

DSM's Global View of Maintenance and Equipment Reliability

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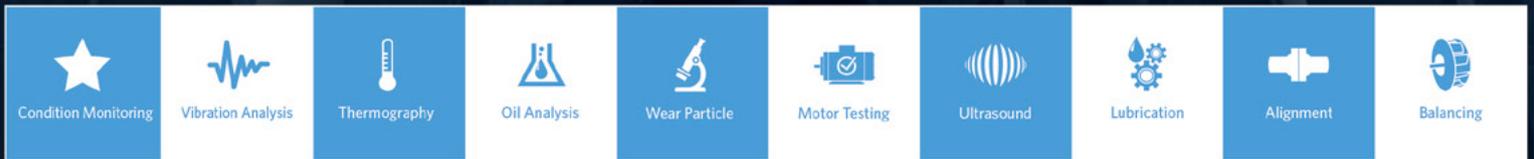


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Summer Shutdown, Avoid The Sizzle!

The cottage, the barbeque, the hot sun, and the cold drinks: for many, summertime means carefree holiday. But for manufacturers, it's the most meticulously managed time of the year.

Many industrial businesses hold "summer shutdowns": a mandatory lapse in operations. To those unfamiliar with the concept, it might feel risky. But planned and executed properly, summer shutdown can help reduce expenses and boost productivity.

Shutting down to avoid breaking down.

Summer shutdown is to manufacturing what spring cleaning is to the household. It's a regular, dedicated time to blitz through big jobs and perform preventive maintenance. This can include everything from full process overhauls to touching up paint chips.

No matter how major or minor the maintenance, a dedicated shutdown can yield benefits for your people, your process, and your profits.

Managing Equipment and Capital Costs

Giving equipment regular attention can prolong its life and help prevent costly, unexpected repairs or replacements.

Major upgrades are a big investment. When you're installing a new piece of equipment, you want to give it your full attention. Likewise, you don't want to interrupt production while you're setting it up. A full shutdown allows you to install and calibrate new equipment without competing concerns.

After the equipment is installed, regular maintenance keeps equipment in top form. Like a check up, you inspect it from top to bottom. This is your chance to correct everyday wear-and-tear, like loose bolts, blown fuses, broken parts; revisit ongoing concerns, like soon-to-expire warranties; and make sure you're not blindsided by big, costly repairs.

Stabilizing Staffing Resources

Your operation relies on human resources. Scheduling a summer shutdown can help manage them.

On one hand, it's good for morale. Employees can take their holidays when the weather is good, their kids are off school, and many of their family and friends are also enjoying vacation. This will help them return to the job refreshed and re-energized.

On the other hand, it helps maintain steady staffing levels for the remainder of the year. When vacation time is staggered, it can create holes on the production line. By encouraging employees to take vacation at once, you're more likely to keep a full complement running at full capacity.

Maintaining Productivity

Scheduling dedicated downtime helps you to address concerns with minimal impact on output.

Trying to do maintenance during production can be tedious. Engineers end up waiting around until there's a good time to turn off machinery and complete the repairs, or completing their work in batches in between production cycles. The staff on the line get annoyed by the constant interruptions and having to work around the engineers.

Clearing the floor and shutting down machinery allows the engineers to get in, get the job done, and get out swiftly and efficiently.

Optimizing Health and Safety

A shutdown helps maintain a safe work environment, both for those making repairs and those benefitting from them.

Trying to complete repairs on a working production line is risky. Line staff may not be used to visitors working in their space, and engineers likely aren't accustomed to the equipment and traffic patterns on the floor. Shutting down the line allows repairs to be made with minimal chance of accidental injury.

A full shutdown also helps MRO workers attend to the overall health and safety concerns in the space. With the area cleared, they can see the full picture, helping them pick out potential hazards that might otherwise get lost in the shuffle – like cracks in the floor, unsecure wires, and worn hazard markings.

Planning to get the most from your shutdown period.

With production at a standstill, you have to make sure you're generating enough long-term value to outweigh the temporary lapse in output. The key to success? Preparation.

A summer shutdown is only as good as the plan that drives it. You must consider and coordinate every detail – securing the right people, the right sequence, and the right products to get the job done as efficiently as possible.



Michael Dominguez, Publisher.

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Systematically Innovative Enclosures

After five years' development work, Rittal has unveiled its new VX25 large enclosure system at the 2018 Hanover Trade Fair.

It is the first enclosure system that has been fully developed to meet the requirements for increased productivity in control and switchgear manufacturing, as well as along the Industry 4.0 value chains.

With the "SYSTEM PERFECTION." slogan, Rittal has made a major innovative leap; a leap which has come from its depth of experience, along with intensive customer feedback and involvement.

The VX25 offers the highest possible quality and consistency of data, reduced complexity and savings in time, as well as safe assembly. More than 25 registered patent and trademark applications demonstrate the high level of innovation that was involved.

How can the best be made even better? This is the question that Rittal asked itself as it began developing a new enclosure system.

"The market needs an enclosure that cuts throughput times in engineering and assembly, reduces complexity and that finds a place for itself as a full-grown module in the megatrend of digitisation," said Dr Thomas Steffen, Managing Director Research and Development at Rittal.

