At Gulliver’s Truck Hire, we recognise that every customer and every industry face different challenges. Whether you need a van for a day or a fleet of specialist vehicles for years, we help you design the optimal vehicle suitable for the roll it will perform for your operation, working with you to uncover hidden opportunities that can boost your fleet productivity and operational effectiveness.

Gulliver’s understand the importance of vehicle down time, providing high quality vehicles, maintained to an exceptional standard in our own workshops. With 8 locations in the UK and 24/7 service maintenance, backed up by an exceptionally skilled team from our workshop engineers to administrators and directors.

Over the last 58 years, Gulliver’s have developed to specialise in the hire of both general and municipal vehicles. Our fleet of 5,000 late registration vehicles, ranging from small vans through 44t tractor units, tippers, RCVs, traffic management, Gully’s and vacuum.

In this time we are proud of accreditation for ISO 9001:2008, ISO 14001:2004, ISO 18001 and ISO 50001 to demonstrate our commitment to better working practices and business continuity along with the Institute of Road Transport Engineers (IRTE) accreditation for our workshops and are members of Safety Schemes in Procurement (SSIP).

Contact: Nic Harding, National Municipal and Liquid Waste Director
T +44 (0)870 850 9990
M +44 (0)7917 778069
nic.harding@gullivers.co.uk
www.gullivers.co.uk

Large capacity short term rental trucks

Area sales manager, Howard Bond, said, “Our engineering team were able to fabricate the correct specification forks, not only to prevent them cutting into the handles, but to provide stops for them not to move too close to the mast.”

Two new TSM 7.0 tonnes capacity machines are on long-term contract hire. Equipped with a turbo charger and intercooler system, the larger FD Series delivers maximum power at low engine speeds, whilst the cooled exhaust gas recirculation (EGR) system reduces NOx emissions.

Contact
T 0808 100 2760

Gulliver’s Truck Hire: Nationwide vehicle hire

ABP turned to Carrylift to provide large capacity short term rental trucks while the new equipment was being sourced.

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T 0808 100 2760

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No-dig pipe repair techniques allow low impact renewal of distillery and energy pipe networks

It is an industrial drainage pipe renewal programme that can only be achieved with the tightest of tolerances. 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 Rohn’s Distilleries (CARD), owners of four distilleries in the village of Rohn, 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.

The company added, “Cleaning tools will only be effective at reducing the risk of cross contamination if they themselves are cleaned and stored efficiently after each use. In a fast-paced environment with food manufacturing staff working a busy shift, this can easily be overlooked resulting in poor storage and can even lead to products being lost or misplaced.”

“Cleaning tools in the UK, has expanded its portfolio and is introducing new products alongside workplace organisation solutions.

“We first entered the food manufacturing industry with our hygiene products in the 1970s, we understand this sector’s need for the highest standards and we use the same diligence in our manufacturing processes,” the company said. “All food manufacturing facilities require a comprehensive workplace segregation system and high quality, food contact approved tools to comply with stringent compliance regulations. Our team is passionate about supporting these practices which is why our product development focus group has been working hard to make our customers’ needs a reality.”

Hillbrush has an extensive range of colour coded cleaning tools made using food contact approved materials. It has just added grey and brown to its offering, meaning it can now offer a hygienic cleaning tool for every defined area.

“Hillbrush has twelve colours available across a wide range of products. This is significant as it can help to reduce the risk of cross contamination and promote water workplace segregation practices. The freestanding range is described as lightweight yet durable. Made using FDA/EU approved materials, it is designed to meet the needs of hotel, restaurant and catering establishments.”

The company added, “Cleaning tools will only be effective at reducing the risk of cross contamination if they themselves are cleaned and stored efficiently after each use. In a fast-paced environment with food manufacturing staff working a busy shift, this can easily be overlooked resulting in poor storage and can even lead to products being lost or misplaced.”

To combat this fully colour coded, anti-microbial protection, wall mounted and perforated shelf based options are available that are said to be easily maintained and allow clear visibility of all cleaning tools.

Industry Update is sponsored by NSF Controls – see them on page 18
Experts in life extension of materials & critical components

Industry Update is pleased to shine our Editor Recommendation spotlight on the highly admirable and long-standing Curtiss-Wright company in light of their continued pursuit of top quality technology, advanced engineering and globally renowned material surface solutions.

Curtiss-Wright have a commendable history behind them, having been founded by three of the world’s most celebrated aviation pioneers, Orville and Wilbur Wright and Mr. Glenn Curtiss, one of the forerunners of naval aviation. Their companies, the ‘Curtiss Aeroplane and Motor Company’ and ‘Wright Aeronautical Corporation’ merged in 1929 in order to create Curtiss-Wright. Today Curtiss-Wright is one of the world’s leading advanced engineering companies, having diversified and branched out into numerous different technologies across multiple sectors, including commercial and industrial, defence, power, metals, aerospace and much more.

At the turn of the 21st century, Curtiss-Wright had grown into a multi-national company, with global sales of over $2 billion and having acquired almost 60 businesses. Many of these companies still operate under their original name, such as Metal Improvement Company, Bolt’s Metallizing, IMR Test Labs, Component Coating and Repair Services and more who now are part of Curtiss-Wright Surface Technologies. These various divisions offer a wide variety of different specialised surface treatments such as thermal spray coatings, solid film lubricants, shot peening technology and much more.

When it comes to engineered coatings, Curtiss-Wright Surface Technologies have a wide scope of services, including providing thermal management, corrosion and erosion, and protection and repair of turbine components. Curtiss-Wright Surface Technologies can provide protective engineered coatings or metal coatings to protect components from the environment, corrosion, heat, and wear. As they can ensure protection for components of any size or complexity, they have a vast client base made up of those seeking their protective coating services, including the aerospace, oil, gas, automotive and medical industries.

Their range of coating solutions includes thermal spray/HVOF coatings, solid film lubricants, liquid coatings, and parylene confomral coatings. Not only that, but Curtiss-Wright Surface Technologies also offer repair and overhaul for gas and steam turbine components, as well as laboratory testing and process verification for: salt spray corrosion testing, UV testing, and development of their own bespoke coating systems such as Everlube®, Microseal, and Fluorene Lube-IX®, sacrificial aluminium coatings, diffusion coatings, and pre-treatments.

Metal and material surface solutions are a huge part of why Curtiss-Wright Surface Technologies has become such an internationally recognised name. In addition to their famous controlled shot peening process, the company can provide highly effective and controlled Laser Peening for components in turbine engines, aircraft structures, wing skins and more. This specialist process puts exceptionally deep residual compressive stress in certain parts of a component to prevent crack initiation and fatigue. Not only does this allow the component to resist damage from erosion, strike damage, fretting, and corrosion, but it can also better withstand pressure from both low cycle/high stress and high cycle/low stress situations. Better yet, their laser peening ensures quality control, precise application and poses no risk of process contamination.

Preventing the failure of critical components is a huge concern for clients, and is one of the most highly sought after services from Curtiss-Wright Surface Technologies. Problems can be caused due to any number of reasons throughout the component design process, whether it’s the choice of materials used, incorrect assembly, or damage to the parts caused by bending, rolling or forging. Components of any type can be damaged, such as Malleable, rotating rings and tie wire helixs used in Aero-Engines, fasteners and stringers used in Airframes, and torsion bars, gears and keyways, which are used to make Crankshafts and more. Thankfully Curtiss-Wright Surface Technologies have a large array of solutions, including but not limited to: C.A.S.E. Isotropic supercrusting, Parylene coating, Thermal barrier coatings, cathode protection and much more.

If you would like to find out more about Curtiss-Wright Surface Technologies and their many specialised services and solutions, then be sure to get in contact with the company today. Alternatively, you can find out more about the company by visiting the website below, where information, animations, case studies and links to their many services can also be found.

T 01635 279609
www.cwst.co.uk
Major healthcare manufacturer moves to induction sealed packaging

Extended shelf life, increased consumer confidence and tamper evidence are among the benefits that a major healthcare manufacturer has gained since moving to induction cap sealing. Lifeplan, a leading UK supplier of vitamins and mineral supplements, began induction sealing its products with Enercon Industries’ equipment after deciding to stop using tamper evident push-on lids.

Rod Bray, Operations Manager at Lifeplan, said, “We now have much better product stability as the product is hermetically sealed in our containers, in some cases this has allowed us to increase their shelf life.”

“Customer feedback has shown preference for an induction seal with a screw cap lid, as consumers find them much easier to open on first use,” explained PN Bray. “Induction seals offer very good tamper protection, as it is impossible to tamper with the product without making an obvious break in the seal,” he added. Lifeplan will induction seal around 10,000 containers per shift using Enercon’s Super Seal™ 75 induction cap sealing machines.

