

EMS

ENGINEERING MAINTENANCE SOLUTIONS

The International Magazine For Maintenance & Engineering Professionals

Feb/March 2017

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SOUTHERN 17 Manufacturing & Electronics

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21st – 23rd March 2017
9.30am – 4.30pm
(3.30pm close Thursday)

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4-11

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SEMINAR ROOM 1 – ENGINEERING

Tues 21st March

Weds 22nd March

Thurs 23rd March

Session 1 – 10.10am CE Marking 2017 & Beyond

Peter Evans, Compliance Engineer, The CE Marking Association

Session 2 – 11.15am Best Practice & World Class Manufacturing

Ailsa Carson, Onsite Insights

Session 3 – 12.30pm An Introduction to 3D Print & the exciting benefits it brings to manufacturers

Wayne Kite, Stanford Marsh

Session 4 – 1.45pm How innovation & new technology adoption in Manufacturing drives growth

Zoe Webster, Innovate UK

Session 5 – 3.00pm What Makes Good Design, How to Generate Good Ideas

Stefan Knox, Bang Creations

Session 6 – 10.10am Demystifying the Internet of Things - How it can be used in industry including Energy data capture & analysis

Craig Astfalck, Ecopare

Session 7 – 11.15am Lean: Driving Efficiency in Business - a Practical guide

Lean means creating more value for customers with fewer resources
Tim Scurlock, Director, Automotive Lean Consulting

Session 8 – 12.30pm CE Marking 2017 & Beyond

Peter Evans, Compliance Engineer, The CE Marking Association

Session 9 – 1.45pm Stop pitching & start selling - Understanding how to sell, however complex your industrial product

Antonio Falco
Session 10 – 3.00pm
The Industrial Internet of Things - Case study examples of how manufacturing across all sectors will change in the future

Session 11 – 10.30am The Industrial Internet of Things - Case study examples of how manufacturing across all sectors will change in the future

Case study examples of how manufacturing across all sectors will change in the future

Session 12 – 11.45am Best Practice & World Class Manufacturing

Ailsa Carson, Onsite Insights

Session 13 – 1.00pm An Introduction to 3D Print & the exciting benefits it brings to manufacturers

Wayne Kite, Stanford Marsh

Session 14 – 2.15pm Stop pitching & start selling - Understanding how to sell, however complex your industrial product

Antonio Falco



SEMINAR ROOM 2 – ELECTRONICS

Tues 21st March

Weds 22nd March

Thurs 23rd March

Session 15 – 10.10am Global workmanship standards within PCB design, fabrication & assembly processes – pathways for excellence

Andrew Farrall / Debbie Wade, Advanced Rework Technology

Session 16 – 11.15am Lean: Driving Efficiency in Business - a Practical guide

Lean means creating more value for customers with fewer resources
Tim Scurlock, Director, Automotive Lean Consulting

Session 17 – 12.30pm Life after Brexit – What next in trade relations & product regulation?

Dr Alex Martin, Edif ERA

Session 18 – 1.45pm The Industrial Internet of Things - Case study examples of how manufacturing across all sectors will change in the future

Case study examples of how manufacturing across all sectors will change in the future

Session 19 – 3.00pm The Shape of Things to Come - How to use design & new product development for commercial success

Alistair Williamson, Lucid Innovation

Session 20 – 10.10am Enclosures, adding real value to machining, printing & keypads

Mathias Bunte, Phoenix Mecano (Bopla) Enclosures

Session 21 – 11.15am Global workmanship standards within PCB design, fabrication & assembly processes – pathways for excellence

Andrew Farrall / Debbie Wade, Advanced Rework Technology

Session 22 – 12.30pm Best Practice & World Class Manufacturing

Ailsa Carson, Onsite Insights

Session 23 – 1.45pm The future of making things & 3D printing

James Newman & Asif Moghal, Autodesk & Cadspec

Session 24 – 3.00pm Life after Brexit – What next in trade relations & product regulation?

Dr Alex Martin, Edif ERA

ElectronicsWeekly

Session 25 – 10.30am Reminiscing on the last 50 years of vibration monitoring

Dr Doug White, DC White

Session 26 – 11.45am CE Marking 2017 & Beyond

Peter Evans, Compliance Engineer, The CE Marking Association

Session 27 – 1.00pm Lean: Driving Efficiency in Business - a Practical guide

Lean means creating more value for customers with fewer resources
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Session 28 – 2.15pm Data Protection, EU or no EU, what should we all be doing?

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Contents

In This Months Issue

SOUTHERN 17 Manufacturing & Electronics

FIVE | Farnborough | Hants | GU14 6XL

PAGE 14 - 15 Front Cover Story

P:4-11 News & Products

P:12-13 Fumes, Dust & Extraction

P:14-19 Southern Manufacturing Preview

P:20-25 Maintec Preview

P:26 Lubrication & Bearings

P:27-31 News & Products

P:32-33 Hire Feature

P:34-35 SAP Conference

P:36-39 Asset Management/CMMS

P:40-41 Pumps & Valves

P:42 News

P:43-47 Buyers Guide

In the next Issue: April/May

- Boilers & Burners
- Condition Monitoring
- Industrial Cooling
- Materials Handling
- Drives & Controls
- Buildings Maintenance
- Latest News
- Product Spotlight
- Technical Articles

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www.industrysouth.co.uk

Versatile Crane Systems Comply With International Regulations & Standards

The crane systems manufactured by material handling specialists J D Neuhaus are designed for arduous operating conditions, and have a proven track record throughout worldwide installations.



Industry applications include oil and gas exploration and processing locations, both on and offshore, where explosion-proof operating conditions are paramount. Utilising an impressive range of compliance standards ensures that the JDN equipment is also suitable for safe operation in a wide range of industrial and commercial activities, meeting the relevant safety standards where appropriate. Examples include, API 7K, Ansi B30.16, ABs, drv Approval Programs, norsok; tensile strength 2.5, dynamic factor 1.33; safety factor 5:1 acc to Ansi B30.16.

These JDN handling products are fully supported by a worldwide servicing operation providing product supply, installation, maintenance and service/repair services with traceability through the JDN unique parts marking system.

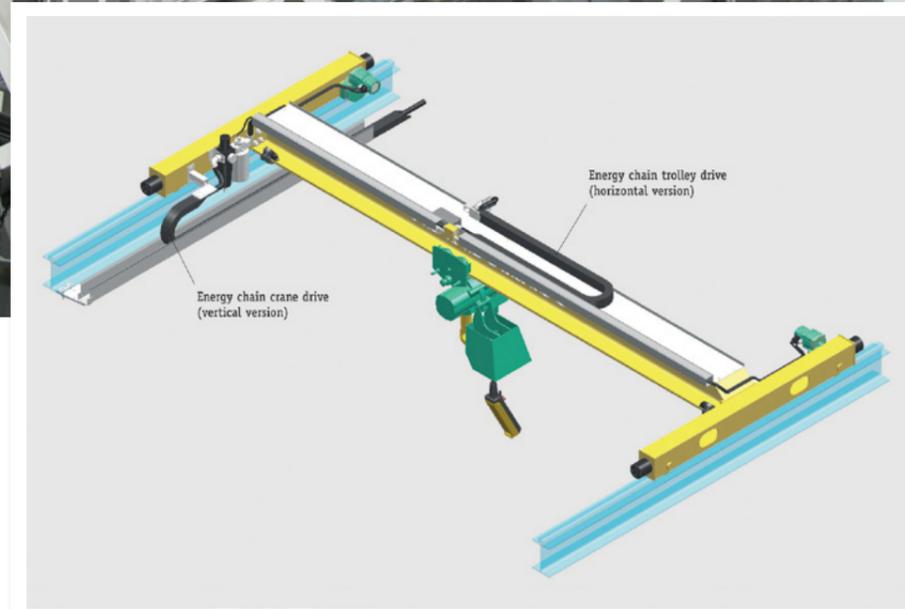
Typical standard crane systems currently available include: overhead cranes with single or double girder design; underhung cranes including low headroom design; jib cranes; cranes with in-line mechanically linked synchronised hoists; cranes with parallel operating hoists; crane capacities up to 100 tonnes; crane operation spans up to 36 metres. All products are suitable for both indoor or outdoor installations with optional power supplies for compressed air or hydraulics.

The J D Neuhaus cranes and hoists are resistant to dust, humidity and aggressive atmospheres as standard, operating within a temperature range of -20°C to +70°C. They provide 100% duty ratings with no downtime and only minimal maintenance requirements. Overload protection and fail-safe braking are incorporated with emergency-stop

safety features. Special limit switch arrangements for end-travel, anti-collision and protected zone status can also be incorporated as required.

Both standard and custom built crane designs can be supplied with crane kits, to fully accommodate customers' design and build requirements. Component kits complete with pneumatic or hydraulic drives can be supplied to crane manufacturers for overhead travelling cranes up to 10 tonnes capacity. The customer simply provides the main girder with JDN supplying all the necessary components for building a crane to their chosen design. Along with hoist and trolleys, JDN provide end carriages with drives, energy feed systems and appropriate safety accessories.

JDN crane systems have been utilised in many general engineering operations ranging from typical heavy duty operations like power plants, refineries, sawmills, foundries, shipyards to even explosives and pyrotechnics manufacture. The Ex classifications applicable to the JDN products



according to EC Directive on Hazardous Locations 2014/34/EU are EX II 2 GD IIA T4 / II 3 GD IIB T4. A higher rating available featuring increased spark protection is EX II 2 GD IIC T4.

Other industries that have less demanding load requirements, but still require explosion protection include chemical and cement plants, sawmills, paint shops, oil storage plants, electro-plating and some aspects of food production where there is potential for dust-laden (and potentially explosive) environments being created.

For general engineering requirements, super-silent operation is available in the hydraulic powered range, while oil or HFC pressure fluids can be used at intake pressures of 100 to 180 bar. Only two supply connections are required per hoist with leakage oil drained internally for maximum safety and cleanliness of the working environment.

The JDN range of compressed air operated hoists, operating at 4 or 6 bar pressure, incorporate integrated overload switch-off functions. They also feature sensitive, infinite controls with controlled load-lowering in the event of power failures.

J D Neuhaus also specialise in the provision of crane systems adapted to suit individual customer requirements. This can include remote radio control of the crane lift and traverse operations, covering comprehensive application requirements and even simultaneous operation of multiple hoists. For lifting operations on offshore rigs or sea going vessels, crane systems can be fitted with rack and pinion drive systems to ensure safe operation during bad-weather conditions. Control boxes with receiver can also be customised to suit specific electro-hydraulic interface requirements, together with all necessary system tubing in stainless steel where required.

Recently introduced nickel-plated hoist units have been introduced for operations where

wash-down cleaning is utilised, such as food and pharmaceuticals manufacture, or wherever other clean-room operating is needed.

Further information is available on request to:
 J D Neuhaus GmbH & Co. KG, 58449, Witten-Heven, Germany
 Telephone: +49 2302 208-219
 Fax: +49 2302 208-286
 e-mail: info@jdnngroup.com
 www.jdnngroup.com

Hi-Line Sees Orders Soar Post Brexit Vote

Hi-line industries, an established and reputable UK manufacturer of high quality compressed air handling and purification equipment is reporting its most successful period ever following the Brexit referendum vote earlier this year.



In fact, at the company's year-end in July, Hi-line's turnover grew at a record 28%. Furthermore, with its new financial year beginning in the summer period, orders have continued to increase at strong levels particularly on large projects.

Since its inception in 1999, Hi-line has expanded year-on-year, enjoying steady double-digit growth. However, the surge in demand for British-manufactured goods since the Brexit vote is unprecedented. Together with a weakening of the pound against the euro, this has stood Hi-line well in the export market. In contrast, competitors in countries like Germany, which is traditionally strong in compressor technologies, are finding it tougher.

Hi-line is witnessing a growing number of companies in Europe using the currency fluctuations to their advantage by buying British. However, from the UK

too, there is growing demand with an increasing number of British brands trying to support other national manufacturers by placing orders in the UK.

The company is part of the Made in Britain campaign and, wherever possible, also chooses to source wholly British materials to build its flagship compressed air purification equipment. As a result, following a strong recruitment drive in December, Hi-line is taking on more engineers and office staff in January to help with the increased demand for their air dryers, adsorption dryers, nitrogen/oxygen generators, filtration equipment and condensate management technologies that 2017 will bring.

Hi-line's UK headquarters are situated in Burton-upon-Trent, a traditional brewery town in the heart of the UK with great transport links. In fact,



Hi-line supplies a lot of compressed air purification technologies to breweries in Burton and the rest of the country, from micro-breweries to international operations.

Hi-line makes some of the most energy-efficient compressed air dryers in the world, and has an enviable reputation for manufacturing the most energy-efficient range of bespoke and 'off the shelf' heat regeneration zero loss adsorption dryers. Furthermore, the company's N2 and O2 generators are recognised as the best value for money in the UK food and beverage industry.

A member of the British Compressed Air Society and carrying ISO 9001:2008 certification, Hi-line has further established their reputation for the innovative design, manufacture, supply and installation of energy-efficient compressed air purification equipment. As Britain's largest stockist of a broad range of air treatment ancillaries – and largest supplier of refrigeration air dryers – the company's products are designed and built to the highest standards of quality by experienced and qualified engineers.