He added that: "The new Rittal large enclosure has now become 100 percent Industry 4.0-capable. With the combination of a real enclosure and its digital twin, the new development will meet every future digitization need – from online configuration and engineering to assembly, as well as automation, logistics and maintenance."

Study: observe, listen and learn

Intensive dialogue with Rittal customers was a crucial factor in the development of the new large enclosure system.

During a large-scale, scientifically based, usability study, researchers used words, images and moving film to document the everyday working life of control and switchgear manufacturers, covering ten companies in Germany, eight in the USA and six in China, including small, medium-sized and large companies.

"This user analysis was an eye-opener. In some cases, we spotted problems that the customers themselves hadn't yet identified," said Dr Steffen.

As a result, 150 systematically recorded and specific requirements for a new enclosure emerged, providing developers and product managers with a robust guide for the actual development work.

Rittal supplemented its findings with those of the customer advisory council (who were also involved). Later, during the development phase, Rittal did not omit one single, essential point.

The Result: Pure Customer Benefits!

The result was the new VX25 large enclosure system.

The name VX25 stands for three elements: the versatility of options; the fulfilment of "x" customer requirements; and for its perfect symmetry through a consistent 25-mm pitch pattern.

"What is new is that no enclosure system has ever been previously developed so consistently and systematically to ensure maximum customer benefit. The VX25 matches the way the control and switchgear manufacturer thinks and works – both in functions and processes," says Dr Steffen.

Customer benefits across the entire value chain of control and switchgear manufacturing can be summarised in three key points: maximum data quality and a constant supply of data; reduced complexity and savings in time; as well as safe assembly.

Patents: a high degree of innovation

The heart of the innovation is the newly developed frame section. This determines the installation space, the efficiency in engineering and assembly, the expansion options, the stability and thus the reliability and flexibility in the customer's workshop.

With the new large enclosure system, Rittal's engineers could maintain all the important and



established product features of the existing, worldwide TS 8 large enclosure system, expanding them significantly with a multitude of new functions and customer benefits.

There were more than 25 registered patent and trademark applications, which demonstrate the high level of innovation in the VX25.

Production: Maximum Quality

For Rittal, SYSTEM PERFECTION also involves high-tech manufacturing.

It has invested in new state-of-the-art production facilities to manufacture the new frame section of the VX25.

New and fully automatic profiling systems and volume production lines, with a total of 31 welding and handling robots, are witness to the focus on top quality combined with precision and stability.

The result is that the frame section of the VX25, which has a consistent 25-mm pitch pattern, is clearly more stable than its TS 8 predecessor although the weight is the same.

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

Assembly benefits combined with savings in time

Time is precious, particularly in control and switchgear engineering where there is always a requirement for some element of manual labour.

With its new VX25 large enclosure system, Rittal is offering tangible installation benefits, thanks to its new, improved functionalities. These include improved accessibility, a greater installation depth, tool-free assembly, clever baying seals, and a completely new base/plinth system.

Most of the improved functions of the VX25 large enclosure system are due to a new frame section which provides better accessibility through all four sides. The outer of the two available mounting levels can now also be directly populated from outside without any additional parts. This reduces assembly time by around 30 minutes, compared to conventional methods. The same applies to the new option of installing mounting plates from the back, which is a great improvement, particularly when heavily populated mounting plates are being installed. The 20 millimetres of added installation depth then provides more room for manoeuvre in the enclosure for particularly deep installations.



Easy installation of mounting plates

Likewise, its new protective slides are designed to make assembly far easier. Up to now, it had often been difficult to install very heavy mounting plates. Lifting with a crane and the subsequent installation in the enclosure were sometimes very awkward operations. With the VX25, protective slides ensure that the mounting plate can be easily positioned and screwed in place after it has been lowered down by the crane.

Additional mounting level

The new frame section has been cleverly rethought to improve the fit-out of the interior. Because it now offers access from all sides, it also means an additional mounting level has been created. Divider panels and partitions, as well as covers for contact hazard protection, can be mounted directly from the outside on the frame section when the side or rear panel is removed. This creates more space within the enclosure, which can then be used for electrical components.

Tool-free installation

Thanks to the new snap-on handle system, the VX25's handles can be changed twice as quickly as before. While, for instance, comfort handles used to have to be laboriously removed and later re-mounted with screws, now they are inserted by merely plugging them in; no tools are needed. As a result, assembly time is roughly halved.



Control and switchgear manufacturers no longer have any need to machine the door with its 180° hinge mounting. The 180° hinge can be quickly and easily mounted on the enclosure without drilling, meaning fitting the doors is now child's play. They are just as easy to remove as they are to attach, and they automatically lock when closed.

Comfortably removing the base/plinth

The base/plinth of the VX25 has been completely rethought. It combines all the elements of the TS and the Flex-Block base/plinth systems, with many new features. This means all the usual enclosure accessories can be installed in the base/plinth. As well as baying brackets and cable clamp rails, routed cables can be easily and efficiently clamped and fixed via the system's punched section. This saves time and money while providing greater reliability.

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Common CMMS Myths

Choosing the right computerized maintenance management system (CMMS), can be challenging. Not only should the needs of your company be considered, but also the company's financials.