“The process is a very simple way to seal products and there is no maintenance required on any of our Enercon machines.”

To find out more about Enercon Industries, the global leader in induction cap sealing systems, visit: www.enerconind.co.uk

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Far East expansion

Frasier Anti-Static, the UK manufacturer of industrial anti-static equipment, has grown export sales again after a successful visit from its Joint Venture Company, Shanghai Fraser Static Technology Co Ltd and leading Chinese Distributor, Beijing Air Leader Technology Corp.

As one of the world’s leading experts in the management of static electricity, Frasier Anti-Static exports to over 70 countries, for applications as diverse as Automotive, Plastics, Pharmaceuticals, and Food. According to Frasier CEO, Bruce Clothier, China has seen significant sales growth with a 46% increase during the last 12 months.

However, as Bruce explains, “China has a huge manufacturing base that is incredibly diverse and growing in sophistication. The Chinese are not afraid to invest in the latest technology, and in the case of static management… Frasier is one of the world leaders.”

Frasier has appointed George Ren to be the General Manager of Shanghai Fraser. Frasier will be highlighting its market leading long and short range 24Vdc static eliminators and new static generation equipment which are suitable for a broad range of industrial applications. Shanghai Fraser Static Technology will shortly be exhibiting at Chinaplas in April 2018.

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Splitting tracks

A global leader in chemical and consumer goods with a wide variety of products wanted to converge two separate streams of closed cartons, transport them up and split the tracks again at the upper end. After the split, both tracks had to span several meters to get to the next machine in their own individual process.

The customer’s wish to fit all these demands into a single SpiralVeyor® meant AmbaFlex had to find a clever way to meet them without increasing the complexity.

AmbaFlex engineers came up with a custom SpiralVeyor® S54 design, a special type of Spiral conveyor that can run multiple parallel tracks independently. In this situation, AmbaFlex installed it with two tracks both 300mm wide to transport the separate products up while keeping them both on their own path. To bridge the gap at the end, they extended the upper-end and built two diverging tracks each connecting to a different process.

The best part of the solution though is that the extended sections at the upper-end are part of the spiral, an innovative option called SpiralConnect. The traditional fix would have been to add conventional conveyor parts which would require two additional motors. The unique SpiralConnect solution meant they were able to keep the number of required motors down to the absolute minimum, saving on costs and maintenance.

One more proof of AmbaFlex’s leading position in Spiral Conveyor Solutions!

---

Packaging & Labelling Update
A milling cutter for perfect surface quality in stainless steel

CrazyMill Cool is a new carbide ball mill for finishing operations in titanium & superalloys. This coated end mill with four teeth is available in diameters from 1-8mm for milling depth of 2xd. Two more versions of 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.

T 0041 91610 40 00
info.mto@mikron.com
www.mikrontool.com

Specialists in metal surface treatments

Curtiss-Wright Surface Technologies (CWST) provides high quality surface treatments which will improve the life and performance of critical components through its global network of over 70 operating divisions and specialist onsite teams. Our surface treatments have been successfully used by OEMs in major industries such as aerospace, automotive, oil & gas and power generation for many years.

We are only too aware of the logistical challenges and costs faced by our customers and so we can offer a 'One Stop Shop' solution providing a wide range of surface treatments including Controlled Shot and Laser Shock Peening, bespoke and trade Coating Applications, Thermal Spray Coatings and Parylene Coatings for metal, alloy, plastic and electronic components as well as Analytical Services.

We offer our customers a single source solution and point of contact for all their surface treatments, supporting their requirements through our global network of over 70 worldwide facilities and on-site field teams, improving and reducing turnaround times and costs.

We are specialists in protecting components from common failures and reducing maintenance costs for key industries such as aerospace, oil and gas, automotive, medical and general industrial markets.

T +44 (0)1635 279621
www.cwst.co.uk

New DEOS from Mirka set to shape the future

The Mirka® DEOS with its revolutionary design gets closer to the surface, easily accessing hard to reach areas and delivers a flawless smooth finish quicker than other sanders.

The DEOS is available in two sizes, DEOS 383 CV 70 x198 and DEOS 353 CV 81x 133, making it suitable for use across multiple applications. The DEOS is the only electric orbital sander on the market that has been optimised for net abrasives with more than 45 holes in the pad. When combined with Mirka’s net abrasives, the DEOS offers an excellent scratch pattern and a dust-free work environment.

Its innovative features incorporate a brushless motor which provides a high power to weight ratio when in use. The design team has been able to reduce the weight, size and height of the sander, providing customers with a compact, lightweight and easy to use tool. In addition, it has an integrated vibration sensor with Bluetooth technology that can be connected to a mobile device with the new myMirka app to give guidance on vibration levels.

Jim Fulton, OEM sales manager for Mirka UK, says, “Our customers require products that can handle both fine and tough applications, while still having the ability to deliver a high-quality finish. This is exactly what the DEOS delivers. The addition these new sanders enable us to provide users with an industry leading tool to improve production, efficiency and output.”

T 01908 866100
www.mirka.co.uk

*Mirka offers a 2 year warranty as standard, with an additional year given subject to the tool being registered within 30 days of purchase on the Mirka website.
Water & Environmental Solutions Update

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, according to the 2016 Digest of UK Energy Statistics – an increase of over 25% since 2011. Yet over the same period 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 use of high temperature heat treatment, of sludge. This makes the sludge more biodegradable and makes it less expensive to transport. A further benefit is that the final sludge is pathogen free and can therefore be dewatered, resulting in a more valuable final product for land application.

Currently, most sewage sludge is treated by water authorities in their own large, centralised treatment centres, which take dewatered sludge from their smaller satellite treatment works. Raw sewage can constitute up to 99% water and the satellite sewage treatment processes remove this water and thicken the sludge before dewatering to a dry solids content (%) of between 15-35%. Dewatering reduces the sludge volume and in turn the transport costs of transfer to the large treatment centres.

However, the trend for water companies to treat only larger treatment centres, which take dewatered sludge from their smaller satellite sewage treatment plants, is changing. Sludge cake pumps are large so it is vital that they are efficient in use and have accessible wearing parts for ease of maintenance when required.

New facilities optimised by Anglian Water

Anglian Water has installed sludge reception centres and new facilities specifically designed to transport the sludge. Tailor-made packages often provide the best solution – integrating pumps with complementary equipment, such as valve live bottom silos, boundary layer injection systems and back mixing technology, together with intelligence control systems, will improve reliability, performance and cost efficiency. Sludge cake pumps are large and are so it is vital that they are efficient in use and have accessible wearing parts for ease of maintenance when required.

While process optimisation, economies of scale and deregulation will all play a part in the continued increase in energy generation by the water industry, it is important not to overlook the importance of correct equipment selection. Pumps in particular 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 the energy use of disposable equipment, such as PC pumps, is important when feeding heat exchangers to ensure the most efficient heat transfer for heating the sludge. Tailor-made packages often provide the best solution – integrating pumps with complementary equipment, such as valve live bottom silos, boundary layer injection systems and back mixing technology, together with intelligence control systems, will improve reliability, performance and cost efficiency. Sludge cake pumps are large so it is vital that they are efficient in use and have accessible wearing parts for ease of maintenance when required.

Advanced energy generation using thermal hydraulics at three locations. It selected SEEPEX progressive cavity (PC) pumps as they can handle both low and high viscosity products, can pump sludge with 85% up to 45%, and are not hindered by solid particles. In addition, they 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 sewage treatment plant 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 of large cake when fludation 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.

Thames Water upgrades existing technology

Thames Water 5TW at Reading aimed to reduce sludge transport costs by increasing the ds% of dewatered sludge from 22 to 25%. However, the piston pumps which transferred the sludge were a limitation due to the frequent maintenance requirements and the high pressures generated, as well as their high operating and maintenance costs and strongly pulsating flow. Furthermore, they had hydraulic draughts and drew absorbed power of 31kW.

In comparison, progressive cavity pumps result in lower pressure generation and lower pulsting flow, and can be further reduced by boundary layer injection. PC pumps have lower operating and maintenance costs and in this case drew absorbed power of 18kW – a reduction of 40%.

Thames Water replaced the piston pumps with SEEPEX PC pumps. SEEPEX project managed the installation, working with Thames Water’s approved contractors to deliver a turnkey system. The new pumps transfer higher ds% sludge with a lower energy demand, also reducing the system’s pressures, 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.

Contact

0113 385 8400
sales@seepex.com
www.seepex.com

Remote data collection project to open new doors for flowmeter firm

Mainstream Measurements Ltd has formed a £120,000 Knowledge Transfer Partnership (KTP) with the University of Huddersfield to develop software and communication mechanisms that will allow the meters to be read remotely, as well as integrating into standardised industrial control systems, such as MODBUS.

