your samples occur we can respond within hours to ensure the safety of your samples.

For those short on lab space, we also offer secure off-site storage and transport of samples. Our services are provided 24/7, 365 days a year.

We comply with ISO9001 and hold a Human Tissue Authority (HTA) licence for the storage and transport of those samples affected by the HTA.



Give us a call to see how we can help with all your cryostorage and ultra-low temperature freezer needs.

T 01159 753743
info@coolrepair.co.uk

Tutela Monitoring Systems

Tutela Systems supply and install fully validated web-based, wireless temperature monitoring, recording and alarming systems for all types of laboratory environments from medical, scientific, food, biotech, pharmacy, hospitals, pharma and research facilities worldwide.

The high value of inventory stored and processed in temperature-controlled facilities, refrigerated warehousing, hospital pharmacy, blood banks and pharmacies is such that a fail-safe remote monitoring system is needed to ensure that advance warning of any potential threats to the compliance of temperature-sensitive inventory is flagged up as a matter of urgency to prevent unavoidable losses.



Compliance is not going to get any easier – and the Genesis 3 automated remote monitoring system with alarming from Tutela is the long-term answer in delivering a rock-solid audit trail and to prevent costly inventory loss.

Tutela Systems are part of Next Control Systems, an ISO9001:2008 company that has been successfully marketing web-based wireless temperature monitoring and recording systems worldwide for

over 20 years.

Tutela Systems deliver unparalleled accuracy for complete peace of mind, whether the need is compliance effective risk management or good manufacturing practise.

Contact: Jason Whittemore
 T +44 (0)1252 406398
 F +44 (0)1252 406401
info@tutelamedical.com
www.tutelamedical.com

xTablet T1 150 from MobileWorxs

MobileWorxs recently announced the launch of the xTablet T1 150 – rugged tablet for the mobile workforce. The features available make the xTablet T1 150 one of the most robust Windows tablets on the market today.

The thin and lightweight highly rugged tablet is an innovative, multi-tasking tool for manufacturing warehousing, distribution, shipping, and other industries where mobile flexibility is required.

The xTablet T1150 boasts a 10-inch scratch-resistant, high definition LCD display.

The rugged tablet runs enterprise-ready Windows 10 Professional and partners with an Intel Atom Quad Core X5-Z8550 processor, 4GB of memory and 64GB of storage. Other integration options and accessories of the rugged tablet include a high performance 2D barcode scanner, 3D camera fingerprint reader, 4G LTE and hot swappable battery.

Contact
T 01905 799555
sales@mobileworxs.com
www.mobileworxs.com/products/rugged-tablets/xtablet-t1150



New recruits strengthen company

Meachers Global Logistics, one of the UK's leading independent providers of transport and logistics services, has strengthened its sales and management team in both Southampton and Derby.

Due to the increasing transport and warehousing demands at the facility in the Midlands, and company plans to grow the services provided there, they appointed Alun Smith as the new Depot Manager. Alun brings with him extensive experience and a wealth of knowledge within new business and client relations having previously worked for companies such as FedEx SCS and Alloga. Commenting on his appointment, Alun said, "The passion and drive to develop the company's transport and warehousing services in the Midlands are second to none and I am privileged to be brought on board to help support and manage this."



The Southampton office has also seen an addition to the Sales department with the appointment of Paul Uglow as Sales Executive. Paul has worked in UK and International Logistics for 30 years in both sales and operational roles. Paul said, "Joining Meachers has given me the opportunity to widen my skill set and work within a friendly business team."



"We are set to see a prosperous year here at Meachers," Gary Whittle, Commercial Director, said. "We currently have half of our fleet operating out of our Derby facility & the demand is growing. The refurbishment will assist Alun in providing the best possible service for our customers. Along with Paul's extensive knowledge in international freight forwarding, it looks like a promising year."

T 023 8073 9999
sales@meachersglobal.com
www.meachersglobal.com

Humidity Solutions launches new range of industrial dehumidifiers

Humidity Solutions is delighted to announce that it has an agreement to distribute the HldROS brand of dehumidifiers in to the UK market. This brings together the superb HldROS equipment and the exceptional application knowledge held within Humidity Solutions.



HldROS refrigerant dehumidifiers provide the solution for industrial storage and commercial applications. Humidity is closely controlled in order to guarantee optimal comfort, while a centrifugal fan with high available static pressure allows connection to ductwork where required or desired.

The total range of HldROS products includes standard dehumidifiers with capacities from 25 to 3,000 l/24h. In addition to this, Humidity Solutions and HldROS can offer a wide range of tailor made machines to meet any customer requirement. Expertise, quality, flexibility, and enthusiasm are the other essential elements brought by both companies that ensure we provide a rapid response with appropriately engineered solutions.

Humidity Solutions is the UK's only independent specialist in humidity control, offering a range of humidifiers and dehumidifiers from the most respected manufacturers around the world. We offer a comprehensive turnkey service, from initial feasibility and design through installation and commissioning, to ongoing after-care.

www.humiditysolutions.co.uk

Food Processing News



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Smart and functional workwear

One of workwear manufacturer FE Engel's bestselling brands is the 'Galaxy' range which offers a comprehensive selection of smart and functional clothing with the emphasis as much on style and fit as on being protective and hardwearing. The trousers are narrower than normal, the jackets slim-cut and all garments are available in a choice of three colour combinations.

The collection also consists of soft-shell and winter jackets, a comfortable fleece cardigan, bib-overall, boiler suit and shorts with fabrics made



from durable, two-ply cotton/ polyester yarns. Most items feature

several spacious pockets and many other shared functional details such as concealed buttons and zippers, adjustable jacket cuffs and CORDURA reinforced jacket elbows.

The company's Galaxy 'Light' range includes the 210 g/m² 'Light' work jacket (1290-880) that has a longer, pleated back for freedom of movement and reflectors on both front and back.

Contact: Mark McBrayne
M +44 (0)7933 150197
mmc@f-engel.com
www.fe.dk/en

New control panel with built-in SD interface

The Schmersal Group is extending its range of control panels with the new BDF 200-SD model. This product variant now has a built-in SD interface. The BDF 200-SD is also fitted with an EMERGENCY STOP function with electronic OSSD outputs and can be fitted with up to three operational command and alarm devices, such as illuminated push-buttons, illuminated alarms, selector switches, and key switches.



The Schmersal Group has extended its range of control panels to include the new BDF 200-SD model, which now incorporates a built-in SD interface

the safety equipment or error messages from a device. This allows individual diagnostics for the safety switchgear devices connected. This means that a user can easily tell which switch in the series has triggered a signal. This helps resolve problems quicker, enables preventative maintenance and thus increases machine availability.

The BDF 200 product range was developed for installation on conventional aluminium profile systems in machine housings and is easy to install. The range is based on a slimline casing made of impact-resistant plastic.

The positioning of the buttons on the control panel can be selected at will. Labelling fields allow the individual marking of functions. This means the machine constructor can show the normal operating functions (EMERGENCY STOP, On/Off, Forward/Back, mode selection, status display, error messages, etc.) on the BDF 200 range.

Contact
T +44 (0)1684 571980
F +44 (0)1684 560273
uksupport@schmersal.com
www.schmersal.com

Using the built-in SD interface, the non-safe diagnostic signals from the command and alarm devices can be transferred via an SD gateway to the controller. In the safety circuit, different electronic safety switchgear devices, such as sensors and interlocks, can easily be connected in series using the BDF 200-SD. The benefit for users: The devices are simpler, quicker and more cost-effective to install. This also reduces installation errors.

Safety sensors and interlocks fitted with an SD interface can transfer extensive status and diagnostics data from individual devices connected in series via the SD gateway and different fieldbuses to the controller. This could be, for example, status data from

Spill containment specialist

Spill containment specialist Empteezy was invited to exhibit at Interspill 2018, Europe's leading oil prevention conference, to launch its containment booms which are used to reduce shoreline pollution from an oil spill, making the oil easier to recover.

In 2017, the International Tanker Owners Pollution Federation Limited (IOTPF) recorded a total volume of approximately 7,000 tonnes of oil which was lost to the environment from a combination of large (more than 700 tonnes) and medium (7-700 tonnes) sized spills. Empteezy was joined by more than 1,300 leading oil prevention professionals from all over the world at Interspill 2018, which aims to combat future oil spills including spill prevention, preparedness and

responses and restoration. Already a prestigious Interspill committee member, Empteezy is well respected in the industry for its comprehensive and internationally recognised standard of spill containment and spill response equipment, which is manufactured and exported to industrial sites worldwide.

Empteezy's range of containment booms includes permanent, curtain, air, and absorbent booms, which are manufactured in their Western European facility to maintain high quality and maximise response times to urgent demand.

Commenting on the launch, managing director of Empteezy, Bruce Wishart, said, "Hundreds of gallons of oil pollutes our oceans every year



which impacts shorelines across the globe, and has a knock-on effect on the environment and wildlife. It is important that companies have access to the right oil spill response equipment such as containment booms, to combat oil spills and reduce the impact on the environment."

Contact
www.empteezy.co.uk

LED safety with Curtis UK

Curtis UK was established in 1974 and is the largest European sales and service subsidiary of Curtis Instruments, a global corporation headquartered in New York. The UK base is a large purpose-build facility in Northampton & provides advanced control system technology for electric vehicles & equipment of all types used throughout the UK materials handling industry.

Being aware of approaching hazards

Alongside this high-tech control system technology, Curtis UK is a leading supplier of traction battery chargers and safety equipment for materials handling equipment. The company's range of LED visual (and

audible) safety warning devices help increase human awareness of approaching hazards. Choices include multiple visual options, offering a wide selection of styles from different coloured spots, arrows or danger zones LED lamps, plus a variety of alarms and horns all designed to increase site safety by using light or sound as a visual warning device.

Though operating on a global in scale, the company prides itself in its local approach to customer support. Its value added services include advanced customer support engineering, vehicle drive and control panel assembly, product testing, repair and failure analysis.

New Danger Zone lamp for materials handling equipment

The new Danger Zone lamp from Curtis Instruments creates a safety zone on each side of a forklift truck whilst in use to provide a visual warning for pedestrians in the vicinity. Easily fitted and adjusted, these lamps help prevent foot injuries and collisions from rear end swing, as well as clearly showing a 'NO GO ZONE' around any type of materials handling equipment.

T +44 (0)1604 885201
www.curtisinst.co.uk



Drives, Controls & Automation News

If Amazon could deliver ABB Motors

Quantum Controls has partnered with Carousel Logistics, one of the UK's leading logistics companies, to provide UK industry with instant access to ABB motors any time, day or night, for the first time in the UK.



Statistics show that your motors are 66% more likely to fail when UK motor stockists are closed, and having recognised this universal problem faced by engineers, Quantum has invested in a solution that delivers the following:

- 24/7 access to the UK's largest stock of WIMES Specification ABB Motors
- Available ex stock, held centrally by UK logistics company
- 2 and 4 pole motors available foot mounted, flange mounted and up to 250kW
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Machines + Tools + Automation

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

Recognised Precision

UNISIG deep hole drilling machines are proven with industry leading manufacturers in all regions of the world. UNISIG is chosen for the ability to consistently meet vital demands of tolerance. UNISIG stands out among industry players for its skill in handling large, complex projects including multiple machines and automation, process development and tooling testing, as well as custom engineering.

For more information, please call +49 7125 9687590
Email info@unisig.de | Web www.unisig.de/en



New slimline switches for Fortress Interlocks' amGardpro range

Fortress Interlocks has brought out two new slimline modules for its amGardpro range of interlock safety gate switches: a slimline solenoid switch body and a slimline option pod body.

These new modules allow an even wider range of safety interlock switches to be configured for many industrial applications. The range is supplied in enclosures sealed to IP67, with a 40mm wide body, and has a retention force of 10,000N, making it ideal for ensuring guard doors are held closed until machines and/or processes are in a safe condition. The slimline nature of the modules also means they can be easily fitted to 50mm guarding sections or where space is limited.

The amGardpro range includes solenoid and non-solenoid safety switches and many additional options, including key control modules, internal and escape release, redundant sensors, lock out/tag out and push buttons, e-stops and indication lights for enhanced functionality, all assembled in one device. Its robust construction makes the amGardpro ideal for industrial applications when safety, strength and reliability are of paramount importance.

The amGardpro replaces all adaptations normally fitted within a guarding system, so additional hardware like door catches, actuators, closing mechanisms, internal release mechanisms, and key functions (including authorised access and deadlocks) are no longer needed.

All these separate functions can be incorporated into amGardpro configurations, resulting in the most flexible safety gate switch solution available for today's industrial environment.

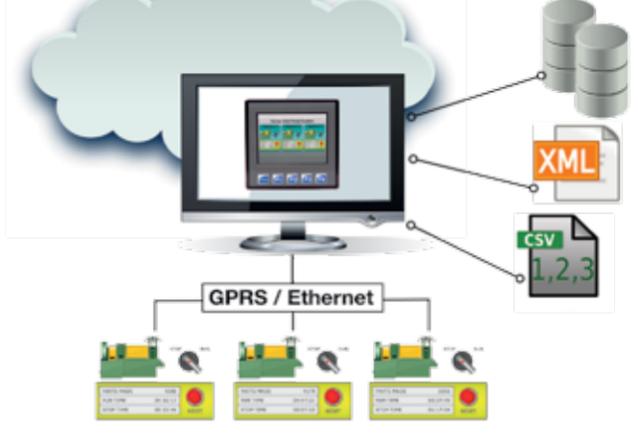
The range has a unique modular construction which allows easy configuration and provides a total electro-mechanical product for practically any safeguarding application up to EN ISO 13849-1, Category 4, PLc (SIL3). It has also been third party approved by TUV SUD.

Contact
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WebMI

Web Portal



With Horner WebMI, you can monitor and control plant data from the palm of your hand. Published directly from the OCS Controller, WebMI allows the same or unique Web pages to be monitored and controlled from your computer, tablet or other mobile device. Developed completely without Cscape environment, WebMI allows for the state-of-the-art HTML 5 development without the need for web programming skills. The licensing and registration process is quick and simple while the benefits and affordability of WebMI will truly change your world.

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 Emails: sales@horner-apg.com
www.horner-apg.com



Industrial Ethernet switch

Korenix has launched a new Industrial Ethernet switch that is suitable for a wide range of industrial automation applications. The switch has IEEE 1588 compatibility for use in Real Time applications using industrial protocols such as Ethernet IP and ModBus. The product is available in the UK from MAC Solutions.



The new JetNet 7310G is a Layer 3 managed switch with Layer 2 network performance and provides 8x35W Power-over-Ethernet (PoE) ports, enabling the simple connection of devices such as PoE enabled I/O modules, GigE cameras, WiFi access points and other devices that require high power levels and industrial cybersecurity features. Like all Korenix products, the JetNet 7310G operates in the harshest of environments, with an operating temperature range of 40°C to 75°C and tolerates extreme EMC conditions, including rail trackside applications.

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tim.r@mac-solutions.co.uk
www.mac-solutions.co.uk

Northern Industrial takes on two old robots to help customers face adoption challenges



Blackburn-based automation spare parts and repairs company Northern Industrial has taken delivery of two used robots, previously employed on production lines in Germany, to help ensure the integrity of repair work and spare components before shipping worldwide.

Northern Industrial provides reconditioned and obsolete parts and repair services to customers in 132 countries. Sourcing parts from over 1,350 manufacturers, the multi-award-winning company covers over 200,000 part numbers and holds approximately £7m in stock.

T 01254 673747
www.nicontrols.com

UNISIG modernises high volume receiver production



Industry: Firearms
Customer Product: Rifle Receivers
UNISIG Solution: UNI25HD with Automation

Rifle barrel receivers go on every rifle that is manufactured, and a growing firearms industry has affected the demands of manufacturers. One US based firearms manufacturer saw their production pushed to the limits with their existing equipment, and recognised the opportunity to update its older gundrilling machines to match its modern manufacturing facility. Its goal was to modernise, to handle current and future demand, eliminate a manufacturing bottleneck, and maintain the highest efficiency and accuracy standards possible.

UNISIG introduced a solution that would consolidate multiple gundrilling machines into a UNI25HD multi-spindle machine, replacing several decades-old pieces of equipment to free up floor space, and equipping the machine with high power and control technology that allows them to take advantage of newly updated tooling technology. By combining multiple spindles and high feed rates of these new indexable gundrills, receivers are now produced at a rate of more than 100 parts per hour, in a steady one piece flow, significantly improving their previous production rate.



Indexable gundrills are rigid gundrilling tools that use replaceable carbide inserts and wear pads for holes from 0.53-2.00in (13.5-50mm) in diameter, at extremely high feed rates. Typical feed rate increase is from 3-4 times faster with indexable gundrilling.

This deep hole drilling process is supported by UNISIG's UNI25HD 4-spindle, heavy duty gundrilling machine. This machine provides additional power, torque, and thrust required for these high-feed gundrills, as well as having extra rigid components to handle any vibration produced as a result of extremely high feed rates. Embedded automation is used to match the drastically improved production rate, and to integrate the gundrilling step with the cut-off lathe beforehand, & turning steps that follow.

Infeed automation loads parts from the previous step onto the smart conveyor, where they are indexed to load a four-part cycle, and lifted into chucks for the approximate one minute drilling cycle. Robotic unloading on the outfeed side brings parts to the next manufacturing step, turning, at a pace that also matches gundrilling.

UNISIG's technical team, along with tooling manufacturers, optimised the process and produced an automated system that was a clear solution for this customer. Their team was impressed with the clean, modern system that fit well into their modern manufacturing concept. UNISIG also provided installation and training to ensure they can hit their production and accuracy goals without issue.

The UNISIG UNI25HD machine ultimately eliminated the production bottleneck and floor space issues previously affecting manufacturing, and introduced a compact, high-value automated machine that maximises production, allowing them to keep up with any demand they may face.

Further information on all machines and solutions at: www.unisig.com



New-generation HMIs support more than 300 protocols

Red Lion Controls has announced a new generation of HMIs said to offer more engaging interfaces with advanced design capabilities, as well as protocol conversion, datalogging and a Web server function for remote monitoring and control. The CR1000 and CR3000 HMIs are available in sizes from 4.3-15 inches and can connect to devices from leading manufacturers using a library of more than 300 protocols built into Red Lion's new Crimson 3.1 software.

Expanded symbol libraries and primitives with anti-aliased rendering, and support for 16 million colours, provide new options for creating more effective and natural interfaces, resulting in screens that speed operator learning and improve comprehension of on-screen information, symbols and messages. The new software also simplifies development. The order of primitives in the libraries can be rearranged to make

the most common items easier to find, and allowing users to create custom favourite lists.

The built-in Web server allows CR3000 users to monitor and control applications securely via PCs, tablets or smartphones. SMS messages and email alerts provide early warning of issues, helping to avoid downtime. Real-time datalogging allows users to see trend data on the screen with more tools to narrow or widen the scope of inquiry.