On top of that, research on different CMMS' has to be done. While researching, you may come across a few common CMMS myths which might give you pause.

Here are a few of the most common ones.

It's too expensive.

Of course there are costs associated with setting up a CMMS. However, many different CMMS providers (such as Mapcon Technologies, Inc.) will allow you to only purchase the add-ons that you need, keeping the cost down. Not only that, it's actually more costly not to have a CMMS in place. Maintenance management systems allow users to schedule preventive maintenance tasks, which means repairs are done before a piece of equipment fails, thus decreasing costly downtime. A system can also save companies money by helping to prevent expensive emergency repairs.

It's too difficult.

There are many systems that offer tons of features, which makes determining your company's needs even more important. Once the specific needs are hashed out, you can search for a system that only has what you need, which will make things a lot easier. There's no sense in having and paying for a ton of extra features you will not use. Some CMMS providers will also allow you to customize your system a bit, which can also simplify things. Once you make your decision, many companies will offer

training and implementation services to make the transition as easy as possible. Depending on how your data is currently stored, the CMMS provider may even be able to assist in uploading your data to the new system.

It's too time-consuming.

While the initial setup and implementation can take time, overall a CMMS will save your workers time. A system that includes a mobile application will save them even more time. A mobile app will allow workers to enter work orders right from the floor. This means they will not need to trek all the way back to a computer to send it. Additionally, most mobile apps allow images to be attached. Having a photograph of the specific issue at hand means repair technicians do not need to do any guessing while making repairs.

Only large companies need one.

Large companies may need a more robust CMMS, but any company that has a maintenance department will benefit from a system. Larger companies with more assets might purchase a CMMS mostly to track their assets, but small companies can still use it for preventive maintenance tasks and work order tracking.

Manual maintenance tracking methods work just as well.

This could not be further from the truth. The most popular form of manual maintenance tracking

is with Excel spreadsheets. Relying on Excel spreadsheets can lead to a lot of headaches and damage. Anyone can edit an Excel spreadsheet and change information without consequence any time they want. Excel does not track changes or specify which user made the changes. A CMMS does both of these things. This means information cannot accidentally be overwritten or changed. If it is changed purposely, the system will track which user made the change, and usually the time and date it was made.

When considering whether or not to purchase a CMMS, it is important you know fact from fiction. Once you figure out what's true and what isn't, then your search for maintenance management software can truly begin.

For further information visit:
www.mapcon.com

Ardaunt Facilities Management appointed Valuekeep as their CMMS provider

Valuekeep has been selected as the CMMS solution provider for Ardaunt, a Facilities Management service provider in the UK, to manage the maintenance operations across their multi-site projects.



Ardaunt, a Facilities Management service provider with more than 24 years of experience in the field, found on Valuekeep's cloud-based CMMS software the best solution for a broader control of corrective

and preventive work, as well as the full control over work orders, incidents, costs and materials consumptions across their multi-site projects in the UK.

“After researching a number of options for suitable CMMS, we decided that Valuekeep offered us the most competitively priced solution for our still growing business, with both remote and in-house training and a full support service included. Valuekeep will enable us to streamline our maintenance management processes and enhance the service reporting provision to our valued clients.”

- Peter Stratton, Managing Director at Ardaunt Facilities

The work that was previously controlled using paperwork and Excel sheets will now be simplified and streamlined with an easy-to-use web solution and mobile app that improves the access to information, data entry and reporting features on the go.

With the implementation of Valuekeep's cloud-based software in June 2018, Ardaunt's technical team will benefit from having access to new management tools that help simplify and quickly react to their facilities management and maintenance work across their multiple customers' sites.

Ardaunt, which count with customers across the Retail, Medical Services, Analytics Instrumentation, Manufacturing, and Technology industries, will further strengthen its quality standards with a new centralized maintenance and work management solution.

More about Ardaunt

Established in 1994, and based in Swindon Wiltshire, Ardaunt offers a wide range of services focused around the Facilities Management, including space planning, refurbishment, relocation, maintenance, pest control, commercial cleaning and project management.

Ardaunt Facilities Management is a BIFM corporate member (a professional body for Facilities Management companies). Ardaunt also collaborates with Racking & Mezzanine in a number of projects in the UK.

Find out more at:
www.ardaunt.co.uk

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Innovation Through Consultation: how the Rittal VX25 Enclosure System was Conceived

When you believe your enclosure is already the best, how can it be made better?

The answer: by listening, watching and learning from customers.

Rittal's new VX25 large enclosure was developed from the bottom up, through a year-long study, gathering data and market intelligence. Detailed, scientific analyses of workshop processes in switchgear manufacturing were coupled with in-depth discussions with customers, and advice from the Rittal customer advisory council. The result was an enclosure geared to deliver maximum customer benefit.

Before developing its new VX25 large enclosure system, Rittal's team commissioned the Munich-based PMO Usability Engineering & Organisational Development Technical Institute to conduct a 12-month field study across three continents and numerous switchgear manufacturers.

Words, images and film were captured and analysed by the Institute's researchers to document everyday working practices within a large number of small, medium and large companies in Germany, the USA and China.

The user analysis was an eye-opener, not least because it highlighted problems that even the customers themselves hadn't been aware of.