The breakthrough will be a massive advantage for companies involved in applications such as efficient monitoring and water distribution, industrial flow and water distribution, who need to monitor flow in order to deal with issues such as blockages and flood risks.

The challenge of the KTP is that there is no dominant data communication protocol in the Internet of Things (IoT) infrastructure, and this is particularly true within the water industry. Using a cellular infrastructure would be costly and consume too much power, which is highly detrimental to devices running on battery power in remote areas.

The LoRaWAN communication protocol could be the answer, and this is being investigated by the KTP. It is also expected that the KTP will help Mainstream boost its R&D capacity and add software engineering to its range of expertise.

Contact

01484 830311
www.mainstream-measurements.com

Lanes wins major new Thames Water contracts

Lanes Group plc has won major new contracts to provide specialist cleaning services for Thames Water. The work includes sewage treatment plant cleaning, pumping station cleaning, wet well emptying & tankering. Lanes Group has joined other contractors on a framework pool to supply the services for three years, with options to extend delivery for up to eight years.

Lanes Group Director, Andy Briney, said, “We’re thrilled to be able to supply these specialist services for Thames Water and its 15 million wastewater customers. We already have highly skilled and dedicated teams in place, combined with the necessary specialist vehicles, to carry out the work.”

Thames Water tendered services in four lots with the most advanced specialist vehicles, to skilled and dedicated teams in place, combined with the necessary specialist vehicles, to carry out the work.”

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Contact

0113 385 8400
sales@seepex.com
www.seepex.com
TransDev and IKO are cutting edge technology to use – reducing the risk of injury, much easier to clean, and since installing it in place of the old night door. It is much lighter, which multiply the available energy and reduces the plant’s overall carbon footprint.

New technology means the night door for food retailers has been warmly welcomed by top supermarkets. The Green-Door – which is actually blue!

Andrew Watson, store manager at ASDA Glasshoughton, kind. The 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 SM’s acclaimed Tempoc, which remains unchanged as the world’s thinnest and most thermally efficient material of its kind.

Andrew Watson, store manager at ASDA Glasshoughton, explained that Franke bearings are a more lightweight and energy-efficient replacement for the heavy sliding ‘night door’, with the potential to save a considerable amount of energy and physical effort for users. It uses SM’s acclaimed Tempoc, which remains unchanged as the world’s thinnest and most thermally efficient material of its kind.

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A Clean Sweep of benefits

Since the recent energy crisis, there has been an increase in the number of businesses, ranging from SMBs to multinationals, that have been turning to hiring cleaning equipment. While the short-term cash flow gain is apparent, this is just the tip of the iceberg.

Time-effective – Hiring means not only do you get top-quality cleaning equipment, it will also come with full maintenance and servicing included as standard, meaning your own employees don’t have to carry out time-consuming repairs to maintain the standard of the equipment.

Flexibility – When you hire, you can get your required machine by the following working day. Plus, you’ll be in contact with experts in cleaning machinery who will be in hand to provide you with advice on what machine best suits the job, and can even visit your site to do a full inspection before sending the machine to you. Full training is also included upon delivery.

Trial equipment – It’s often a benefit that is overlooked, but why not try before you buy? By trialing a machine, it allows you to test the machine’s capabilities, the frequency with which you use the equipment, its flexibility and increase in efficiency it delivers, all making capital purchasing decisions, intelligent ones.

Cost-effective – With hire, there is no significant upfront outlay, freeing up capital to be used elsewhere in the business. Hiring is also fully tax deductible, and unlike capital equipment, comes off your tax bill in the first year. Plus, there will be no servicing bills and you’ll get the latest equipment delivered immediately, saving you money and avoiding potential delays.

TCFM named as Tomorrow’s FM awards 2018 finalist

Facilities Management (TCFM) has been named as a finalist in Tomorrow’s FM awards for 2018, thanks to the Cleaning & Security Services 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. 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.

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

Refinery specifies decontamination shower

A refining international oil and gas refinery on France’s western coast recently installed a €400 million facility upgrade to capture profitable new markets in low-sulphur fuels that meet evolving European Union specifications. This substantial investment will significantly improve the refinery’s profitability and secure its long-term future.

Producing diesel, home heating oil and gasoline from oil sourced mainly from Eastern Europe, West Africa, the Mediterranean and the North Sea, the refinery is the second biggest in France, handling more than 11 million tonnes of oil each year. The organisation commits to safety ahead of everything else at its industrial facilities. As an existing customer, the organisation approached Hughes for a customised solution to meet their exacting requirements.

Hughes delivered a customised solution, based upon the standard model DEC-D-29. This self-draining, walk-through decontamination shower with multiple nozzles incorporates a double unit, an automatic on/off activation complete with optoelectrical sensors, alongside a stainless steel frame and sump. The extended damping time of the double unit provides the additional assurance the customer required and ensures operators are fully doused without the chance of passing through the unit too quickly. The optoelectrical sensors allow the shower to start instantly upon entering. This feature means the unit is easy to operate, adding further ease to the user.

Lighting & Electrical Update

Introduce their NEW & IMPROVED Active and Passive range...

H22WPAFN-C
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T 0161 430 6618
Quartz crystals for high temperature applications

GEYER ELECTRONIC is a leading manufacturer of frequency controlled products, offering quality crystals and oscillators qualified to ISO9001 standards. GEYER’s KX-327RF quartz crystal is suitable for use in automotive and harsh environment applications, and is the latest addition to its 32.768kHz tuning fork crystal range. This AEC-Q200 qualified component, with dimensions of 2.0 x 1.2 x 0.6mm and an extended temperature range of -40°C to +125°C, is ideally suited for the automotive industry. The device is also suitable for use in real-time clock applications in the electric mobility and IoT industrial applications.

The KX-327RF is currently available with a load capacity of 12.5pF. For automotive applications requiring a 9pF load capacitance, GEYER offers its KX-327NH with the same 40°C to +125°C temperature range, but in a slightly larger package size.

GEYER ELECTRONIC’s range of AEC qualified crystals and oscillators for automotive applications is continually expanding. It currently includes small package 26MHz and 40MHz frequency KX-5T crystals, measuring just 2.0 x 1.4 x 0.7mm, and 16MHz KX-7H crystals capable of working in temperatures up to 150°C, and various clock oscillators with 25MHz and 27MHz frequencies. A full list of GEYER’s AEC qualified components is regularly updated on their website. All components are RoHS compliant and lead-free solderable.

GEYER ELECTRONIC’s head office, based in Munich, includes a Design and Test Centre to answer questions on circuit design and crystal technology, enabling GEYER to work with their clients from design stage through to volume production.

Contact
T 01794 329341
sales@geyer-electronic.co.uk
www.geyer-electronic.com

BLE Lighting & Power Ltd

BLE Lighting & Power Ltd is able to provide expertise in all aspects of emergency lighting and will assist you to ensure your premises are fully compliant with the latest lighting regulations.

Long-standing experts in the emergency lighting industry, including centralised backup power solutions, BLE can service your existing installation or deliver a new turnkey emergency lighting solution where required.

BLE has a wide range of internal and external, energy efficient LED lighting options, providing reduced energy and maintenance costs, immediate cost savings are made following installation.

Full turnkey lighting services

Through consultation with each individual customer, BLE can conduct an assessment and subsequently provide guidance, information, and proposals to address your specific lighting needs, taking into account budgets, legislation, and aesthetics.

Our wide range of emergency lighting products are tested to BS EN 60598-2-22; our self-test emergency lights are tested to BS-EN-50172. BLE is ISO 9001 Quality Management certified by BSI under certificate number 94605924.

Contact
T 01246 432325
sales@blelighting.co.uk
www.blelighting.co.uk

New recruits at Meachers

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, it 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 said, “Joining Meachers has given me the opportunity to widen my skill set and work within a friendly business team.”

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

Industry Update is sponsored by Awesome Apps – see them on page 21
Improved lifespan for wooden pallets

James Jones & Sons has unveiled a new venture it says will dramatically improve the quality, length of life, and environmental benefits of wooden pallets, and significantly reduce whole life cost.

UPALL manufactures and fits protectors at the point of entry to wooden pallets. This is designed to help the pallets last longer, need fewer repairs and stay in circulation for longer than conventional non-protected pallets. The protectors are based on the US pointGUARD invention, which UPALL has redesigned and developed for the European market.

Tests on the protectors at Virginia Tech show that they increase the lifespan of a wooden pallet by three times and potentially longer. This is all because UPALL-protected pallets experience substantially less damage with significantly fewer wood chippings and debris. This reduces downtime, experience substantially less damage with significantly lower trip costs. The protectors are also to negotiate curves, while longer crossways further improve the maximum load.