Utilising the latest 3D CAD software design tools, alongside ongoing investment in staff training, Hi-line has both the technology and expertise to develop innovative products. In fact, such is the company's confidence in its high quality workmanship and materials that a five year warranty is offered.

Hi-line also offers a nationwide service department, managing the compressed air requirements of customers across the UK so that they can concentrate on their core business. The service department boasts some of the country's most experienced compressed air treatment service personnel, all of whom are ACRIB-registered engineers trained in all aspects of compressed air and gas generation.

Further information is available from:
Hi-line Industries Ltd,
5 Crown Industrial Estate, Oxford Street,
Burton on Trent, Staffordshire DE14 3PG
Telephone: 01283 533377
Fax: 01283 533367

SD Products - The Official UK Distributor For Ketterer

We are proud to announce the beginning of our official partnership with Ketterer – global specialists in mechanical and electromechanical drive solutions.

Starting from the first of January 2017 SD Products Ltd has become the first official and exclusive Ketterer distributor in the UK.

The company takes its origin with Benedikt Ketterer, who founded his clock making factory in 1832 in Black Forest, a region in southwest Germany famous for high-precision mechanical systems. From the outset, one of the management's goals has been to be in the forefront with new ideas. The result, in



addition to high-precision delicate work for clocks, was the first electricity connection in Baden and the factory's own private rail siding for its material supplies.

The range of products changed over time, and from the middle of the 20th century the company focused on the development and manufacture of mechanisms for various kinds of sun shades. For the past 25 years Ketterer have been making height adjustment mechanisms for office and workshop systems, as well as a wide variety of drive technology components, including motors and controls.

The continuous growth in demand in recent years made it necessary to renovate and expand at the company's site in Furtwangen. The focus was not only on expanding the production area, but also in restructuring operations in order to

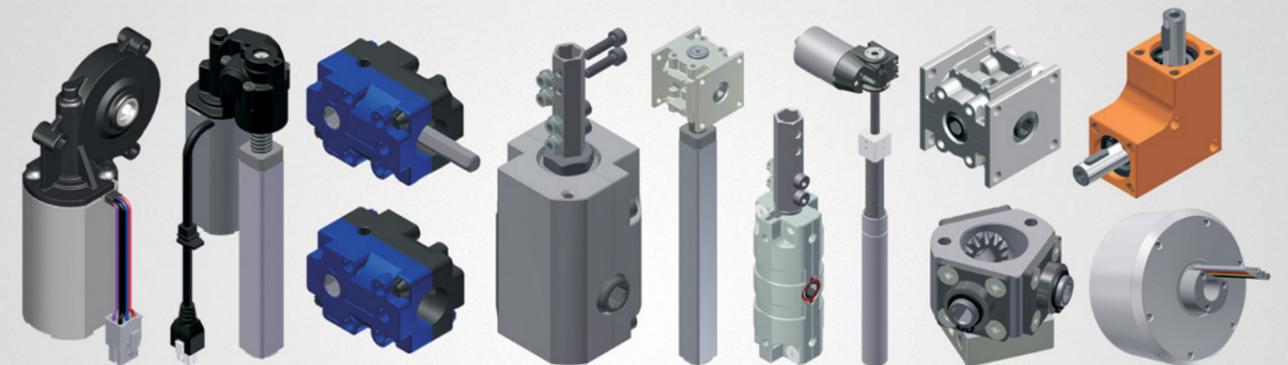


increase productivity while reducing unit costs. The Furtwangen facility now has a workforce of 175 people.

An extensive range of Ketterer products is now available from SD Products. We are excited to be in business with Ketterer and we hope to have a long and successful relationship.

Visit: www.sdproducts.co.uk

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DRIVES



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WWW.SDPRODUCTS.CO.UK

Polynom AG acquire majority share holding interest in leading UK self testing emergency lighting specialist, P4 Limited

Leading self testing emergency lighting manufacturer and supplier, P4 Limited has announced the sale of a controlling interest in the company to Polynom AG, the Swiss holding group of emergency lighting module manufacturer Sander Elektronik AG, based near Baden in Switzerland, who have supplied P4 since it was founded.

The sale of equity in P4, was brought about by the retirement of founder and Chief Executive, Peter Warner and his wife, Financial Director Maureen Warner. Founded 27 years ago, P4 Limited has grown to become the leading independent self testing emergency lighting company in the UK.

P4 specialises in providing self testing emergency lighting, most of which is connected via wired or wireless networks and installed in major healthcare, education and commercial establishments to provide remote monitoring and control, ensuring compliance with legal requirements.

The acquisition of shares from Peter and Maureen Warner gives Polynom a majority shareholding in P4, the remaining shares being held by the directors of the business. Day to day operation of the business will continue to be managed by the current team.

Managing Director of P4, Rob Warner commented **"The acquisition by Polynom is excellent news for P4, it secures the future of the business, ensuring that the strategy of providing high integrity emergency lighting solutions, that has**



proven to be successful over the years, can continue unchanged. Sander Elektronik has proved to be an ideal supplier to P4 since we started in the emergency lighting market and we have worked very closely together. We are commencing a new phase in our business and excited by the opportunities to develop new technology, monitoring and control systems to further reduce user operational costs"

For more information contact
Rob Warner at P4. Tel: 01328 850555
or rob@p4fastel.co.uk
Visit: www.p4fastel.co.uk

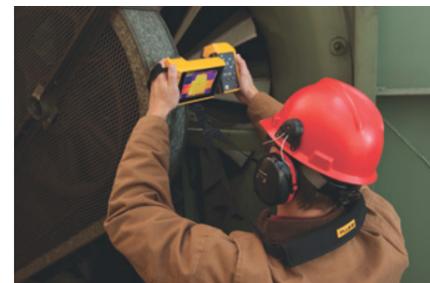
Fluke integrates IR camera temperature data with LabVIEW and MATLAB software for seamless analysis and reporting

High-resolution infrared data from multiple Fluke infrared cameras enhances advanced R&D analysis

Infrared measurement adds important and often revealing data to certain types of R&D analysis, but it hasn't always been easy to incorporate these measurements into experiments and reports. To close that gap, Fluke has introduced a new software feature that integrates high-resolution thermal data from the company's TiX580 and TiX560 infrared cameras with National Instruments' LabVIEW and MathWorks' MATLAB software, leveraging the strength of those powerful platforms and making it easy to add high-resolution infrared data, video and images to R&D analysis and reporting. More information can be found at www.fluke.com/infrared-r-and-d which also provides links to the two cameras.

Once installed, the software allows continuous download of pixel-by-pixel, high-resolution radiometric data. R&D professionals can now use any of these two highest-resolution Fluke infrared cameras to thermally capture video and port the video data frame-by-frame into their MATLAB or LabVIEW software, and monitor it over time, identifying very small temperature changes that could indicate problems.

The TiX580 Infrared Camera, the newest addition to the Fluke high-resolution line of cameras, features 640 x 480 resolution for high measurement accuracy and an intuitive interface, making it easy to use for electronic design and validation, material science

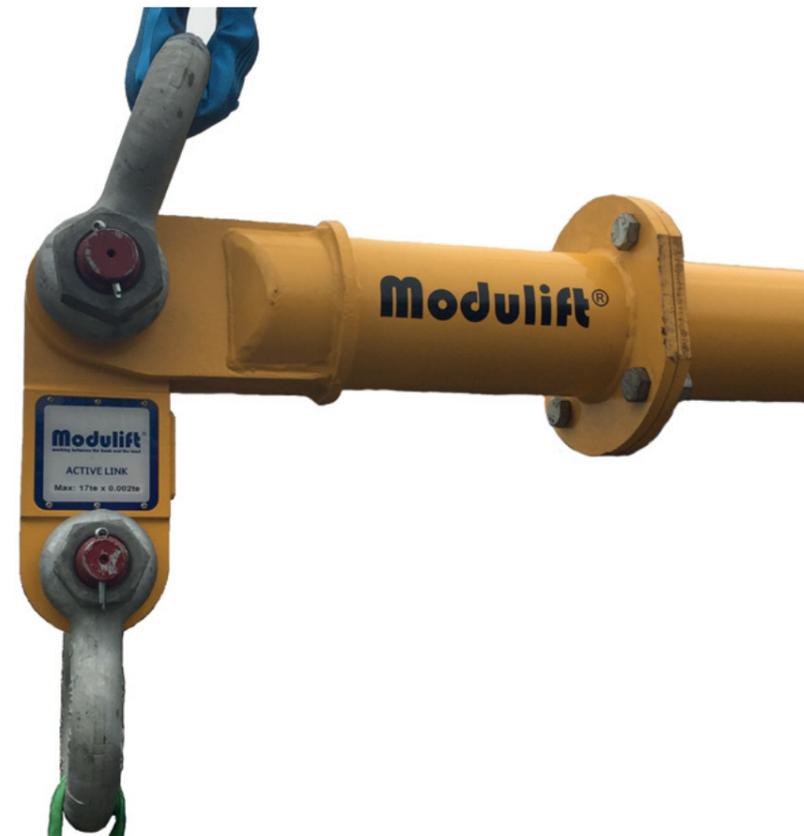


evaluations, and thermal modeling. Designed for exacting R&D engineers, scientists, and researchers, the TiX580 features a 240-degree rotating screen that allows R&D professionals to easily perform non-destructive testing over, under, and around objects to preview and capture images with ease.

Information about all other Fluke products can be obtained via the Fluke web site at www.fluke.co.uk.

Modulift Revolutionises Load Monitoring Capabilities with New Active Link Spreader Beam

The Active Link is an innovative new end unit system with an integrated load cell, compatible with the existing range of Modulift spreader beams.



from MOD 12 to MOD 70H; the initial range will be AL 12, AL 24, AL 34, AL 50, AL 70 and AL 70H. The new drop links are designed to fit standard end units, as well as the standard top and bottom shackles specified for the spreader.

Chris Schwab, sales manager at Modulift, said: "We recognised that if we could supply a spreader with a built-in load cell, eliminating the need for additional force measurement devices and associated rigging, it would be welcomed by the industry"

He added: "Our marketing and engineering departments agreed there was a market for it, particularly among customers who lead the way in best practice. It felt like a good idea at the time and I'm delighted that my sales colleagues and I can now promote the concept to industry influencers and decision makers."

Upon consensus that the Active Link concept was worthy of further exploration, a prototype was designed and extensive tests were subsequently conducted over a six-month period either side of the turn of the year. Modulift is now welcoming orders and enquiries.

11 New Field Business Park,
Stinsford Road, Poole, Dorset, BH17 0NF,
United Kingdom
Tel: +44 (0) 1202 621511
Email: sales@modulift.com

It will provide wireless real time data by measuring the load at either end of the spreader beam and is ideal for both weighing and dynamic load monitoring. Data is transmitted wirelessly to a USB transceiver that must be connected to a Windows computer or tablet with a spare USB port.

The Active Link, which replaces the standard drop link component, presents a myriad of benefits with time, cost and weight savings all attributable to the fact that measurement technology doesn't have to be sourced as an additional rigging tool. Another standout feature is that the height of rigging is significantly reduced, especially beneficial in low headroom applications.

Modulift has worked closely with load monitoring and load cell equipment specialist Straightpoint to integrate its strain gauge technology into the new spreader beam concept. David Ayling, director at Straightpoint, said: "Rigging a load cell into a crane or lifting application takes up space that can otherwise be removed by incorporating the load cell in the beam itself." He added: "In the case of a Modulift spreader beam, the drop link lends itself perfectly to the adaptation and the product makes a lot of sense to both manufacturers."

The Active Link is available in a range of capacities up to 100t based on standard Modulift beam sizes

Medium Voltage Drive Combines Robust Performance With Ease-Of-Use

A cabinet-built medium voltage AC drive rated from 6 to 11 kilovolt (kV), 200 kilowatts (kW) up to 6,300 kW and for use across many industries such as cement, power generation and water is available from ABB.

The ABB drive, ACS580MV, features a new generation of cascaded h-bridge technology which offers superior harmonic mitigation.

The drive's power loss ride-through ensures reliable, robust operation against weak network performance. The drive's ability to ride through short main supply voltage interruptions means that in most cases, the process is unaffected.

Features like IP42 redundant cooling fans and an advanced preventive warning system ensure highest reliability even in harsh industrial environments. The

plug-in fieldbus adapter modules enable connectivity with all major automation systems.

The control panel's settings menu and assistants help operate the drive effectively. The menus are clearly named by function, such as motor, ramp and limit settings. The Drive composer PC tool offers extensive drive monitoring and process tuning capabilities. The PC tool is connected to the drive's control panel via USB or Ethernet interface.

The built-in energy calculators, including used and saved kWh, CO2 reduction and money saved, help



the user monitor and fine-tune processes to ensure optimal energy use.

The standardised interface for fieldbus, I/O's, cable entry and breaker control in combination with emergency off and emergency stop functions ensure easy and safe drive operation.

For more information:
Layla Hewitt, Tel: 01925 741111
layla.hewitt@gb.abb.com
www.abb.co.uk/energy

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Glasgow Firm Does Its Bit To Help Save The Planet

To coincide with the relaunch of GAP Hire Solutions Green Action Plan, the firm donated £1,000 to environmental charity World Wildlife Fund (WWF) Scotland, which is working to make a difference by tackling the issues facing our planet today.