In total, the study gave Rittal no less than 150 specific requirements for the new enclosure. These were then combined with findings from the Rittal customer advisory council and every single point was acted upon during subsequent development work.

Reducing complexity

One of the key innovations, highlighted in feedback from Holger Mrzyglodzik, Project Leader at Schubs

Steuerungstechnik GmbH, is the fact that Rittal has significantly reduced the number of installed components.

He advises: "The greatest strength of the new enclosure system is its range of accessories. There are fewer parts but their functionality is greater."

The VX25's consistent 25-mm pitch pattern has allowed Rittal to reduce the number of individual parts. So, for example, there are 40 per cent fewer punched sections and rails.

Assemble-friendliness

Rittal has also focused down on user-friendly design elements to speed up installation.

Thomas Frink, Managing Director of KSV Koblenzer Steuerungs- und Verteilungsbau GmbH, says the new enclosure is better than its predecessor, the TS 8 because "it's easier to assemble, especially in combination with the base/plinth."

The new frame section with a 25-mm pitch pattern is used throughout, which means the enclosure can be easily expanded, giving users far greater flexibility.

Components such as divider panels and partitions, as well as covers for contact hazard protection and mounting plates, can all be installed from the back of the enclosure.

All this adds up to greater simplicity, speed and convenience during its assembly. Heinz-Josef Schmitz, Head of Switchgear Manufacturing and Technical



Services at the Blumenbecker Group says: "What really impressed me is that you need no more than two tools to complete the enclosure."

The door and door handle design go one step further, in that both can be mounted and removed without any tools at all.

Wide range of applications

Overall, the VX25 is a far more adaptable and practical enclosure than its forebears.

"The new enclosure is an improvement on the previous model; it is much more versatile," says Andreas Ripplöh, Managing Partner of Ripplöh Elektrotechnik GmbH.

It's worth re-emphasising that all of these innovations were as a direct result of consulting and engaging with outside specialists and customers. This means, Rittal has been able to develop a new enclosure system that was hotly anticipated even before the launch, and has been warmly welcomed since.

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

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Denso Steelcoat™ Protects Newquay Private Suspension Bridge

If your home is the beauty of an island, connected to the Cornish coast by a suspension bridge, you have few problems - but one of the biggest is the corrosive marine atmosphere.

When the owners of The Island in Newquay were planning maintenance work on their private footbridge they wanted to use a product which would give the steel cables long-lasting protection against the harsh coastal elements.



Winn & Coales (Denso) Ltd were contacted to meet this challenge and advised the use of their Denso Steelcoat™ 100/400 system. Denso Steelcoat™ Systems provide a cost-effective, long term solution to corrosion on exposed steel and can provide many years of maintenance free service life.

After surface preparation, Denso Hi-Tack Primer™ was applied, followed by Densyl™ Profiling Mastic for filling awkward profiles. Denso Hi-Tack Tape™ was then applied, followed by Denso Ultraseal Tape™ and finally painted with Denso Acrylic Topcoat™.

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The Beha-Amprobe IRC-110-EUR Infrared Camera offers point-and-shoot thermal imaging technology for the professional

The new, rugged Beha-Amprobe IRC-110-EUR Infrared (IR) Camera, designed for the professional, offers point-and-shoot functionality to give a visual heat map image for quick and accurate identification of temperature related issues.

It is an ideal tool to troubleshoot electrical connections and motors/drives, HVAC, mechanical and automotive applications, and insulation leaks around buildings to identify potential energy savings. More information, and where to buy Beha-Amprobe products, can be found at www.beha-amprobe.com.

The Beha-Amprobe IRC-110-EUR thermal camera offers a visual image with five blending modes with the IR heat map overlay (at 0%, 25%, 50%, 75% and 100%) providing a quick indication to the actual hot spot location. The images are also viewable in one of three selectable color palettes for better analytical evaluation - grey scale, hot iron and rainbow. Intuitive joystick navigation enables ease of

navigation through on-screen menus and settings. The Beha-Amprobe IRC-110-EUR is focus free and provides a centre-point temperature measurement, with hot and cold markers instantly identifying the hottest and coldest spots within the image. The distance to spot ratio is 20:1 and the emissivity is adjustable from 0.10 to 1.00. Featuring an Auto-off function, it offers an IR temperature range from 10degC to +500degC.

The Beha-Amprobe cameras are suitable for use in industrial maintenance, commercial facility maintenance, oil & gas maintenance, reliability inspections, building diagnostics, utilities and in research & development.



For more information on the Beha-Amprobe infrared cameras, and about other Beha-Amprobe test and measurement products, or to download a catalogue, visit the website at www.beha-amprobe.com

Global production as per Industry 4.0

A state-of-the-art centre for manufacturing large enclosures is currently under construction at Rittal's Rittershausen plant, based on Industry 4.0 principles.

While work there is ongoing, Rittal is also installing new high-tech production lines for its new VX25 large enclosure, at a total cost of €120m.

The company is gearing up its production to Industry 4.0 through consistent digitization of processes and fully automated profiling, welding and panel manufacturing units, making the new centre a model for all Rittal production plants worldwide.

In 1961, Rittal made history by manufacturing the first volume-produced enclosure at its Rittershausen plant and by launching its off-the-shelf delivery programme.