Numerous benefits are provided by Profi TI hoists. For example, these easy-to-operate, lightweight hoists are suitable for use in hazardous areas and are insensitive to dust, vapour, humidity and temperatures ranging from -20 to +70°C. Profi TI hoists can also perform continuous work, extended duty cycles, provide fail-safe starting conditions and no additional motor lubrication is required. Users can enjoy a two-step travelling speed and changeable track width options. The trolleys are also to negotiate curves, while longer crossways further improve the maximum load.

JDN’s range of Profi TI air hoists is extensive (up to 100 tonne carrying capacity), but models in the 0.25 to 2 tonne UDL capacity range are proving increasingly popular for pallet industry applications. A number of infinitely variable speed-control systems (including remote control) help users achieve accurate load positioning. Various different trolleys can also be offered to meet customer demands.

Of particular note is the low-headroom design. When only low headroom is available and standard trolleys do not meet the application’s requirements, JDN low-headroom trolleys are recommended. They are many advantages of using JDN Neuhaus low-headroom trolleys, such as a low-wear patented mating efficiency (no backlash), low components and no additional motor lubrication is required. Users can enjoy a two-step travelling speed and changeable track width options. The trolleys are also to negotiate curves, while longer crossways further improve the maximum load.

Peter Solia, founder and MD of Storage Solutions, says, “Our ethos has been to improve the manufacturing efficiency and quality of our products, which are all made in the UK. After 10 years of recessionary challenges we are now able to compete head on with the once cheap competition from Asia. New products have expanded Spur from the commercial and DIY sector to also offer industrial systems and we hope to see our products enter many more new markets in the post Brexit era.”

Contact: T 01485 624062

Celebrating 65 years

The Spur shelving brand is celebrating 65 years of being manufactured in the UK. Today, the company has ranges that encompass both industrial and commercial shelving systems. In 1957 Spur was acquired by Savage Industries which propelled Spur from a single product brand to one that became a household name during the 1960s and 70s.

In the mid-1990s, Spur was taken over by McKechnie, an industrial conglomerate that owned various home improvement manufacturers. McKechnie itself was then acquired by Newell Rubbermaid.

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Contact: T 01485 624062

Handling & Storage Update

JD Neuhaus deliver ‘elevated’ performance

The versatility and performance of the latest Profi TI series air hoists, from JD Neuhaus (JDN), ensure their suitability for a wide range of applications in the process industry, from food, beverage and packaged goods, to chemical, pharmaceutical and biotech.

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T 01224 722751
Global leader in filtration systems

One division of Original Ltd, Original AVG, specialises in the design, manufacture and assembly of air, vacuum and gas filtration systems, focusing heavily on the treatment of compressed air. Compressed air is integral to numerous industries around the world, being used in the automotive industry, food and hospitality, mining, the pharmaceutical sector, plastic manufacturing, electrics, forestry and much more.

From their location in Shrewsbury, Original AVG have built up a reputation as one of the world’s best sources of cutting edge manufacturing and technology. They boast a firm client base around the world, including the UK, Germany, Qatar, South Africa, Mexico, Brazil, the USA, Russia, Singapore, South Korea and Australia just to name a few.

One of their most noted products is the Expel, the world’s first cleanable and reusable filter. The Expel is a filtration system used to separate water, oil and other particulate matter from air. Lauded for its innovative design and many features, the Expel is a marvel of filtration technology that has three separate global patents pending.

In the Expel, compressed air enters the Head of the system through an inlet port and is then channelled down to an area between a Bowl and Filter Assembly within the system. Here, there are a number of zigzagging vanes which manipulate the flow of air and force it to follow a tortuous route, moving in opposite directions. This creates eddy currents which rotate at high speeds, forcing out any such liquid, oil or particulate matter from the air. They coalesce against the side wall of the filter, are deposited at the base of the Bowl, and then exit through a drain port. By the end of this stage, 95% of the air is already filtered.

Afterwards, the partially filtered air moves up into the Umbrella Assembly (Unitary Vertical Bodies) portion of the Expel, consisting of numerous overlapping umbrella-shaped chambers. The air is forced upwards and the final 5% of water, oil or particles are again coalesced together, falling down to the bottom of the bowl.

With the Expel, clients can be rest assured that 99.9999% of all liquid water, liquid oil and solid particles (even as small as 1 micron) are removed. Not only that, but any cleaning or maintenance can be swiftly addressed as the Expel is easy to dismantle. This is perhaps one of the Expel’s most unique aspects, allowing for in-depth cleaning and maintenance as the entire system can be taken apart, washed and then re-used. There is no need to replace the filter. Any part of the machine is replaceable if need be, with all parts of the Expel available to purchase separately.

Needless to say, the Expel is a remarkable innovation that saves users on energy, time and money, and is already making waves around the manufacturing industry. If you would like to get in contact with Original AVG and find out how you can best utilise the Expel filtration system, or some of their many other exemplary products, then be sure to get in contact today. Alternatively, more information can be found on their website listed below.

T 0345 505 0222
www.originalavg.com
Roasting over 147 years experience, Minebea Intec can provide services for a range of different sectors, including food and beverages, hospitality, pharmaceuticals, chemical and more. Minebea Intec specialises in providing inspection tools such as X-ray and metal detection, plus other related components. All of these products are made in Germany and are designed to ensure long life, durability, ease of use, and installation. Minebea Intec’s inspection products can detect glass, metal and other products in materials, as small as 0.5 of a mm. If something is found within the product, it is immediately ejected from the line. This technology is also particularly popular in food production as a means to ensure food safety.

We spoke to Minebea Intec’s UK and Ireland Manager Colin Maher about what sets Minebea apart from the rest of the industry, to which he explained, “At Minebea Intec, we set the standard for the rest of the industry when it comes to inspection and detection devices. We offer the very best in resolutions, meaning the smallest of objects can be spotted and dealt with. With our machines, the second a metal detector detects something, it is removed from the production line. Service wise, Minebea Intec’s engineers work on call and are available to help 24/7, and we are the only ones in the UK market to offer such reliable after sales support.”

One of the most exciting things Minebea Intec has demonstrated is their Concept Scale, which they showcased at last year’s PPMA show. The CS 5000 Concept Scale contains a weight platform and can perform everything from weighing-in to batching. It also comes with a range of features such as wireless charging, an intuitive operator interface, and a fully housed body with minimum dirt traps for better inspection and easy cleaning. More can be found on the highly innovative Scale here: www.youtube.com/watch?v=GAs8BicunxM

If you would like to find out more about Minebea Intec and their many technologies, then be sure to get in contact using the details provided below.

T 0121 779 3331
www.minebea-intec.com

**Dunlee**

**Company of the Month**

**The true measure: Global leaders in inspection technology**

Dunlee leading the tungsten revolution

Dunlee is an internationally recognised name, with a global presence that stretches across continents. With over 110,000 staff around the world and an annual turnover in excess of €6.5bn, Dunlee have solidified themselves as one of the world leaders in providing innovative and technological solutions.

In addition to selling imaging components, Dunlee has a wealth of 3D production facilities in the US, China and Europe.

In the world of imaging solutions, Dunlee also has an array of solutions:

- **CT solutions:** Zeroboil off 1.5T & 3.0T magnets & RF Amplifier for MRI systems
- **Low dose Smit Röntgen fiber-interspaced anti-scatter grids**
- **OEM equivalent replacement tubes for GE CT scanners**
- **Integrated cardiovascular solutions:** high voltage generators & X-ray tubes
- **Highly reliable X-ray tubes for radiography, fluoroscopy & image guidance in oncology treatment**
- **Low dose limit Hologram is now calibrated in scatter grids**
- **ZeroBoil off 1.5T & 3.0T magnets & RF Amplifier for MR systems**

If you would like to find out more about Dunlee, be sure to get in contact below. Alternatively, you can find out more information by visiting the website at: www.dunlee.com

Contact Dunlee at: marketing@dunlee@philips.com

Dunlee is a brand of Koninklijke Philips NV.

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Inspection Technology

Company of the Month

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Contact Dunlee at: marketing@dunlee@philips.com

Dunlee is a brand of Koninklijke Philips NV.
New range of Eurospec handles from Carlisle Brass

Carlisle Brass is pleased to launch a new & improved range of Steelworx commercial handles with a 6mm slim fit rose. The range has 7 handles with 2 brand new designs Hallstatt & Metro along with escutcheons and thumb turn designs to match.

Product benefits:

- 6mm slim fit rose designed in line with the latest market trends
- Stainless steel inner rose
- No additional morticing over 8mm
- Blank escutcheon with bolt through fixings now added to the range
- G304 architectural quality sprung handles
- Secure Sesso spindle fix
- Full range of matching accessories
- Redesigned box to save space and reduce transport costs
- 10 year mechanical guarantee
- Suitable for commercial and domestic use

Carlisle Brass handles are designed to provide beautifully engineered stainless steel commercial door hardware for the specification market. The CSL range will provide a cost-effective stainless-steel solution that can be used both commercially or for residential projects.