The IP66-protected HMIs have rugged polycarbonate enclosures. They offer high shock and vibration tolerance and an operating temperature range of -10°C to +50°C.

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Fulton's PURE Technology approach achieves world-first vertical steam boiler design with highest efficiencies and ultra-low NOx emissions

Fulton's all-new gas-fired, vertical spiral-rib tubeless steam boiler, the VSRT, is the first to emerge from a new 'PURE Technology' approach, an initiative that results in a world-first design that is durable, long-lasting and boasts the highest efficiencies and ultra-low NOx emissions.

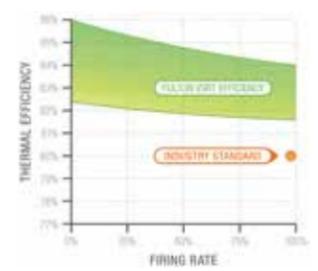
By adopting a systems-engineering approach and

implementing PURE Technology – the result of a clean-slate design approach that combines new people with new skills bringing a new approach to the design and optimisation of heat transfer solutions – Fulton's VSRT radically challenges the heat transfer and mechanical design principles of traditional steam boilers. It's also claimed to be the most radical change to vertical steam boiler design since Fulton pioneered the vertical

tubeless boiler in 1949.

Commenting, Fulton's Leigh Bryan says, "To meet stringent industry and environmental standards, PURE Technology looks to enhance heat transfer, provide class-leading efficiencies, improve steam quality, and reduce NOx emissions. Rather than improve existing products to achieve this, PURE Technology radically

challenges conventional boiler design by engineering solutions that are fit-for-purpose and application."



With over 15 patents pending in three continents, the VSRT attains industry-leading heat transfer rates thanks to a unique spiral-rib heat exchanger, which achieves low stack temperatures by passing the flue gases through a spiral-wound heat exchanger that is fully immersed in water.

The spiral-rib design benefits from an extended heat transfer path and dual-direction heat flow, with the spiral annulus designed and optimised to create high heat transfer rates. This optimises heat transfer to improve efficiency and create a longer-lasting boiler that, with virtually zero thermal stress, a thick-walled construction and featuring vertical tubeless design architecture, Fulton believes will beat the competition in every category of durability!



A fully-water-backed pressure vessel is wrapped in high-density insulation to achieve minimal thermal losses and low outer surface temperatures; and the tubeless design has created a compact boiler with minimal footprint. No refractory also means significantly lower weight to ease installation.

The VSRT's combustion technology achieves ultra-low NOx emissions of <20ppm and features a fully-matched modulating burner and furnace that have been purposely-designed as a single component. This helps to achieve >10:1 turndown capabilities and industry-leading performance of >82.5% gross thermal efficiency and 99.75% steam quality at 8 bar. When correctly sized for applications, the exceptionally high turndown will result in savings above-and-beyond those gained from the stated efficiencies.



With a tubeless design, no internal refractory, industrial control platform and easy access to the pressure vessel, the VSRT is easy to maintain and operate. Maintenance is further improved thanks to a revolutionary air filter where, for applications where contaminated air can reduce boiler uptime, a cyclonic air filter separates debris and damaging particles from the combustion air and eliminates the need for replacement filters.



The VSRT is currently available with outputs from 160-960kg/h, complies with the City of London Air Quality Strategy and anticipated MCPD regulations, is constructed to BS EN 12953 and CE marked to PED. Its pressure vessel and burner are backed by a five-year guarantee as standard.

Contact: Carl Knight, Fulton Limited
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Contact: Carl Knight, Fulton Limited
T +44 (0)117 972 3322
sales@fulton.co.uk
www.fulton.co.uk

Save time, save money, save energy

RABScreen is the provider of external mesh protection screens, also known as air intake screens, for all air movement equipment. Dedicated to improving air quality, RABScreen provide the unique external air filter which can be fitted to any air movement plant to protect existing filters and coils.

RABScreen was set up in 2013 by Managing Director, Richard Betts. Richard discovered the product, which is manufactured in the USA, when helping a customer solve a problem at a major data centre. In 2012, he gained the right to distribute Air Intake Filter Screens to the whole of Europe and RAB Specialist Engineers was formed in 2013. RABScreens' air intake filter screens offer a unique external filtration system to protect your plant from seed, pollen, dust, cottonwood seed, and all other airborne debris. As the only UK supplier of such systems, the company are able to offer their clients made to measure solutions, from as small as 200mm² to as large as 150m² on a supply only or on a supply and install contract basis.

We spoke to Richard Betts and asked him what differentiated his company from other air filtering corporations, to which he explained, "Our filter



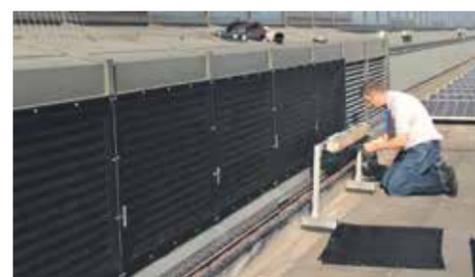
expertise and design team are able to manufacturer multiple fixing options to best suit our client's needs. Not only are our products cost and energy-saving efficient, but our RABScreens are reusable, washable, resistant to wind velocities of 120mph and come with a ten-year sustainability guarantee."

Additionally, most businesses don't realise they are wasting thousands of pounds each year due to inefficient air-handling systems that require replacement or frequent maintenance. This can have significant cost implications for any business's profitability. However, Costly HVAC equipment can be correctly maintained while reducing expensive maintenance schedules, simply by fitting the unique RABScreen external filter. Well-maintained equipment costs less to operate, ensures optimal life expectancy and maximises energy efficiencies.

Furthermore, ensuring that your HVAC equipment delivers consistent high-level performance alleviates the need for unnecessary servicing and warranty claims. Fitting external RABScreen filters to existing and new HVAC systems will help prevent expensive repairs. RABScreen filters work by protecting existing prefiltration devices, and also those areas where traditional filters are not practical, such as chillers or cooling towers, from various types of airborne debris.



By creating a static charge that attracts and traps airborne particulates, the RABScreen prevents sensitive components such as evaporators and cooling and condenser coils from contamination, without restricting airflow through the equipment.



Going forward, Richard added that company plan to further expand in order to "enable us to reach more of the market. It is a simple solution to many problems but not enough people are aware of RABScreen and its benefits."

While there is currently only one media product available at the moment, the company's latest, innovative design idea RABScreen CAS, Continuous Mounting System, provides a new and unique method of installing filter screens. The company are also mounting their washable filter media in panel filter replacement sizes with a guarantee of 5 years to reduce the volume of disposable filters going to landfill.

RABScreens are manufactured from negatively charged polyester and positively charged polypropylene. Air movement creates an electrostatic charge which attracts and captures airborne debris like iron filings to a magnet. They are simple to install and can be easily cleaned with a broom, hose or vacuum cleaner.

So, if you have air movement plant of any kind considers installing a RABScreen to save energy, time and money for at least 10 years, then get in touch with the team today.

Contact
T 01635 248633
www.rabscreen.com



Famous green Steam Boiler gets exclusive copper makeover

The famously distinctive bright green shell of one of CFB Boilers' 4VT Steam Boiler has been transformed with a copper overskin – and the result is jaw-dropping. This customised job was completed at the request of an equally famous client who is set to launch a microbrewery in Devon later this year. The brewery will produce real ale to help pubs and restaurants meet increasing demand for the product.

Handcrafted at CFB Boilers' manufacturing facility in Essex, this exclusive 4VT Steam Boiler underwent an overskin process using a 12mm copper sheet – the same material that is used by coppersmiths in the brewing industry on copper tanks, vessels and pipework – to give

the boiler a more traditional look. The usual bright red burner casing was also exchanged for a more complementary metallic silver finish. Ready to fire with skid, the boiler was then sited and installed by CFB Boiler's in-house engineers at the client's microbrewery.

Despite its copper exterior, the 4VT steam boiler still very much retains its green credentials; it is arguably the most energy efficient, high performance, reliable, and low maintenance steam boiler on the market thanks to a number of class-leading innovations. These include energy-saving four-pass technology, a 30% larger steam chamber, and integral heat recovery.

Additionally, the 4VT Steam Boiler boasts a start-up time of just 10-15 minutes, precise temperature delivery, a compact, tubeless design, and can be used with gas, oil or LPG.

CFB Boiler's 4VT Steam Boiler is available in 12 models from 8-150HP and is manufactured by the 120 year old steam specialist in Britain.

Contact
T 01255 224500
boilersales@steamboilers.co.uk
www.steamboilers.co.uk



UK's first choice for heating

When it comes to heating, Elmatic Ltd are one of the most experienced suppliers in the UK. As the UK's largest manufacturer of industrial and electric heating elements, they can be relied upon for an array of top quality products to suit a range of applications.

The family owned company was first set up back in 1949 and has seen successful growth over the last few decades, cementing themselves as the UK's premier heating tool element manufacturer. Their wide selection of heating elements brochures nozzle heaters, cartridge heaters, load banks, ceramic knuckle heaters, tubular rods, thermocouples, mica heater plates, Hotplates and much more.

In addition, Elmatic also provide bespoke heaters and tailor-made heating elements. They have manufactured bespoke products for clients from every industry, whether it be for power stations, pipe lines, trains and railways, oil refineries or even the aircraft industry. They have developed bespoke high temperature hot plates, custom made square section heaters, and impressive bespoke large heated tunnels production of pipelines.

If you would like to get into contact to see how their vast selection of heating elements can benefit you, then be sure to pick up the phone today. Or more information can be found on their products via their website, detailed below.

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AAF: Gas turbine solutions



Industrial Process News is pleased to announce that AAF International has been recognised as its highly regarded Gas Turbine Solutions Company of the Month.

The origins of AAF International can be traced back to 1921. This was when skilled engineer and entrepreneur Bill Reed made a significant realisation: that cleaning the air was critical to the growth of society, the advancement of technology and the protection of human health. The well-established company now operates within two key groups: Air Filter (known as AAF Flanders in the US) and Power & Industrial, the latter covering the central areas of gas turbine solutions, nuclear filtration, diesel engine filtration and air pollution control.

The gas turbine solutions division of AAF is one of the industry's leading suppliers and holds a globally



renowned reputation. The head office is based in Cramlington, Northumberland, and has been based in this location for over 50 years. Over this period, AAF has executed thousands of projects around the world, delivering gas turbine auxiliary equipment for small, medium and large machines of both aero and industrial derivatives. Successfully facilitating the needs of major gas turbine OEMs, operators and EPCs, AAF also prides itself on its provision of aftersales support services.

The core strength of AAF has always been filtration technology but within the gas turbine division the business has expanded to much more than that of a traditional filtration company. The business has the capabilities to offer an extensive product range that focuses on a broad range of ancillary equipment. This includes filter housings, acoustic equipment and exhaust systems, this type of equipment can exceed 250 tonnes.



In 2015, AAF acquired Stejasa, the global manufacturer of diverter dampers, hot gas exhaust systems and flue gas dampers in a bid to further extend its impressively vast product offering. Upon discussing this acquisition, Darren Allsopp, Chief Operating Officer of AAF's Power and Industrial Division, said, "The acquisition brings many synergies which reinforce our core competencies. Stejasa's expertise and experience will open up new opportunities as we look to become the supplier of choice for gas turbine solutions."

AAF has a solutions outlook with an in depth knowledge of the needs of a gas turbine customer, this includes heating and cooling of intake air and a broad range of repair and upgrade services. Steven Brett, Aftermarket Manager at the company, explained more, "Repairing and refurbishing equipment can help customers (at a time of challenging market conditions) who are keener than ever to enhance the reliability of existing assets and make their operations as cost-effective as possible."

Continuous monitoring of equipment performance and stringent maintenance regimes can increase the life cycle of the gas turbine as well as ancillary equipment. AAF maintenance packages can include regular inspections and in-depth site surveys by qualified engineers, air quality guarantees, materials and design analysis, failure modes and effects analysis, remote monitoring, inventory management (filter and spares), and in situ or factory repairs to OEM standards.

AAF continues to evolve and advance and has now formed a Strategic Partnership with Texo Drone Survey and Inspection (Texo DSI). Texo DSI operator is the world's most advanced fleet of unmanned aerial vehicles for industrial survey and inspection. This unique partnership will see innovative UAV inspection service applications integrated into planned operations and maintenance schedules for both existing and new turbine installations. Steven Brett commented, "This strategic partnership highlights AAF's commitment to challenging the norm and developing innovative solutions to help our clients. This partnership will see us expand our current service offering and deliver even greater levels of flexibility and added value into our operations and maintenance (O&M) work scopes."



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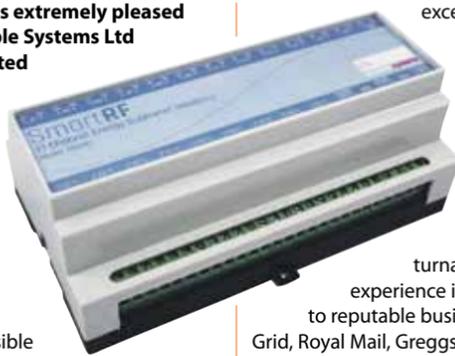
Technology Solutions Supplier of the Month

Your one-stop-shop solution for wireless LoRa energy and IoT services

invisible systems
DELIVERING INFORMATION

Industrial Process News is extremely pleased to announce that Invisible Systems Ltd has been specially selected to receive this issue's coveted Supplier of Technology Solutions Company of the Month profile in light of their unmatched design, manufacturing and installation services.

Founded in 2003 by current owner Peter Thompson, Invisible Systems Ltd specialise in the design, manufacture and supply of wireless LoRa energy and the condition and compliance monitoring and control of IoT systems. Invisible Systems Ltd concentrates on surveying client buildings and sites, proposing then designing solutions, through to supply and installation of monitoring hardware. They also provide their own Realtime Online software, a web-enabling platform software suite, with dashboards, tailored reporting around various applications and alarm notifications in the event of



exceptions.

Excellent customer service is at the forefront of Invisible System's priorities, with the company working in close conjunction with clients' supply chains to ensure their products are delivered on time with a fast turnaround. With over 14 years' experience in delivering reliable products to reputable businesses such as National Grid, Royal Mail, Greggs, Universities across the UK and more, Invisible Systems are your one-stop-shop solution for all of your manufactured, innovative wireless energy monitoring and control tools.

We asked Pete Thompson from Invisible Systems Ltd what differentiated the company against other technological manufacturers and suppliers, to which he responded, "Here at Invisible Systems Ltd, we are able to supply a wide range of wireless hardware for various applications, and not just for one vertical. Our web-based software with different modules are designed around different applications and our team have the experience and development capability to produce bespoke products and software to meet our client's requirements."

The past year has been immensely successful for Invisible Systems Ltd, as their leading and highly efficient IoT solutions have increased the company's brand and product awareness. The company were also named as joint winners of BT's latest Infinity Lab competition aimed at discovering business transformation solutions in the Internet of Things. The competition attracted entries from almost 100 SMEs from the UK and overseas with several themes



emerging around the potential application of future IoT based technologies. Invisible Systems' wide range of products and Realtime Online cloud based software programmes which provides end to end IoT solutions, caught the eye of the judges because it helps businesses save money and achieve regulatory compliance. BT is interested in these technologies as a potential IoT based solution for buildings which currently lack a building management system (BMS). This is typically used to control and monitor equipment such as ventilation, lighting and power as well as fire and security systems. Such critical factors need to be continuously monitored in a data centre environment, which is an application of Invisible Systems' technology.

Additionally, in order to meet with current customer demands and to be able to provide clients with the latest technological solutions available on the market, Invisible Systems Ltd continuously develop a highly innovative, engineered range of products, with the same and additional functionality to the current range; where these will be both LoRa for private networks and LoWAN for public networks. Due to their commercial success, going forward, Invisible

Systems are looking to increase the business turnover by circa 50-75% this year and are currently on track following their initial thriving first three months of this financial year.

As one of the UK's leading technological supply and manufacturing companies, Invisible Systems Ltd can be found at numerous trade shows throughout the year. This includes Industry 4.0 manufacturing, Edie Live, London IOT, Food Expo, and The Pharmacy Show, all of whom Invisible Systems Ltd are planning to visit again in 2018.

If you would like to get in contact and find out how their many specialist services can benefit you or your business, then don't hesitate to pick up the phone today. More information can also be found by visiting the website below:

T +44 (0)1539 722520
info@invisible-systems.com
www.invisible-systems.com



Gratnells Engineering invests in state of the art laser technology

Gratnells Engineering has recently invested in a new state-of-the-art BLM LT Fiber machine, allowing the Harlow-based company to expand their capabilities in 2018 and ensure clients benefit from even faster turnaround times.

This brand-new machine sits next to the existing LT5, a Laser tube cutting machine designed to cut from small to medium diameters and thicknesses of metal tubular sections.

The LT Fiber allows tubes of any shape to be cut, process of special sections and even open shapes without any additional special equipment required. The laser cutting range boasts an automated

unloading and support system for pre-cut lengths up to 6,100mm, automatic weld seam detection, and a module that maintains the cleanliness of the internal tube surface whilst machining.

Anti-crush technology makes the machine capable of processing even the lightest of tubes without deforming the walls. This high-tech equipment is also great for scrap reduction by setting the sequence of parts to be cut and minimising end of bar scrap, meaning less overall waste, which is good for the company and for the environment too.

The additional BLM LT Fiber machine is already helping to increase factory efficiency by allowing

unloading to various positions, with finished parts from one machine being unloaded while production continues uninterrupted on the other.

The need to manually separate parts from different orders has also now been eliminated.

Tube laser cutting continues to grow in popularity as it offers a quick route to a precise finish, eliminating conventional, time-consuming stages such as marking out, sawing and finishing whilst delivering significant cost savings.

Contact
www.gratnellslasercutting.com



Engine driven welders



The new MOSA engine driven welders TS EVO and TS EVO MULTI4 are the most advanced result of MOSA's innovation and research activity, as well as the evolution of the TS welder series.

These two ranges of engine driven welders are characterised by the use of the original MOSA three-phase asynchronous alternator and feature a new control system that is said to guarantee superior quality welding current and performance.

They are designed for professional use. The TS EVO range is available with power ranging from 300 to 600A, in five different models. Powered by air or water-cooled diesel engines from leading international brands, they allow manual metal arc welding in Direct Current or scratch start DC TIG welding, ensuring high quality results.

T 0161 793 8127



Electron Beam Processes Ltd

This year saw Electron Beam Processes Ltd exhibit at their fourth consecutive SPE Offshore Europe – Aberdeen – bi-annual event. The Upstream Oil & Gas conference and exhibition is the largest of its kind outside of North America. The event enables EBP Ltd the opportunity to showcase the company's core expertise in electron beam welding and additional services.