It was a game-changer for the industry.

Today, the plant is the company's most efficient factory for manufacturing high-quality enclosures.

The €120m investment sets the future direction for the plant, once work there is complete in 2020.

"Our goal is to establish the world's most modern centre for manufacturing large enclosures. To this end, we have started the transformation into the age of Industry 4.0. We are setting the next standard in the Rittal production system for our worldwide plants – based on the 'one Rittal, one standard' principle," says Carsten Röttchen, Managing Director International Production at Rittal



The Rittershausen plant already featured a high degree of automation in its sub-processes.

"With the increasing digitization called for by Industry 4.0, we will be automating further sub-processes, increasing data consistency and integrating the production process into a completely digitized value chain through a manufacturing execution system", added Mr Röttchen.

The process improvements include knowledge-based systems that are constantly evolving through data networking and analysis. Trends can be detected in real time, as they arise, by means of continuous target-to-actual comparisons of the production machines and statistical processes.

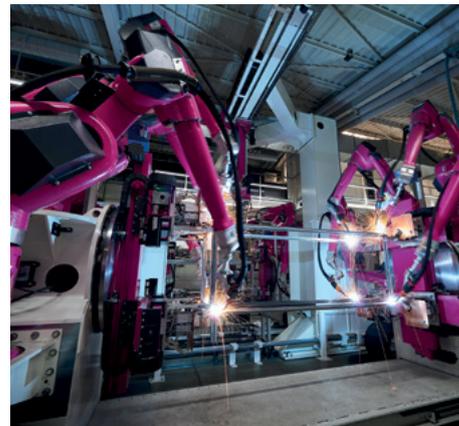
As a result, interference factors can be avoided before they occur and tolerances can be safeguarded in order to achieve the high quality demands of the process. In addition, predictive maintenance data is used to improve the technical availability of the production facilities.

More than 30 Robots Required for VX25 Volume Production

In contrast to the new Haiger plant, which is being built on a greenfield site and will be ready to start production at the end of 2018, the conversion towards digitized and automated processes at Rittershausen is taking place during ongoing operations.

The first units for the VX25, such as the fully automated panel lines for mounting plates, as well as the profiling and welding systems, have already been installed.

When completed in 2020, the new production facility will have three profiling systems, each 70



metres in length. This means that the horizontal and vertical frame sections of the new VX25 large enclosure system, which have perfect symmetry and a consistent 25-mm pitch pattern, will be manufactured in one process.

The volume production lines also have fully automatic welding systems. Thirty-one robots (for welding and handling) deployed in the fully automatic volume welding system will ensure that the transport and welding processes run reliably within the plant. They will also guarantee the Rittal quality standard of the new Rittal VX25 large enclosure system.

"The development of the new VX25 production lines was only the first step on the way to the digital future of the Rittal production facilities. The global transformation of Rittal's production towards Industry 4.0 is already going flat out," Carsten Röttchen explained.

The transformation has already begun in the Valeggio plant in Italy. The first Industry 4.0 principles are being applied there for manufacturing Rittal Blue e+ cooling units.

Rittal is also planning to expand and reorganise the Chinese and US sites, focusing on digital transformation, and getting them ready for the future.

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

New Radio Remote Controls For Hoists And Cranes

J D Neuhaus (JDN), the world leader in air hoists, cranes, trolleys and monorail hoists, has further enhanced their remote control capabilities.

This innovation will bring exceptional ease-of-use and convenience to users across all industries. Three remote control models are now available, RC-X, RC S and RC-SP, each comprising of a transmitter and receiver and all can either be integrated in existing JDN solutions or directly combined with a new JDN hoist.

One of the many advantages of the new JDN receiver is its rigid and extremely compact design. All components are housed in a space-saving, shock-resistant GRP (glass-reinforced plastic) casing featuring protection class IP65 (dust and water protected). A breathable membrane guides any condensation away from the interior to the exterior. The design also offers seawater-resistance for offshore applications. The radio remote control model RC-X is even suitable for the use in potentially explosive environments rated up to ATEX zone 2/22.

Consideration has also been given to ease-of-installation. Even existing JDN hoists and cranes can be retrofitted thanks to the standardised interface of

the JDN RC. The receiver can be mounted directly on the hoist or the trolley, or individually at site. The compact design of the receiver makes it even suitable for hoists with low carrying capacity.

Individual solutions according to specific customer needs are available. Up to 20 hours of use is possible before recharging of the portable transmitter is required.

Perfect for covering long distances between hoist and operator, the JDN RC represents a sensitive alternative to applications with long control hoses. In addition, it can be used in hard-to-reach places and for simultaneous control of multiple hoists.

JDN's decision to develop electronic-based radio remote controls as a renowned designer and manufacturer of exclusively pneumatic and hydraulic hoists and cranes may be surprising. Certainly, continuous innovation has been a long-lasting ethos at JDN. Thanks to a series of industrial firsts the company enjoys an ever increasing market share in the field of lifting technology.