Carlisle Brass Ltd is an ISO 9001 and ISO 14001 certified company, which means that Eurospec branded products are fully traceable from point of manufacture to the customer and that the environmental impact is being constantly measured and improved. We offer a complete package from specification, scheduling, and supply of a full range of guaranteed quality and value ironmongery.

T 01228 511300
enquiries@carlislebrass.com
www.carlislebrass.com

Integrated solution wins major access system project for SGB

The ability to respond efficiently to specific client requirements and supply large quantities of equipment helped SGB to be appointed as the access system provider for a major new development in Manchester. The company has since supplied a large integrated mastclimber access solution for the Middlewood Locks development which has been built in Salford, Manchester.

The mixed-use development includes six blocks of between eight and 11 storeys in height, and an access system was required which could accommodate the different requirements posed by various parts of the site. "The client, BCEGI, needed an access systems supplier who could design and install a bespoke solution," says SGB’s Business Development Manager, Karl Hancock. "They knew that SGB could meet that requirement, and back this up by providing large quantities of equipment, a flexible service plus detailed technical back-up and support."

The £700 million Middlewood Locks development was one of the first major projects undertaken by BCEGI in the North West, and it saw SGB provide 91 single and double mastclimbers.

"We needed a large-scale supplier who could design an integrated solution and provide all the necessary equipment," adds a BCEGI spokesman. "SGB was able to satisfy that requirement, and also provide a full installation and management service, so we were confident that its solution was the best one available to us."

The Middlewood Locks development is part of a 24 acre regeneration scheme.

For more details, visit: www.sgb.co.uk, call 01372 381300, follow ‘SGB a BrandSafway Company’ on Linkedin, or @SGB_Brand_UK on Twitter.

Perforated image panels

E Ingleton has completed further projects using its new PicPerf© image perforation system. Anodised aluminium panels were manufactured for Thames Architectural & installed in Berkeley Homes Victory Pier development in Gillingham, as well as for ambulance bay screen panels at London’s University College Hospital.

Both projects called for very high open area panels to meet ventilation requirements, whilst retaining striking images and patterns. The Victory Pier panels feature seven waterbirds, whilst the UCH installation was based on the architect’s ‘funny trees’ concept. The PicPerf© system has been used for various prestigious projects including Debenhams’s flagship Oxford Street store for Dane Architectural and Kingston upon Thames Riverside development for Cadisch MDA.

T 0114 275 7834
Unigloves’ new Fortified single use gloves incorporate silver ion technology from BioCote which, the company says, has been scientifically proven to destroy 90% of harmful bacteria within just 15 minutes and 99.5% in only two hours.

BioCote is proven effective against E.coli and Salmonella, antibiotic-resistant superbugs like MRSA, VRE, CPE and CRE, invasive fungi species such as Candida auris, plus H1N1 influenza, H7N9 and the current Aussie/French flu strain. Exposure to BioCote treated materials (such as the surface of the Fortified glove) is said to prevent microbial colonisation and also renders them non-infectious, through protein and oxidative damage membrane disruption and DNA interference.

For more information on our training schedules, please contact Sadie Beavis on 01270 586944 or email: sadie.beavis@advancedvalvesolutions.co.uk.
A new approach to gates

Dofygate was first established back in 2011, with the launch of their innovative prototype gates that took three years in development to make. Dofygate is based in Norfolk and specialises in creating different gates for specific purposes.

Largely aimed at the farming industry, their gates can satisfy any number of purposes, from stopping cattle and sheep from getting out of farms, to helping people easily get in and out of isolated farms. Made from strong and durable carbon fibre, the gates can span anywhere between 2-6 metres and are capable of opening in just three and a half seconds. On top of that, they don't require any wires as everything is done via remote control.

There are a number of different gates available, including the 2 Bar Electric Gate, 4 Bar Electric Gate, 7 Bar Electric Gate, as well as Mobile Barriers for outdoor shows and events. The 2 Bar Electric Gate is mostly used for biosecurity and pedestrians and allows for a one way system onto the protected site. The 4 Bar Electric Gate is among their best-selling for farming purposes. It is most commonly used to access cattle paddocks and sheep paddocks and even comes with a built in shock unit for commonly used to access cattle paddocks and sheep from getting out of farms, to helping people easily get in and out of isolated farms. Made from strong and durable carbon fibre, the gates can span anywhere between 2-6 metres and are capable of opening in just three and a half seconds. On top of that, they don't require any wires as everything is done via remote control.

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Due to the popularity of Dofygate, they can be found in farms up and down the UK and have even branched out onto construction sites and even schools. There are a number of benefits to using Dofygate, hence their popularity. In addition to providing peace of mind knowing that animals, school children and hazardous construction sites are safe and secure, the Dofygates are also reliable all year round, are easy to install, and come with after sales support. One of the best things about Dofygate is that it’s all solar powered, meaning wiring and electricity costs are significantly slashed after their installation. The gates can also be put anywhere along a fence, ensuring the owners can still gain access and exit the area at any point of their choosing.

Due to the success of the gates, Dofygate have plans to enter the industrial markets, offering their revolutionary gates to a wider customer base and expanding their reach. They also regularly attend trade shows throughout the year, including the Safety and Health Expo at the ExCel, London. You can also catch them at the Agricultural and Machinery Show where they display their gates and demonstrate how to use them.

If you would like to get in touch with Dofygate to find out about their many gating options, then don’t hesitate to get in touch: M: 07785 352730
https://www.dofygate.co.uk

Access control system

Students, staff and property at Newcastle University’s New Urban Sciences Building are now protected with a sophisticated access control system, provided and installed by Chubb Fire & Security, part of UTC Climate, Controls & Security, a unit of United Technologies Corp. Chubb’s access control solution with an integrated intruder alarm is already proven in other campus buildings.

“We required a highly secure yet flexible and user-friendly system to ensure convenience and safety,” said Richard Johnston, senior project manager, estates support service, Newcastle University. “As a new build, it was vital that the building’s security was in place for the new term.”

The estates management team is able to print ID passes, restrict and monitor access, and be highly responsive to potential incidents. It can review arrangements for events and monitor door use. The Urban Sciences Building has 60 doors, requiring separate zoning and access restrictions for students, staff and visitors.

T: 01784 424100
www.chubbfiresecurity.com

KFC is a southern based company covering south east of England including London & home counties, with over 30 years experience in fire protection & building trade including design, manage & supply & install on major projects such as hospital, retail, schools, commercial & public buildings.

Also being members of FPA (Fire Protection Association), ASFP (Association for Specialist Fire Protection) & BWF (British Woodwork Federation) & also supporting the BWF Fire Door Scheme.

We operate differently to our competitors with a more personal & innovative approach by offering a more competitive products to suit your budgets and or your specifications. Site surveys can be arranged or we are can price from drawings or bills of quantities.
LS-37K 3.5” SBC based on 6th generation Skylake & 7th generation Kaby Lake

Further extending its 3.5” format industrial grade embedded SBC portfolio, BVM has announced the LS-37K, which offers a 30% performance improvement and power reduction over Ivy Bridge based units when using the 6th generation Skylake Core i7/i5/i3 processors, and even higher improvements when based on the latest 7th generation Kaby Lake.

The LS-37K also supports the Intel Xeon® E3-1200 v5 processor; all processors are mounted into the new format FCLGA 1151 socket. The LS-37K is aimed at graphics-rich, heavy computing environments where lower power consumption is also a primary requirement for fanless operation in boxes and similar environments.

All options run under the Intel C236 chipset, and the LS-37K is the first desktop platform to support a DDR4 DIMM slot with up to 16GB of memory running at 1,866/2,133 MHz.

The graphics engine is the Intel® HD Graphics 530 for Skylake versions, the HD 630 for the Kaby Lake or the HD P530 for the Xeon processor. All decode H.265/HEVC video completely in hardware, significantly more efficiently than previous GPUs.

The LS-37K provides high-end media and graphics capabilities for videos, 2D/3D graphics & interactive content, with up to three displays using VGA, DVI-I, Display port, HDMI and LVDS interfaces that are independently controllable to provide advanced solutions for imaging, video processing, machine vision and digital signage applications.

Extensive I/O is provided on board. A Gigabit PHY LAN and a Gigabit LAN port, two SATA III ports supporting Raid 0 and 1, a PCIe x16 port, a PCI E Mini card with optional miniSATA support, four USB 3.0 and five USB 2.0 ports, five RS232 and a RS232/422/485 serial port are standard. Power is from an external 9-30 VDC source.