The WWF Scotland panda and Head of Communications Lexi Parfitt visited GAP's Head Office in Glasgow to receive the generous donation from Head of GAP one Shaneen Waddell.

Lexi commented: "We're delighted to receive this generous donation from the team at GAP. This will help us continue our work to tackle climate change and help to shape a low carbon future where people and nature thrive."

GAP donates 0.5% of its annual profit to charitable causes. For the financial year 2016/2017, their Charitable Foundation GAP Giving has already donated £71,365 to around 80 charities across the globe.

The new Green Action Plan highlights the steps that the UK's largest independent hire company are taking to be commercially responsible and reduce the impact that their operations have on the environment. The document details their achievements to date and covers a range of topics from vehicle emissions and waste disposal to responsible procurement and pilot innovations.

GAP's Green Action Plan is available to download.
More information on the work of WWF Scotland is available on their website.

Speedor Storms for Dunstable

Hart Doors Systems has completed the installation of two Speedor 'Storms' at a recently opened packing and distribution facility for a major online retailer.

The doors were installed to keep a stable working environment within the 310,000 sq ft fulfilment centre on Prologis Park, Boscombe Road, Dunstable.

Mark Richardson, Hart's South East sales manager, says the Speedor 'Storm' variant of Hart's leading high-speed door range is a popular choice where exceptional wind resistance up to Class 5, that is over 90 mph, is required.

Mr Richardson says: "Both doors measure 4.3m wide by 5m high. The system has been through rigorous testing without any issues arising. This is achieved through a reliable and clean direct drive system complete with integral safety brake."

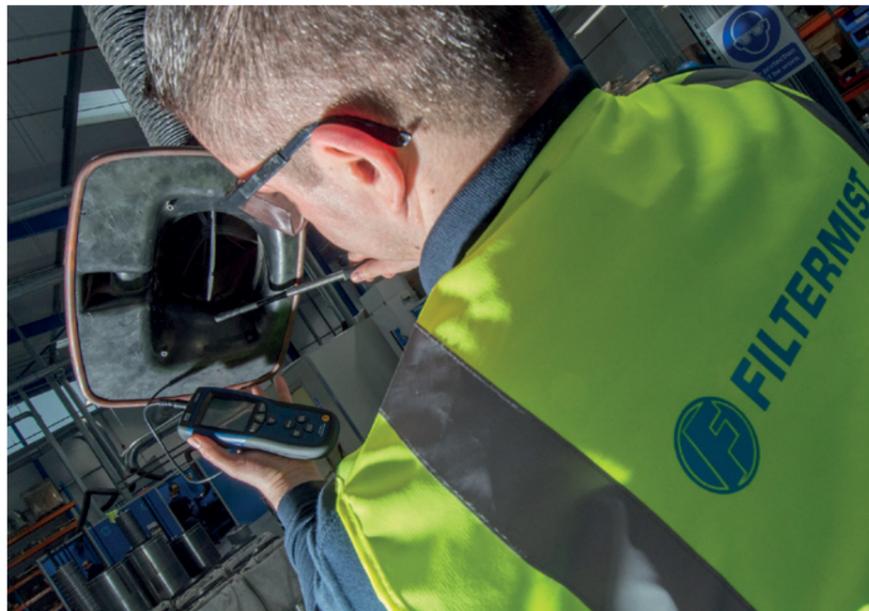
Speedor Storm conforms with ISO9001/3 and the machinery directive for power operated doors, BSEN 12453 - 2001

www.hartdoors.com tel: 0191 214 0404



Is Your LEV Test Report As Comprehensive As It Could Be?

As people that live and breathe (no pun intended!) Local Exhaust Ventilation (LEV) testing, Filtermist's dedicated LEV engineers are still sometimes surprised by the varying levels of competency they encounter when talking to customers about their experiences of LEV testing.



Anyone responsible for ensuring workplace air is safe already knows that all LEV systems are subject to a number of legal requirements.

The Control of Substances Hazardous to Health (CoSHH) Regulations 2002 Regulation 9 states that in addition to testing by a competent person at least once every 14 months, 'every employer shall keep a suitable record of the examinations and tests...and of repairs carried out as a result of those examinations and tests, and that record or a suitable summary thereof shall be kept available for at least 5 years from the date on which it was made.'

LEV Engineer Jamie Allen elaborates, "HSE recommends including a wide range of information in LEV test reports to ensure an accurate record of both the LEV system and the examination results.

"It seems like common sense to experienced LEV engineers to include as many details as possible, but we still hear from customers who have been given a

one-page summary sheet as the outcome of an LEV test. This is all very well until there is a problem and it proves difficult to back-track and cross-reference with previous test results."

Filtermist has carried out LEV tests for some customers who have already had equipment tested, but felt the service was not as stringent as it might have been. Jamie continues, "Some employers double-up on their LEV testing to ensure their systems are working properly. They may receive the service as part of their business cover through their insurer, but still pay for a third party to carry out additional tests for their own peace of mind. We recently came across an example of this with a customer in Sheffield - they had already had an LEV report done through their insurer, but they weren't happy with the quality of the report.

"We re-tested all LEV systems on site and made some recommendations on the basis of our findings. On this occasion nothing serious was found, but if

the customer implements the suggestions we made they will be able to improve the operating efficiency of at least two of their LEV systems."

All LEV Test Reports compiled by Filtermist include the following information:

- Initial risk assessment
- Safety policy
- Method statement
- Customer name and date examination took place
- Reference number for system that the report relates to
- Substance / process being controlled
- A photo of the LEV system and product reference
- Details of the systems intended performance
- Test point details
- Quantitative assessment readings and details of any repairs required
- Statement of competency for the Test Engineer
- Safety policy
- Report observations and recommendations for improvement

"LEV Test Reports play a vital role in ensuring the control measures taken by an employer are working as intended and safeguarding employees from potential exposure to substances hazardous to health," Jamie comments.

Whilst Filtermist's background is in effective oil mist removal, it also has extensive experience in dust, fume and smoke extraction and its dedicated LEV team provides CoSHH compliant LEV testing for all makes and models of LEV systems.

Email lev@filtermist.com or call 01952 209967 to book CoshH compliant LEV Testing from Filtermist's P601 accredited engineers.

Ensuring Air In Industrial Workplaces Is Free From Hazardous Airborne Contaminants

Established in Shropshire in 1969, Filtermist provides a wide range of products and services designed to ensure the air in industrial workplaces is free from hazardous airborne contaminants.

Manufacturing processes including milling, drilling, turning and grinding all generate oil mist, whilst a wide range of operations produce other harmful pollutants. Oil mist, smoke, dust and fume can be hazardous to health and pose a fire and slip risk if left in the atmosphere.



Filtermist effectively removes all types of airborne contaminants from workplace air. Its comprehensive service includes extraction system design, specification, equipment manufacture, supply, installation and commissioning.

Air monitoring, routine maintenance and CoshH compliant LEV Testing for all types of air extraction equipment are all included in Filtermist's extensive nationwide aftersales service.

Visit www.filtermist.co.uk for more details.

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- Airflow indicators
- CoSHH compliant LEV Testing

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Find Your Solution At Southern Manufacturing 2017

Southern Manufacturing & Electronics returns to FIVE, Farnborough on new dates of the 21st to 23rd of March 2017.



New, more convenient dates in early Spring and some significant improvements to the site's infrastructure serve to make the show more accessible than ever.

Southern Manufacturing and Electronics is without doubt the UK's top annual industrial equipment show. At around 18,000 square metres, and once again hosting around 800 exhibitors, Southern 2017 continues to offer one of the best opportunities of the year to solve multiple sourcing issues in a single, time-efficient visit.

While the size of the show is certainly impressive, what really makes it such a worthwhile event is the broad selection of companies taking part. The scope of the show covers pretty much every aspect of industrial activity from machinery to components, consumables and a huge variety of engineering

services. And it's not just companies from the South taking part either; the size of the show means that it figures prominently in the calendars of numerous major global manufacturers as well as a respectable number of vendors from continental Europe and beyond.

For maintenance engineers, the show offers plenty to see, from parts and components to consumables. Global brand names are augmented by hundreds of smaller suppliers between them catering for pretty much every conceivable need. Igus UK returns with live demonstrations of its maintenance-free lightweight bearings and cable management systems. Highlighted will be its new Compact Rotation Module, a system that guides power, signal and fluid power lines through rotational movement. Another well-known name in cable management, Kabelschleppe Metool, showcases an impressive

range of solutions from miniature parts for electronic printers to huge steel carriers for the oil industry. Highlights this year include its TraxLine dynamic cabling systems, and TotalTrax complete turnkey solutions.

Fluid power component suppliers exhibiting include Pneumax. Three new product ranges will be launched at the show; a range of power clamps designed for automotive applications, a range of 316 stainless steel products for the oil & gas industries, including ATEX-certified filters, regulators and valves, and a comprehensive range of vacuum components. Hydraulic and pneumatic systems can also be found on the stand shared by The West Group and Metal Work UK. Examples include hydraulic components, actuators, EB80 valves and control units. Flow Technology is an ISO9001:2008 accredited firm manufacturing a wide variety of stainless steel and high-nickel components used in a broad range of hydraulic and hygienic applications.

As the name implies, the electronics side of industry is also extremely well represented, with an equally wide variety of suppliers taking part. Numerous examples of every type of component and OEM part will be on show at Southern Manufacturing 2017 including thermal management products from Aavid Thermalloy and G. English Electronics; connectors from Yamaichi, Molex, Coax Connectors and ODU; Springs from European Springs & Pressings and Lee Spring; LCD displays from Craft Data and Midas Components; EMC parts from Kemtron and literally thousands more.

The show is also a great place to locate hardware to improve works management and efficiency. Filtermist International will highlight products for the removal of oil mist, dust, smoke and fumes. Its recent acquisition of Multi Fan Systems means the company can also offer VOC abatement, evaporative cooling, ventilation and cooling, production waste extraction, vacuum cleaning and conveying services. Leading vibratory finishing specialist PDJ Vibro will promote its comprehensive range of new and refurbished bowls, barrels and



high energy centrifugal equipment, as well as the vast range of consumables and the company's repair and subcontract finishing services.

Industrial fixtures and fittings are also well represented. Yaplex and Scaglia Indeva return with a wide range of manual handling equipment, and there's storage systems from SSI Schaefer. Brady will highlight its range of industrial printing and labelling systems; there's air conditioning and

industrial ventilation systems from the Clean Air Group and waste management services from CSG. Industrial consumables are represented by firms such as Ambersil and Henkel Loctite, and there's also suppliers of industrial oils such as Q8 Oils and Wyse Oil.

Finally, the show's ever-popular free seminar programme provides the chance to rest weary feet and engage the grey matter. The programme

for 2017 offers its customary high standard of presenters drawn from industry, academia and commerce, and is designed to appeal to anyone involved in engineering or manufacturing. Topics addressed range from advice on Lean, effective design and selling technical products, to reviews of the latest advances in manufacturing technology. A total of 28 sessions over three days will include an overview of advanced manufacturing and 3D Printing, enclosure design, Industry 4.0 and the regulatory significance of the Brexit vote amongst others. All of the sessions are free of charge, although pre-booking is definitely recommended. A complete listing of sessions and the online reservation form is available at www.industrysouth.co.uk



Entrance to the show and seminars is free of charge, and FIVE Farnborough offers abundant free parking. There's straightforward access by road from the M3 or by public transport. A free shuttle bus connects the show and both of Farnborough's railway stations. To sign-up for tickets, simply visit www.industrysouth.co.uk. Visitors can stay informed with the current show and exhibitor updates by going to the event's official blog, <http://blog.industrysouth.co.uk>, by following @industry_co_uk #southmanf on Twitter or by becoming a member of the show's official LinkedIn group at LinkedIn at <http://linkedin.industrysouth.co.uk>

SOUTHERN 17 Manufacturing & Electronics

FIVE | Farnborough | Hants | GU14 6XL

21st – 23rd March 2017
9.30am – 4.30pm (3.30pm close Thurs)

The UK's top Manufacturing and Industrial Technology Exhibition

Meet over 800 national and international suppliers under one roof in Farnborough this March at Southern Manufacturing & Electronics (inc AutoAero) 2017.

See live demonstrations and new product launches of machine tools & tooling, electronics, factory & process automation, packaging & handling, labelling & marking, 3D printing, test & measurement, materials & adhesives, rapid prototyping, ICT, drives & controls and laboratory equipment.

Free industry seminar programme online @ www.industrysouth.co.uk

The exhibition is **free** to attend, **free** to park and easy to get to. Doors open at 9.30am on Tuesday 21st March.

Pre-register online now for your free entry badge and show preview at www.industrysouth.co.uk

SOUTHERN MANUFACTURING & ELECTRONICS is an ETES event organised by European Trade & Exhibition Services Ltd
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etes Regional Manufacturing Exhibitions

Filtermist Heads South To Highlight The Importance Of A Comprehensive Approach To Clean Workshop Air

Clean workshop air specialist Filtermist will be highlighting the importance of both fitting and maintaining effective extraction and filtration systems to protect people from harmful airborne contaminants on its stand (Q128) at Southern Manufacturing.