EBP Ltd is an AS9100 QA systems accredited company; who also hold OEM approvals from Siemens, OneSubsea, BakerHughes/GE, Schlumberger, Halliburton, Aker Solutions, Rolls Royce RB211 & Trent Industrial Power Generation to list a selected few. To the Oil & Gas sector, EB welding is a fairly new process, but with EBP's presence at the show over the past 8 years, the company have seen a gradual acceptance from many Upstream clients; mechanical engineers are now specifying EB welding as a core process when they are looking to find a manufacturing solution that will deliver some of their most challenging product designs.

In more recent years the Oil & Gas industry has been blighted by the low value of oil, but towards the back end of 2017 and with the price of oil showing some signs of recovery, EBP Ltd's presence at SPE Offshore Europe was not seen as a flag flying exercise. Even though the attendance figures were not at the same level as in previous events, enquiries from new and existing clients have been promising, this has led to many technical discussions between EBP Ltd and clients interested to utilise EB welding. Thus so far, orders have been received from new overseas and UK based organisations keen on pushing the technology boundaries and realising their product designs.

To find out more about electron beam welding and to discover whether your products would benefit from the process, please find below the contact details for EBP Ltd.

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www.ebpglobal.com

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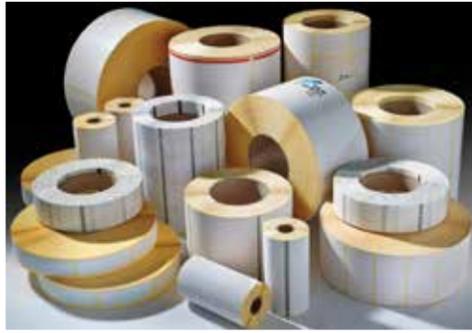
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Laser Cutting

Leading UK specialist label & label solution providers

Datamark UK is a leading manufacturer and supplier of a wide range of labels and labelling solutions to a variety of customers from various industries. Established in 1995 in Lancashire by Pete Jackson and Steve Henshall, the company has immensely progressed since their humble beginnings and are now recognised as one of the UK's independent experts in the supply and manufacturing of labels, labelling and label printing.

The team at Datamark UK offer a broad range of knowledge and experience in dealing with your label and label solution requirements. Their wide range of products and attention to detail keeps their customers loyal, regularly returning to Datamark for repeat orders. Datamark UK provides exceptional quality, service and cost-efficient pricing to a wide range of market sectors, with Logistics, distribution and parcel delivery companies finding work with Datamark a real benefit to them. The team work



closely with their clients in order to better understand their individual needs. Additionally, their pricing is substantially cheaper than sourcing your labels from a Printer OEM.

Datamark's aim is simple; always think outside the box and go that extra mile to ensure their customers are satisfied. This has increased their portfolio of clients from a wide range of industries including food, distribution and logistics, storage and contract packers, electronics, homecare, automotive and industrial. Currently based in Hull, East Yorkshire, Datamark's success is driven by dedicated and friendly staff, with many years of experience behind them; who strive to deliver the best customer service and advice available.

We spoke to Neal Hebblewhite from Datamark UK, about what differentiated the company from other labelling solutions specialists, to which he explained, "We like to think we offer an excellent service based on customer care, delivering goods on time in perfect order. Additionally, we don't just offer labels, but

we provide thermal transfer ribbons and labelling solutions as well; and our quality, service, value for money and ability to meet with demanding labelling requirements from our customers, has made us frontrunners in our industry."

One of Datamark UK's most highly sought-after products is their plain and colour-washed label range, which allows customers with the use of direct thermal and thermal transfer printers the ability to overprint their own information and barcodes, in-house. They produce and supply a wide range of white and colour-wash plain labels for both direct thermal or thermal transfer applications that are available in either roll, sheet or fanfold format. The options are from general-purpose paper through to high-performance synthetic materials for the most



demanding applications. Datamark provides labels using a range of adhesives from standard permanent adhesive through to a more highly aggressive hot melt adhesive for the most demanding applications. Removable adhesives include standard peelable for standard applications and ultra-removable adhesives which leave no residue after removal (suitable for library's and window manufacturers). Other adhesives available include deep-freeze, chill, water-soluble, block out or opaque and high temperature.

Going forward, the business will be concentrating their efforts more on the core business of plain label manufacturing, as the company will continue to provide outstanding labelling process services to online retail, food processing and repacking services to transport, distribution and logistics and other trade label suppliers. If you would like to get in touch and find out how their many specialist labelling solutions can benefit you or your business, then don't hesitate to pick up the phone today. More information can also be found by visiting the website below.

T 01482 506560
www.datamarkuk.com

Pregis strengthens EU operations following Easypack acquisition

US packaging giant, Pregis LLC, is expanding its global operations across Europe following its 2016 acquisition of the UK's leading environmentally friendly packaging brand, Easypack Limited.

Over the last two years, Easypack Limited has strengthened its entire operations in preparation for European growth, and from January 2018 the Company will trade as Pregis Limited.

The change of name allows the company to further

expand and develop new opportunities through its new portfolio of innovative protective packaging solutions and its increasing European distribution network. Customers across Europe will have access to some of the most advanced packaging systems in the world, which are currently enjoyed by thousands of major US brands from across all sectors.

The Easypack range of eco-friendly packaging solutions will continue to be an important part of the Pregis Limited offering; design and manufacture will remain in



the UK and customers will continue to be fully supported, now with the added benefit of having access to further, complementary solutions. Its 100% recycled, recyclable, and biodegradable paper packaging will continue to be distributed from its UK production centres.

Pregis Limited will be introducing a number of exciting new packaging solutions throughout 2018. For more information, or to sign up for their latest packaging innovations and event information, visit: www.pregiseu.com

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Real time production data

By installing eWON Flexy VPN routers and using the Talk2M Internet-based remote access system, manufacturer of high speed food tray sealing machines, Packaging Automation, is able to offer customers a range of added-value options.

The tray sealing machines are capable of sealing from 12 to 200 packs per minute. These machines are fitted with the eWON Flexy and Talk2M solution, which enable remote diagnostics and real time visualisation of live production data on the machines.

Rui Cardadeiro, senior R&D engineer at Packaging Automation says, "The eWON Flexy router and Talk2M solution provide us with remote connectivity into the heart of the customer's machine via the Internet, enabling our engineers to remotely access and diagnose faults, regardless of the machine's location, so that we can get to the root cause of stoppages quicker."

Available in the UK from Industrial Data Communication and M2M specialist M.A.C Solutions, the eWON Flexy is a flexible, modular, industrial machine-to-machine



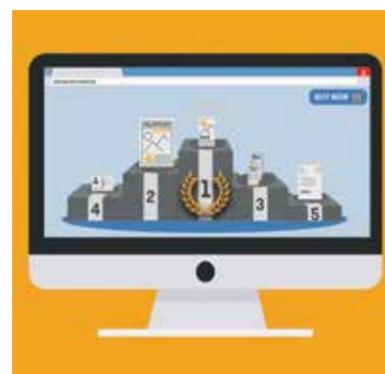
(M2M) VPN router.

Please call MAC Solutions on 01527 529774 or visit: www.mac-solutions.net or email: sales@mac-solutions.co.uk

Top ranking: The top five of offline marketing

The five best-selling printed advertising products have been determined. The marketing strategists of print provider Onlineprinters analysed more than a million data records for this purpose. In 2017, Onlineprinters' customers preferably put classic advertising products into their shopping carts: flyers, posters, folded leaflets, business cards, and letterheads.

"Despite the shift of advertising to online media, printed advertising is still an important part of the marketing mix. Our double-digit sales growth highlights just how much potential this has," says Christian Würst, Chief Commercial Officer (CCO) of Onlineprinters. The data analysis shows advertising flyers are still favoured by industries such as the hospitality and catering sector, the crafts and especially the



booming construction business.

Customers who purchase flyers order 5,000 copies on average; the biggest run for a

single order was 800,000 flyers. "Smaller quantities, however, are increasingly more popular because they are ideal to promote temporary campaigns and events, and address small target groups," Würst remarks.

He continues, "The average print run of flyers decreased the most, going down around 10%. At the same time, the number of orders in this segment is rising significantly. Today, customers are willing to spend more for faster production and delivery. They are also prepared to pay an extra charge for finishing options, and additional services such as bundling where we pack flyers in bundles of 100 each. This has the advantage of greatly facilitating the distribution among different groups of recipients."

www.onlineprinters.com

IMSPEX Diagnostics Ltd: Providing a range of GC-IMS solutions for your analytical questions

Industrial Process News is very happy to announce IMSPEX Diagnostics Ltd as our Analytical Chemistry Solutions Company of the Month.

IMSPEX Diagnostics Ltd was founded in 2011 as a spinoff of the University of Glamorgan, in South Wales, with the aim to develop markets and applications for Ion Mobility Spectrometry Technology in clinical research, clinical diagnostics, food and environmental analysis. Through its acquisition of GAS GmbH in January 2013, IMSPEX secured access to World leading IMS technology



and to a range of equipment which is market ready for customer applications. During 2013, the group formed by IMSPEX and GAS and has established relationships and provided instruments to a range of blue-chip companies, research hospitals and research centres and universities.

Now recognised as a group of international leaders in multidisciplinary with extensive experience in business development and analytical sciences, the combined IMSPEX and GAS GmbH teams are a World leading business, application and technological development team with over 120 years combined experience in the field of Ion Mobility Spectrometry.

We asked Kevin Fernandes, Sales Manager at IMSPEX Diagnostics Ltd, what differentiates the company from other analytical chemical providers, to which he explained, "We are rapidly growing company with exciting chemical sensor technology for a wide range of applications. Perhaps our most recent success was the award of 3 million Euros from the Horizon 2020 (European Research Budget) to explore the possibility of diagnosing by breath samples differences in bacterial versus viral infection and the subsequent decision or not to prescribe antibiotics."

He added, as an example one of our targeted applications is on the rapid separation detection and identification of siloxanes in biogas down to levels as low as 10 parts per billion (ppb). Siloxanes when burnt are converted to silica which is akin to having sand in

the gas burning engines. What this means potentially is down time and loss of income from biogas but also considerable service costs for replacement parts and labour. The GC/IMS siloxanes instrument when deployed is very important early warning system that filters are saturating and need to be changed. Costs saving again can be considerable as the filter material can be a significant cost to landfill, AD food waste, and sewage treatment works operators.

IMSPEX Diagnostics Ltd focus is on solving analytical needs by providing turn-key, automated and simple solutions to specific problems by leveraging the expertise of their group. For instance, one of their most highly-sought after products is their GC-IMS ODOR™ standalone instrument, developed for at-site, on-line sampling and delivers quantification and reporting of Gasodor®-S-Free® (methyl acrylate and ethyl acrylate) and THT concentrations in natural gas.



Eliminating the need for helium or hydrogen, the system requires only a nitrogen or synthetic air source for carrier and drift gas. The system can also be used with the new G.A.S internal gas loop, making the system totally portable, without the need for cylinder gas. The measurement intervals are user-defined and calibration can be carried out using a traceable gas standard via a designated calibration port either manually or routinely to ensure maximum accuracy. The large TFT touchscreen permits system control displays, current measurements, and allows review of previous results. Results and measurement files are stored internally on the integrated compact flash card. These results can be downloaded via USB or transferred via the 4-20 mA current loop, a modem or network connection to a control station.

If you would like to get in touch with IMSPEX Diagnostics Ltd to find out about their specialist range of equipment, then don't hesitate to call today. More information can also be found on their website, listed below.

T 01443 740217
www.imspe.com
www.gas-dortmund.de



International and innovative industrial electronic repairs and supplies experts

Industrial Process News is extremely pleased to announce that Kontroltek Ltd have been specially selected to receive this issue's coveted Electronic Manufacturing and Supply Company of the Month.

Founded in 2011 by Andrew Follant and Phil Gore, Kontroltek was initially set up to provide cost-effective, high-quality electronic repair solutions for businesses through all industry sectors. Today, this philosophy remains engrained at the heart of the company; who have since immensely progressed from their humble beginnings and have now expanded nationwide as well as in Europe.

Currently situated in Bridgend, South Wales, the West Midlands, and Poland, Kontroltek are leading, international specialists in the industrial electronic repair and supply sector; providing a number of solutions for a variety of different, leading manufacturers. Kontroltek's vast experience and high quality standards place them at the forefront of the industry as all of Kontroltek's electronic engineering experts have been chosen for their highly skilled and unique long term experience within the industry.

We asked Andrew Follant, Managing Director of Kontroltek, what differentiates their company from other electronic repair and supply companies, to which she responded, "The main benefit we bring to our customers is the 700 years of combined industry experience that our engineers have in the industry. We value quality and great customer service: we employ the best electronic engineers, make sure all customers have a dedicated account manager to keep them up-to-date, and have a thorough sourcing team tracking down hard-to-find/obsolete parts. With over 35 years of engineering experience and consistently high, customer-focused standards, Kontroltek



have evolved from a small start-up in Bridgend to an international company with local, personal knowledge and service."

Excellent customer service is at the forefront of Kontroltek's priorities, with the company working in close conjunction with clients' supply chains to ensure electronic manufacturing solutions is delivered and installed on time with a fast turnaround. Kontroltek also have a strong and dedicated network of customers ranging from small, precision engineering



companies, right up to large, multi-million turnover corporations. Andrew added, "Our main vision and mission is to place the customer at the heart of every company decision; empowering staff to consistently deliver top-quality solutions to all challenges."

The past year has been Kontroltek's busiest year yet, as Kontroltek's Head Office has this year relocated to a new workshop that was fully funded through internal resources and funds. Now operating from a custom built, 24,000ft² workshop; 3 x the original workshop size, this £200,000 investment will see the company continue to flourish and grow. Kontroltek were also recently chosen as one of Wales' Fast Growth 50 companies, as well as achieving Bridgend business Forum's Business of the Year this year.

Going forward, the plan for Kontroltek is to continue to develop in the UK market and to begin to expand into the European market. Andrew further adds, "We want to continue to input further investment into people and equipment. We aim to create a successful, Welsh based business which continues to grow, employing local, talented team members and providing continuous opportunities for them to develop. We also plan to invest further in Wales, and the UK's, next generation of engineers, by providing apprenticeship schemes and employment opportunities for



future members of the Kontroltek team."

If you would like to get in contact with Kontroltek Ltd and find out how their many specialist electronic services can benefit you, then don't hesitate to pick up the phone today. More information can also be found by visiting the website below.

T +44 (0)1656 330460
www.kontroltek.biz



Engineering excellence



Industrial Process News is thrilled to present Velden as our Engineering Company of the Month.

Established in 1973 by Alex Kitchen, Keith Marshall, and Charles Aspinall, the company quickly developed by building a reputation for best practice, quick response, quality and reliability and by the late 1980s had grown to over 100 employees, winning various awards on the way. During the 1990s, Alex bought out the other two partners and Velden became a sole family business, in which he is now Chairman and his son Austin is Managing Director.

Based in Bolton, England, Velden is renowned as a sub-contract precision engineering company. They have a varied capability including CNC machining,

CNC turning, conventional turning and milling. Through consistent investment and acquisition of other companies, Velden offer their clients a wide range of additional services, for example, large parts machining, welding and fabrication, product build and system build plus they have a state of the art busbar production facility. They aim to provide a single source manufacturing solution to customers, to simplify procurement challenges by providing assembled products whenever possible. They also have a range of finishing services including an in-house plating plant.

We spoke to Susan Smith from Velden, about what differentiated the company from other subcontract precision engineering companies, to which she explained, "Our success has been built on quality, rapid response, flexibility and offering more than just a machined component. We aim to nurture relationships and grow with our customers. Most of our customer base has been with us for



many years. Additionally, our company prides itself on getting to know customers and tailoring our services to meet their specific requirements, whether that includes assembly, project management, testing or bespoke delivery packages."

Excellent customer service is at the forefront of Velden's priorities. The business understands that customers and suppliers intend to be successful and appreciate that its success is linked with theirs, which is why they are happy to forge such strong partnerships and work together to this aim. They consider themselves to be solution

oriented and when faced with a challenge, their highly talented team will think outside of the box to provide a solution.

The company is well established in the power distribution and generation, automotive, semiconductor and OEM industries, but also has many years of experience within safety critical environments including, food, nuclear, oil, gas and fluid handling, using exotic metals and providing full data books and testing facilities.



Going forward Velden have an ambitious investment plan and are currently renovating their mill to accommodate more state of the art machines, increased automation and new office space and reception. In the past two years, they have invested £2.5 million in cutting-edge technology, to ensure the company remains at the forefront of the engineering market. If you would like to get in touch and find out how their many specialist engineering solutions can benefit your business, don't hesitate to pick up the phone today. More information can also be found by visiting the website below.



T 01204 520620
www.velden.co.uk



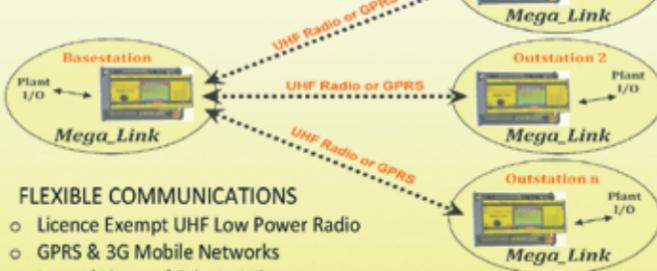
Water, Energy & Environment News



Mega_Link is a cost effective and versatile radio telemetry system for passing two-way instrumentation, measurement and control data between industrial plant and site locations. Our equipment is used by all UK water companies for fresh water supply, wastewater, land drainage and other applications include industrial, chemical works, landfill and boiler monitoring.

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No-dig pipe repair techniques

It is an industrial drainage pipe renovation programme that can only be achieved with the lightest of touches. When you operate thousands of metres of industrial effluent and water pipes that spread out under a village, through fields, across a river bridge, and under a stream – twice – the last thing you want to consider is major excavations.



That was the challenge facing RCL, the owner of a biomass combined heat and power (CHP) plant, a process evaporation plant, and the operations management provider for the Combination of Rothes Distillers (CoRD), owners of four distilleries in the village of Rothes, Moray.

RCL needed to renovate a 3km network of pipes that take 450,000 tonnes of process condensate from the CHP and evaporation plant, and 50,000 tonnes of waste water from the whisky production process, to a central effluent treatment plant every year.

An 800 metre main, which takes water from a tributary of the River Spey to a fire pond, where it is used for process cooling and emergency fire-fighting, also had to be rehabilitated.

The solution has been the development of a four-year drainage renewal programme that all but avoids the need for excavation. Instead, advanced no-dig pipe renovation techniques are being used by Lanes Group plc, the UK's largest independent drainage specialist.

www.lanesfordrains.co.uk

Innovation happens here

Interplas 17 proved its position as the UK's largest plastics industry event after another smash success show. The 2017 show saw more than 400 exhibitors in attendance covering the entire breadth of the plastics sector, with everything from manufacturing processes to technologies to other crucial services covered.