163x36 Industry Update is sponsored by NSF Controls – see them on page 18
Casella celebrates Intrinsically Safe approval for Apex2

Following a rigorous testing process, Casella has announced Intrinsically Safe approval for its Apex2 personal sampling pump range, with class leading performance and capability.

Instruments supplied for application in atmospheres where there is a risk of explosion must be designed with the appropriate safety equipment critical in achieving IS approval, protecting the equipment and ensuring it is safe to use. Achieving the IS certification for the Apex2 range ensures that monitoring and analysis of dust exposure can be carried out safely and effectively in these areas.

The range includes three separate models – the Apex 2, Apex 2 Plus and Apex 2 Pro, with different functionality to meet varying requirements; all designed to monitor workplace dust levels to help protect workers from developing long latency health problems as a result of occupational exposures.

For more information, please watch the following video: www.youtube.com/watch?v=CLQ4wVLMNY
T +44 (0)161 777 6611
www.casellasolutions.com

Portable data logger

OMEGA's new OSXL-TG165 series of high performance thermal imaging cameras feature a portable, ergonomic design.

Features include tripod mount/lanyard connection, dual pointer lasers that frame the area of interest, a convenient pull trigger that activates lasers and freezes images, and a mini USB port for downloading images and charging the internal battery. The OSXL-TG165 is simple to operate with intuitive buttons and menu icons.

Since its inception in 1962, OMEGA has grown from manufacturing a single product line of thermocouples to an established global leader in the technical marketplace, offering more than 100,000 state-of-the-art products for measurement and control of temperature, humidity, pressure, strain, force, flow, level, pH, conductivity and automation. OMEGA also provides customers with a complete line of data acquisition, electric heating and custom engineered products.

Freephone Sales 0800 488 488 (UK ONLY)
T +44 (0)161 777 6611
F +44 (0)161 777 6622
sales@omega.co.uk
www.omega.com/pptst/OSXL-TG165.html

New thermal imager announced

OMEGA's new OSXL-TG165 series of high performance thermal imaging cameras feature a portable, ergonomic design.

Driving the need for engineering training

Historically data acquisition and analysis was a tricky business and engineers had to be on top of their game to ensure all the variables were correctly set to provide accurate data, developing the ‘gut feeling’ if something was right or wrong.

The advances in engineering analysis software have without doubt opened new doors for faster development and better access to results, however has it all been for the better? Can we really determine good data from bad or is there a tendency to assume it is right because the software has been able to analyse it?

The issue with any modern acquisition system is that what goes in will be analysed regardless of its quality, so although it appears easy to complete an analysis, the figures could in fact contain hidden error. In actual fact the sensor can be the most critical part of a system and there are many pitfalls to be avoided to ensure accurate and reliable data.

DJB has been providing training both onsite as well as at its factory in Mildenhall, Suffolk. The aim: To educate engineers about the way data accuracy can be improved with a little more thought and focus on the accelerometer end of the test system.

For further details about any of these courses or to discuss the possibility of having an on-site event, please contact DJB Instruments UK Ltd on +44 (0)1638 712288 or email: sales@djbinsturments.com
A full list of events is available on the DJB website at: www.djbinstruments.com
**Drives, Controls & Automation Update**

The path to digital transformation is easier than you think

It manufacturing expert and Qlik Elite Solution Provider, Informance, says that the path to digital transformation is easier than you think. The business benefits that Industry 4.0 can bring, such as improved operations, business agility, and product quality with faster productivity and time to market, are clear to see. But connecting your people, processes, equipment, and data together without any disruption to your business, sounds complex and costly.

We’re all aware of the digital benefits to collaboration and data being shared securely through various operating systems and solutions, particularly to those close to the factory floor – highly flexible mass production, predictive maintenance, accurate and fast management reporting, improved decision making, and an optimised, cost-effective supply chain.

And in today’s competitive market, manufacturers are always looking to improve efficiency by utilising big data analytics and business intelligence to connect their business and turn their data into actionable insights. However, Industry 4.0 is a multifaceted challenge with the most common misconception to implementing smart manufacturing being that you ‘have to replace or modernise all your legacy systems and software’ to achieve a ‘connected factory’.

But in fact, almost all manufacturing organisations already capture data and store it somewhere so the path to digitalisation is just about connecting these many silos of data to achieve an entire factory connected and collaborating with logistics, sales, human resources, finance, management, and the supply chain. Hence the barriers to entering the fourth industrial revolution are not as complicated as you may think, and the benefits are limitless. So, don’t get lost in the complexity of Industry 4.0 for fear the need for expensive IT investment.

Whatever your size or type of manufacturing organisation, we can help you realise your digital transformation by providing a Qlik manufacturing solution that quickly connects all your existing data, without you having to change systems. Our solutions can be tailored to your exact needs and are powerful, yet easy and intuitive to use. They consolidate data from multiple data sources into one view with real-time performance information, so you can collaborate more insightfully, improve performance, operate leaner, cut waste, and boost efficiency and profitability.

Cathryn.hunter@informance.co.uk

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**ENEMAC distance couplings – simple connection of far distant shafts**

As the ENEMAC customers wanted a simplification when connecting two widely spaced shafts, the different types of distance couplings have been developed by the drive technology specialist from Kronenthal, Germany.

Labour costs and material costs for intermediate bearing are no longer required. Distances from up to 6m can be bridged; the intermediate pipe is getting modulated after customer’s requests.

In many cases the distance coupling can be installed as clearance-free connection, drive line or synchronous shaft and replaces therefore complex additional intermediate bearing.

T +49 6022 71070

www.enemac.de

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**Datum Electronics introduces maintenance-free, waterproof alternative to slip rings**

Datum Electronics has developed a new range of contactless waterproof replacements for slip ring applications, DX 8600 Universal Wireless Data Link. The DX 8600 Series Data Link has been specifically designed for simple data & power transmission from any rotating shaft to a static location. The Data Link utilises an inductive coupling to provide power to the rotary transmitter, which then sends serial data back to the static module.

Datum Electronics have supplied rotary couplings that are used in all manner of test rigs, drive lines, ships, mixers, pump monitoring and numerous similar applications.

The latest DX Series has been designed as a wireless alternative to slip rings, suitable to retrofitting to existing machines and drive lines, providing a greater range of signal and power to shaft options.

Unlike, traditional slip rings, which have limited performance and high maintenance costs, the DX 8600 Wireless Data Link is fully waterproof and doesn’t rely on friction to enable data & power transmission. Originally designed for marine applications, the system has been tested to meet food industry requirements, including cleaning with caustic soda, immersion in water, milk, oil and other contaminants. Furthermore, the coupling can be cleaned using a jet wash without damage.

If you require a system to transfer sensor data from a stationary device to a rotating shaft efficiently, effectively and in a reliable manner, please contact our technical sales team at: web@datum-electronics.co.uk or call +44 (0)1983 282834.

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**Oil condition monitoring for industrial applications**

Tan Delta Systems is the global leader in oil condition monitoring technologies. Unique full spectrum holistic monitoring allows owners and operators to improve the financial return on their equipment investments and improve operational reliability and safety.

Tan Delta has developed application kits which can be quickly and easily fitted to industrial engines, hydraulics and gearboxes enabling oil to be monitored & tracked continuously in real time.

- **Significantly reduces maintenance costs**
- **Improves efficiencies, part time**
- **Extends equipment life**

With an average investment returned in under four months followed by many years of net financial and operational benefits, contact Tan Delta today to find out more.

Contact: Chris Greenwood, Managing Director

T +44 (0)845 094 8710

info@tandeltasystems.com

www.tandeltasystems.com

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ENEMAC distance couplings – simple connection of far distant shafts

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Oil condition monitoring for industrial applications

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18 Industry Update is sponsored by NSF Controls – see them on page 18
**Handheld VOC meter**

A hand held VOC meter from OMEGA Engineering, the HHAQ-107 can be used for taking general measurements of various organic compounds (VOC) levels such as formaldehyde, benzene, toluene, etc. The meter's storage capacity can be devoted entirely to VOC readings or split among other measurement types.

**Smart Switch**

Nort Building Technologies is pleased to announce the launch of Smart Switch. Smart Switch is Nort's new multi-system controller, with touchscreen and rocker buttons. Smart Switch simplifies the user interface for heating, lighting, air conditioning, energy monitoring, home automation systems, and more.

**Fan upgrade offers energy savings**

For over 30 years Swe gon has been helping Britain’s industries keep up and running by servicing, maintaining & repairing their critical process cooling and air conditioning systems. Swe gon says changing old beltdriven fans and motors with EE direct drive plug fans helps to remove any energy loss through transmission and also saves annual belt replacement costs (on average £200 per year). Swe gon’s fans are fully compatible with most systems, meaning simple and cost-effective upgrades can be carried out with minimal disruption.