Record breaking year

Stuart continues, "Despite market uncertainty around Brexit, Filtermist experienced a phenomenal 12 months. Export trade was a significant factor, but we also performed exceptionally well in the UK across all of our divisions.

"2016 saw a number of changes at Filtermist. The acquisition of Filtertech and a deal with Plasteel in the first half of the year has enabled Filtermist to significantly strengthen its service and LEV testing offering, whilst the recent acquisition of Multi Fan Systems means we are now able to offer a range of additional services including VOC Abatement, Cooling and Ventilation and Production Waste Extraction."

Representatives from Multi Fan Systems will also be available on Filtermist's Southern stand to discuss the range of services it offers. Multi Fan Systems specialises in customised air movement systems and has extensive experience of designing, installing and commissioning centralised extraction systems.

"Southern Manufacturing provides an ideal opportunity for us to tell manufacturers about all of the changes Filtermist has undergone since this time last year," concludes Stuart. "2016 was an unprecedented year for us as a company and we have equally ambitious plans for 2017 and beyond."

Find out more about all of the products and services Filtermist offers in the UK by visiting www.filtermist.co.uk.



Filtermist's Director of Sales, Stuart Plimmer, comments, "As well as our world-renowned oil mist filters, in the UK we offer a comprehensive range of products and services that all have the same aim - to protect people by ensuring cleaner, safer, more productive workshops.

"Fitting effective extraction is key, but under CoSHH regulations, employers are also responsible for ensuring control measures work as intended and employees are required to report any defects 'forthwith'. We work closely with many of the UK's leading manufacturers to ensure their facilities are safe. Routine servicing, LEV testing and air monitoring are just as important as having an extraction system in place."

How clean is your coolant?

Maintaining coolant cleanliness can also contribute to the overall quality of the working environment – a fact which Product Manager Grant Tyrer from Direct Filtration, an operating division of Filtermist, will be discussing with show visitors.

"Using the best type of media to filter process fluid will ensure the coolant stays cleaner for longer," says Grant. "Simple changes such as switching the type of filter media used can bring a number of benefits including reduced costs, less machine downtime and cleaner working conditions."

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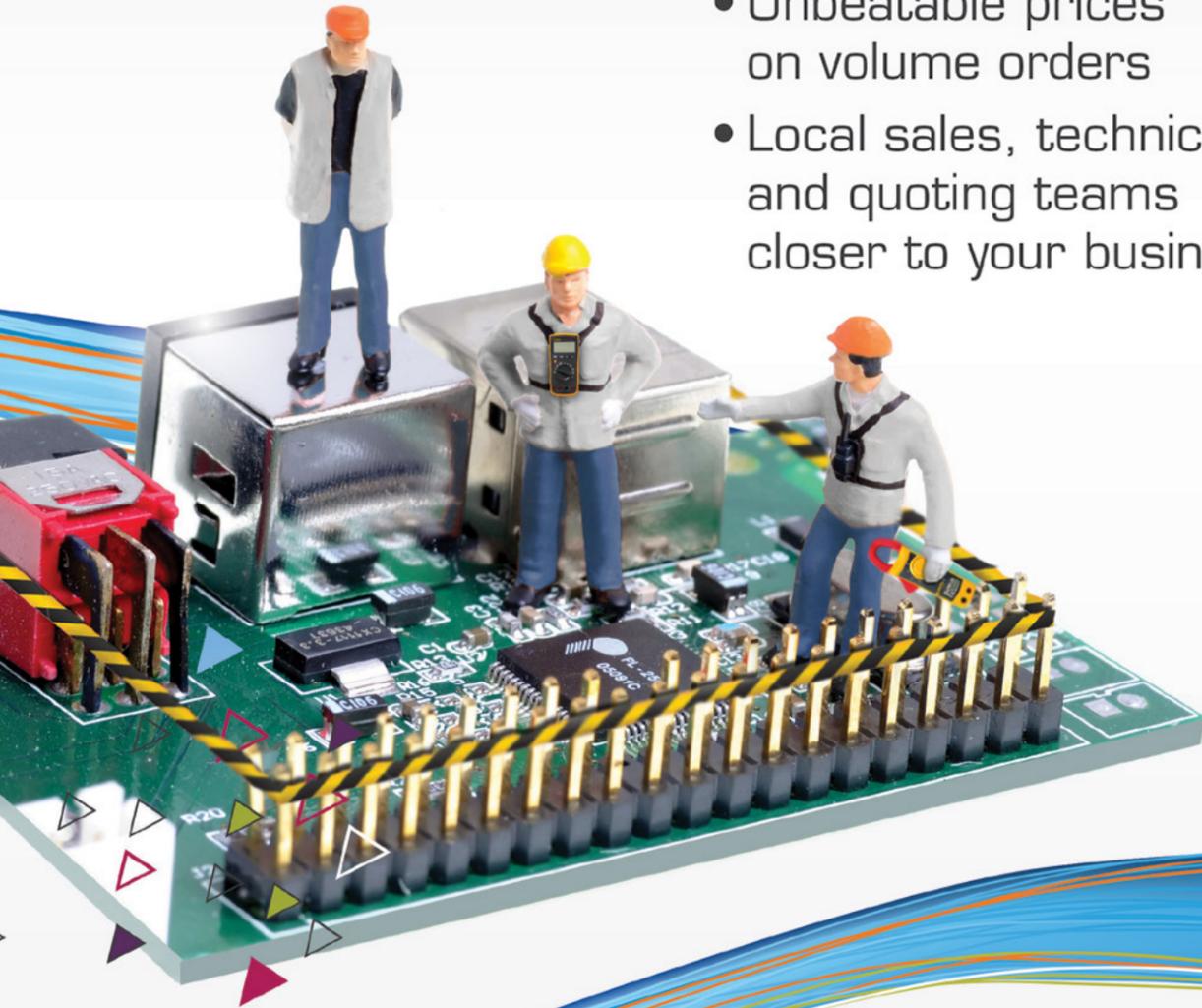
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Farnell Element14 Announces Attendance At Southern Manufacturing Show With Schneider Electric

Farnell element14, the Development Distributor, will highlight its electromechanical proposition at Southern Manufacturing Show in conjunction with Schneider Electric between 21st and 23rd March 2017.



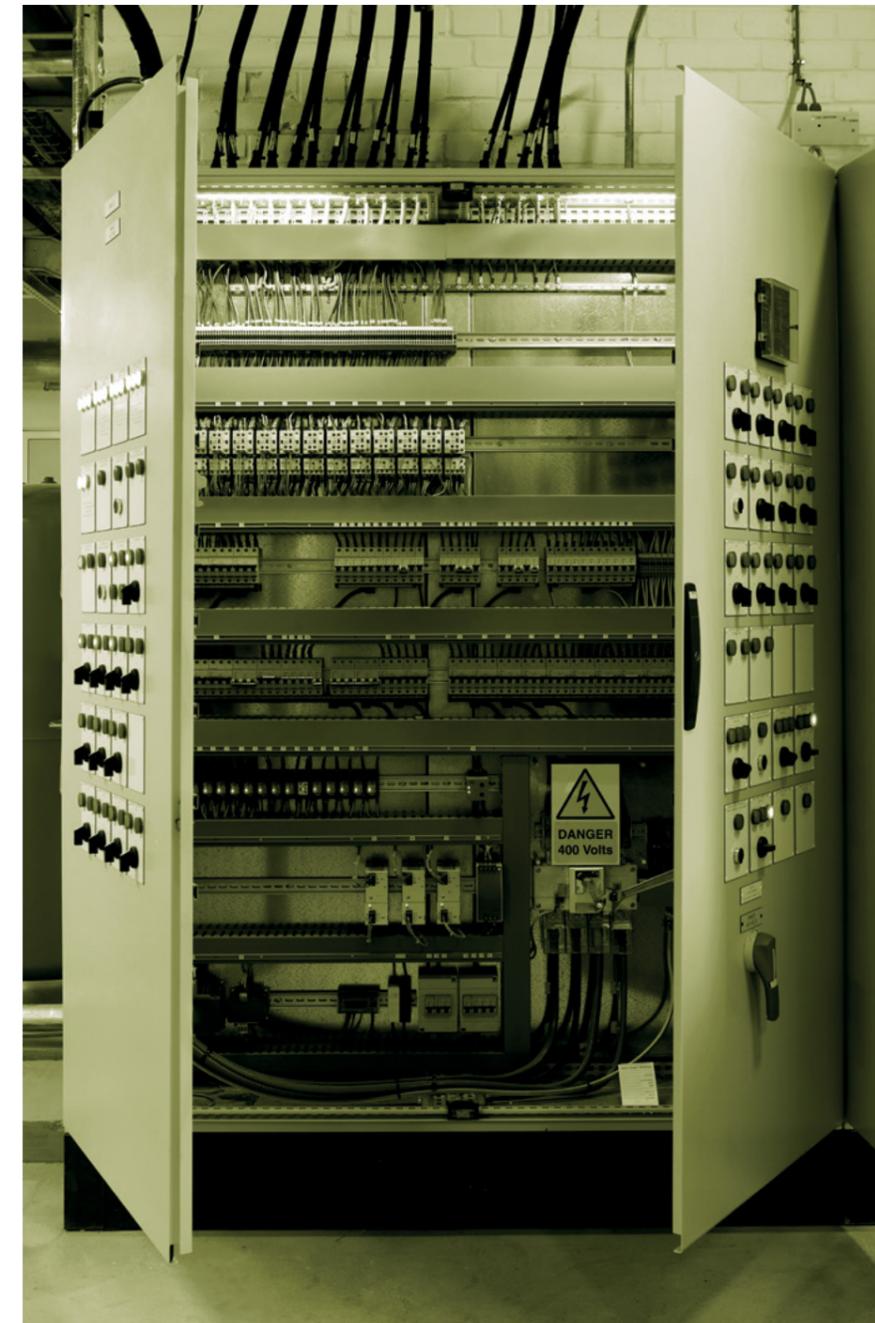
Farnell element14's presence at the show will demonstrate its significant knowledge on sensors, high value relays, beacons and buzzers available to its potential customers.

As the Development Distributor, Farnell element14 supports engineers to develop products faster and more efficiently through its vast product offering, Design and Manufacturing services and Sales and Marketing teams.

Premier Farnell has invested in extending its product range and inventory as well as production-ready packaging options to original equipment manufacturers (OEM) and contract electronic manufacturing (CEM) customers, building its range to suit the manufacturing world.

Peter Birks, European Business President, said: "We have the technical support capabilities to meet all customers' needs, from simple cross-reference to complex design making us a perfect choice to partner with. We recognise the importance of local service and have a number of field sales executives available to work through your requirements."

Visitors can play on the bespoke arcade games built from a Raspberry Pi 3 with a chance to win a prize each day.



<http://uk.farnell.com/>
<http://www.schneider-electric.co.uk/en/>

Maintec 2017

The Future Of Maintenance Engineering

21 – 23 March 2017, NEC
Birmingham, B40 1NT

Maintec, the UK's premier event for the maintenance and asset management community, is undergoing a radical makeover.

2017 will see a 'new look' educational programme for the show featuring two new theatres, Maintec Dialogue and Maintec Summit packed with keynote speakers and high-level free to attend seminars.

During the three days of the event, enjoy free-to-attend educational conference and seminar content from industry leaders and engineering pioneers discussing the IIOT, smarter factories and the impact, challenges and opportunities facing the maintenance engineering community. Through two new theatres, Maintec Dialogue and Maintec Summit, the seminar programme will give attendees best practice advice on reducing downtime, energy management and lowering repair costs.

Maintec 2017 will discuss how the Internet of Things will change the face of Maintenance Engineering

The digitisation of manufacturing and the transformation in the way that products are serviced through the Internet of Things (IoT) are just some of the forward-looking trends that will be discussed at Maintec 2017, the UK's leading maintenance and asset management show.

The event takes place at Birmingham's NEC from 21-23 March, and will also be accompanied by a wide-ranging educational programme, featuring global perspectives on topics such as predictive maintenance and remote monitoring.

IoT will be a dominant theme at the show. The fitting of myriad equipment with sensors, and the ability to collect, transmit and interpret data in real-time, is enabling improved connectivity across industrial environments. It will provide companies with far better visibility of their assets, bringing the potential for smarter factories based on preventative maintenance methodologies.

"The move towards predictive methodologies means the maintenance role will become less about how

accompanying the event. "We felt it was important to increase the educational aspect of Maintec to reflect the rapid pace of technological change in the industrial sector," says Tim Else, Event Director. "IoT is set to revolutionise the way that modern maintenance engineers go about their daily tasks and it's important that this trend features prominently at the show."

Confirmed speakers include Steve Brambley, a director at Gambica, the trade association for instrumentation, control, automation and laboratory technology in the UK, who will speak about smart maintenance, focusing on how the industrial base can get involved with IoT demonstration efforts. Professor Rajkumar Roy, director of Through-life

"Maintec 2017 will discuss how the Internet of Things will change the face of Maintenance Engineering"

quickly employees can fix assets, and much more about preventing equipment from failing in the first place," says Lee Hibbert, industry analyst and content curator for Maintec 2017.