Company information

JDN located in Witten, Germany, has over 200 employees worldwide and is a manufacturer for pneumatic and hydraulic hoisting devices and crane systems. Its internationally unique specialisation sets the benchmark for quality in their field. With customers in over 90 countries J D Neuhaus is furthermore also the world market leader. The products are characterised by their ability to steadily and reliably move loads of up to 115 tonnes even under the most extreme conditions. This also includes the protection against explosion. JDN products are e.g. used in the field of gas and oil movement, under arctic temperatures down to -45°C, under water for ship repairs, for mining applications, in the chemicals industry, for heavy



machinery construction and in various areas of logistics. J D Neuhaus supplies a total of around 70 industries.

Production exclusively takes place at the JDN headquarter in Witten, Germany. The wide range of products is complemented by services such as installation, inspection, maintenance, general overhaul of the systems and individual trainings for customers.

In collaboration with international partners and JDN subsidiaries in France, Great Britain, Singapore, and the United States, the company has developed a close-knit distribution network that spans the globe. J D Neuhaus has an export rate of over 80%.

Founded in 1745 the company is now family-owned in the seventh generation. The hoisting device museum worth visiting at the JDN headquarter in Witten, Germany, showcases the company's history as a lively part of corporate culture.

J D Neuhaus
Tel: 01224 722751
e-mail: info@jdneuhaus.co.uk
www.jdngroup.com



New Fluke Ti400 PRO and Ti300 PRO Infrared Cameras offer a more intuitive interface and better colour differentiation

Fluke has introduced upgraded versions of two of its best-selling infrared cameras. The new Fluke Ti400 PRO and Ti300 PRO Infrared Cameras feature a more intuitive touch screen interface with a higher contrast display and compatibility with optional smart telephoto, wide-angle and macro lenses which can be interchanged without calibration.

They also feature Fluke IR-Fusion® technology, which captures a visible light image in addition to the infrared image and combines them with three different operating modes (Picture-in-Picture, full visible light, and AutoBlend™), and are provided with Fluke Connect SmartView® Desktop Software, for optimising and analysing thermal images, generating customisable reports and exporting images in multiple formats to the Fluke Connect Cloud.

Fluke Connect Compatible

The new infrared cameras integrate into Fluke Connect® - the company's full-feature platform that permits Fluke tool users to receive, store, visualise, and report electronic measurement data from more than 40 Fluke Connect wireless test tools. This allows technicians to record and share thermal images, along with electrical and other measurements, in real time via their smartphones or tablets and automatically upload them to the cloud.

The Fluke Connect system provides access to maintenance records simultaneously at the inspection site and from the office or an off-site location, enabling faster decision making. It also enables real-time collaboration between team members with ShareLive™ video calls, increasing productivity in the field.

Images sync wirelessly direct from the camera to the Fluke Connect system, so images can be attached to an asset record or work order using optional software. Reports can be created and shared directly from the job site via email.

These two new models follow the earlier introduction of the Ti480 PRO and Ti450 PRO InfraRed Cameras both of which offer some additional features not available on the Ti300PRO and Ti400PRO such as MultiSharp™ Focus and SuperResolution.

For more information about all Fluke products, please visit the Fluke web site at www.fluke.co.uk.



The cameras provide fast, one-handed operation to perform multiple inspections quickly and accurately – ideal for predictive/preventive maintenance, for industrial, commercial and HVAC electricians, facilities managers and energy auditors. More information about the new thermal cameras and the rest of the Professional Series of IR cameras can be found at www.fluke.co.uk/ti

Both the Fluke Ti400 PRO, with 320 x 240 resolution, and the Ti300 PRO, with 240 x 180 resolution, feature LaserSharp™ Auto Focus, which, with the touch of a button, uses a built-in laser distance meter to calculate and display the distance to target and snaps the image into focus. An alternative advanced manual focus mode can be used.

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DSM's Global View of Maintenance and Equipment Reliability

DSM has increasingly moved from a centralised asset management approach to operating diverse sites across the globe, bringing both challenges and opportunities in its approach to maintenance and equipment reliability (M&ER), said Jos Van der Aelst, DSM's company lead in the area.



DSM is a global science-based company that is active in health, nutrition and materials. It works in global markets such as food and dietary supplements, personal care, feed, medical devices, automotive, paints, electrical and electronics, life protection, alternative energy and bio-based materials. DSM and its associated companies deliver annual net sales of about €10 billion with approximately 25,000 employees.

There are huge differences in backgrounds and

asset diversity among the DSM facilities, Van der Aelst said. The creation of a common vision and implementing strategic initiatives – including mechanisms and processes that work in many different environments – is the foundation for realising maximum value with the DSM asset portfolio, he said.

'The DSM global M&ER network created a common vision for M&ER,' he explained, and developed strategic initiatives to realise this vision. 'This starting

point ensures commitment and involvement for actionable initiatives and realising, amplifying and leveraging mechanisms for global roll out.'

The company adopted a range of strategic initiatives around best practice sharing and network structure, aiming to 'connect the whole DSM community', he said. It is working to optimise equipment reliability through the use of predictive maintenance and other technologies, while it also has an initiative focused on continuously improving the knowledge and competences of staff members. Enhancing an integrated asset life cycle approach is key for maximising asset utilisation and optimising operational and capital expenditures, Van der Aelst said.