**A hand in depth look at free cooling**

**A guide to controlling data centre temperature**

Data centres are continually evolving, and among the plethora of cooling methodologies, free cooling, the most effective regarding both cost and application.

**Power savings**

Data centres consume almost as much energy for non-computing resources as they do for powering their servers. That is why FREE (U)E is so important – the closer it is to 1.0 the better the management of non-computing energy, and free cooling can reduce this figure.

**Temperature gauge**

There are various measurable temperatures present in a data centre, including supply air, return air, room air, cold aisle, and server inlet and exit temperatures. Server inlet temperature and server exit temperature both have a significant effect on cooling system efficiency and the higher the server inlet temperature, the more efficient the cooling system.

**Indirect free cooling**

Two stage indirect free cooling systems have a smaller footprint but are less efficient, functioning with two heat transfers.

**Direct free cooling**

Two stage indirect free cooling systems have a smaller footprint but are less efficient, functioning with two heat transfers.

**Direct free cooling with air plate heat exchanger**

The reliability and payback of multi-scroll liquid chillers is now available in a free-cooling version for applications that require chilled water even in wintertime.

SPINchiller3 Free-cooling are highly efficient air-cooled liquid chillers for outdoor installation (cooling capacity from 260kW to 670kW) for applications that require cooling even in wintertime, such as:

- Data centres and server rooms to dissipate the heat produced by processors
- Telecommunications to dissipate the heat produced by electrical and electronic devices
- Industrial processes to cool process liquids
- Shopping centres to dissipate the heat produced by people.

In these situations cooling load is a major expense, therefore being able to use the low outdoor temperature to generate part of the cooling capacity free of charge, SPINchiller3 FC, enables notable annual energy consumption savings, up to 40% in harsh climates.

Multi-scroll compressor technology provides seasonal energy efficiency equal to that of chillers with inverter compressors (ESEER 4.5) with a much lower initial investment and payback period of typically less than three years.

**Fan upgrade offers energy savings**

**Fan upgrade offers energy savings**

**OMEGA also provides customers with a complete line of data acquisition, electric heating and custom engineered products.**

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sales@omega.co.uk
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**Hand-held VOC meter**

**Smart Switch**

**Hand-held VOC meter**

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**Handheld VOC meter**

Available from OMEGA Engineering, the HHAQ-107 can be used for taking general measurements of mixed gas volatile organic compound (VOC) levels as part of an indoor air quality (IAQ) maintenance programme.

The instrument is said to be cheaper than photo-ionisation meters designed to make precise measurements of VOC levels from a single gas. Small and light weight with a tripod mount fitting, the HHAQ-107 is a versatile tool for HVAC and IAQ technicians. The meter’s storage capacity can be devoted entirely to VOC readings or split among other measurement types.

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www.omega.com/gst/HHAQ-107.html

**Handheld VOC meter**

**Smart Switch**

North Building Technologies is pleased to announce the launch of Smart Switch. Smart Switch is North’s new multi-system controller, with touchscreen and rocker buttons. Smart Switch simplifies the user interface for heating, lighting, air conditioning, energy monitoring, home automation systems, and more.

Installers and designers can choose the façade and touchscreen colours to match interior decoration, and configure its operation to match installed systems.

Smart Switch can use its inputs and outputs to control a local heating zone, or allow remote systems to manage them.

Come and see how Smart Switch achieves all this at our new offices in Brighton, or call to arrange a demo at your offices.

T 01273 694422
info@northbt.com
www.northbt.com

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UNISIG modernises high volume receiver production

UNISIG Solution: UNI25HD with Automation

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 and wear parts for holes from 0.33-2.00in (8.5-50mm) in diameter, at extremely high feed rates, the optimal solution for receiver components in a high production environment. Typical feed rate increase is from 3-4 times faster with indexable gundrilling, yet they found themselves significantly improving their previous production rate.

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. Each spindle on the UNI25HD provides 13hp (10kW) of power to the tool, and the machine also offers increased coolant capabilities to handle the rapid removal of chips, while keeping the process clean and enclosed. Embedded automation is used to match the drastically increased production rate, and to integrate the gundrilling step with the cut-off lathe both back/forth, and turning steps that follow.

Inflated 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. Additional parts continue to load and unload, aligned with the drilling rate, in a steady one piece flow production and eliminating the previous bottleneck.

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 of the B series and the complete UNISIG machine program is available at: www.unisig.com or follow the company on LinkedIn and Twitter (@UNISIG).

You can meet UNISIG at the AMB show in Stuttgart, Germany in Hall 9, C13 From 18-23.9.2018.

UNISIG handles the challenges of landing gear drilling

Alta Precision is an industry-leading manufacturer of commercial aircraft landing gear in Montreal, QC, Canada. When they recently expanded their production facility to introduce a new landing gear product, it was an opportunity to invest in updated capabilities. Alta was faced with sourcing equipment to handle the complexities of manufacturing landing gear for the aerospace industry. By nature, their components are highly stressed, complex, with thin walls in tough metals such as 7000H alloy steel. They require a profiled deep hole to be drilled and machined down the centre.

At 9in (230mm) in diameter and over 7ft (2.1m) deep, this hole can only be performed on a dedicated deep hole drilling machine, not a conventional machining centre. In addition to having the capability to machine these boxes to strict tolerances, Alta was seeking a solution that allowed ergonomic setup and operation, with the versatility and power to handle a variety of complex parts in different lengths, on the same machine.

Their landing gear parts offered an additional challenge, with an asymmetrical feature that both requires a swing of 54in (1370mm), and acts as an off-centre weight on a workpiece which is counter-rotated during the drilling process, essential for achieving the required straightness tolerances. All of these challenges resulted in a single type of component that is essential to Alta’s business.

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

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, REXROTH, 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.

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Providers of practical technology

**AWESOME APPS**

Moonray 3D Printer. This highly innovative and advanced technology uses an LED based light source within a DLP projection system to project ultra violet light onto a UV sensitive resin. This creates a thin layer that once cured, solidifies into shape. The process is repeated with layer after layer building upon each other until an accurate plastic model in the desired shape has been created.

The Moonray has seen considerable interest across a large number of sectors, including rapid prototyping, jewellery and dentistry. We spoke to founder Don about the Moonray, to which he explained, “The Moonray has been seen considerable success since the launch. It is particularly sought after among the dental sector, where it is used to perform a digital scan of the mouth to create a bio-compatible replica made out of non-toxic resin. It can also be used to make everything from surgical guides to caps to crowns and more.”

In addition to this, Awesome Apps have a wide variety of tools and spare parts to drive machinery and specialise in providing solutions for scanning, CAD software and production engineering. Their software range includes Space Claim, Stampack, and Castle. Space Claim is specially designed to work in conjunction with CAM and design simulations, allowing modellers significant time saving when creating their products. Stampack is renowned for its leading technology in analysing sheet metal deforming and simulations. With Stampack, users no longer need to create physical prototypes and as a result save on both time and money. Castle is a die casting simulation software that is ideal for aluminium and zamac castings, and is even capable of eliminating trapped air. You can see all this and more at the TCT Show, September 2018, where Awesome Apps will be demonstrating how to use their wide range of technology. If you are interested in getting your hands on some of the expert tech, then be sure to get in contact using the number below where one of the friendly team members can help you in the right direction. Alternatively, you can find more information by visiting the website listed below.

T 01243 924005
www.awe-apps.com

Leading supplier of sensor and display technology

**MMS Electronics Ltd**

MMS Electronics Ltd is a highly advanced electronics and technology company, supplying electronic displays, digital converters, sensors, transducers and high accuracy frequency to digital converters. MMS Electronics is one of the UK’s most popular sensor suppliers. Their wide array of sensor technology includes High Accuracy digital temperature sensors, infra-red thermometer modules, pressure sensors, humidity sensors, transducers and high accuracy frequency to digital converters.

For those interested in getting their hands on some of the display and sensors, then be sure to get in contact with MMS Electronics using the details provided above. Alternatively, you can find more information by visiting their website.

T 01943 877668
sales@mmselectronics.co.uk
www.mmselectronics.co.uk

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Industry Update is sponsored by Awesome Apps – see them on page 21
Minova & ISS bring RamWall to market

RamWall is a revolutionary gravity retaining wall system. Minova and ISS are partnering with a view to bringing ISS’s RamWall solution to a wider market.

Minova is renowned throughout Europe as the premier provider of ground control solutions, it delivers its solutions to a long list of types of construction projects including; Road, Rail, Coastal, Commercial & Residential schemes. ISS was formed to develop and supply innovative solutions to the construction industry, namely Ramleech and Ramtraxle. Minova has been keen to be associated with both solutions.