With over 12,000 attendees from across 60 countries, it was the perfect opportunity for companies to display their latest wares and services and meet those with real buying power. Held at the NEC, Birmingham, Interplas 17 included seminars, workshops, conferences and rows upon rows of innovative and eye-catching stands and demonstrations.



The 2017 show also introduced their brand new, exciting 'Introducing Stage.' This specialist stage saw 5-minute long presentations highlighting the most unique, pioneering and creative technologies and solutions, giving everyone a concise overview of all the latest things on

offer. Conferences covered everything from manufacturing, to the plastics industry in the UK, to sustainability, to plastic use in sectors such as medicine, automotives and more.

This is our third pick of the best exhibitors from last year's show, listed here in alphabetical order: ELTEC. Further details can be found below.

The next Interplas show will take place 29th September to the 1st October, at the NEC, Birmingham, and will see growing numbers exhibiting and attending. To find out how you can exhibit, or to attend, check out the link below.

www.interplasuk.com

How much waste energy are you tipping down the drain?

ELTEC was originally formed to identify causes of wasted energy and offer solutions within industry, specialising in the plastics manufacturing sector.

The technologies used are: Thermal imaging for identifying and quantifying leaking steam traps, steam valves and safety valves and heat loss from surfaces and ultrasound for compressed air leaks and steam traps. Further uses of these technologies included thermal imaging to identify loose electrical connections and ultrasound for early indication of bearing failure.

On average a single compressed air leak costs £250 per year with an average of 75 found per visit, this can account for more than 30% of a

compressors capacity and can cost more than £20,000 in some cases.

Compressed air systems need checking for leaks on a regular basis as any leaks will only get larger if left unattended.

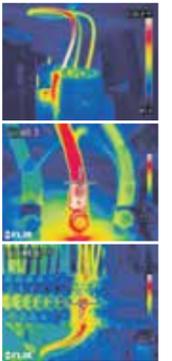
ELTEC can offer regular surveys that do not interrupt the production process, take on average a day to complete and have a digital report showing the individual leak and the cost. Regular surveys offer an excellent ROI, in most cases several weeks.

Contact Bryan at ELTEC on: +44 (0)7961 033715, +44 (0)1673 828614 or visit: www.eltec.co.uk



Thermal Imaging

Thermal imaging can be used to identify loose electrical connection that could result in lost time at best and a fire at worst.



Infrared Windows

Infrared inspection windows retrofitted to distribution boards and cabinets allow safe and efficient inspection.

Please contact Bryan Elwick to find out more: +44 (0)7961 033715 | bryan@elwicks.co.uk
Visit our website www.eltec.co.uk

Fastenings & Fixings News

Engineering excellence creates remarkable new friction guides

Using engineering expertise gained from the development of class-leading telescopic slides, a new range of linear friction guides is launched.

Friction guides use a plain bearing surface with no rolling elements. The lack of exposed moving parts makes this solution ideal for harsh environments where dust, sand or dirt particles might be present. Compared to equivalent recirculating ball bearing slides, they are lighter, easier to use and engineered to minimise stress and wear on the friction elements; a durable and reliable system.



The new linear bearing guides showcase all the benefits that customers have come to expect of

Accuride products from JET PRESS – ease of use, superior performance and designed-in reliability. The strong engineering pedigree has delivered a friction guide that, thanks to its extra-tough anodised aluminium track and superior polymer guide, is hardwearing and long-lasting. This longevity adds to the low total cost of ownership and also makes it an attractive alternative to applications that might be over-engineered with costlier solutions.

Three variants of the new friction guide are available; non-adjustable, manual adjust and auto-adjust. The

height, width and hole pitches all comply to ISO 12090 standard to ensure compatibility to existing systems.

Tracks are available in two standard lengths of 1 or 2 metres and seamlessly fit together to form a track of any length for the bearing blocks to transverse freely along.

Available from stock at JET PRESS for next working day delivery. Contact our sales team on 01623 551800 or email: sales@jetpress.com or visit: www.jetpress.com

Range of standard and custom washers

Challenge Europe, in their new Fastenings & Fixing brochure, reveal that they not only offer a very wide range of standard ex-stock same-day despatch washers, but they also offer special washers to customer drawings. This covers industries as diverse as electronics and construction as well as machine assembly, marine application and aerospace.



Their brochure lists flat form (A, B, C, and D types), mudguard (penny) washers, spring washers in rectangular and square section, internal/external serrated tooth lock washers, crinkle, cup, Belleville/disc spring, grip, fibre and Dowty/bonded seal washers. Of special interest in the electrical industry are copper grip and brass terminal cup washers. Sealing washers in a range of materials are covered under this programme, along with O rings.

Challenge Europe can provide washers to metric and imperial standards in materials such as steel, stainless steel, copper, brass, nylon, fibre, rubber, and more sophisticated metals in a wide range of finishes. For a copy of their brochure, contact Challenge Europe on the details below.

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www.kingston-engineering.co.uk

Leading UK LPG supplier



Industrial Process News is extremely proud to present AvantiGas with the Liquefied Petroleum Gas Company of the Month Profile, in light of their high quality services.

AvantiGas was established in 2011, when UGI Corporation purchased the UK LPG business of Shell. With their head office based in Chesterfield, Derbyshire, AvantiGas have a UK-wide footprint via a network of owned depots as well as two terminals based in Stanlow and Mossmorran. Via this network, they can service domestic, commercial and industrial customers across the UK.

As well as their extensive experience in LPG (Liquefied Petroleum Gas) supply, the company is the UK's leading supplier of aerosol products. They provide LPG for domestic customers as well as a range of fuel solutions for commercial and industrial clients including bulk and cylinder LPG, LNG (Liquefied Natural Gas) and biomass. They have also built up extensive experience in fuel conversions, helping off-grid businesses relying on inefficient and carbon-intensive fuels like oil and coal to convert to a more cost-effective and efficient solution. Therefore, AvantiGas work across a series of industries and sectors ranging from food production to packaging and manufacturing to chemicals. LPG and LNG are both versatile fuels for a diverse range of off-grid businesses and AvantiGas specialise in supplying gas for both space and water heating as well as specific business process applications.

We spoke to Chui Green from AvantiGas UK about what differentiates the company from other off-the-grid energy providers, to which she explained, "We try to stand out by offering a highly flexible and



tailored service to our customers. There is no one-size-fits-all solution to providing effective energy solutions, particularly to industries with heavy energy requirements. We work closely with our clients to identify the best – and bespoke – solution for their business's individual circumstances.

We also offer very flexible financing offers for our fuel conversion installations – there's even the option to pay zero up-front costs – in order to adapt to different clients' financial situations."

Chui added, "For off-grid businesses that are reliant on expensive, heavy polluting fuels such as coal or oil and without the funds or appetite to invest, we can offer funding or lease of boilers and associated equipment with no upfront costs and quick payback time on investment. We'll carry out a site survey in order to understand usage and requirements and identify if switching to LPG or LNG from oil or solid fuels is going to cut costs on on-going energy spend. The customer will also benefit from having a brand-new energy efficient boiler and with the Government's recent Clean Growth Strategy announcement, businesses need to focus on both cost savings and carbon emission reductions. LPG or LNG is the perfect solution for off-grid businesses currently on oil or solid fuel."



Moreover, excellent customer service is at the forefront of AvantiGas's priorities, as the team are committed to putting their clients' needs at the heart of everything they do, and continually trying to improve upon the services they offer. AvantiGas can ensure excellent customer service with their friendly, highly skilled and experienced staff, who are happy to provide clients with any support that they may need throughout the operating life of their equipment. From the preliminary selection through to quotation, commissioning and after-purchase service, you are guaranteed of committed and personal support from the highly proficient team at AvantiGas.

Moving forward, the group are constantly trying to improve their product and service offering. They have recently enhanced their fork-lift truck offering with the addition of CPD-accredited training, for example. They've also added Liquefied Natural Gas (LNG) into their offering for industrial applications and processes, as well as now supplying mains gas for on-grid businesses. As a result, AvantiGas can offer a solution to cater for all businesses in the UK, no matter what their size, sector, or location. If you would like to find out more, then get in touch with the group today.

Contact
T 0808 208 0000
www.avantigas.com

Leading powder coating manufacturers



Industrial Process News would like to congratulate Thermaset Ltd for achieving our highly prestigious Powder Coatings Company of the Month Profile.

Established in 1984 by Tom McElhannan, Thermaset Ltd is based in Tamworth, Staffordshire and is recognised as one of the UK's leading privately owned powder coating manufacturers. Offering a wide range of powders from stock including architecturally approved and Thermasets' full fluorescent range, all stock products are available for next day delivery. Thermaset also offers a bespoke colour matching Made to Order service with a 7-10 working day turnaround schedule.

Thermaset Ltd is proud to say they have over 30 years' experience in giving expert advice and providing friendly service to all of their clients. The company offer a specialist stocking range of epoxy, polyester and architectural materials in matte, gloss, and semi-gloss finishes and free pre-12 delivery service, meaning that the product will be delivered



before 12pm if ordered the previous day before midday. Their exceptional services were recently recognised as the team were BCF finalists for the Customer Service Award and for the Young Business Leader 2017 awards.

We spoke to Thermaset Ltd and asked what differentiates the company from other power coating companies, to which she explained, "Thermaset are ISO 9001 & 14001 accredited which ensures that the customers are receiving the highest quality products as well as the business being environmentally forward-thinking, ensuring that we as a business are as green as we can be. Alongside our ISO accreditations, we are also Qualicoat approved meaning we are maintaining a high level of quality with our products."

Additionally, the well-respected company have recently introduced their new and exclusive collection of fluorescent and post forming powder coating powders which gained massive interest from visitors. Created for indoor use, this new and

innovative powder coating creates a stunning finish on anything from Ceiling Panels, Display Shelving, Heaters and Household Goods to Instrument Casings, Internal Vehicle Components, Sports Equipment, Tubular Steel Furniture and Wire work. It is available in an array of colours including Green, Yellow, Orange, Red and Pink. Thermaset Ltd also supplies a wide variety of stock hammers, which are also available in a range of colours.

As one of the UK's leading coating manufacturers, Thermaset Ltd can be found at numerous tradeshows throughout the year including the SubCon exhibition on the 5th-7th June, held at the NEC in Birmingham, the Made in the Midlands expo held on the 21st June, at the Ricoh Arena in Coventry and the Surface World Live show, exhibiting on the 19th & 20th September, at the NEC in Birmingham.

With a reputable list of clients such as Primark, Footlocker, Marks & Spencer's, who have all trusted Thermaset Ltd with their coating services, the company have become renowned for their extensive portfolio which consists of a variety of different coating finishes to meet market requirements and customer demands. Moving forward, Thermaset Ltd will continue to widen their knowledge and experience within the powder



coating industry, allowing them to meet and exceed the needs of clients and offer yet more varied and high quality solutions.

To find out more or to speak to one of the dedicated team, contact Thermaset on: +44 (0)1827 55777, email: enquiries@thermaset.co.uk or visit the website at: www.thermaset.co.uk



A feast of modern technology

PHOTONEX EUROPE LIVE! is the UK's premier showcase event dedicated to photonics and light technologies – the event that connects the supply chain with the UK's photonics & light technologies user communities in industry and research. It was held at Coventry's Ricoh Arena from 11-12 October 2017.

Source the latest technology – PHOTONEX brings together all aspects of industry and research, helping visitors research solutions, and examine applications for photonics in research and industry. Every day, photonics finds ever more uses in research, industry and the consumer environment. Photonics technologies are of increasing importance to scientific research and for industry. Its use is growing... as is the PHOTONEX exhibition.



Co-located with PHOTONEX was Vacuum Expo, the UK's and increasingly Europe's premier vacuum technology exhibition, took place in October and has been hailed a great success with a 45% increase in attendance.

Visitors met on stands came from as far afield as China, Czech Republic, Denmark, France, Germany, Hong Kong, Poland, Russia and the USA to name just a few of the countries.

On display at the exhibition were companies from across the world, with a broad range of technologies to show off from basic components and equipment such as pumps and in-vacuum manipulators to vacuum furnaces, surface-engineering and surface analysis.

The shows return to Coventry's Ricoh Arena from 10-11 October 2018. This is our pick of the best exhibitors from last year's shows, listed here in alphabetical order: Adept Optical, Caeleste, Crystran, Fraunhofer CAP, Hidden Analytical, HORIBA, Lambda Photometrics, Leybold, MDC Vacuum, Pfeiffer Vacuum, Phase Photonics, Physik Instrumente & Vac Techniche. Further details can be found here and on the next page.

www.photonex.org
www.vacuum-expo.com

NEW high performance Binary Gas Analyser from SRS

Distributed in the UK by Lambda Photometrics, the SRS BGA244 Binary Gas Analyser is a new product harnessing the fundamental physical principles of acoustic resonance to measure the speed of sound in a gas mixture and provide gas ratio measurements with errors as low as 100ppm.

This technique has advantages over conventional thermal conductivity binary gas analysers, providing a dramatic improvement in performance and value:

- Ten times better accuracy
- Thousand times better stability
- Lower cost of ownership due to reduced installation cost and maintenance



- Greater flexibility with ~500 pre-calibrated gases and no recalibration to change gases

The BGA244 uses a colour touchscreen LCD for

configuration and measurement display, and can be controlled over USB, RS-232 and RS-422 computer interfaces. Multipurpose analogue inputs/outputs allow control and monitoring of external devices and there are two user-defined relays for process control applications. The BGA244 operates at pressures from 5 to 150psi with flow rates from 0 to 5,000sccm.

We want to hear from prospective customers who are excited about the possibility of better process control using the new BGA244.

T 01582 764334
contact@lambdaphoto.co.uk
www.lambdaphoto.co.uk

Compact HPR-20 Evolved Gas Analyser

Hidden Analytical introduces the new HPR-20 range of application-specific compact benchtop gas analysers for dynamic measurement of in-process gas composition. All systems feature precision quadrupole mass spectrometers with standard mass range options 200 and 300 amu, with mass range options from 20 to 1,000 amu being available for specialised applications.



The HPR-20 R&D system is optimised for the researcher, with a wide selection of standard and customised system interface configurations available including options for direct sampling from sample pressures up to 30 bar. An 8-channel multi-stream selector option enables sample auto-selection from multiple gas streams, and a 4- or 8-channel mass flow-controlled gas preparation module provides on-line precision gas mixtures for system calibration and for direct supply to the user's reaction process.

info@hidden.co.uk
www.HiddenAnalytical.com

The HPR-20 EGA system is configured for fast-response evolved gas measurement at near-atmospheric pressures utilising bypass capillary sampling, with sample consumption rates typically 1-15mL/minute. Systems are routinely used in conjunction with thermal gravimetric analysers (TGAs), with standard interface options available for operation with a wide range of TGA systems.

The HPR-20 TMS Transient system offers the optimum response time for fast event studies. The system uses a direct pulse ion counting detector with a 7 decade dynamic range, from 1 to 107 counts per second, and with the multichannel scalar option provides a time resolution of just 50 nanoseconds. The TMS system uses the 3F-series quadrupole with triple-stage mass filter providing optimum abundance sensitivity for mass resolution of minor species.

IR & UV materials from Crystran

Crystran has established a global reputation as a leader in the fabrication of high specification components from IR and UV materials. Working mainly with crystals and innovative glass, we derive the name of our company from the special transmissive properties that these materials possess.

Crystran has access to some of the finest crystal growth facilities in Europe through our associate company in Germany, who are renowned for their high quality optical fluoride materials.

The crystals we supply cover all of the traditional IR and UV materials as well as many of the more exotic ones. This means we are able to supply the broadest range of infrared and ultraviolet materials from under one roof. With an extensive stock inventory of windows, lenses and prisms as well as raw material ingots available for custom manufacture, we are able to accommodate a wide variety of custom requirements in both prototype and production volumes. Our optical workshops are full of specialist equipment which allows us to accommodate a variety of custom requirements in both prototype and production volumes. From traditional pitch



polishing to lapping and double sided polishing, we can select the best method for achieving optimal flatness, parallel and surface quality specs.

T +44 (0)1202 307650
F +44 (0)1202 307651
sales@crystran.co.uk
www.crystran.co.uk

PI brings ultra-precision positioning technologies into focus

Physik Instrumente (PI) is a world leader in ultra-precision motion and control, offering an unrivalled portfolio of nano- and micro-positioning technologies, from piezo microscopy stages to vacuum-compatible hexapod motion controllers. The capabilities and ease of use of the company's systems allow design engineers to take advantage of the latest developments in precision positioning and motion control while enjoying reliable and repeatable nanometre accuracy.

As a pioneer in the sector, PI is continually pushing the boundaries of precision positioning,

and offers a number of free educational initiatives to help customers make the most of these advances. From relaxed and informal 'Lunch and learn' sessions to full-day technology education seminars, these workshops provide opportunities to learn how the latest off-the-shelf and customised solutions can make previously unachievable applications entirely possible. Each session is tailored to your specific industry needs, giving you the benefit of the company's extensive experience and in-depth market understanding, whether you need a precision focal positioner for super resolution microscopy or an automated



assembly and alignment system for silicon photonics manufacturing.

For more information on Lunch and learn sessions and other educational opportunities, visit: www.physikinstrumente.co.uk/en/news-events/lunch-and-learn or contact: uk@pi.ws

Caeleste: Your supplier of beyond-state-of-the-art custom CMOS image sensors

Caeleste is a young (c.2006), innovative and dynamic company, specialising in the design and production of turnkey, high-end, beyond-state-of-the-art CMOS image sensors. Customised image sensors offer camera and system integrators serious added value and differentiation for their innovative products.

Caeleste is the author of many new image sensor concepts and patents such as a scintillator-based X-ray detection sensor with photon-counting capability, including energy resolved imaging, and an image sensor with sub-electron read noise (0.21 electron noise).

The core competences of Caeleste are in the design of linear and area image sensors with



High Dynamic range (True HDR) larger than 100dB, global shutter and low noise operation: single frame noise <2 e-rms. The image sensors can be equipped with on-Board AD converter

with 12, 14, or 16 bit digitisation depth and a serial LVDS or CML output channel. These types of very demanding image sensors find their way into applications such as medical instruments, satellite applications, industrial vision, life-sciences photonics, and scientific imaging applications.

Caeleste also has experience with the detection of high energetic particles, X-rays, UV, and NIR light, as well as with the design of readout circuits for Infrared detectors.