DSM has a variety of technological projects underway to support this work, Van der Aelst said. The deployment of Asset Strategy Development and Asset Health Monitoring applications, as well as new technology in condition monitoring and making use of drones and robots for inspections, provides proactive, actionable insight into asset performance and condition, he said.

The strategic initiatives need to be embedded in processes and practices and employed by the different sites. Site M&ER organizations need to embody the vision and implement actions to realise the strategic initiatives, he said. DSM therefore deploys a number of instruments and tools, including a continuous improvement programme, management systems, and active networking activities across all DSM sites.

Van der Aelst said the aim is to continuously improve performance in terms of safety, asset reliability and costs. He also highlighted the environmental element, which he said is a key goal for DSM.



‘Sustainability is a core value and all our M&ER decisions and activities need to take into account the potential impact and opportunities in this domain.’

The company adapts technologies and processes to allow people across the global organisation to communicate, sharing their M&ER knowledge and experience to improve the capabilities of the company as a whole, he added.

‘We connect people to increase knowledge and security, to improve our asset health and our asset management,’ Van der Aelst said. ‘These are the main focus points for us.’

Jos van der Aelst will speak at Euromaintenance 4.0, where he will present on the journey from a corporate maintenance and equipment reliability vision to making it happen.

Visit www.euromaintenance.org for the agenda, pricing and registration.

Euromaintenance 4.0 : Europe’s biggest congress and exhibition on industrial maintenance and asset management.

Gartner Inc. anticipates 8.4 billion connected “things” will be in use globally by the end of 2018, an increase of 31 percent compared to 2016. The forecasts increase to 20 billion in 2020 and 70 billion in 2025 with close to 60 percent of these industry-related!

The industrial landscape is currently right in the middle of the fourth industrial revolution with new technologies such as IIoT, big data, predictive analytics, machine learning and more being implemented at an ever-increasing pace. The combination of IIoT and predictive analytics offers unseen possibilities for maintenance and asset reliability with more diverse and affordable solutions to monitor the condition of equipment and the market while making asset condition data accessible through “the cloud.”

The Euromaintenance 4.0 Conference offers a unique opportunity to learn how new 4.0

technologies and fundamentals in maintenance and asset management reinforce each other in order to achieve higher equipment reliability and cost performance in asset intensive industries.

- Learn about the new technologies and insights that are changing the future of your job right now.
- Gain profound insights on how companies are applying maintenance 4.0 today.
- Become inspired about the possibilities of predictive technologies, Industrial Internet of Things, big data and more.
- Tackle your challenges and improve reliability, productivity, safety and (energy) efficiency.

And then there’s the location: Antwerp is the industrial heart of Belgium and home to the largest integrated oil and chemical cluster in Europe.

Hydra-Cell® Metering Solutions P400 Pumps offer enhanced performance

Wanner has made significant improvements to its Hydra-Cell Metering Solutions Model P400 pumps that aid in priming for low-speed operation and improve performance when pumping gaseous fluids such as hypochlorite solutions.

Geometry changes to the diaphragm pocket valve plate have reduced the diaphragm pocket by 30%, thus minimizing “dead space” within the pump chamber. In addition, the valve port through-holes have been reduced by 6% to increase fluid velocity through the valve plate.

Used for a wide range of metering applications in chemical processing plants, the Hydra-Cell P400’s multi-diaphragm design provides a virtually pulse-free flow without the use of expensive pulsation dampeners. It exceeds API 675 performance standards for steady-state accuracy ($\pm 1\%$), linearity ($\pm 3\%$) and repeatability ($\pm 3\%$).

This Hydra-Cell P400 with a reduced pocket valve plate has a flow capacity of 766 l/hr (202.36 US gal/hr) and a maximum pressure of 69 bar (1000 psi) for metallic pump heads and 24 bar (350 psi) for non-metallic pump heads. Wanner says that the seal-less design of Hydra-Cell means that there are no dynamic or mechanical seals, cups, or packing to leak, wear, or replace

Spring-loaded, disk check valves, combines with the seal-less design, enable model P400 pumps to handle viscous fluids and abrasive particulates up to 500 microns in size. These pumps can also run dry indefinitely without damage to the pump and



are available in a wide choice of pump head, valve, diaphragm, and O-ring materials. A variety of options and accessories (e.g. pressure regulating valves, motors and controllers) is available to help provide a complete chemical-feed pumping system.

For more information please visit:
www.hydra-cell.eu



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www.dualpumps.co.uk

ABB Ability Smart Sensor now also monitors pumps

The ABB Ability™ Smart Sensor provides data for the predictive maintenance of low voltage motors. In partnership with Emile Egger, a Swiss producer of pumps, ABB has now developed the solution to remotely monitor pumps.



The pump manufacturer Emile Egger is constantly on the look-out for ways to improve its products and processes. Michel Grimm, Egger's chief business development officer and grandson of company founder Emile Egger, became aware of the ABB Ability Smart Sensor in early 2017. This solution, developed by ABB in 2016, revolutionised the maintenance logistics of motors by enabling the owners to detect problems early due to remote monitoring. This meant that maintenance work could be carried out preventively for the first time and, thus, downtime could be drastically reduced.

"Pumps, such as those in wastewater plants, usually fail without warning. In order to prevent typical problems such as blockages, it is necessary to undertake time-consuming maintenance several times a week," explains Grimm.