RamWall provides some key advantages when compared with other gravity retaining wall structures:

- RamWall forms a monolithic, ribbon-like structure as it made up of a number of layers of overlapping mesh, the overlapping joints within the mesh being staggered. Any uneven loading that the structure may experience can be spread along the length of the wall.
- The modular nature of its construction ensures that complex wall cross sections can easily be formed, hence negating the need for additional secondary structures.
- The simplicity of its construction ensures that any competent contractor can install the system rapidly with the minimum amount of training (typical 1/2 day). A quality overall finish is easy to achieve, and the stone filling operation could not be simpler, stone is simply dropped into the open structure, there is no need for hand placement.
- Its rapid and robust construction, and the simplicity of any maintenance required, makes it an ideal wall solution for coastal projects, road and rail schemes.

Contact: Robert Fisher
M 07711 594583
Robert.fisher@minovaglobal.com
www.minovaglobal.eu

SES for all your marine needs

SES Electronic Services Ltd (SES) is one of the UK’s leading names in maritime communication and navigation electronics, renowned for its unrivalled distribution to the marine industry.

SES was first set up back in 1974 and today has amassed a huge network of partners and clients, with some of the leading brands they work with including such names as Furuno, Jotron, Kelvin Hughes, Raytheon, Sailor, Jotron, and Praxis. Automation. SES is proud to work alongside a varied array of commercial shipyards and leisure yacht builders in order to provide everything from designing to supplying, installation, and commissioning services.

Whether you’re seeking airtime, commercial shipping, offshore, DP and automation or yacht and leisure support, SES can be relied upon for a timely, professional and comprehensive service. Its phones are manned 24/7 and its engineers are always on hand to provide expert guidance and technical assistance no matter the query.

It also has an extensive stock of cost-effective spares which it is able to source all over the world, with its factory-trained engineers also able to travel across the world to different clients to help them optimise their vessels and equipment.

Contact: Jeff Dixon, Sales Manager
T +44 (0)1634 295500
www.ses-marine.com

Fastenings, Adhesives & Assembly Update

Engineering excellence

Long 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 wear and ease 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 strong engineering pedigree has delivered a

For more information and details of our global distribution network visit www.katocoilthread.com

Available from stock at JET PRESS for next working day delivery. Contact our sales team on 01282 555800 or email: sales@jetpress.com or visit: www.jetpress.com

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Loyalty and love in abundant supply at Sleep

Sleep

With imaginative designs and thought-provoking debates, the 12th annual Sleep, Europe’s hospitality design and development event, returned to London’s Business Design Centre from 21-22 November 2017. Attracting a record number of visitors from around the world who all share a passion for creating hotels, restaurants, and bars, this year’s edition explored the theme: Loyalty: Lessons in Love through a spectrum of intriguing hotel space installations, Conference sessions that tapped into the undercurrents shaping tomorrow’s cutting-edge design destinations and the highest quality of international Exhibitors, many of whom reported doing more business than ever on their stands.

Sleep Set, the event’s annual guestroom competition, sparked a diversity of design responses. Developed in cooperation with Ipsos Loyalty, the global leader in customer experience, satisfaction and loyalty research, the Loyalty: Lessons in Love theme was uniquely interpreted by each contender. Sponsored by Kohler, the 2017 Sleep Set saw four global teams of designers, and fit-out contractors each create a room that explored how design influences feelings of love and loyalty. Top quality, high style and exquisite craftsmanship were in abundant supply by Duran Lighting & Interiors an exciting and rich design influence.

Enthusiastic feedback as to the quality of attendees andSleep as a platform due to its specialised focus and global visitor profile. In addition to the latest technology to produce bespoke print ready artwork; if you already have your own artwork, we can adapt it to work with our print processes. We can also take our own designs from the PRINTLAB Library and recolour or rework them to suit your design needs.

To find out more about Edmund Bell PRINTLAB, contact the sales office on +44 (0)706 717070 or visit: www.edmundbell.com/printlab

Edmund Bell is a supplier of high quality decorative blackouts, dimouts, shades, swags, voiles, and upholstery fabrics to the hospitality, cruise, healthcare, education, and workplace markets. We also offer one of the widest selections of high-end curtain lining solutions, workroom accessories, and roman blind systems.

Our market-leading blackout and dimout fabrics offer a sumptuous and tactile experience, providing both function and versatility without compromising on style. Many of our ranges are available in both wide and narrow width and meet UK and international FR standards.

If you’re looking for something different, our bespoke PRINTLAB design and print solution can create and deliver that special fabric for your project, whatever the budget requirements.

Our design team have the skills and latest technology to produce bespoke print ready artwork; if you already have your own artwork, we can adapt it to work with our print processes. We can also take our own designs from the PRINTLAB Library and recolour or rework them to suit your design needs.

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Duran Lighting & Interiors

The Duran Collection provides a refined selection of lighting, furniture, cushions, and accessories – a perfect blend of sophisticated design in muted tones with a sparkle.

All products are handmade with an eye for quality and detail. Our lampshades are produced in our own atelier and are true masterpieces of exclusivity and handcraft combined with the most exquisite fabrics.

The same goes for our ever-expanding collection of furniture and lighting. All designs are a combination of exclusive materials and muted colours, made by the finest craftsmen.

Our latest collection Bohemian Luxury offers a range of side tables with various sized tops in marble, fabric, and a rustic wood filled with resin. The collection also comprises huge Terracotta-looking vases, mirrors, lighting, and decorative objects.

With each new collection we also introduce a range of matching cushions in the most exquisite fabrics.

The unique combination of the soft and exclusive textures of our cushions, our simple but refined furniture, and eye-catching lighting is what makes Duran Lighting & Interiors an exciting and inspiring brand.

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Classifieds

Deep Hole Drilling Systems

UNISIG Deep Hole Drilling Systems Machines + Tools + Automation

www.unisig.de/en

Industrial Heating Elements

Leading the way

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Industry Update is extremely pleased to announce that Membrapor has been specially selected to receive this issue’s coveted Gas Sensing Solutions Company of the Month profile in light of their unmatched, reliable electrochemical gas sensors services.

First established in 1995, by Dr. Christian Huggenberger and Ines Moretti Huggenberger, the family-led company has since progressed to become globally recognised as a leading OEM provider of gas sensing solutions supplies. Situated in Zürich-Wallisellen, Switzerland, the company are well-reputable for their durable, high-quality, reliable and cost-efficient services, where their manufactured Membrapor sensors are applied in the most diverse fields across the world.

Founded on years of dedicated research and development, Membrapor are able to formulate gas diffusion electrodes that exhibit unparalleled properties. Combined with practised expertise and an innovative approach, the experienced engineering team at Membrapor are able to produce gas sensors of unrivalled performance. Due to the modular concept of their fabrication, Membrapor can readily adapt to customer requirements and provide economical, tailor-made solutions to meet with their requirements.

Innovation is the driving force behind the technological progress at Membrapor for more than 20 years. One of their most highly sought after products, the Hydrogen Sulfide Gas Sensor in compact housing (H2S/CG-100-4E), is a popular purchase amongst clients.

MEMBRAPOR’s special 4-electrode sensor is used for target gases like hydrogen sulfide (H2S) and allows to compensate for interfering hydrogen (H2) gas, which is not possible to eliminate with filters or other techniques.

In applications, where the H2 concentration is very high, or where the concentration of the target gas is very low, the sensor signal has to be corrected for the response to H2. While both, the oxidation of H2S and interfering H2 occur at the sensing electrode, the signal at the auxiliary electrode is almost exclusively due to H2. With two signals caused by two gases, the respective concentrations can easily be calculated and thus, a highly accurate H2S reading is obtained in applications where 3-electrode sensors would fail.

Excellent customer service is at the forefront of Membrapor’s priorities, with the company working in close conjunction with clients’ supply chains to ensure electrochemical gas sensors services are delivered on time with a fast turnaround. Committed to providing an outstanding service to clients, Membrapor go to great lengths to ensure that no matter the application, each client is getting the most out of their electrochemical gas sensors services.

For this reason, Membrapor guarantee excellent customer service with their friendly, highly skilled and experienced team, who are happy to provide clients with any support they may need throughout the operating life of the equipment. From the preliminary selection through to quotation, commissioning and after-purchase service, you are guaranteed of committed, proficient and personal support from Membrapor.

Due to their commercial success, the company plan to enlarge their interests further through shaping the future of gas detection with innovative research strategies and constructive developmental approach.

Going forward, Membrapor will continue to expand their institution through both acquisition, enhancing and furthering their knowledge and expertise in their unmatched reliable electrochemical gas sensors manufacturing, so they can remain the UK’s preferred partner of manufacturers of gas sensing equipment.

If you would like to get in contact and find out how Membrapor’s many specialist services can benefit you, then don’t hesitate to please pick up the phone today. More information can also be found by visiting the website below.

Contact
+41 433117200
www.membrapor.ch