Contact
T +32 (0)15 71 05 03
sales@caeleste.be
www.caeleste.be

caeleste
The Supplier of Beyond State-of-the-Art Custom CMOS Image Sensors

Scientific Imaging | Space Imaging | Industrial Vision | Medical Imaging | Life Science Photonics | IP Cores

Caeleste cvba – Hendrik Consciencestraat 1 b – 2800 Mechelen – Belgium
T: + 32 (0)15 71 05 03 – www.caeleste.be – email: sales@caeleste.be

Vac Techniche

Vac Techniche, was founded 5 years ago with the aim of working within the research environment and manufacturing sectors, providing a good understanding of what was required and the restrictions that needed to be overcome.

Vac Techniche specialises in vacuum science research equipment and tools, incorporating Graphene and 2D growth systems, sample preparation and analysis, RF power supplies, coated and standard viewports and scroll and turbo vacuum pumps.

The highly proficient team at Vac Techniche offers support, advice and consultation, ensuring that the products supplied match both the client's budget and requirement specification.

LabTechniche

This year, the company are pleased to introduce Lab Techniche, a sister company to Vac Techniche, specialising in a broad range of laboratory equipment: histology

VacTechniche

PROBLEM SOLVED

sample preparation, electrospinning, freeze dryers, climatic chambers and ultrasonic mixers.

In the next coming months, Vac Techniche will be adding recirculating water coolers, hardness testing, air sampling, optical microscopes, roll milling and other consumables to their supplies. Both of their companies offer our own Desktop Coaters, Raman and Scanning Probe Microscopes (SPM/AFM STM). If you would like to find out more, simply get in touch today by using the contact details supplied below.

T 01424 814411
www.vactechniche.com
T 01424 834810
www.labtechniche.com

Replace your ageing Helium leak detector

Pfeiffer Vacuum is a world leading provider of vacuum solutions. Products include hybrid & magnetically levitated turbo pumps, backing pumps, measurement & analysis devices, components, vacuum chambers & systems.



guarantees top performance & maximum flexibility in vacuum or sniffing leak detection – you decide on your preferred choice of backing pump to best suit your application – making it an ideal replacement for your existing leak detector. Plus, every leak detector includes 2 years warranty, delivery, installation & training at no extra cost.

Benefits include:

- Maximum flexibility – as you choose the optimum Backing Pump solution
- Easy operation, detachable control panel, intuitive menu & large colour

Now, for a limited time only, Pfeiffer Vacuum Ltd (UK) is offering to replace your ageing leak detector – adixen ASM142, Pfeiffer HLT 560/570 Oerlikon PhoenixXL 300, Agilent/Varian PRO2, Inficon UL1000 or any other, with a new ASM 340 Series via the 'New for Old' Replacement Scheme.

The multi-purpose ASM 340 series



touch screen

- Links with 'ASM Pocket' – a free app to transform a smartphone or tablet into a wireless remote control
- Unique capability to detect massive leaks starting at 100 hPa
- Low maintenance
- Transport cart, WiFi & Bluetooth, dedicated remote control, sniffer probes & spray guns are all available

T +44 (0)1506 418000
Lisa.menzies@pfeiffer-vacuum.co.uk
www.pfeiffer-vacuum.com



Fraunhofer CAP

The Fraunhofer Centre for Applied Photonics (Fraunhofer CAP) offers professional research and development services to industry. Our mission is to provide a flexible and practical resource that responds to the needs of companies in the development of advanced photonic technologies.

Working in collaboration with customers and partners, Fraunhofer CAP delivers projects across a wide range of industry sectors. Projects undertaken by Fraunhofer CAP have been commissioned by a wide range of industrial customers, from micro SMEs to some of the largest organisations in the UK.

Fraunhofer CAP, in collaboration with

industry partners, has undertaken many innovative UK and European projects, leveraging the research & development capabilities of our customers and collaborators. In these projects there is significant leverage of funding & access to expertise for all participants.

The evidence of our success is the growing base of repeat customers and multiple collaborations. Fraunhofer CAP offers a wide range of expertise and knowledge as well as fully equipped research laboratories.

Main areas of expertise include:

- Novel laser sources including OPO systems, Mid-IR, Solid-State, Raman
- Fibre Optic and Semiconductor Disk Lasers



- CW and Pulsed Laser Sources – including Ultrafast systems
- Sensing and Imaging Systems
- Measurement and Instrumentation
- Integrated Fibre Photonics
- Waveguides and Plasmonics

T 0141 548 4667
photonics@fraunhofer.co.uk

Suppliers and designers of advanced cost-effective optics

Congratulations to Adept Optical for being chosen as one of the Top Exhibitors at the Photonex and Vacuum Expo.

Held on the 11th and 12th October 2017, the two shows were held in the Ricoh Arena, Coventry, and brought together the photonics, lights and vacuum technology industry. One such exhibitor at the show included Adept Optical, providers in everything optics.

Based in Edinburgh, the UK leading company specialise in supplying standard parts and creating bespoke supply parts and more for optics. Adept use only leading industry standard software to design their optical systems, guaranteeing the client gets the best solution for their needs that is advanced, reliable and cost-effective.

Whether you're after glass, plastic or assembled optics, light sources or LEDs, microscopes or magnifiers, or opto-mechanics such as bases and clamps, then Adept Optical can provide you with the specific parts you need. They have a wide array of excellent glass optics for example, with everything from spherical lenses to prisms, aspheric, condenser and fused silica lenses available. Custom optics, whether individual elements or full optical systems, can



also be designed and supplied to meet the customers' requirements.

If you would like to find out more about Adept Optical, then don't hesitate to get in contact today using the number below. More information can also be found by visiting the website below.

Contact
T 0131 208 0719
www.adept-optical.com

MDC Vacuum Ltd. (Europe): Driving your process forward

Located in Milton Keynes, UK, the MDC Vacuum Limited (MDC Europe) division of MDC Vacuum Products, LLC serves as an integral part of our worldwide network. Our 2,500m² facility provides convenient distribution, custom engineering, and onsite manufacturing for MDC customers in Europe. We can take customers' designs or proposals and turn them into bespoke solutions. Using state of the art CAD/CAM facilities and ANSYS finite element analysis, we can efficiently design and produce everything from simple vacuum adapters to complex sample handling systems. MDC Europe is ISO 9001:2008 certified and adheres to PD 5500:2015, PED 2016, and ASME VIII Div 1 specifications.

MDC Europe's high capability and versatility can be seen in our capacity



to produce highly specialised vacuum components while maintaining a robust catalogue of standard parts. We are proficient in the manufacture of high specification components and assemblies for applications such as material analysis, medical use, nuclear research, and research at global universities and institutes. We also specialise in the design and manufacture of magnetically shielded Mu-metal vacuum chambers and

chambers that require ultra-high vacuum to high pressure capabilities.

MDC Europe wants to provide our customers with a one stop shop for all of their vacuum requirements. Wherever you are in the world, MDC is there to drive your process forward.

T +44 (0)1908 563267
sales@mdcvacuum.co.uk
www.mdcvacuum.com

Leybold UK attends Photonex and Vacuum Expo

Ricoh Arena, Coventry, played host to the Photonex and Vacuum Expos during 11th-12th, where much of the industrial and technology sector gathered for two days of enlightening and intensive discussion, debate and innovation. At the two shows, attendees and exhibitors were able to catch up on the latest exciting industry trends, learn about new pioneering developments, meet the rest of the industry and network.

Different sides of the sector were able to gather together, including researchers, manufacturers and academia, providing the perfect opportunity for new partnerships, relationships and clients. One of the many exhibitors at the show included Leybold UK, one of the industries most recognised providers of highly efficient, reliable and above all advanced vacuum solutions.

First set up back in 1850, Leybold have almost 200 years' experience in designs and manufactures vacuum technology, services and solutions that can be used in a variety of different industrial applications, as well as in the food and beverage industry, research and development sectors, and



among solar, semiconductor, display, coating and analytics technology.

They were able to showcase their many products and services at Vacuum Expo and Photonex, including their oil sealed vacuum pumps, vacuum systems, leak detection technologies, refurbished products and much more.

If you would like to find out more about Leybold UK, then be sure to get in contact with the details below. Alternatively, you can find out more about their many products and services by visiting the website below.

T 01372 737300
www.leybold.com/uk/en

Explore the future

HORIBA, an industry leader in Optical Spectroscopy and an OEM of high-performance Mass Flow Controllers (MFCs), is widely recognised for its capabilities in a variety of applications where high levels of product reproducibility, performance, quality and integrity are demanded.

HORIBA can exceed most application requirements due to its diligence in developing and manufacturing products that are robust, reliable and repeatable.

With 57% market share, HORIBA is the world's leading MFC producer and its products are used extensively for the delivery of critical process gases into the vacuum chambers of the world's leading chip makers' equipment.

HORIBA's 'Copy Exactly' engineering processes and rigorous QA procedures have led to equipment manufacturer's designing HORIBA MFCs into their products; and their customers are also specifying HORIBA products be used. It's not surprising therefore that HORIBA's MFCs have also become the products of choice for controlling the flow of gases in other high value process sectors.

With over 200 years' experience in photonics and gratings, HORIBA's Jobin Yvon products bring a unique combination of high quality and industry expertise that makes HORIBA your ideal partner for measurement, control and analysis solutions.

HORIBA employs over 600 people in



the UK and provides a comprehensive global network to support customers anywhere in the world.

Contact
www.horiba.com/uk/semiconductor/products/new-product-lines/mass-flow-control/r100-series

Phase Photonics

Phase Photonics is a new company providing off-the-shelf spectrometers and custom spectroscopy solutions. The team behind the company began as a consultancy but began marketing products under its own brand in the last 18 months.

Phase often works closely with clients to develop integrated solutions. For example solutions for system to separate plastic types for recycling, medical instrumentation and food quality monitoring have been developed. In each of these cases a full integrated system including illumination and data analysis was developed.

The company now has 4 main product lines:

- RapidSight** is probably the highest speed spectrometer on the market, providing 80,000 spectra per seconds & combining 2 detectors to cover the whole wavelength range from 300-1,700nm in a single device.
- FineSight** combines the highest resolution with the highest sensitivity. With noise levels below 10 photons, and resolution <0.1nm, it's ideal for Raman spectroscopy and many other applications.
- HyperSight** is Phase's newest product. It is a fast 800



- frames per second hyperspectral camera covering 900-2,200nm.
- NIRSight** is a compact, robust spectrometer covering 900-2,500nm with a 3 stage cooled detector. A reliable tool for both lab use and for integration onto production lines.

T +44 (0)203 286 2639
info@phasephotonics.com

Master Abrasives installs first Micromatic grinding machine at Earlsdon Technology Ltd

Master Abrasives has sold and installed its first Micromatic grinding machine in the UK, the ECO-200 high accuracy universal grinder, at Coventry-based Earlsdon Technology Ltd.

Since being made the sole UK distributor for Micromatic Grinding Technologies, Master Abrasives' has been visited by numerous UK engineering companies to its showroom based in Daventry to see a demonstration of the ECO-200 grinding machine. This included Earlsdon Technology Ltd. based in Coventry, a company that has been designing and building special-purpose machine tools and allied automation since 1993. They specialise in machines for manufacturers of engine valves and producers of fasteners for aerospace, automotive and industrial applications.



Brian Little, Toolroom Supervisor at Earlsdon, recognised the importance of choosing a cost-effective machine, with the necessary precision and versatile enough to meet the company's wide-ranging requirements.

"This machine was purchased on the basis that it will in the long term provide cost savings in producing customised tooling for customers' specific bespoke requirements and will reduce the risk of causing

delays in machine manufacture and approval. Currently we send this work out to subcontract and cannot rely on a speedy reaction time or the geometrical accuracy required. The ECO-200 will provide an in-house service which can be easily controlled to suit the demands and timeframe of our own machine production and meets the accuracies required."

Earlsdon's new machine has a 400mm grinding capacity between centres and an additional internal grinding spindle. The wheel head nitride hardened steel spindle runs in high precision multipoint hydrodynamic bearings which gives very high rigidity and excellent damping.

Contact
T +44 (0)1327 703813
www.master-abrasives.co.uk

Hertfordshire marketing agency now among the best in the UK



Hertfordshire marketing agency, The Product Marketing Company, is celebrating its 10th anniversary this year, along with their achievement of becoming one of the top performing B2B marketing and PR agencies in the UK.

Founded in 2008, The Product Marketing Company, better known as TPMC, entered the competitive agency arena with the aim of providing a full set of value for money business marketing services that enable companies to have end to end marketing support as and when required.

In a recent Benchmarking Report published by B2B Marketing in January 2018, TPMC is now listed among the top 70 UK B2B agencies and among the top 24 UK B2B PR agencies.

Based in Hitchin, Hertfordshire, TPMC was founded by Tim Gale, who had previously co-owned a multi-million pound creative design agency. Tim decided that he wanted to offer customers a more integrated marketing service that not only had a more consultative approach, but one that was also able to offer value-led marketing support and related services. This led him to set up TPMC.

In 2012, Tim joined forces with Debbie Reeve, a senior B2B marketer who had been a client of Tim's for over 15 years and had worked in numerous multi-million

pound organisations. This combination of skills from both agency and client-side, allowed the business to offer a total marketing support service to business customers.

Supported by a growing team of digital experts, creatives, PR and marketing managers, the company works with a wide range of businesses from multi-million pound entities through to new product start-ups.

Tim Gale, Managing Director, said, "I'm incredibly proud of the work that we produce and our fantastic team. The creative industry has always been challenging, but our approach is to listen to our customers and give them honest direction, and teach them how to be better marketers. Around 65% of our new business comes in from referral, which is an indication of the level of value that we provide. We're not afraid to share our knowledge – we tend to start out by helping customers to understand their own brand and then we provide them with the tools and guidance that enables them to market their businesses independently and efficiently."

TPMC provide marketing consultancy, branding, design, marketing communications, PR and digital services to businesses all over the South East.
www.theproductmarketingcompany.co.uk

Thorite launches AMAS

Thorite is launching AMAS – Aluminium Modular Assembly System – which is an extremely flexible, extruded aluminium sectional system manufactured by Bosch Rexroth that, quite literally, has unlimited capabilities.

In its basic form, AMAS is available in lengths of up to 6 metre high quality extruded sections which can be cut to size and joined together using different connectors.

In actual fact, the range of different connectors fills a large catalogue and it is possible to make practically anything that isn't curved. Static and mobile workstations, machine guarding, KanBan flow racks, machine frames and access platforms can all be built using AMAS.

Even though AMAS has been designed for industrial purposes, it



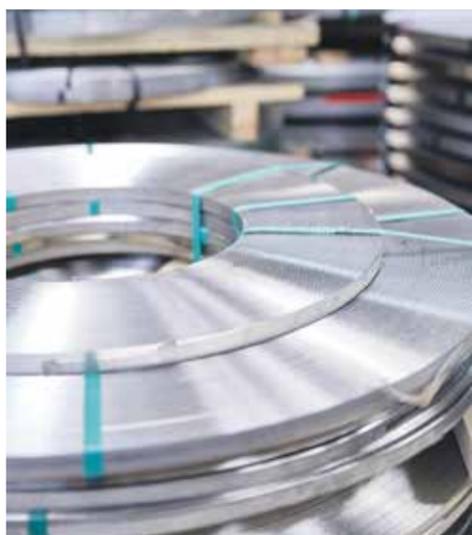
is still an attractive looking system which is durable and corrosion resistant. AMAS is also very cost-effective in that if an assembly such as a flow rack needs to be extended or modified in any way, different

connectors and additional sections are all that are needed.

While AMAS is available for customers to build their own projects, Thorite has launched its own assembly department. A team of trained technicians have access to a software system which can plan the most complex of projects without error. A member of the team will visit the customer's site, discuss the requirements, and take measurements. All the different parameters are then keyed into the software which then produces a cutting and fitting list. If this is a large project, it will be test assembled and then broken down prior to delivery. Smaller projects are delivered assembled and ready to use.

For more information, please contact Thorite on 0800 034 5850 or visit: www.thorite.co.uk

Stainless Band



Supplying to manufacturing companies worldwide, Stainless Band is a UK-based producer of stainless steel coil processed products. Quality is assured by testing, which is carried out on material in both in raw state and before leaving its facilities after processing, as well as multiple spot-tests throughout the production process.

A £320,000 recent investment allows Stainless Band to store more raw materials, increase processing capabilities, streamline logistics and reduce its impact on the environment. A wide range of in-house processing services including slitting, shearing, coating, finishing, edge dressing, and more is available, so there's no wonder that Stainless Band is a preferred supplier to so many manufacturers worldwide.

For more information on Stainless Band, please call +44 (0)1274 566831 or visit: www.stainlessband.co.uk

Etched titanium implants and more from Precision Micro

Precision Micro will return to Medtec Europe once again this April, seeing it as an ideal platform to showcase its market-leading photo chemical etching technology for medical devices.

Exhibiting from booth 9A40 at the Messe Stuttgart, 17-19 April 2018, attendees will see examples of the intricate and accurate metal parts Precision Micro produces for leading medical OEMs, including connectors, contacts, springs and meshes for hearing aids, medical implants, and instruments, including bone saws used for knee and hip surgery.

Chemical etching is a highly precise, tightly controlled metal machining technology used to produce complex metal components with very fine detail – and Precision Micro has over 50 years' experience developing the technology to make it accessible to a wider range of high-tech industries, including the medical device sector.

Precision Micro is reinforcing its market-leading status in chemical etching, as well as showing its absolute commitment to the demands of its medical customers, in the area of titanium etching.

Chemical etching is suitable for the widest range of metals, including medical grade alloys which exhibit high strength-



to-weight ratio, biocompatibility and corrosion resistance, attributes making them difficult to machine with traditional metalworking technologies, and indeed chemical etching.

Massive investment in etchant chemistry, dedicated equipment and a stand-alone production unit has enabled the company to develop a proprietary etching process to machine titanium, a notoriously difficult, but highly desirable metal. Today, Precision Micro leads the way in Europe as the only manufacturer that can fulfil the requirements that medical OEMs have for precision titanium parts and components, and is further reinforcing its commitment by working towards ISO 13485 accreditation by the end of 2018.

Contact
T +44 (0)121 380 0100
sales@precisionmicro.co.uk
www.precisionmicro.com

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Tel: 01452 381849 www.applied-rubber.co.uk

Master Abrasives at MACH and GrindTec

Internationally recognised abrasives supplier Master Abrasives will be exhibiting at MACH in April 2018 presenting a grinding machine by Micromatic Grinding Technologies alongside measuring equipment, abrasives, and superfinishing devices.

This will be the first time Master Abrasives exhibits at MACH for several years and the company has made many strategic changes since then. One significant development is the appointment as Micromatic Grinding Technologies sole distributor in the UK and Ireland. At MACH

2018, Master Abrasives will be displaying the Micromatic eco 200 machine on stand H6-442 in the Grinding Zone which is located in hall 6 at the NEC.