Maintec will also focus on how IoT will transform the way that equipment is monitored and repaired out in the field. For maintenance professionals, the increased connectivity will prompt the use of new technologies such as augmented reality and wearable devices, changing the way they perform their daily roles, and moving them up hierarchical structures.

These are also some of the topics, which are included in the extensive conference program

Engineering Services Centre, Operations Excellence Institute at Cranfield University, will speak on how digital technologies will underpin the concept of continuous maintenance, focusing at the foundations and technologies required to offer such service.

Meanwhile, Cyril Deschanel, head of IoT in Northern Europe for Vodafone, will discuss the role of IoT-enabled technologies in supporting reliable preventative maintenance programmes, while Chris Mitchell, principal consultant at US-software giant PTC will look at how augmented reality and wearable technology will change the way that factory equipment is maintained.



In addition to the conference activities, the exhibition halls at Maintec also promise to be packed full of clever companies showcasing interesting technology. Maintec 2017 is expected to feature more than 100 exhibitors, covering a wide range of sectors including electric motors, pumps, lubricants, hydraulic equipment, vibration analysis software and safety products. There will also be interactive demonstration areas, where visitors can view machinery and safety equipment in operation.

The show is expected to attract more than 5,000 delegates from leading companies. Maintec 2016, for instance, had visitors from blue-chip companies

such as Jaguar Land Rover, Bentley Motors, Rolls-Royce, Network Rail and Robert Bosch.

Prioritise your visit to Maintec 2017

Whether your business covers multiple sites or is focussed in a particular region of the U.K., no venue can compete with Birmingham's NEC for accessibility. Situated at the heart of our transport networks no venue is better connected, which is why the NEC is the obvious choice when we bring the MRO community together in March.

New for 2017

We know just how valuable your time is and are therefore committed to the continuous improvement of the educational content we provide. Our range of conference and seminar topics is designed to inspire you to be heard and affect real workplace enhancement. Delivered by engaging and thought provoking individual speakers as well as carefully created expert panels, we provide the chance to exceed your CPD requirements without any delegate fees - entry is free to qualifying professionals who register online in advance.

Maintec is strategically co-located with 3 complementary exhibitions, all organised by the same team:

- The Health & Safety Event
- The Fire Safety Event
- Facilities Management

With access to over 400 exhibitors and no fewer than 8 focused educational theatres, these events combine to provide your Maintenance, FM, Safety, and Security teams with direct access to a compelling, entertaining and valuable visiting experience.

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BLUE CHIP COMPANIES AND KEYNOTE SPEAKERS COMMIT TO MAINTEC 2017

UK's premier maintenance exhibition boosted by packed conference programme

A host of blue chip companies and prestigious trade associations have signed up to support Maintec 2017, the UK's premier maintenance and asset management exhibition and conference.

The Institute for Automotive & Manufacturing Advanced Practice and the Association of Electrical and Mechanical Trades will be in attendance at the show, which takes place at Birmingham's NEC from 21-23 March. The Society of Diagnostic Engineers and the British Compressed Air Society will also be represented at the event.

Maintec 2017 will also be underpinned by a wide-ranging conference programme, amounting to more than 15 hours of free seminars and round-tables with more than 30 industry figures. Confirmed speakers include:

- **Steve Brambley**, Director, Gambica
- **Professor Rajkumar Roy**, Director of Through-life Engineering Services Centre, Operations Excellence Institute at Cranfield University
- **Chris Richards**, senior business environment policy adviser, the EEF manufacturers' organisation
- **Cyril Deschanel**, Vodafone, Head of Internet of Things in Northern Europe



- **Chris Mitchell**, Principal Consultant, PTC
- **David Wright**, Director General, United Kingdom Lubricants Association

The conference theme and activities are being guided by the publication of new research that addresses how the Internet of Things (IoT) is set to change the way that maintenance engineers go about their roles. The research is presented in the form of a whitepaper - The Future of Maintenance Engineering: How the Industrial Internet of Things Will Deliver Smarter Factories with Reduced Downtime and Lower Repair Costs – which will be distributed free-of-charge to delegates.

"Maintec 2017 is attracting some major names and will be the must-attend show in the maintenance sector," said Tim Else, Event Director. "Maintec is strategically located with three complementary exhibitions – The Health and Safety Event, The Fire Safety event, and Facilities Management – so visitors can really make the most of their time away from their day jobs. Overall, there will be more than 400 exhibitors, with no fewer than eight focused educational theatres."

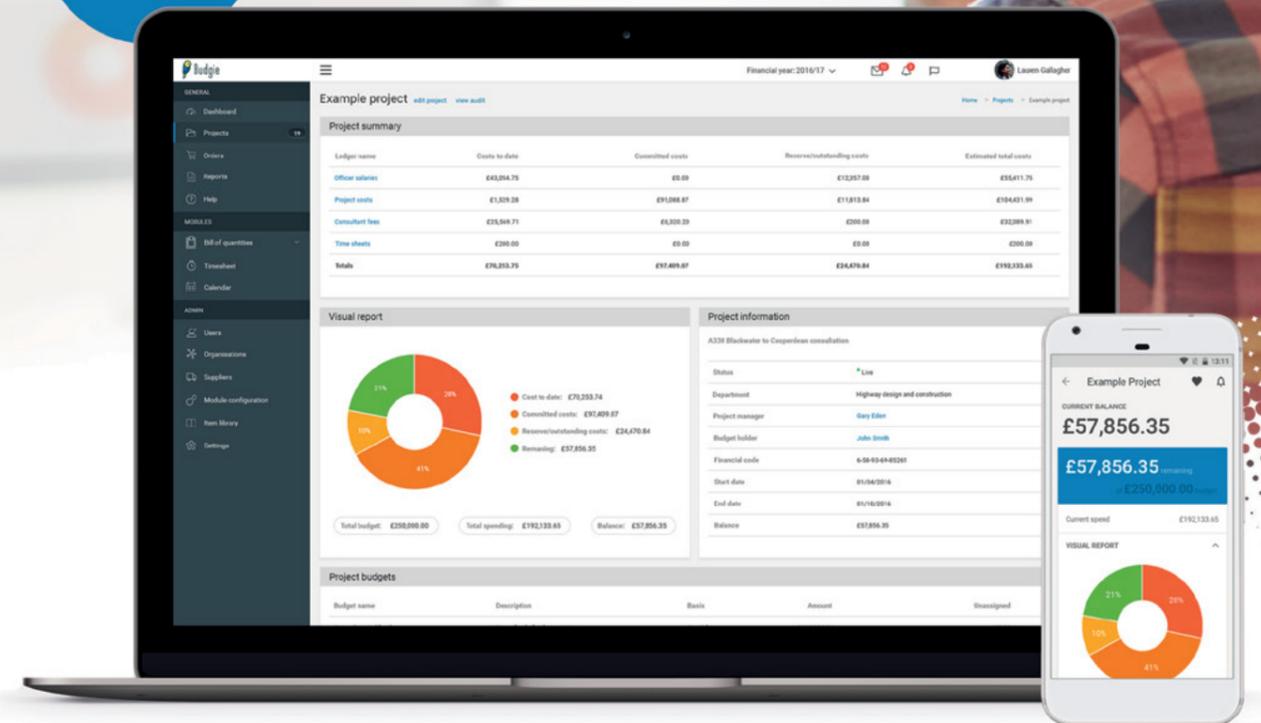
For more details go to www.maintec.co.uk

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SPM Instrument presents HD Enveloping®

A new era in vibration monitoring SPM Instrument, Sweden, leading worldwide provider of condition monitoring technology and products, now announces the launch of HD Enveloping®, a new high definition vibration enveloping technique for detection of early stage gear and bearing faults.



A new achievement in vibration monitoring technology, HD Enveloping® is an ideal complement to traditional vibration analysis. Capable of detecting at a very early stage such machine problems which are generally difficult to find in good time with conventional non-enveloping techniques - for example gear and bearing damages - the method utilizes cleverly engineered and patented algorithms for digital signal processing, preserving the true highest peak of the vibration signal. Signals buried in machine noise are revealed through high definition digital enveloping, extracting and enhancing the signals of interest from the overall machinery vibration signal.

HD Enveloping® provides outstanding performance with the latest innovative technologies. The unit

of measurement is HD Real Peak, a scalar value expressed in decibels. Representing the true amplitude levels found in the envelope signal, HD Real Peak is the primary value to use for determining the severity of a given damage. It is also used for triggering alarms. Using order tracking and symptom enhancement, applying FFT on the signal is very useful to determine the source of the signal. Spectrums and time signals are marvels of clarity, providing a snapshot of machine condition to give the maintenance department a heads-up on potential problems.

The setup of HD Enveloping® measurements in the diagnostic software is straightforward. A set of predefined filters are available for easy selection; each designed to detect damages or anomalies in

different stages of development. HD Enveloping can be used to monitor applications in the 15-20,000 RPM range.

HD Enveloping® enables the detection of gear and bearing faults very early on in the damage process, making it possible to closely monitor the development throughout the stages. Significantly extending the planning horizon for predictive maintenance, the method is a boost to maintenance efficiency. The HD Enveloping® technique can be used with existing vibration transducer installations and thus quickly and easily integrates into existing industrial infrastructures.

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HD-ENVELOPING - a new era in vibration monitoring



HD Enveloping is a new unique measuring technique providing fantastic opportunities to plan maintenance and ensure production

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 - Get started right away - use your existing transducer installation

Do you have questions and want to know more?
Please call
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Rittal LED Light Series Now Complete

Rittal has launched two new versions of its LED system lights, thus completing the range.



Its series of specially designed lights now includes 600 and 400 lumens of light output (luminous flux), to add to the current 1200- and 900-lumen versions. This means that Rittal can now offer lighting solutions to suit all sizes of enclosure, from small housings right up to large systems.

With a luminous intensity of 1,200 and 900 lumens, the LED system means that even enclosures up to 1,200 mm wide and 2,200 high are perfectly illuminated.

The new lights are designed to enable control and switchgear manufacturers to provide lower light output for smaller enclosures. The 600-lumen version meets the standard requirement for the large TS 8 enclosure while the 400-lumen lights are suited to wall-mounted enclosures, such as the Rittal AE

compact enclosure series.

An optical cover made of transparent plastic, in which a Fresnel structure is integrated, provides optimal illumination. It focuses the light so that the entire enclosure, even at the bottom, can be illuminated so the light reaches all the places where it is needed – inside the enclosure rather than outside.

All the lights have been designed for a wide-range voltage input (100 – 240 V AC) and can therefore be used in every market all over the world. This cuts storage costs and simplifies selecting products.

The lights can be adapted to any type of installation and fitted either vertically or horizontally in the enclosure section. They can be mounted quickly and

easily just by clipping them into the TS 8 enclosure section. They can be screwed into the section if required.

The use of a universal bracket provides rapid assembly in AE compact enclosures.

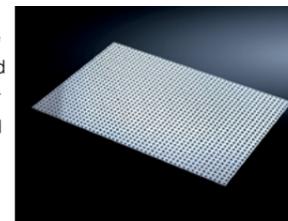
Rittal's range of accessories includes door-operated switches and through-wiring for bayed suites for all the LED system lights.

Further information at www.rittal.co.uk and www.friedhelm-loh-group.com or on twitter @rittal_ltd.

Rittal Launches Slotted Cover Plate for Electrical Distribution Systems

Rittal, a leading global provider of solutions for industrial enclosures, power distribution, climate control and IT infrastructure, has announced the launch of a new cover plate for shielding live components within electrical distribution systems.

The plates, which are transparent and made of slotted insulating material, can be cut and formed to protect smaller moulded case circuit breakers inside control gear or switchgear assemblies. They can be used to cover all the live parts behind the door of an installation, helping panel builders to comply with the IEC 61439 standards by offering protection to IP2X.



Each plate is 1200 x 800mm and 3mm thick, making them relatively easy to store and handle. The integral vent holes allow convection of warm air inside the assembly, ensuring an uninterrupted air flow within the compartments.

Further information can be found at www.rittal.co.uk and www.friedhelm-loh-group.com or on twitter @rittal_ltd.

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Beware Bearings Copy-Cats

Low-quality thermoplastics tend to give thermoplastics, in general, a poor reputation, with some melting when exposed to UV light, some offering limited resistance to solvents and some relaxing and weakening under long-term loading.

This situation is worsened by the fact that some companies are producing copy-cat or even counterfeit products that pretend to have the characteristics of top-performing thermoplastic brands.



To combat this trend, it would be advisable for users to check whether they are using the product that they intend to use. Sometimes a visual inspection is enough to ensure that the polymer that is being used is what it claims to be, but there are some products that are being marketed by unscrupulous polymer dealers who match polymer colours to convincingly persuade users of a particular polymer's authenticity.

These experiences tend to be the exception, but can be costly. Not only can the cost of copy-cat or counterfeit bearings be considerable, if bearings fail catastrophically, expensive production downtime or equipment break-down can result.

It may be best to check with the manufacturer if there is any doubt as to a polymer's authenticity, especially when a thermoplastic brand is chosen for particular characteristics. If purchasers are buying from a reseller, it is recommended that buyers request a certificate of conformance with a manufacturer's stamp.

To discuss this issue further, contact Eddie Swanepoel on +27 11 616 1111.

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ATS Electro-Lube (UK) Ltd Have Added Another Product To Their Well Proven Range Of Self Contained Automatic Lubricators.

The new Jack-Luber is a fully self-contained battery powered lubricator available with either a 125cc or 250cc replaceable grease cartridge.

Grease cartridges can be supplied filled with the specific brand & type of grease type required for the application & can be changed in seconds by the user.

As the Jack-Luber is a motor-driven lubricator, it can generate up to 250psi operating pressure, meaning that it can be used with long feed lines or in cases where there is high back pressure at the bearing.

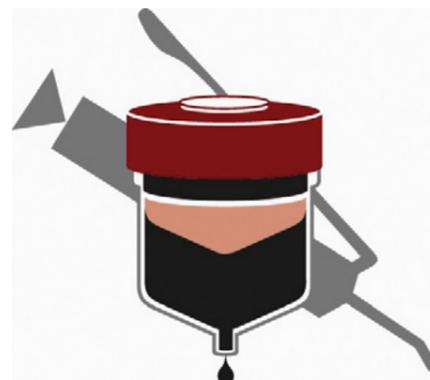


Jack-Luber Model 125 & Replacement Cartridge

The innovative new Jack-Luber incorporates a Jackscrew mechanism which reduces wear & therefore prolongs the operational life of the unit. Once activated, the Jack-Luber runs intermittently to supply grease on the optimum "Little and Often" principle. Integral switches allow users to set the required feed rate, allowing up to 2 years operation between cartridge/battery change.

The Jack-Luber is suitable for indoor or outdoor use and is not affected by changes in temperature. In addition, the Jack-Luber is certified intrinsically safe for use in hazardous areas.

This new addition fills the gap in the ATS Electro-Lube product range, fitting between the low pressure (50 psi) Electro-Luber Gas Series and the



higher pressure (900 psi) Ultimate-Luber Motor Drive Series.

Detailed information, including demonstration videos for the entire ATS Electro-Lube product range can be found at their new website: www.atselectrolube.co.uk.

Hose Assemblies, Fittings & Valves Backed By 100 Years Of Innovation

It's not every year a company can celebrate 100 years of business so Dixon are proud to be celebrating their centenary.

Founded in 1916 Dixon has grown to become a world leading manufacturer of hose fittings and related accessories for all industries with footprints across the globe; Dixon Group Europe, based in Preston, UK is responsible for sales across Europe, Africa and the Middle East.

From the original Boss Steam Couplings to the latest innovative solutions, Dixon has grown to become a hose and coupling supplier who can offer more than just a great product. Dixon is committed to providing customers with the solutions to their fluid handling requirements across all industries, be this within the food & beverage industry, utilities, oil and gas or general industrial applications.

The Dixon range includes couplings whether it be Cam & Groove, hygienic fittings, Boss™ couplings and clamps, interchangeable quick release couplings, to manual or actuated valves for both industrial and

hygienic applications, and with a hose range which covers a broad spectrum of application and a team of experienced and technical sales personnel, Dixon can offer you a complete service advising on the most appropriate solutions for your application.

When industrial hose and couplings are properly specified for the task, these assemblies perform their function flawlessly. However, the potential hazards of hose assemblies are very real. When we try to get them to do things they were never designed to do, such as running steam through a chemical hose or using cam and groove couplings for air, they fail miserably with sometimes catastrophic results. To avoid potential harm to personnel, site and equipment; and to prevent product loss, Dixon stresses the importance of inspecting all hose assemblies prior to each use.

Here in the UK, Dixon offers, specialised support and bespoke engineered solutions from concept, to design,

through to installation. Dixon's onsite manufacturing and engineering department means that new designs, animations and 3D modelling can rapidly be produced to support customer's requirements.

The difference between Dixon and our competitors is our commitment to you.

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Furniture Manufacturer creates dust free workshop using VertEx from AirBench

Devonshire Pine have completed the installation of 4 large VertEx dust extraction units, creating a wide area dust control zone in previously unused warehouse space.



Devonshire Pine are one of the largest employers in North Devon and manufacture a wide range of quality pine and oak furniture. When faced with a dust issue in their finishing shop, they contacted AirBench Ltd, who were asked to specify a solution that not only solved the dust issue but also worked within Devonshire's space constraints. Because of

these constraints, and the size of the items being worked, traditional extraction systems had proved ineffective.

Devonshire were already familiar with AirBench products and are a long-standing user of AirBench downdraught benches for smaller components such as drawer fronts. AirBench Ltd recommended the installation of multiple VertEx modular dust extraction systems. VertEx units are self-contained, so no installation or ducting was required; and as they run from a standard single phase supply, existing wiring could be used.

The new VertEx solution extracts and filters in excess of 15,000m³/hr of air, with a total power



consumption of less than 3kw. The finishing shop at Devonshire is now noticeably cleaner, with consequent improvements to employee safety and of course product quality.

For more information, contact AirBench Ltd or visit www.airbench.com/devon

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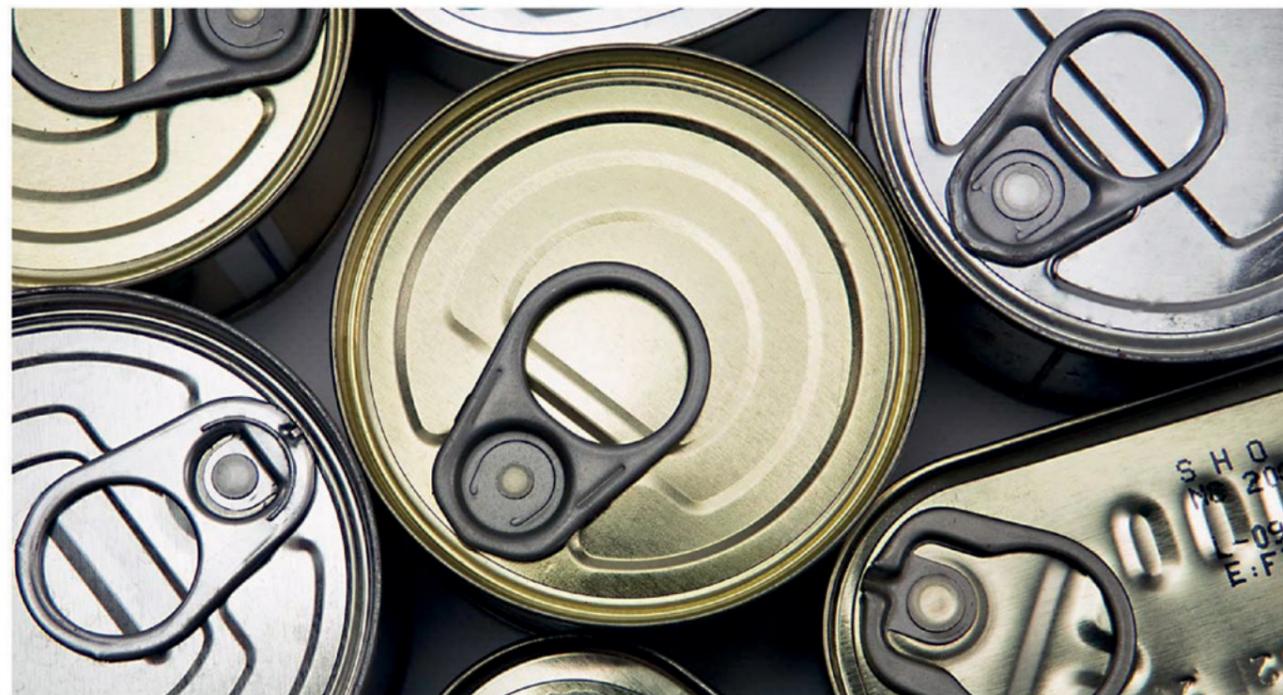
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EMKA PROflex Inspection Windows

EMKA PROflex 1210 program inspection windows offer a simple and aesthetic way of protecting infrequently accessed equipment such as meters, reset buttons, indicators/lamps and instruments as used on fire alarm and suppression systems or engineering controls.



Typical usage may be seen in the gas industry for flare control and monitoring panels as used with gas analysers, telemetry panels, gas boosters and purging equipment.

1210 program aluminium windows provide visual observation while enabling rapid access when required - and ensuring protection against accidental operation or tampering. The 1210 program comes in self-assembly DIY format or fully glazed and assembled and is available in two formats - with 30mm depth frame for deeper items

- up to 47mm - and without depth frame to cover shallow instruments or screens - up to 18mm.

DIY assembly greatly reduces volume of the package while allowing the customer to glaze as they wish. Fully assembled units are supplied with acrylic, polycarbonate or Alucabond - an aluminium/plastic/aluminium bonded sandwich for use as an operating panel which allows access behind front mounted equipment.

Standard profile locks, inserts and wing knobs

ensure appropriate access and security levels in industrial or more office-like environments. Dimensions up to 2000x1000mm may be accommodated.

Further information on EMKA products can be found on the EMKA website - www.emka.co.uk. Readers can find the latest information and news on the EMKA blog - www.emkablog.co.uk or follow them on twitter - <http://twitter.com/emkawk>.

ULTRASOUND INSPECTION

Use Ultrasound to optimize your maintenance program!

Ultrasonic is a very versatile technology that can be applied to a wide range of applications in your maintenance & reliability activities.

AREAS OF APPLICATION:

- Reducing energy costs and optimizing compressed air or steam systems
- Increase the availability and lifetime of your assets
- Troubleshooting mechanical and electrical systems
- Proactive bearing maintenance by using just the right amount of lubrication

The Ultraprobe instruments from UE Systems can help with one or for all of the above applications. This makes it a very versatile tool that lets you get the most out of your investment and time.



ULTRASOUND APPLICATIONS

Leak Detection

Ultrasonic leak detection can be used on a wide range of leaks: pressure, vacuum, compressed air and every type of gas. ATEX approved instruments for use in hazardous areas are also available for this application.

Bearing Monitoring & Lubrication

Ultrasound inspection can be used on all bearing speeds (high, medium and low). With UE Systems ultrasonic instruments you can easily identify & prevent incorrect lubrication. Set a dB baseline for each bearing, take periodic measurements and note increases on dB levels.

Steam Trap Inspection & Valves

When steam traps are faulty, this can cause considerably costs and compromise product quality, safety and lead to energy loss. Ultrasonic technology can be used to determine the condition on each type of steam trap.

Electrical Inspection

Partial discharge, arcing and corona all cause ionization, which produces high frequency sound. An Ultraprobe detects these high frequency sounds. You can hear the specific type of electrical failure directly on the headphones and analyse it with UE Systems free software.

Chris Hallum

Regional Manager UK & Ireland
+44 7930352188 | chrish@uesystems.com



UE Systems LeakSurvey app

Create leak reports on Android or iPhone with UE Systems Leak Survey App

UE Systems Leak Survey app for Android and iOS can be used to easily generate reports from data collected in identified leaks.

Once leaks are identified and the respective information is entered in the app, the data can be used to generate a comprehensive excel report that includes estimated CFM loss, up-to-date cost avoidance, leak location photos (taken with your smartphone or tablet), and greenhouse gas reductions.

Survey quality assurance is optimized by identifying leaks that have been repaired and leaks that have not been repaired. Also works with specialty gases like Argon, Helium etc.

The app works with all digital Ultraprobes from UE Systems – Ultraprobe 3000, Ultraprobe 9000, Ultraprobe 10.000 and Ultraprobe 15.000.

The Leak Survey App can be downloaded for free from the iTunes store or from the Google Play Store. UE Systems ultrasonic instruments are the perfect tool for leak detection, even in the most demanding scenarios. Besides the Leak Survey App, users can also create reports through UE Systems free DMS Software.

UE Systems is the world leading manufacturer of ultrasonic detection instruments since 1973, producing a wide range of ergonomically designed portable, and very accurate airborne/structure borne ultrasonic instruments.

Used primarily for leak detection, mechanical analysis and electrical inspection, these instruments have helped plants all over the world in reducing energy waste and optimizing production & maintenance efficiency.



UE Systems is also a global training company, offering standardized & customized training programs to support the implementation of ultrasound technology in any plant – including Level I and Level II certification Ultrasound courses.

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Welding for the aerospace industry requires an extremely high level of precision. For products to work under a zero gravity atmosphere, air tight joints are essential, making laser welding the perfect choice.

Carrs are currently involved in welding part of the reaction wheels used by New Space Systems. These wheels are increasingly popular for use in satellites and spacecraft for full three-axis manoeuvrability and accurate speed control.

With huge success, these wheels have been exported to the USA, Indonesia, China, Spain, Germany and Italy.

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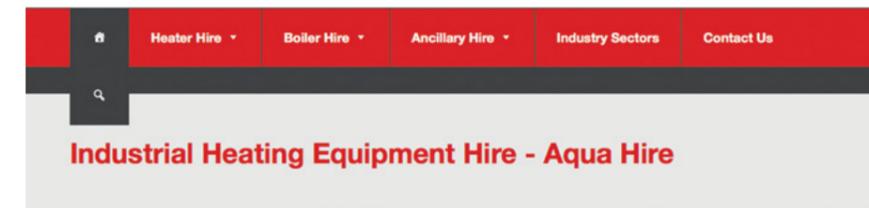
South Coast Engineering Firm Turns Up The Heat With New Hire Service

Hampshire-based specialist engineering firm Aqua Cooling, which also has an office in York, is using the chilly winter months to launch a hot new service for its customers across the UK.