Midlands-based Master Abrasives will also be exhibiting the full range of Master® products at the



include the precision product range of grinding wheels and dressing products as

2018 GrindTec exhibition in Germany. Over 575 companies will be representing the largest selection of grinding solutions. Master products being exhibited

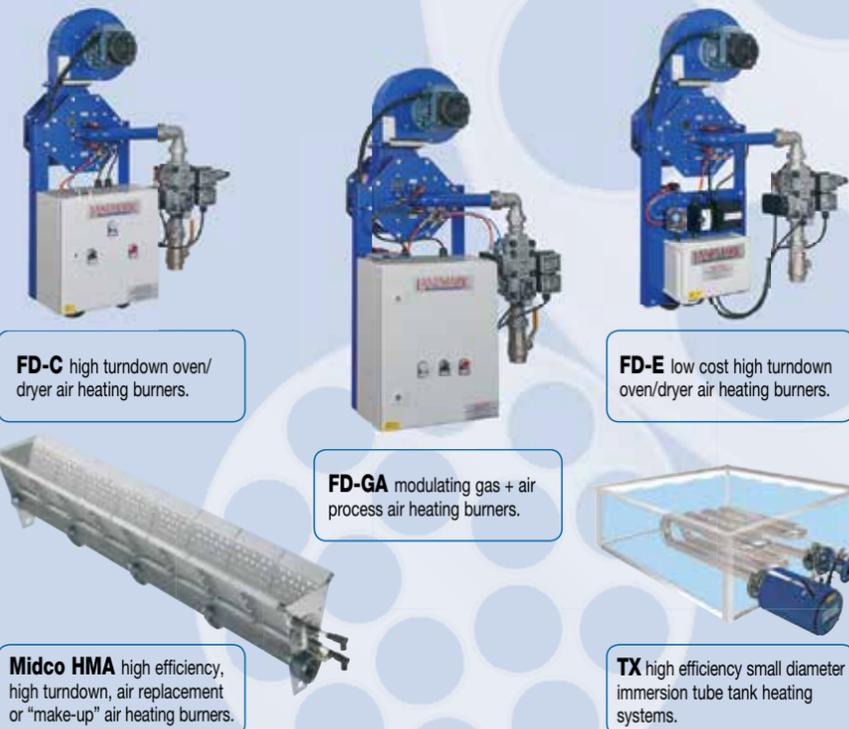
well as mounted points and carbide burrs.

Master Abrasives recently relaunched the Master brand of products to include a full range of high-quality abrasive products used in manufacturing industries such as aerospace and automotive. This range will be exhibited at the GrindTec show from stand 5060 in hall 5 and technical representatives will be available to discuss how these products can improve productivity in various applications.

T +44 (0)1327 703813
www.master-abrasives.co.uk



LANEMARK Gas Process Burners



Lanemark gas burner systems offer users reliable, high efficiency, process heating solutions.

FD Series Packaged Oven/Dryer Burners

- Specifically designed for process air heating applications in convection ovens and dryers
- High turndown/short flame lengths providing accurate process temperature control
- High efficiency gas + air modulation, gas only modulation and simple high/low control options
- Heat Input Range: 9 kW – 1550 kW

TX Series Gas Fired Process Tank Heating Systems

- High efficiency (80%+) heating of all types of spray and dip process tanks
- Compact high efficiency small diameter immersion tube heat exchangers occupying minimum tank space
- Accurate performance modelling using Lanemark TxCalc design software
- Heat Input Range: 15 kW (1½") – 1150 kW (8")

Midco HMA Series Air Replacement or "Make-Up" Air Heating Burners

- Direct fired, high efficiency burner systems, for high volume air heating applications such as paint spray booths, ovens and dryers.
- Supplied either as Midco burner heads for OEM system integration or as Lanemark DB or FDB complete packaged systems including modulating gas valve trains and controls
- Wide range of firing rates to suit alternative temperature rise and air velocity system requirements
- DbCalc system design software

FD-C high turndown oven/dryer air heating burners.

FD-E low cost high turndown oven/dryer air heating burners.

FD-GA modulating gas + air process air heating burners.

Midco HMA high efficiency, high turndown, air replacement or "make-up" air heating burners.

TX high efficiency small diameter immersion tube tank heating systems.

Lanemark Combustion Engineering Limited
Lanemark House, Whitacre Road, Nuneaton, Warwickshire CV11 6BW United Kingdom
Tel: +44 (0) 24 7635 2000 Fax: +44 (0) 24 7634 1166 E-mail: info@lanemark.com
www.lanemark.com



Abfad's Fuelvac®

Probably the most environmentally friendly double skin tank lining system in the world



Fuelvac® solvent free double skin lining system provides around the clock leak detection for above and below ground storage tanks of any size, utilising Class 1 vacuum pressure monitoring. It is the world's only double skin liner that uses solvent free coatings throughout the system alongside non-hazardous materials.

The system has been independently tested to conform to EN13160-7:2016 by TUV NORD and has completed all testing successfully.

Fuelvac® double skin liner has been designed to conform to the 2015 COMAH Regulations to prevent major accidents involving dangerous substances, limiting the consequences to people and the environment. Fuelvac® provides an extra level of safety for clients for management control against pollution.

T 0191 543 7166
info@abfad.co.uk
www.abfad.co.uk

New brochure for Master carbide burrs

Our new carbide burr brochure has now been released in line with our plans to increase stock levels.

Managing Director, Paul Batson, said, "Improving competitiveness through better productivity is a major factor driving business in the UK. We will work with customers to find the best solution to their application, whether that's a standard stock item or a specially developed design for the application."

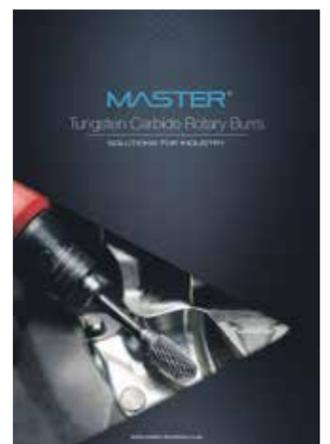
Our team of experienced technical sales representatives can help assess the application requirements. Contact us for more information on our range of burrs.

We manufacture rotary burrs from a superior grade of carbide to provide high stock removal rates and long life. Our comprehensive range of shapes, sizes, and fluting styles ensures we can offer a tool that meets the most demanding application.

We offer a wide range, including:

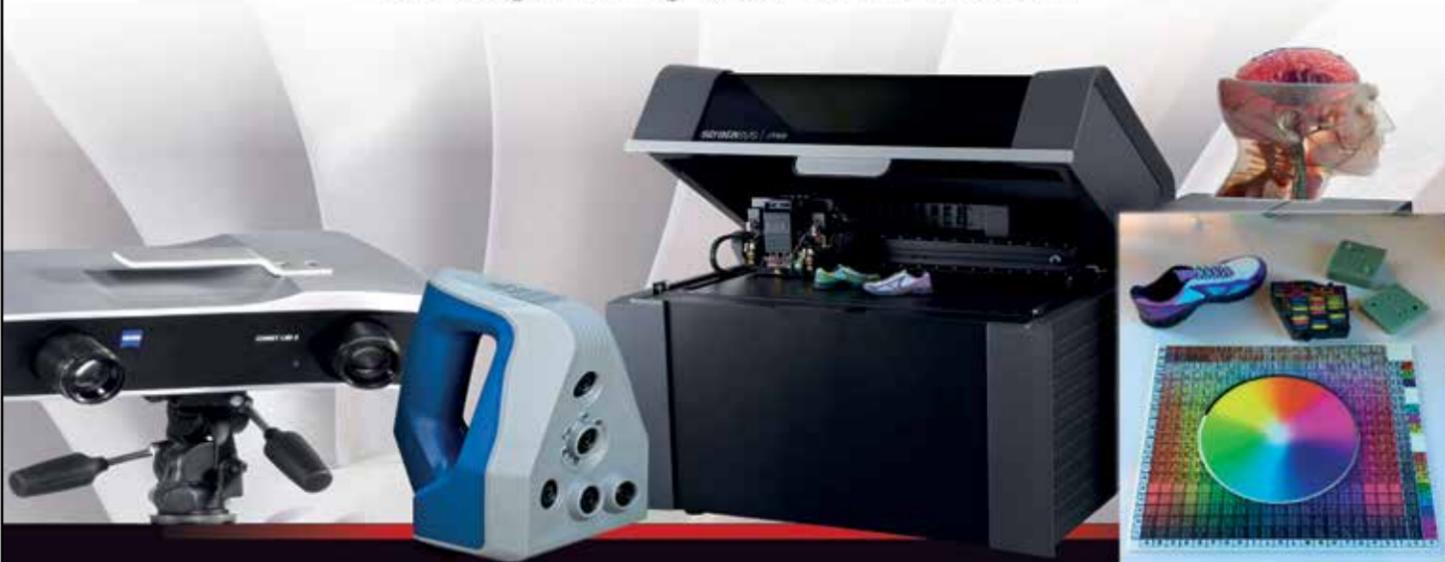
- Miniature 1.5mm-6mm diameter on 3mm spindles
- Standard 6mm-25mm diameter on 6mm & 8mm spindles
- Double Ended and Long Spindles are available on request
- Cuts available: Single Cut – Double Cut – Diamond Cut – Ripper Cut

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Your one stop shop from prototyping to production

Industrial Process News is pleased to present 3D Systems as our Digital Manufacturing Company of the Month.

Established in 1983 by Chuck Hull, who was motivated to find a new way to make table coatings using ultraviolet lamps, Chuck reasoned he could harness the UV technology to turn computer designs into working prototypes faster than anything done before. He called the new process stereolithography, patented it, and launched a new industry which is known as 3D printing or additive manufacturing.

Since then, the company has immensely progressed from its humble beginnings and now has a presence in 13 different countries, staffed by over 800 experts worldwide. The company specialises in providing comprehensive 3D products and services, including 3D printers, print materials, on-demand manufacturing services and digital design tools. Its ecosystem supports advanced applications from the product design shop to the factory floor to the operating room. 3D Systems' precision healthcare capabilities include simulation, VSP® (Virtual Surgical Planning) and printing of medical and dental devices, as well as patient-specific surgical instruments. As the originator of 3D printing, 3D Systems has spent its 30 year history enabling professionals and companies to optimize their designs, transform their workflows, bring innovative products to market and drive new business models. Additionally, the company ensures seamless ordering and project management 24 hours a day, 7 days a week



with instant online access to quotes, ordering and process selection.

We spoke to Séverine Guevara, the Director of Marketing at 3D Systems On Demand Manufacturing, and asked



her what differentiates the company from other digital manufacturing institutions, to which she explained, "We offer a complete ecosystem of advanced manufacturing products, services, tools and materials to help designers and engineers bring their ideas to reality. This is backed by nearly three decades of experience helping design and manufacturing organisations develop new approaches to their product development lifecycles."

Correspondingly, On Demand Manufacturing provides instant access to the tools of modern manufacturing for organisations looking to extend their capabilities. 3D Systems offers a unique combination of 3D printing and conventional manufacturing processes, such as CNC machining and injection moulding, with the ability to produce low-volume bridge production parts. By partnering with On Demand Manufacturing, companies can accelerate innovation and manufacturing processes,



empowered by a collaborative and agile approach to product development.

The last 12 months, in particular, have seen great success for the company, with new business, new clients and new products. The company also unveiled their new eCommerce site, to which Séverine Guevara adds, "Our On Demand Manufacturing group empowers designers and engineers with knowledge and instant access to tools to design, test, and develop new products and solutions using the best technology available in the market. Our group of 200-plus application engineers around the world partner with clients across a diverse set of industries to produce the next generation of innovative products and services to drive the industry forward."

Going forward, the company plans to continue to expand and grow and this summer in London, visitors to the Great Pagoda in Kew Gardens will be able to see the impact of the company's On Demand Manufacturing services. This is the first time this hallmark of Chinoiserie architecture has been renovated since being built in 1761 by George III. It also marks the first time additive manufacturing has been deployed to bring a UNESCO World Heritage Site back to its former glory.

If you would like to find out more about 3D Systems' wide range of specialist manufacturing services, then don't hesitate to contact Barry Assheton (Head of Sales) today. More information can also be found on their website listed below.

Contact: Barry Assheton, Head of Sales, 3D Systems Europe Ltd
M 07931 419805
<http://uk.3dsystems.com/odm>

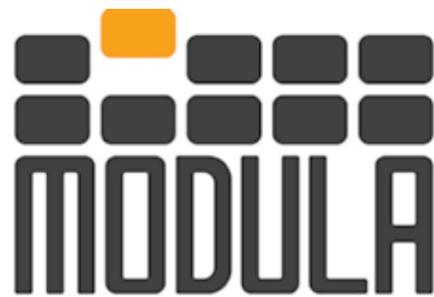


Think vertical, think Modula

Industrial Process News is extremely proud to present the Modula group as our selected Manufacturer of Automated Warehouses Company of the Month.

Founded in 1987 by Franco Stefani, Modula's mission is simple; provide customers with effective storage solutions. Since their humble beginnings, the company has immensely progressed and is now world-renowned for their innovative solutions, which have led to the expansion of existing production facilities which operate to the highest quality production standards.

As a Part of System Group, Modula's headquarters are in Salvaterra di Reggio Emilia, in Italy and Lewiston (ME) in the USA; and they distribute their services worldwide.



The group has a large international footprint, thanks to their collaborations with other branches and a number of carefully chosen dealers. This gives the Modula group a presence in 50 countries, enabling them to remain close with each and every customer. In turn, this allows them to respond quickly and efficiently and gives them in-depth knowledge of specific markets. The very name System, for many years is recognisable as the leader in the field of industrial automation, which is a guaranteed testimonial of the quality of Modula's services.

Modula's products are designed to save space and time and improve efficiency. There is a Modula Solution for every storage optimisation requirement. We asked John Faren, Director of the UK subsidiary of Modula Storage Solutions, what differentiated the company from other automated warehouse manufacturers, to which he explained, "Our products such as the Vertical Lift Module is the ideal solution for issues surrounding the management, picking and retrieval of components, as well as semi-processed and finished products, in a diverse range of Industries and applications. The warehouse greatly influences the total costs that a company can sustain and becomes an important lever in its competitiveness. Automation is the best solution for making the warehouse more efficient."

Modula is the ideal solution to store any industrial product, components or spare parts in all possible industrial environments, businesses and departments. Many companies have chosen to use Modula to help them re-organise and improve their workflow due to its flexibility, the wide range of models, the design and ease of use. The software can be used with Modula or as a stand-alone

system that manages all possible warehouse operations or a combination of both. To gain the most benefit from your Modula Lift and increase your productivity, their team offers a wide range of accessories. Their highly sought after Modula Lift can go up to 16m high with a 990kg tray load capacity, save up to 90% of the occupied floor space 80,000kg total load capacity. Thousands of companies around the world already enjoy the benefits that the installation of Modula Lift technology brings them, and newer Modula products have helped to set new standards in heavy payload storage and management of small-sized spaces. Their warehouse storage solutions maintain Modula's reputation in terms of quality, reliability and functionality, exemplified by the success of the group's products in an international market.

With an extensive list of reputable clients from the pharmaceutical, biomedical, aeronautical, aluminium, army, public administration, automotive, electronic, oil and gas,

food and drink and several other industries, Modula are able to meet customer demands from any kind of industry as their exceptional automated warehouse solutions can be used in a wide range of applications. Committed to providing an outstanding service to clients, Modula goes to great lengths to ensure that no matter the application, each client is getting the most out of their warehouse solutions and strive to find their customers suitable storage facilities that meet with their specific requirements.

If you would like to get in contact and find out how their many specialist warehouse facilities can help benefit you or your business, then don't hesitate to pick up the phone today. More information can also be found by visiting the website below.

Contact
uk@modula.com
www.modula.com



Innovec Controls: Solutions that work

Industrial Process News is extremely proud to present Innovec Controls Limited as our Process Control & LED Safety Solutions Company of the Month.

Founded in Australia in 1987 by current Managing Director, Rob Newman, the company has gone from strength to strength since their humble beginnings. In 2017 the company established a presence in the UK with an office in the Liverpool area to service the UK and European markets.

Today, Innovec Controls ranks among the leading providers of innovative solutions for niche market segments, a position enhanced by its reputation for quality products at competitive prices.

Their corporate mission is simple; Innovec aims to increase your productivity by providing reliable, accurate and user-friendly instruments that deliver solutions with application-based designs. As a result, the company have become reputable for their design and manufacturer of highly efficient and reliable process control instruments and LED safety lighting products, which are sold across a

broad range of industries including the automation, transport rail, the oil and gas industry and more.

We spoke to Managing Director, Rob Newman, about what differentiated Innovec Controls against other manufacturers of process control instruments, to which he explained, "We bring a green alternative to our products. For instance, our energy efficient, low maintenance LED Safety Lighting products offering high reliability and long lamp lifecycle that are used extensively on Metro Rail, Metro Tram and Freight Rolling Stock Locomotives. These products tend to last for at least ten years and are highly sought after in the oil, chemical and mining industries." In relation to this, their ITS Totalising System is a 12-40VDC powered totalising system for liquids that incorporates a six (6) digit 18mm LCD (liquid crystal) display with white LED backlight, is highly sought after amongst customers. The instrument can totalise up, provide the excitation power supply for the flow sensor and output the total in real time by Bluetooth to a tablet. A client acceptance signature can be written on the tablet screen and included with the email to show a proof of delivery.

Another popular purchase from Innovec Controls is their Injection Controller device. The IAI Additive Injection Controller is a universally powered (85-265VAC) or 10-40VDC, injection controller for liquids with a 2.8-inch colour LCD display of 320 x 480 pixels & an M4 32 bit ARM processor running at 120 Mhz. The controller



combines with an additive injection manifold to provide a compact additive injection system. The system is configured by either a four buttons IR remote, a tablet with the Innovec Android app or RS485 communication from a host with an optional Ethernet connection and Hart Interface.

With their head office based in Sydney, Australia, Innovec Controls trade their equipment internationally. With clients based in Australia, North America, Scandinavia, Asia and the UK, the team are always looking to expand their market. Rob Newman added that, "Our next goal is to build a stronger partnership with industries in the UK, as with BREXIT just around the corner, such partnerships could be profitable and beneficial for both parties involved." In relation to this expansion, the group have already established a UK based support office located in Birkdale, England; so they can continue to work closely with customers and build a stronger relationship with UK based clientele.

Additionally, excellent customer service is at the forefront of Innovec Controls' priorities, with the company working in close conjunction with clients to offer them free and honest consultation about their desired product of choice. Having established a reputation for offering honest consultation and best solutions with integrity, the team at Innovec Controls specialise in best practice and up-to-date compliance advice to ensure clients are provided with high quality process control instruments

and LED safety lighting products that best match their requirements.