"Innovative, competitive Boiler Hire and Industrial Heating Equipment Rental solutions from the market-leading Heating specialist!" +44 0845 322 4202

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Aqua Hire offer a range of industrial Heating Hire equipment, available on either short or long-term Hire. Our Rental fleet includes portable Electric Heaters, Gas Heating, Oil Heating, Packaged Oil and Gas Fired Boiler Plant Rooms, Electric Boilers, with a range of heating capacities depending on your specific requirement.

Why Aqua Hire?

Aqua offer UK Nationwide coverage, with a prompt turnaround from initial enquiry stage, right through to delivery. Our range of Heating Ancillary equipment enables us to get your Heating solution up and running as quickly as possible – ensuring minimal disruption and downtime.

Aqua's Heating Rental equipment is available to Hire for as little as one week and can be available and delivered the very Next Day!

If you can't find what you are looking for on our website, why not give our Sales Engineers a call today on 0845 0941 800 - Aqua Hire are here to help!



Aqua Heating Hire is a brand-new option from Aqua Cooling offering heating and hot water solutions for short, medium and long-term rent. This latest addition to the award-winning company's portfolio of engineering solutions complements the cooling equipment hire service it introduced as a separate entity at the beginning of 2016.

During the past decade Aqua has developed a reputation for technical expertise in the design, supply, installation, and maintenance of cutting edge temperature control technology. It has customers in a wide range of sectors including food & beverage, chemical and pharmaceutical, data centre and

communications, agriculture, utilities, plastics and packaging.

While sales remain important for Aqua Cooling's business, the firm has created a dedicated hire division to enhance the services it can offer its diverse client base. Aqua Heating will supply a range of heating equipment for use in a multitude of situations, from emergency/breakdown to planned maintenance and specific seasonal requirements.

Sales Director Simon Davis said: "The introduction of Aqua Heating Hire is a natural progression for us as we enter the winter months. We've already had

a great response to our cooling hire services and we wanted to ensure we can meet our customers' needs year-round.

"During the colder months many UK companies rely on effective and efficient heating solutions to keep their business and processes running. With more than a decade of experience in the temperature-control industry we have the technical expertise to understand our customers' needs. With a dedicated hire team and our nationwide network of engineers we can respond as and when they need us."

Aqua Heating Hire can supply rental solutions for a variety of scenarios, from comfort cooling in offices, retail units, and marquees to containerised boiler systems for industrial applications. Customers can hire equipment for as short a period of time as one week; most equipment can be delivered to site and installed within 24 hours.

Aqua Cooling has been recognised as one of the UK's leading engineering companies, with several awards to its name. Most recently it was presented with a Commended Innovation Award by the Institute of Physics for its patented Leak Prevention System (LPS), which is part of its water-based cooling system for data centres. In 2015, the LPS achieved a Queen's Award for Enterprise (Innovation).

For more information about Aqua Heating hire services visit: aquaheating-hire.co.uk

SAP Conference for Environment, Health, and Safety Management

The 5th annual SAP Conference for Environment, Health, and Safety Management, will take place in Chicago on March 21-22, 2017.



The event will focus on Driving Digital Transformation within EHS and offer opportunities to discover how to plan, predict and react faster to meet the demands of a hyper-connected digital world.

Learn how digital transformation and new technology enablers like the cloud, Big Data, Internet of Things and mobile applications are changing the game for EHS professionals. Acquire a deeper understanding of how digitization is transforming EHS management and how SAP can help you meet these challenges, in areas such as Environmental and Regulatory Compliance, Occupational Health, Product Safety, Incident and Risk prevention, and operating and reporting on sustainable operations.

The event will kick-off with three interactive deep-dive pre-conference workshops:

- Workshop 1** - Increasing Product Safety and Compliance in a Global World - SAP's Current and Future Product Compliance Solution
 - Workshop 2** - SAP EHS Management and Migration to S/4HANA: Technical and Architecture Considerations
 - Workshop 3** - Driving Digital Transformation with S/4HANA in EHS
- These sessions will provide you with the opportunity to look at EHS applications from SAP in more detail, ask your questions, and learn from experienced SAP solution experts.

The main conference will feature SAP keynotes and solution updates to ensure that attendees are fully up to date with the latest roadmap and insight from SAP. You'll also hear from senior environment, health and safety management executives from leading organizations including C&J Energy Services, Commscope, Enel Green Power, Kimberly-Clark, Micron Technology, Newalta, Southern California Edison, TVS Associates and more, who will share their implementation experiences with SAP solutions for EHS.

The conference will showcase best practices and expert insights on:

- Migration to SAP S/4HANA
- Product safety and stewardship
- EHS solution strategy and road map
- Regulatory content and documentation
- Product content reporting and data collection
- Custom SAP Fiori applications
- The impact of IoT
- SAP co-innovation program

The event will additionally include interactive roundtable discussions, track sessions for SAP EHS and SAP Product Safety and Stewardship, live demos illustrating solutions to common issues, and micro-forums on topics that will help expand your knowledge of SAP EHS and Product Safety solutions. Dedicated networking sessions and a conference evening event will round out the agenda.



SAP Conference for EHS Management
 March 21-22, 2017
 Chicago - IL

This conference is the only US event solely focused on SAP EHS management and proves year after year to be the largest national gathering of SAP customers, partners, and experts sharing insights, strategies, and practical advice in this field.

Whether you're an existing SAP customer or are looking for a new solution provider, this event will equip you with the necessary information and insight to transform your EHS operations by learning how digital transformation and new technology enablers like the cloud, Big Data, Internet of Things and mobile applications are changing the game for EHS professionals.

In addition, enjoy the location and venue of the conference as a bonus! The Palmer House Hilton

Hotel, where the event will be held, is located in the Chicago's downtown "Loop" and prides itself as America's longest operating hotel, being the first to incorporate the light bulb, vertical steam powered railroad (elevator) and telephone – they are said to have even invented the brownie! Housed in the financial, business, theater and cultural districts, you will be only steps away from Millennium Park, the Art Institute of Chicago, shops along State Street and the Magnificent Mile, and many fine dining restaurants. The Palmer House Hilton is a member of Historic Hotels of America.

Chicago is among the largest cities in the U.S. Renowned for its bold architecture, blazing skyscrapers such as Willis Tower (formerly the Sears Tower) and the neo-Gothic Tribune Tower, the city's

waterfront location along Lake Michigan is a big attraction for residents and tourists alike. The city boasts many upscale dining establishments, world class museums, shopping, and nightlife, as well as distinctive musical, theatrical and fine art traditions. In 2013, Chicago was chosen as one of the "Top Ten Cities in the United States" to visit for its restaurants, skyscrapers, museums, and waterfront, by the readers of Condé Nast Traveler.

Register online today at:
www.tacook.com/sap-ehs17
 or, to find out more, please feel free to contact the T.A. Cook team at:
info-us@tacook.com or 919-510-8142.

Freeing The Store Room...

From The Old Guard to MROM Management

Maintenance, Repair and Operating Materials (MROM) management... everyone has heard about it but few have really come to recognise the opportunities for development and the benefits available within the business.

Businesses with high regulatory oversight such as pharmaceuticals have to show that they have MROM management developed to the extent that control of replacement items throughout their life can be comprehensively monitored by the controlling authorities.

Opportunities to have control of inventory costs, improved equipment performance and less working capital cannot be ignored. Typically, in a company with around £1million under MROM management, adopting current best practices can look to reducing expenditure by £2-300,000 per annum!

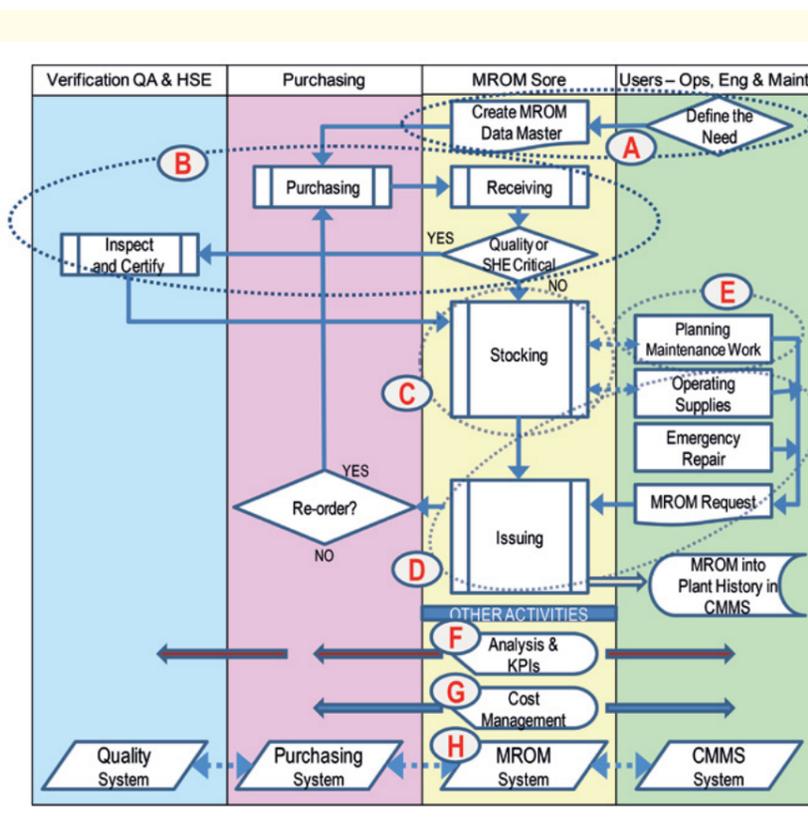
In the world of Asset Management and the welcome new era of ISO 55000, it is the humble engineering stores that are undergoing the most dramatic change. From chalk to cheese, you might say, from engineering stores to MROM management in 20 years, and what a difference!

Until the 1990s, the typical engineering store was a mysterious world that was completely ignored and certainly not understood by most managers.

New facilities had been and continue to be built without any allowance for a properly planned engineering store which, more often than not, was provided as an afterthought and located in any (usually inconvenient) spare space.

Inevitably the engineering store was 'guarded' by a traditional storeman typically sporting a cap and warehouse coat. But, as many apprentices were to discover, he could be your friend (if he liked you) or your worst enemy by providing any amount of unchallengeable reasons why the item you wanted was not available.

Without any sort of system, control was, at best, a manual paper trail method often created by the storeman whose self-preservation seemed assured when he demonstrate he remembered what and where things were. No one else knew the system: no one really cared.



Above: Diagram 1

Across the whole spectrum of businesses there is now a recognised need for MROM management. Rising regulatory compliance demands evidence of correct behavior and a rigid adherence to identified processes. MCP's experience with clients suggests that there is a need for between 23 and 35 clear (interactions) processes across the 8 elements above. Those who manage MROM in the future will not be the cap and warehouse coat brigade.

A new enlightened approach to managing this part of the business demands a competency and career path that will attract the best future managers. They will be team players that interact across functional boundaries including engineering, purchasing, operations quality, finance and suppliers as a minimum. Competency with systems is essential. Providing a transparent and valued service will be expected.

Then it all started to change.

- Engineering stores were offered electronic systems as an ad-on to the growing interest in Computerised Maintenance Management Systems (CMMS)
- Supply Chain Management (SCM) principles and techniques shone a light on the possible ways to optimise inventory (this came from advances in technology and data handling, enabling data to be extracted, this along with a need to be more cost efficient, more cost efficient use of plant, capital, labour – optimising cost and efficiency)
- Businesses became concerned about the level and turnover rate for spare parts inventory – rise in risk based maintenance, particularly within airline, electronics and automotive industries meant increased drive for quality, safety and yield, more regulations (MCP has found using information from AMIS that unmanaged situations could lead to up to 4 times the annual usage).
- Companies were able to check their relative position on a journey toward adopting world class practices for maintenance management (including engineering stores) using techniques such as MCPs Asset Management Information Service (AMIS).
- Realisation that spares and operating supplies account for between 10% of turnover (for facilities maintenance and lower maintenance cost environments) and 30% of turnover for complex and expensive equipment manufacturing environments) as shown from MCP work conducting AMIS assessments. Here were the areas for potential cost reduction.

With stores and supplies now under the microscope another opportunity for savings appeared. Because of the lack of internal understanding of storeroom operation businesses turned to the great white hope of outsourcing as a quick and convenient route to plug the gap and gain savings. However, the result for those who leapt into the void was often not the promised controls and savings.

MCP noticed that, historically, the best engineering stores and companies developing a MROM approach were usually internally managed and only now, as understanding of MROM management gains traction among businesses that outsourcing opportunities may really become viable.

And so, at last, in the 2010s businesses that wish to be considered competent (meeting ISO requirements) and/or world class (meeting AMIS requirements) recognise the value from successful MROM as a vital part of the total approach to Asset Management.

At a high level, MROM can be considered as a system with eight elements (A – H in list below) involving 4 main functions (interacting as shown in diagram 1).