Furthermore, as one of the world's leading process control and LED safety solutions companies, Innovec Controls can be found at numerous trade shows throughout the year. This includes the Sensors and Instrumentation Show held in Birmingham, England at the NEC on the 25-26th September 2018. After a hugely successful 2017 exhibition, Innovec Controls will be returning to the Sensors and Instrumentation Show to demonstrate to potential new customers the benefits of their reliable, accurate and user-friendly instruments that can provide solutions with application-based designs.

Moreover, if you would like to get in contact and find out how their many specialist products can help benefit you, then don't hesitate to pick up the phone today. More information can also be found by visiting their website below.

Contact
(AU) +612 9906 7158
(UK) +44 (0)7860 642280
www.innovec.com



Reliable and innovative drilling and completion solutions



Industrial Process News is extremely proud to present a profile of Downhole Products as our Completions Technology Company of the Month, due to their outstanding design and manufacturing services for oil and gas industries.

Founded in 1994 in Aberdeen, Scotland, Downhole Products has grown considerably and has many offices located around the world, employing people from a variety of countries and cultures and has been part of two successful acquisitions. The group is internationally reputable as a market leader in the design, manufacture and supply of casing accessories and completion tools, including centralisers, reamer



guide shoes, and control line protectors. Now recognised as leaders in completion technology, proprietary design capabilities, efficient manufacturing, and global sales, Downhole Products are in a unique position to provide reliable completion solutions faster than anyone else, because they are customer focused with an innovative team conducting business in a responsible manner with a passion to win.

We spoke to Keith Bradford, the General Manager of Downhole Products Ltd, and asked him what differentiates the company from other completion technology specialists, to which he said, "Downhole Products have an extensive track record of providing the best product results, along with the ability to provide quick turnaround and bespoke solutions for clients' challenges. We continually evolve and improve our products to ensure they are the best in class." Additionally, Keith further explained, "Keeping pace with technology and the increasing demands of the oil and gas industry, DHP is committed to ongoing in-house research and development in order to meet and surpass the exacting requirements of its clients, as we will continue to strengthen and develop our UK and overseas marketplace, valuing and building on strong



customer relationships to provide field-proven, trouble-free solutions."

Downhole Products focus has always been on manufacturing highly efficient casing and completion sectors. However, they have recently designed a product that moves towards the drilling sector, in partnership with their sister company Varel. The CaseBit is a crossover sector product, which harnesses the expertise of Varel (Drilling) and DHP (Completion) to offer a premium drilling with casing shoe for precise applications. This highly sought after product is an engineered formation oriented bit for use in Casing/Liner While Drilling applications to drill and set casing or liners in one trip. This eliminates additional trips and ensures uninhibited delivery and positioning of the casing to bottom every time. This product combines PDC drill bit technologies; force balancing, cutting structure wear modelling and computational fluid analysis with flexible manufacturing technology. In addition to the CaseBit product and in their efforts to provide the best solutions for their core sector, Downhole Products have also recently developed the Reaper reamer shoe, the industry's most extreme reamer shoe to overcome challenging wellbore issues; as it has been designed to aid the installation of any casing, liner, or



screen application where there are concerns over potentially difficult wellbore conditions.

Going forward, Downhole Products plan to grow along with their valued clients, by continuing to provide them with the latest, most innovative products that are available on the market. The company are currently in the process of investing in their engineering capabilities and infrastructure to bring new products and ideas to their product offering. In addition, they are increasing their social media exposure, to enable clients to see their story and successes. If you would like to find out more about Downhole Product's innovative products, then don't hesitate to get in touch today.

T 01224 784411
www.downholeproducts.com

Thermaset Ltd

Thermaset Ltd is one of the UK's leading privately owned architectural approved powder coating manufacturers based in Tamworth, Staffordshire and offers a wide range of stock powders available for next day delivery. Thermaset also offers a bespoke colour matching Made to Order service with a 7-10 working day turnaround schedule.



Benefitting from over 30 years in the powder coating industry, Thermaset offers expert advice to provide our customers with the best powder coating solution for their requirements.

This year Thermaset has exhibited at Surface World Live and SubCon. Both of these were a huge success, gaining interest and opportunities for the company. The teams at these events were able to meet a variety of new contacts and potential clients. Due to the positive response from these exhibitions, Thermaset has already booked a 2018 Subcon and Surface World Live.

While showcasing at SubCon 2017, Thermaset Ltd was able to demonstrate its new fluorescent range which was released this year. This has generated a huge interest at the exhibition which has continued into the year. The new fluorescent range consists of a variety of colours including pink and green and are all available from stock. This gives customers an exciting alternative from other powder coating manufacturers.

For any enquiries and sales please contact Thermaset via email, phone, website, or social media.

T 01827 55777
www.thermaset.co.uk

UAE oil & gas storage chooses Denso Steelcoat Tank Base Protection



Applying Denso Tank Base Protection system at Fujairah

BPGIC is a prominent tank storage operator whose activities in Fujairah, United Arab Emirates, include the storing of crude oil, fuel oil, and all types of oil products and gas.

Denso Steelcoat Tank Base Protection System was recently applied on all BPGIC's tanks in their new Fujairah storage facilities terminal. The approval was based on the successful record of this Denso system used by other tank farm operators in the UAE.

After hand power tool cleaning and the application of Denso Hi-Tack Primer, Densyl Mastic was used to fill all voids before the areas were wrapped with a layer of Denso Hi-Tack Tape. Denso Primer D was then applied to a masked area before a layer of Denso Ultraseal RT Tape was applied. Finally the surface was over-coated with Denso Acrylic topcoat to form a lasting waterproof and flexible seal.

The external base area of steel storage tanks is susceptible to corrosion problems. The Steelcoat Tank Base Protection System seals the vulnerable area while remaining flexible enough to move with the tank when it gets filled and emptied, while also providing a tough, highly weather-resistant outer armouring.

T 020 8670 7511
F 020 8761 2456
mail@denso.net
www.denso.net

A milling cutter for perfect surface quality in stainless steel

CrazyMill Cool is a new carbide ball mill for finishing operations in titanium and superalloys. This coated end mill with four teeth is available in diameters from 1-8 mm for milling depth up to 5xd, each with a cutting depth of 2xd. Two more versions are available especially for medical applications (implants) with usable milling lengths of 3xd and 4xd. A unique geometry with progressive flutes enables vibration free milling. This provides excellent surface quality when milling in radius areas or

cylindrical areas. Integrated cooling channels provide the cutting edges in each position continuously with coolant avoiding overheating and allowing highest cutting speeds and maximum performance. Chips are flushed out of the machining area. The result is a surface quality equal to a grinding finish.

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www.mikrontool.com



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Improving component life and performance

maxon motor uk: Driven by precision

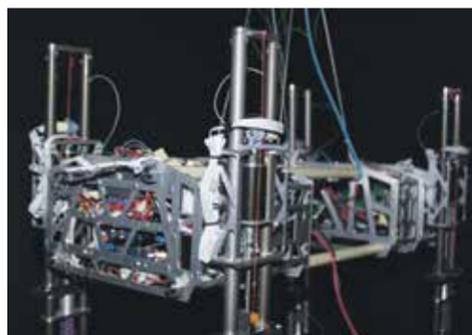


and more.

We spoke to Managing Director, Will Mason, about what made maxon motor uk unique, to which he explained, "We ensure to work closely with our customers and manufacture everything ourselves in order to meet their specific technical and commercial requirements, finding the best solutions to their needs. Our products are all highly efficient and powerful for their size."



One particularly impressive project saw maxon motor uk work alongside the Instrument Design Technology (IDT) to improve their Diamond Light Source particle accelerator, based in Oxfordshire. As opposed to the usual stepper motor, it was decided that the Double Crystal Monochromator use a DC motor. Enlisted to help, the expert engineers at maxon motor uk succeeded in creating a motor that not only achieved higher rotation speeds at a lower motor temperature



with a smoother drivetrain, but it also boasted an excellent high temperature tolerance and could work in a vacuum.

Another example of maxon motor uk's expertise in action can be seen in the intricate and complex OC Robotics' robotic snake-arm. The Bristol based company utilises maxon motor uk's brushless motors to achieve high-precision movements, allowing the snake-arm to navigate the smallest and most hazardous of places to reach in order to carry out inspection, maintenance and repair tasks. Each wire within the snake-arm, which is specially designed to act like tendons within an arm, is connected to a 30mm brushless DC motor, which transmits mechanical power. The motors can also be found in



the snake-arm's head, where it powers the gripper jaws, swage tool and other mechanisms. Brushless motors are especially beneficial as there are no brushes to inevitably wear out, hence ensuring longevity.

maxon motors have even been used to test theories at the University of Reading. This partnership saw the successful creation of a new polymeric, fibrous material from food waste, using a centrifuge. Using maxon's cost-effective motor and controller package, the centrifuge was able to achieve 10,000rpm, but further improvements were still required. As such, a motor was provided with a hollow shaft that allowed the solution to be gravity fed into a large cylinder, stopping the flow of waste material until the cylinder was running at the required speed and hence minimising waste.

If you are interested in finding out about maxon motor uk and how their many products can be used to suit your specific application, then be sure to get in contact today using the details below. Alternatively, you can find out more information by visiting the website below.

T +44 (0)1189 733337
www.maxonmotor.co.uk

Industrial Process News is happy to announce that maxon motor uk ltd have been specially chosen to receive this issue's Micromotor Manufacturing Company of the Month profile in light of their excellent contribution to the precision drive technology sector.

maxon motor uk is the UK arm of the worldwide maxon motor group, a renowned and leading supplier of drive technology. For over fifty years now, maxon motor has been consistently meeting client specifications with their wide range of innovative and cutting edge components and systems. Specialising in producing full DC motor drive systems, they are able to design and engineer bespoke products to meet their client's individual applications. Their diverse range of motors can be used in everything from vehicles to telescopes, medical treatments, aerospace



Maintenance, Engineering & Tooling News

Industrial impact wrenches

The new CP67X3 Series is one of the most compact, powerful and robust industrial impact wrench offerings in its class, according to Chicago Pneumatics. Comprising two models, the 3/8in CP6763 and 1in CP6773 are suitable for industrial maintenance applications.



The CP67X3 Series delivers high power in a very compact design. The powerful and hard hitting twin hammer clutch, can loosen virtually any rusty fastener up to M27 [ISO 10.9]. Featuring an efficient motor (14.2 l/s @ load) and delivering a high free speed of 6,300rpm, the CP67X3 impact wrenches can

reach up to 1,630Nm of ultimate torque. In addition, the clutch housing has been redesigned to be a mere 41mm in length. Chicago Pneumatics says this reduced size increases tool versatility, brings better balance in hand, and enables easier operation in restricted areas.

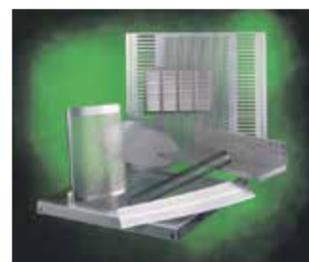
Engineered to withstand the toughest environments, the CP67X3 series was designed with features that include a steel clutch housing, reliable steel motor, and a durable twin hammer clutch.

When compared to equivalent models, the company believes the CP67X3 provides improved operator comfort which reduces fatigue and increases productivity. The CP67X3 Series offers vibration levels to 9.4m/s² according to ISO 28927-2 and noise levels of just 96dB(A) according to ISO 15744.

T 01442 838999

Perforated products from RMIG

RMIG is the world's largest manufacturer and supplier of perforated metal and related products. We know our customers' requirements for price and quality and meet their demands with uncompromising service. Not only do we offer standard perforated metal sheets, we are able to offer you a range of secondary operations for example levelling, cutting, forming, rolling and welding as well as colour coatings, galvanising and anodising.



Complete solutions – As a result of the combination of our specialised machines and our network of professional partners we are able to produce prime quality products and solutions – from the custom made perforated sheet to the fully formed and coated part.

- **Cutting** – We can cut and shape the perforated sheet to meet the needs of your final application.
- **Levelling** – For some applications a high degree of flatness of the sheet or coil is required. We offer levelling according to your requirements.
- **Rolling and forming** – We can roll, bend and form your perforated sheets, using special

tooling where necessary, to meet your requirements.

- **Galvanising** – If protection against corrosion is required for carbon steel perforated sheets and parts, hot dip galvanising ensures the best possible solution.
- **Powder and wet coating** – We will be pleased to arrange colour coatings of products supplied by RMIG. There are many bright and opaque colours available if you choose a painted surface.
- **Anodising** – Anodising is a surface treatment of aluminium in which the aluminium surface is given new protective and decorative qualities.

For more information, please contact us at: www.rmig.com or email: info.uk@rmig.com or call 01925 839610.

Automatic detection of multiple defects on your machine



From symptoms measured, Fixturlaser SMC provides automatically:

- Detection of multiple defects
- Diagnostics and report generation
- Advice on the global condition of the machine

For each defect:

- Localisation and type of defect on the machine
- Severity of the defect
- First level of recommendation

Features:

- Built in machine creation
- Wireless triaxial sensor
- Built in pyrometer, stroboscope & camera
- Optional 1 to 4 plane balancer

Fixturlaser SMC is a powerful plant reliability analyser that makes predictive maintenance accessible to all mechanics. Fixturlaser SMC automatically reproduces the behaviour of an expert performing symptom-based analysis from vibration data.

Email us at: sales@fixturlaser.co.uk or 07715 538952.

Express Diagnosis through Real Innovation

Fixturlaser SMC

Fixturlaser SMC does live, field diagnosis, on machine trains as and when required, by your own staff. No offsite vibration guru is needed to carry out the analysis for you!

Place the triaxial sensor on your machine and Fixturlaser SMC will generate your report, there and then, identifying a list of defects, if present, such as:-

- Unbalance
- Gear wear
- Misalignment
- Pump cavitation
- Structural resonance
- Shock/modulation (gear)
- Bearing defects - wear, lubrication
- Shock/modulation (mounting, clearance, friction)

1 to 4 plane balancer
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Dura 7 readily pumps these liquids with ease. With no valves or stators to wear, Verderflex Dura 5 and Dura 7 pump lime and similar highly abrasive chemicals at a pressure of 5 to 8 bar with minimal downtime.

- Other features of Verderflex Dura 5 and Dura 7 include:
- No clogging maintenance costs
 - Long life heavy-duty hoses
 - True dry priming eliminating pre-wetting and priming
 - Superior secondary containment and viscous performance
 - Care free dry running capabilities
 - In addition to the above advantages, the simple to use Verderflex Dura 5 and Dura 7 provide scalable performance and low maintenance. They are an excellent chemical dosing solution for water-treatment, brewing and food industries with much lower operating costs!



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New Venturi valve cuts retraction time

Leading high pressure, hydraulic cylinder maker, Enerpac, announces a new Venturi valve to speed up the retraction time for single-acting, spring, and load return cylinders after lifting projects. Attached to an electric pump, the valve allows cylinder retraction as much as three times faster than conventional methods, independent of load.



"The Venturi valve has been developed by Enerpac in response to users' requests for a quicker way of retracting hydraulic cylinders, especially on-site. Often there is little available space above the cylinder once the load has been removed, which can mean waiting for gravity to take effect. The Venturi valve is a far quicker alternative," says Fred Weber, commercial marketing manager, Enerpac EMEAI.

Until now, retracting single acting cylinders to their original closed position has been time consuming and laborious using a combination of gravity, applying a load, and (optional) spring, to force the hydraulic oil out of the cylinder and back into the reservoir.

valve, it creates a vacuum-like effect in the pump system drawing the oil from the cylinder back to the pump's reservoir at a much faster rate and increasing the retraction speed of the plunger by up to three times.

Venturi valves are supplied as retrofit kits to upgrade Enerpac pumps and available in both manual and electric configurations.

By routing pump flow through the Venturi

Contact
www.enerpac.com

Hydra-Cell® metering pumps with virtually pulseless flow

Pulsation can be a major problem with reciprocating metering and dosing pumps, potentially causing component failure through fatigue or simply leakage in discharge pipe work due to pipe strain.

frequency, virtually eliminates pulsation.

The cost of additional pulsation dampeners and their on-going maintenance is avoided in most instances and systems become more reliable.

Equally important, the pulses can cause inconsistencies in flow rate that are unacceptable in many in-line process applications.

The Hydra-Cell metering and dosing pump range can accommodate measured flow requirements from 0.23 to 6,360 lph at pressures of up to 245 bar. Hydra-Cell pumps also exceed API 675 performance requirements in terms of repeatability, linearity and steady state accuracy, and are able to pump abrasives and liquids that contain solid particles reliably due to its unique check valves and can even run dry indefinitely without suffering damage.

The unique multi-diaphragm arrangement of Hydra-Cell metering & dosing pumps removes the need for pulsation dampeners in most situations. Having multiple diaphragms in a single pump head, operating sequentially and each pumping a relatively small volume of liquid at a greater



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NEW: MULTILINE CONFIGURATOR

Eisele's MULTILINE CONFIGURATOR makes it easy to combine the diverse options of the modular MULTILINE multiple connector system.



The multiple and multi-media connectors of the Eisele MULTILINE series offer an innovative modular kit system for combining compressed air, vacuum, gases, coolants, liquids, electronics, and electrical wiring in one connector body.

The MULTILINE CONFIGURATOR

To present the diverse options of combining the MULTILINE modules and to give users a free planning tool for selection and configuration of the right MULTILINE product, Eisele has developed the MULTILINE CONFIGURATOR. In a step-by-step process, users can choose the form, size and adaptive inserts, as well as any accessories in order to configure a custom MULTILINE E multiple connector. The list of parts can then be used to request a quote from Eisele. The new MULTILINE CONFIGURATOR is now available at <http://konfigurator.eisele.eu> or via links on the Eisele website.

Practical locking lever complements MULTILINE

The MULTILINE series has also expanded to include an optimised housing version with a practical locking lever. This quick-change system also requires less manual force, making it very convenient to operate a MULTILINE E multiple connector that is completely equipped with drip-free adaptive inserts.

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Come and see Plug & Play on the Thorite Stand

Stand 63, Airtech Exhibition, 10th-12th April at the NEC

Thorite is the largest distributor and installer of compressed air, pneumatic, and fluid power products in the UK. At the Airtech Exhibition, in addition to showcasing the products and services for which Thorite is renowned, visitors to the stand will also be able to experience Plug & Play, which is a completely new innovation that Thorite is launching at the show.

Among the recently launched products on the Thorite stand will be the modular aluminium assembly system which is available in 6 metre lengths of high quality extruded sections. A vast selection of different connectors is available for customers to build an equally huge range of different projects such as static and mobile workstations, machine guarding, KanBan flow racks, machine frames, and access platforms – even exhibition stands and display systems. Customers can build their own projects or make use of Thorite's own assembly department.