- A. Creating an MROM Item
- B. Purchasing, Receiving & Inspection
- C. Stock Management
- D. Requesting and Issuing
- E. Planning
- F. Analysis & KPIs
- G. Cost Management
- H. Interacting Systems

for further details visit:

<http://www.mcpeurope.com/>



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Balancing Costs, Driving Efficiencies – The True Importance Of Asset Management

Asset management is a well-known process within the industrial market sector but much lesser known, are the management services available for specialist measurement equipment.



Here James Sherlock, UK key accounts manager for Trescal, highlights the continuing importance of managing and monitoring equipment and explores how stock upgrades can truly drive efficiencies.

When you consider that asset management is focused around managing and monitoring equipment, it doesn't seem that taxing. Where some customers struggle however is finding suitable partners to work with, with many choosing original equipment manufacturer (OEM) providers and opting for add-on service rather than a dedicated offering. With the correct approach, asset management will instigate effective pooling and asset sharing of equipment across sites, reduce costs, and improve efficiencies throughout the life of equipment.

An experienced asset management provider can supply proven software and methodology to help make the process of monitoring and managing

equipment as simple as possible and it needn't be the OEM provider offering this service. A successful programme should be able to identify procurement avoidance, reductions in calibration and repair costs, and be led by a team of technical experts. As a result customers should see an increase in service levels and significant savings potential.

What to look for

Building a successful calibration asset management strategy needn't be a challenge with the first step being to carefully select a suitable provider. Before agreeing to carry out any work a Schedule of Accreditation, detailing United Kingdom Accreditation Service (UKAS) accreditations, should be requested.

This will provide assurance of the provider's capabilities, in terms of independence, quality and

technical knowledge. For example, if a provider is accredited to the ISO9001 standard, this is an indicator that performance and service is consistent across all operations, which provides reassurance to customers on the credibility of calibrations. Similarly, ISO9001 benchmarks consistent performance and service across all operations. Other accreditations such as ISO / IEC 17025, whilst not a requirement for asset management, is core when verifying a providers competence to carry out tests and calibrations. There is also the ISO10012 guideline, which is designed to manage and demonstrate compliance of measuring processes and equipment.

In short, these standards are an important way of verifying that a device has been calibrated by a trusted provider, and is traceable to International System of Units (IS). This is important given that a business could be tasked with providing evidence that a device has been calibrated, by an accredited provider, and when.

OEM vs third party provider

By choosing a third-party independent of the OEM, for an asset management programme, one of the main advantages is in the objectivity of the provider. For instance, a third-party will always offer an unbiased solution to a problem, whether that's repairing what's already there, purchasing new equipment, or even using second hand items.

The real added-value comes when a customer chooses a tailored solution to asset management. Ideally any new partnership should begin with a full audit of equipment, flagging common business inefficiencies such as the unnecessary re-purchasing of equipment already in stores, or incorrect calibration intervals which could be costing the business more than is necessary. In some instances



for example, companies have been sending stores equipment to be calibrated at the required date, despite the fact that they aren't currently in use and will require further calibration before being operated/ installed.

With due care and attention at audit stages, Trescal has helped large companies identify 30 to 50 per cent of assets which are not being fully utilised. It is also possible to highlight any potential assets that can be traded-in with funds used against other new equipment purchases. This provides large potential cost avoidance, savings of thousands, possibly millions in the first few years, depending on the current businesses stores situation.

A thorough audit can help a business to continually monitor the operational life-cycle of products from 'cradle to grave', while also ensuring each asset continues to meet compliance criteria, in line with the latest industry accreditations.

The role of online databases

Luckily developments in asset management software are making it even easier and clearer for companies to service and document the journey of equipment and fulfil equipment's on-going

maintenance requirements. Online databases offer different levels of instant and easily accessible operational control, from a single source. This gives engineers the freedom to quickly and reliably access a central store of equipment via a database and request to share or pool equipment between different sites. Trescal has found that by investing in an internal team of software developers to develop customised solutions, this in-turn provides peace of mind while significantly saving time and reducing administrative costs.

Additional benefits of online management software is the ability to choose from a number of bespoke solutions, such as flagging the different calibration intervals equipment requires or perhaps recording and ensuring compliance with metrology standards. This is all whilst providing access to instrument inventory and history control, as well as managing asset availability including the costs of deployment and ownership. In fact, Trescal has a unique 'Master Library' database to generate the relevant information, statistics and history required to optimise calibration intervals and maintenance decisions.

To further cater to the specific calibration and management needs of businesses, Trescal also has

dedicated teams across the UK with experience and success in asset management. The business has expertise across several domains to provide a one stop shop for technical and normative support; from set-up to the on-going maintenance and improvement of processes. This gives businesses added peace of mind that the asset management system will be equipped to adapt over time, whilst taking into account the changing metrology landscape.

Ultimately, realising the true potential of assets should be a day-to-day concern if businesses are to reap the savings and efficiency benefits. The best advice would be to always do your research and don't automatically revert to the OEM, which could end up costing businesses more in the long term. Third party providers can offer real added value to a business through asset management but it's up to customers to embrace the opportunity and to take an integrated approach in order to meet the complete requirements of a business.

Liane Avery – Marcoms Co-Ordinator
Tel: + 44 (0) 1252 533 317
E-mail: info.uk@trescal.com

Tapflo. All About Your Flow

Tapflo is a leading pump manufacturer with the ambition to provide a wide range of premium products for various industrial applications.

Tapflo operates and distributes in more than 60 countries spread over the world on 6 continents - products and spare parts are available worldwide.

"With fewer hands between the manufacturer and end user, the price and availability of Tapflo pumps are a great strength, making Tapflo the leading and most competitive industrial pumps suppliers in the UK."

Tapflo is the manufacturer and global supplier of Air operated diaphragm pumps, centrifugal pumps and other industrial process equipment. The company was founded in 1980 in Sweden and has since then been working with design and manufacture of thermoplastic, metal and sanitary series diaphragm pumps and also a complete range of centrifugal pumps and industrial equipment. After years of dynamic development the company evolved into Tapflo Group with worldwide operations.

At Tapflo we believe that quality is one of the highest values, both for our customers as well as our employees. As a result, we comply with various



globally recognised certification and quality control institutions. Many of our products comply with EC ATEX directives for equipment intended for use in explosion hazardous environments. The aseptic series is EHEDG certified (European Hygienic Engineering & Design Group), the pharmaceutical series has USP VI approval. All our products are CE marked and followed by our comprehensive instruction manuals. Tapflo manufacturing process is certified according to ISO 9001:2001.

Tapflo pumps are some of the most safe and versatile pumps on the market today. They can be used in a variety of installations in numerous applications. Thanks to the simple operating principle, with a compact and reliable design, Tapflo pumps meet the demands of heavy industrial duties. Tapflo pumps are compatible with a wide range of chemicals: corrosive and chemical aggressive; high and low viscous; abrasive; solid laden; shear sensitive and flammable.

Tapflo knows how to deal with liquids and our experience and knowledge offer a selection of pumps and filters that have perfect application within today's manufacturing and processing industries by supplying pumps able to meet the requirements of each process. What is more important, Tapflo ensures a safe process, especially when many hazardous chemicals are used. Safe handling and automatization processes have become a relevant issue to avoid harm to human and to provide a safe environment throughout the process, from beginning



to waste handling. Safe and reliable pumps and filters are important components to creating a safe process.

At Tapflo, we also believe that energy saving represents an important factor of everyday business strategy. Here in the UK, Team Tapflo has designed and developed a new generation of diaphragm pump with the green and innovative LEAP Technology, Low Energy Air Pump, able to achieve up to 70% in energy savings. LEAP uses a new patented method to control the cycling of diaphragms and reduce the energy required to operate the pump, resulting in a saving of £ 652.64 on £1,843.20* average running costs of standard pumps per year (*annual cost of 2" pump running at 150 L/min at 1 bar discharge). The benefits of LEAP Technology are: pulsations reduction; improved lifespan thanks to the new applied air valve; noise reduction due to the lower uses of air pressure; improved maintenance; control simplification and electrical feedback; batch dispensing allowing the pump to automatically stop after the required volume is dispensed; dry running and dead heading by monitoring the frequency of the pulses. All the above benefits contribute to reduce the energy consumption to a minimal running cost annually.

For further information visit:
www.tapflopumps.co.uk

Pump Maintenance – Three Tips To Prevent Hidden Cost Rises

Now is a common time of year for maintenance contracts to come to an end; many are on auto-renewals, which can mean hidden cost increases because people tend not to shop around for a better all-round deal.

It can also mean a ticking time-bomb threatening system failure if the maintenance is not carried out sufficiently well.

Owen Ford, Managing Director at Dura Pump, an engineering firm specialising in pump design, installation and maintenance, advises three simple things to look out for when you look at your contracts and evaluate the best deal:

"Firstly, does the contract include full servicing that completely covers all areas of the pump and pump system? For example, with sewage pump stations, the pumps should be raised, cleaned and unblocked to ensure the build up of debris is removed. Regular and proactive maintenance means you are reducing the risk of breakdowns and more importantly, will be prolonging the life of the system.

"Secondly, it's important that your maintenance and service programme covers emergency situations. If your provider is adequately carrying out services which help prevent against emergency situations, contracts should include work on emergency situations, minus additional costs.

"The third thing to remember when choosing a servicing provider, and this is the case with most servicing; it's important to shop around for not only the best prices, but the best quality and customer service. If you are looking for reliability and reduced cost the answer is regular proactive maintenance."

As well as these key principles for maintenance, Dura Pump actively promotes the most energy efficient solutions for pump requirements. Energy efficiency is currently a huge priority for governments, as illustrated

by the IE3 motor directive in the EU, and the ESOS energy efficiency legislation in the UK.

The IE3 motor legislation applies to motors from 0,75 kW to 375 kW, and came into force from 1st January this year. The European Union has introduced this directive to make sure all pumps are of premium efficiency. Similarly, ESOS requires large companies to prove their commitment to saving energy throughout their businesses.

With a combination of proactive maintenance and energy efficiency measures, you can ensure you stay compliant with laws and ultimately save money on energy and the cost of breakdowns.

Dura Pump has been offering professional and friendly pump services with expert knowledge for 10 years; if you need help with your pump systems and maintenance contracts, contact Dura Pump today via www.durapump.co.uk.



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Landfill Site Cuts Pump Power By A Third With Variable-Speed Drives

ABB drives cut power use of gas pumps, allowing more energy to be sold into the grid



A landfill site has saved a third of the power used by motors to pump gas, following the installation of two ABB variable-speed drives (VSDs).

Methane gas extracted from decaying waste at the site is used to generate electricity. The two 45 kW VSDs efficiently control the speed of the motors running the gas compressor pumps, which were previously operated direct-on-line. Maintaining the correct gas pressure from the pumps allows more efficient operation. This means an extra 199,368 kWh per year can now be exported back on to the grid, increasing revenue by £16,946.

The solution uses two ABB general purpose drives to provide constant gas pressure to the generators.

The VSDs use pressure transducers to feed back the gas pressure to the drives and allows them to control the speed of the motors to maintain the pressure at the correct level.

Patersons Quarries' landfill site at Mount Vernon near Glasgow covers 91 hectares divided into four zones, each operating independently to prevent the migration of gas and other materials. The site also includes a fenced gas management compound. This brings in gas from the zoned sections of the landfill site and burns it to produce heat to convert into electricity.

The site produces 40,000 MW of green electricity a year, enough to power up to 4,000 homes. This is

sold by Patersons to Scottish Power Distribution, producing a significant income stream from the site.

The gas management compound has four, 45 kW motors which are used to boost gas pressure to 100 mbar to ensure correct combustion in the site's five generators. Two of these motors are used at any one time to provide gas for all of the generators.

"The main problem was that the motors were running at 100 percent speed all the time, whether they needed to or not," says Alan Hoggins, site manager at Mount Vernon. "Because the motors are run from the electricity we generate on site, this was obviously wasteful of energy that we could otherwise sell."

Patterson was interested in gaining a better control of this process to ensure it could always maintain the correct gas pressure. The company approached EDC, the ABB's authorised value provider for Scotland, which it had worked with previously on a project at one of its silica sand quarries. This project had used a VSD to control the pumping of water.

EDC performed an energy assessment on the booster pumps. This logging revealed that using VSDs to run the compressor pump motors could save a third of the energy used.

Another challenge was that the existing star/delta enclosures were too small to take the VSDs. To solve this, EDC designed custom enclosures to house the drives and other components. These were sited next to the existing enclosures, with interconnections between them.

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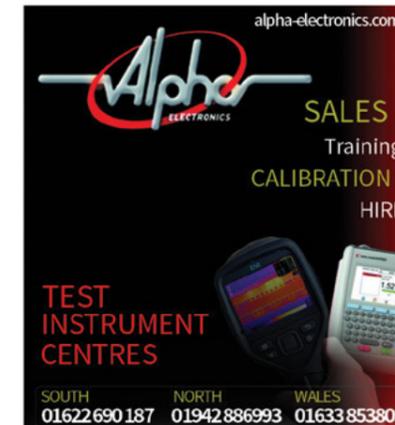
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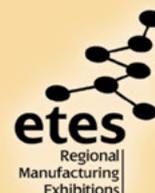
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