Energy saving has almost become an industry in itself



and, in many ways, Thorite is helping to lead the way – a fact emphasised by our recent Carbon Trust accreditation. Staff on the stand will be demonstrating cost-effective and energy-saving customer solutions which are relevant to the entire UK manufacturing industry.

For more information, please contact Thorite on 0800 034 5850 or visit: www.thorite.co.uk

In-line Bag Filter system for hazardous applications

Amazon Filters recently announced the launch of the new 86B Series Bag Filter housing which has been designed to provide a safe, cost-effective, in-line filtration solution for hazardous or high temperature fluids.

The robust cast head of the 86B Series bag filter housing incorporates an integral one-piece unique cast head featuring in-line connections for the inlet and outlet, double vent ports, and a special bolt retaining mechanism. With minimal product hold up volumes 20% less than conventional side entry housings, and easy access to the disposable filter bag via the retained hinged lid, operators will appreciate the ease-of-use and time saving design features.

Available in 316L Stainless Steel it is suitable for

operating parameters of 10 bar at 150°C with a flow capacity of up to 30m³/hr. Two housing sizes are available for the 7" diameter bags, P1 (16") single length and P2 (32") double length. The 86B Series perforated basket is fully compatible with almost all standard commercially available filter bags.

For further information on the 86B bag filter housing, please visit: www.amazonfilters.com/products/filter-housings/bag-filter-housings/86-series or contact Amazon Filters on +44 (0)1276 670600 or email: sales@amazonfilters.co.uk

To view a video on Amazon Filters' design and manufacture capabilities, please visit: www.youtube.com/watch?v=DG9S6SLDgM4



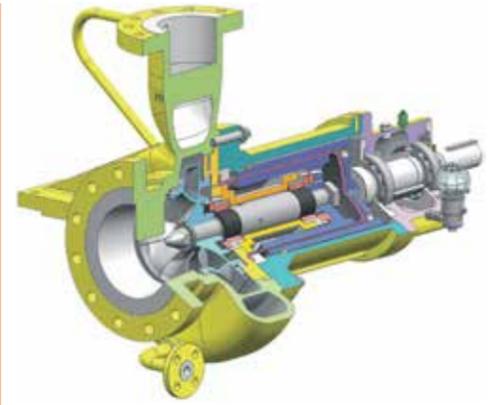
ZeroLoss for further frame sizes

HMD Kontro Sealless Pumps has expanded the ranges for its ZeroLoss™ containment shells to Frame I, II, and III versions of its most popular seal-less magnetic drive pumps.

Previous magnetic drive pump containment shells were made of metal, but the ZeroLoss Containment Shells are engineered from a composite material of poly-ether-ether-ketone (PEEK) and carbon fibre that was initially developed for military and aerospace equipment. Five times lighter than steel but just as strong, the ZeroLoss Shell increases the pump's reliability, provides greater efficiency, allows for temperature ranges from -40°C to +150°C, bolsters the pump's resistance to thermal shock, and eliminates potential vaporisation of process chemicals near the pump's bearing.

As a result, ZeroLoss Containment Shells enable HMD Kontro seal-less magnetic drive pumps to resist a wider range of volatile and heat sensitive chemicals, and endure the rigours of a wider range of process applications.

For more information, please visit: www.hmdkontro.com



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TF Automation designs assembly

An existing customer of TF, Pegler Yorkshire approached the design team to automate a manual handling process which had issues with quality, consistency and reliability as well as being slow and labour intensive.

TF designed and manufactured a fully automatic assembly and test machine incorporating five bowl feeders and three stations. The five part assembly focuses on improving quality standards and product consistency as well as increased output and reliability.

An exemplary example of automation engineering, the five components are automatically bowl-fed into the machine where 100% testing is carried out. The only operator input is to supply the machine with components and remove the completed assemblies (1 assembly per 5 seconds).

To complement the assembly process, parts are vision inspected by a Cognex camera and Smac electric actuators which record force and distance of key parts and the completed assembly. Any failures are automatically quarantined within the machine and live results are displayed on the operator HMI screen which also collects and stores historic data.

Pegler Yorkshire is well known and respected as one of the



leading manufacturers of advanced plumbing, heating and engineering products in the world. It's a reputation earned through a total dedication to quality, innovation and customer service that's been the hallmark of the company since it was established in the 1890s (originally trading as Pegler Ltd and Yorkshire Fittings Ltd).

Contact
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info@tfautomation.co.uk
www.tfautomation.co.uk

Efficiency in action – what's behind the UK's booming sewage sludge sector?

By Lesley Eaton, Business Development and Marketing Manager, SEEPEX

Energy generation from the anaerobic digestion of sewage sludge has reached 888 GWh* – an increase of over 25% since 2011 – yet the installed theoretical MWe capacity has grown by just 9%. How has the energy generated increased so dramatically and is the trend for efficiency improvements set to continue?

One of the biggest changes is the high temperature heat treatment of sludge. This makes it more biodegradable and enables loading rates to the digesters to be doubled, delivering a higher gas yield. The final sludge is also pathogen-free and can be easily dewatered, resulting in a more valuable end product.

However, correct equipment selection is also playing a part in the continued increase in energy generation. Pumps are vital to the water sector's continued success and selecting the right pump for the job will give the optimum return on investment. Minimising energy use is desirable and progressive cavity (PC) pumps fare well in this respect, maintaining an even flow despite varying pressures and variable sludge viscosities. Tailor-made packages – integrating pumps with complementary equipment such as special live bottom silos, boundary layer injection systems and back-mixing technology – together with intelligent control systems, will also improve reliability,



Lesley Eaton, Business Development and Marketing Manager, SEEPEX

performance, and cost efficiency.

New facilities optimised by Anglian Water

Anglian Water has installed sludge reception centres and advanced energy generation using thermal hydrolysis at three locations. They selected SEEPEX PC pumps as they can handle both low and high viscosity products; can pump sludge containing up to 45% dry solids (ds); have good discharge pressure capabilities that enable long distance pumping; and boast non-pulsating flow characteristics. Open hopper pumps for high solids transfer and liquid transfer pumps also formed part of the package.

A visit to an existing sludge treatment plant



Water companies use SEEPEX PC pumps for efficient sludge transfer and mixing duties

demonstrated how removing conveyors in parts of the process could be achieved by using customised pumps fitted directly to silo outlets, which could back-mix sludge cake with dilution liquid to the required ds%. Integrated controls link the liquid addition and back-mixing silo pumps to ensure optimised mixing. As well as lower capital costs, operating costs were reduced by constantly injecting small amounts of liquid to the pump outlet, reducing friction losses and operating pressure, and extending the service intervals.



Anglian Water uses SEEPEX pumps to mix sludge cake with water

Thames Water upgrades existing technology

Thames Water STW at Reading aimed to reduce sludge transport costs by increasing the ds% of dewatered sludge from 22-25%. However, the piston pumps which transferred the sludge were a limitation due to frequent maintenance requirements, high pressures generated, high operating and maintenance costs, strongly pulsating flow, and an absorbed power requirement of 31 kW.

By replacing them with SEEPEX PC pumps, Thames Water can now transfer higher ds% sludge with a lower energy demand (18kW, a reduction of 40%), also reducing the system's pressure rating, enabling de-rating of pipework and valves. The pumps have been in use for over two years and have required no maintenance interventions, delivering a hat trick of cost reductions: lower sludge disposal costs, lower energy use and reduced maintenance costs.

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*2016 Digest of UK Energy Statistics

Eurolec reveals new warranty and ambitious plans for 2018



Following on from a successful buyout by Scientific Measurements Pte Ltd in 2017, Eurolec Instrumentation has enjoyed significant investment in equipment, infrastructure and marketing.

More than £50,000 was ploughed into the growth of the temperature and pressure instrumentation manufacturer at the end of last year, which has already produced dividends with an extended distributor network and increased international sales.

Eurolec is now represented in more than 20 territories globally and its Republic of Ireland-based lab has been technologically enhanced increasing Eurolec's overall capacity for precision calibration certification and product service requirements.

Managing Director, Chris Mears, said, "2017 was a very exciting year for Eurolec but it looks like that is going to be exceeded by further improvements and progress in 2018.

"Thanks to the investment and support by Scientific Measurements we have been able to introduce Eurolec's first five year warranty which has boosted interest in our portable thermometers and probes, particularly within the highly competitive HACCP and food markets."

He added, "We also have new product development well under way, together with further enhancement to our existing product range across portable thermometers, manometers and temperature calibration sources.

"Our established portable thermometer (TH & PC Temp series) and manometer (PR and PC mano series) portables have already been restyled and have received something of a makeover in advance of new ranges to be announced in the near future.

"Investment in new reference instrumentation in Eurolec's calibration laboratory has also resulted in an improved temperature calibration service from the company with stated uncertainties of measurement now as low as $\pm 0.03^{\circ}\text{C}$."

Eurolec is also the official UK & Ireland distributor for the Ono Sokki range of specialised engine tachometers, FFT analysers, rotary encoders, and linear gauges, with further announcements due shortly on developments in this promising sector.

<http://eurolec-instruments.com>



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Temperature/humidity data loggers with USB Interface

New from Omega, the OM-140 Series of low cost, compact, battery powered temperature and humidity data loggers are capable of unattended logging (recording) of ambient temperature and relative humidity (RH) for days, weeks or months.



The OM-144 data logger can also measure and optionally log surface temperatures spot-checked by a technician using the unit's integral infrared (IR) thermometer. Data logging can be started or stopped by pushing a button on the logger, eliminating the need to bring a laptop to the site.

For full specifications, please visit: www.omega.co.uk/pptst/OM-140-SERIES.html

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ECD chloride water quality sensor



The measurement of water quality is critical in many different industries including food and beverage, water and wastewater, oil and gas and chemical along with many others. It can be important to understand and record the levels of various parameters and also control the level of chemicals in a solution. Bell Flow Systems were approached to provide a solution to monitor the level of chloride in a stream and to transmit this data to control dosing to maintain a set concentration. Using equipment manufactured by Electro Chemical Devices we were able to provide a chloride sensor married with a digital transmitter offering an accurate, reliable and user friendly package.

The T80 transmitter has been designed as a universal transmitter to accept various different sensors for pH, ORP, dissolved oxygen, specific ion, conductivity or resistivity measurement and has two channels to simultaneously measure two different parameters. The transmitter allowed the user to read the

measured values, which could be viewed graphically, as a percentage of the 4-20mA scaling or as the measured value and also to use a 4-20mA output to control the dosing and maintain an accurate chloride concentration. Relay outputs are also used to trigger alarms when specified values were reached. The transmitter also offers Modbus, and HART communications making this a versatile unit for many industrial applications. The simple menu structure and easy to read LCD display makes this very user friendly and an attractive choice for clients.

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DD Scientific launches combustion monitoring sensors

DD Scientific, a leading manufacturer of gas sensors for industrial, commercial and residential safety applications, is pleased to announce the first in a new line of products designed to make the measurement of combustion gas simple.

Traditionally, if you wished to measure carbon monoxide gas in the exhaust of a boiler or burner, your choices were limited to a few expensive sensors, available only from a small number of suppliers. With the DD Scientific F-range of gas sensors, you can benefit from the high performance associated with our life safety devices, coupled with a competitive price position and market-leading application support.



Our novel carbon monoxide sensors, available in industry standard 20mm and 32mm diameter packages deliver superb

gas response times and are fitted with innovative filter technology ensuring they remain robust even in the most challenging of gas streams. The proprietary catalyst deposition techniques ensure that long working lifetimes are guaranteed which means that you can fit a DD Scientific sensor into your flue gas analyser and be certain that it will meet its performance requirements for many years and avoid the annoyance of unplanned and inconvenient sensor replacement.

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Water vapour causes problems. Big problems that cost the UK several billion pounds every year. Vapour simply permeates through materials, which leads to machinery that jams, electronics that short-circuit, pharmaceuticals that lose potency, missiles that crash, and valves, pipes, and seals that leak. It can be a major headache for both product development and quality controller as, traditionally, it can take weeks to check a single sample.

Versaperm's latest range of permeability meters can produce fast results in these areas, sometimes taking just thirty minutes. Measurements are accurate in the PPM (parts per million) to PPB (billion) range. The equipment can optionally measure permeability for virtually any gas or vapour including hydrocarbons, solvents, hydrogen, oxygen, and CO₂.

The equipment is highly automated, simple to use and can measure the permeability of individual material samples, finished components, and products or combinations. Samples can range in size from a thimble to a pallet load.

Variations include single and multi-sample systems as well as offering control of environmental conditions such as temperature, pressure and humidity. Versaperm also runs a technical consultancy and a laboratory permeability measurement service for companies where the volume or logistics of measurements does not demand a dedicated instrument.

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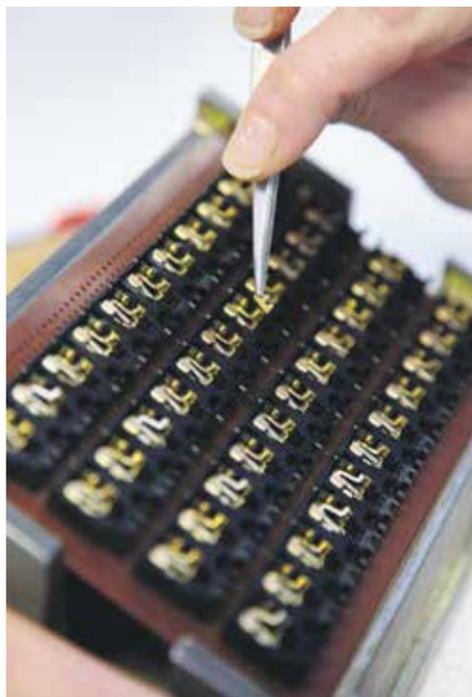
Industrial Process News is extremely proud to present NSF Controls as our awarded Electromechanical Assembly Services Company of the Year, in light of its professional design and manufacture of solenoids, switches, and its specialist electromechanical facilities.

Founded in 1931, but formed in 1997 after a management buyout, NSF Controls Ltd has come a long way since its humble beginnings. Having just celebrated 20 years since the buyout, the company has seen on-going investment in advanced tooling and manufacturing facilities as well as with the development of its accreditations. NSF Controls is ISO 9001 and ISO 14001 accredited and operates from a world-class UK manufacturing base, employing around 80 staff including a number of people from the original MBO team. Based in Keighley, West Yorkshire, the company manufactures and distributes its products worldwide through an established and trusted network of selected suppliers in Italy, Germany, Benelux, and Israel.

NSF Controls is now recognised as the UK's leading manufacturer and designer of solenoids, and switches, and is able to supply a number of specialist customised electromechanical assembly services to meet with its customers' requirements, which is why the company was chosen as our Electromechanical Assembly Services Company of the Year.

We spoke to spokesperson Doug Priestley, at NSF Controls about winning this award, to which he said, "It's great to be recognised for the hard work we put in here at NSF Controls. We work tirelessly to grow through innovation and service, and remain a leading UK manufacturer."

"Upholding our established reputation for high-performance products and good customer interaction is key to our role as a specialist service provider. Listening carefully to our customers' needs and responding with practical, innovative solutions, we strive for continuous improvement to maintain the provision of world class standards from a UK manufacturing base."



In particular the last 12 months have seen great success for the company, with new business and new customers. Additionally in November 2017, NSF Controls appointed a new CEO, Julian Heyworth, who is recognised as an experienced and successful business leader and plans to lead NSF Controls in a new and exciting direction; by continuing to build on the company's success and expand its range of manufacturing and design services. Doug Priestley further added, "Having our new CEO, Julian Heyworth, at the helm will be a great catalyst in leading the next phase of NSF Controls' development. We're excited to be looking ahead and embracing the changes that will be happening in manufacturing and identifying how we can support the technological and engineering complexities of the markets in which we operate today."



NSF Controls is renowned for its ground-breaking services such as the highly sought after Shut-off Valve. Delivering a more compact, cost-effective solution for smart meter manufacturers, NSF Controls' Shut-Off Valve was developed originally to meet a new requirement to regulate gas usage. It can be engineered to exact requirements and applied across a diverse range of utilities meter applications, as well as utilising the drive mechanism in other positional locking device uses. There are two successful valves in operation for smart meter applications suitable for installation to either the outlet or inlet port with a customer-specific interface. The MGV Series is a motorised gas shut-off valve whilst the SGV Series is a bi-stable solenoid-operated gas Shut-Off Valve.

The Shut-Off Valve is just one example of the many successful services available and moving forward, the company plans to branch out further and expand. Furthermore, NSF Controls has recently launched many new service campaigns, including "A small part of something big," which focuses on NSF Controls' reliable and flexible Electromechanical Assembly Service solutions. With an enviable skill set and manufacturing facilities, NSF Controls' interchangeable skills used for its core products and special orders are available when customers choose to use the assembly service. With its scalable services, NSF Controls has the flexibility and the multi skilled operators able to deliver precision-produced products from single or several workstations and dedicated or reconfigurable assembly lines for high volume production. Small, medium or large-scale production capacity is available, avoiding the need to commit to factory space and the associated cost implications.

Additionally, from an initial idea, NSF Controls' in-house experts work with its customers to assess each project's requirements and provide design for manufacture (DFM) input and guidance to



Doug Priestley, Sales and Marketing Director, accepts the Company of the Year Award

achieve an appropriate solution. Using CAD and 3D modelling facilities, ideas are turned into tangible propositions for assessment and development, with bespoke automated testing an integral element of the production process. Integrated tooling and production facilities combined with unparalleled access to components mean product samples and prototypes are produced quickly and efficiently. This flexibility also means that any necessary product modifications and refinements can be completed cost effectively. Working to agreed schedules, production is designed to suit the customers' own manufacturing and product development timescales.

We asked NSF Controls spokesperson Doug Priestley about what differentiates the company from other electromechanical providers, to which he explained, "With an advanced approach to product development, engineering and technology, NSF Controls offers the widest range of solenoids and switches from a single source anywhere in Europe, with knowledgeable in-house product experts to help design, select and source the most suitable products to meet application requirements."

Recognised for superior quality and reliability, NSF Controls' specialist components provide a foundation for the development of bespoke solutions, driving



forward technological breakthroughs that improve performance & capability of client products & services.

From minor modifications to custom designs for progressive new applications, NSF Controls' wide-reaching engineering expertise, integrated manufacturing and assembly skills enable all aspects of development to be progressed in-house, with 90% of output customised. In addition to product development & design for manufacture, NSF Controls provides an Electromechanical Assembly Service, which includes a range of assembly support solutions."

Going forward, NSF Controls' CEO, Julian Heyworth, said, "NSF Controls is renowned for solving the actuation requirements of today's technologically complex and changing world. I'm looking to develop UK opportunities and capitalise on those presented by the wider global market. On-going development in our world-class UK manufacturing facilities is also a priority of mine."

If you would like to get in touch with NSF Controls to find out more about its many specialist services, then don't hesitate to call today. More information can also be found on the company's website, listed below.

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