Egger considered that if smart sensors can monitor motors predictively, why shouldn't they be able to provide the same valuable services for pumps? It then contacted ABB, which gladly took up the challenge. The two companies decided jointly to develop a new smart sensor tailored to the specific needs of pumps.

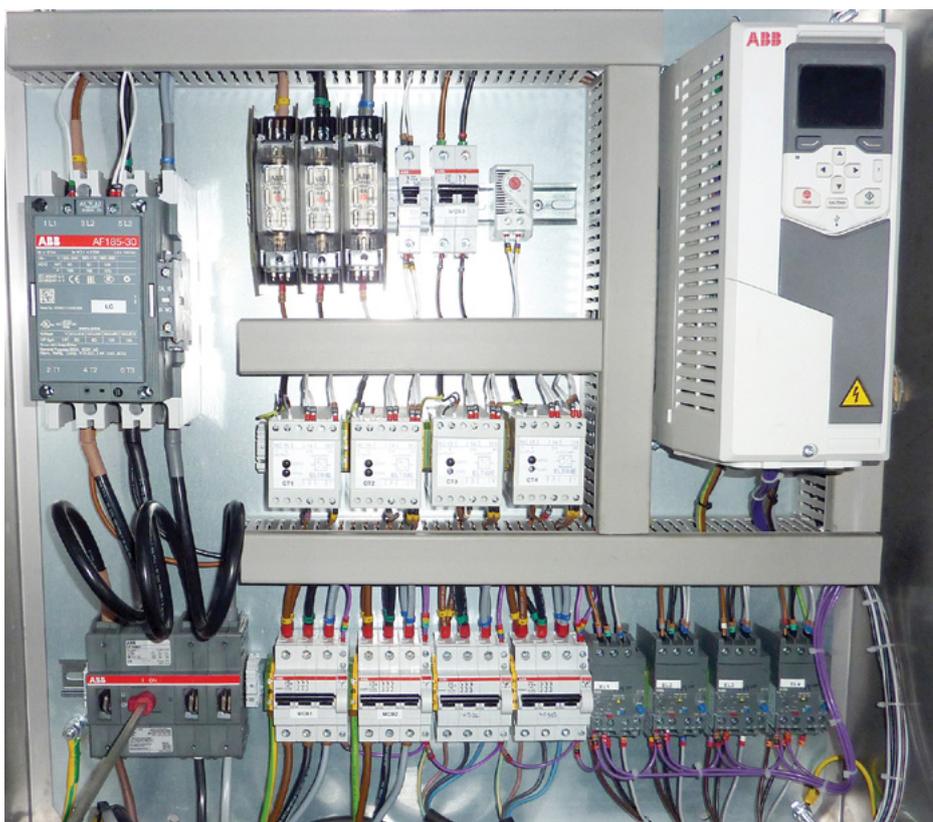
The combined experience of the engineers and scientists of ABB and Egger quickly led to success. In less than a year, the sensor solution has been successfully developed. Using their reliable hardware, the motor sensors were adapted such that they now can also provide readout values on pump speed, overall vibrations, unbalance, cavitation (formation of vapour bubbles in fluids), and clogging. To achieve this, ABB used the scientific expertise of employees in Germany, India, the USA, and Switzerland. In return, Egger provided access to German and Swiss end customers, whose input helped to develop data analytics that meet the requirements.

The first tests were carried out at Egger's test facilities in Cressier at the end of July 2017 and proved satisfactory. Meanwhile, ABB has delivered the first prototypes to enable testing in a real-world environment. In these pilot installations, the whole digital background of the ABB Ability Smart Sensor technology is used: health indicators and key performance indicators are not only gathered but also sent to the ABB Ability Cloud through a gateway. The pump operators can read the data via an app on their smartphone or in a browser. ABB and specialised partner companies will carry out further analyses in the cloud to detect tendencies and to be able to run cloud-based services in the future.

For more information, visit <http://bit.ly/ABBUKEnergyProductivity> or call ABB DRIVES (that's 07000 374837).

Malt producer raises glass to improved productivity with ABB drive

A control package, built around an ABB variable speed drive, eliminates machine stoppages, improves safety and cuts maintenance costs for malt producer.



A production facility that turns barley into malt for use in beer and whisky production has increased productivity and safety by installing a new germination machine controlled by an ABB variable speed drive (VSD).

Bairds Malt operates five malt houses across England and Scotland, supplying 250,000 tonnes of malt annually to brewers and distillers, around one fifth of which is produced at Witham.

The ABB industrial drive, ACS880, controls four gear motors located on the corners of a 15-tonne trolley that is used to agitate the barley during the germination process. Should a blockage occur,

the VSD slows the speed of the motors driving the trolley – known as a turner – giving it time to work through the obstruction. Since the new system was installed stoppages at the site have been reduced from once a fortnight, on average, to practically zero.

The turner plays a crucial role in the malting process at Bairds Malt's production facility in Witham, Essex. Once barley has been steeped, it is fed into an open-topped box measuring 45 metres in length – known as a street – to enable germination to occur. During this process, it is necessary to constantly agitate the barley in order to stop the roots from knitting together. The turner performs this function as it moves along the box at exactly 0.42 rpm,

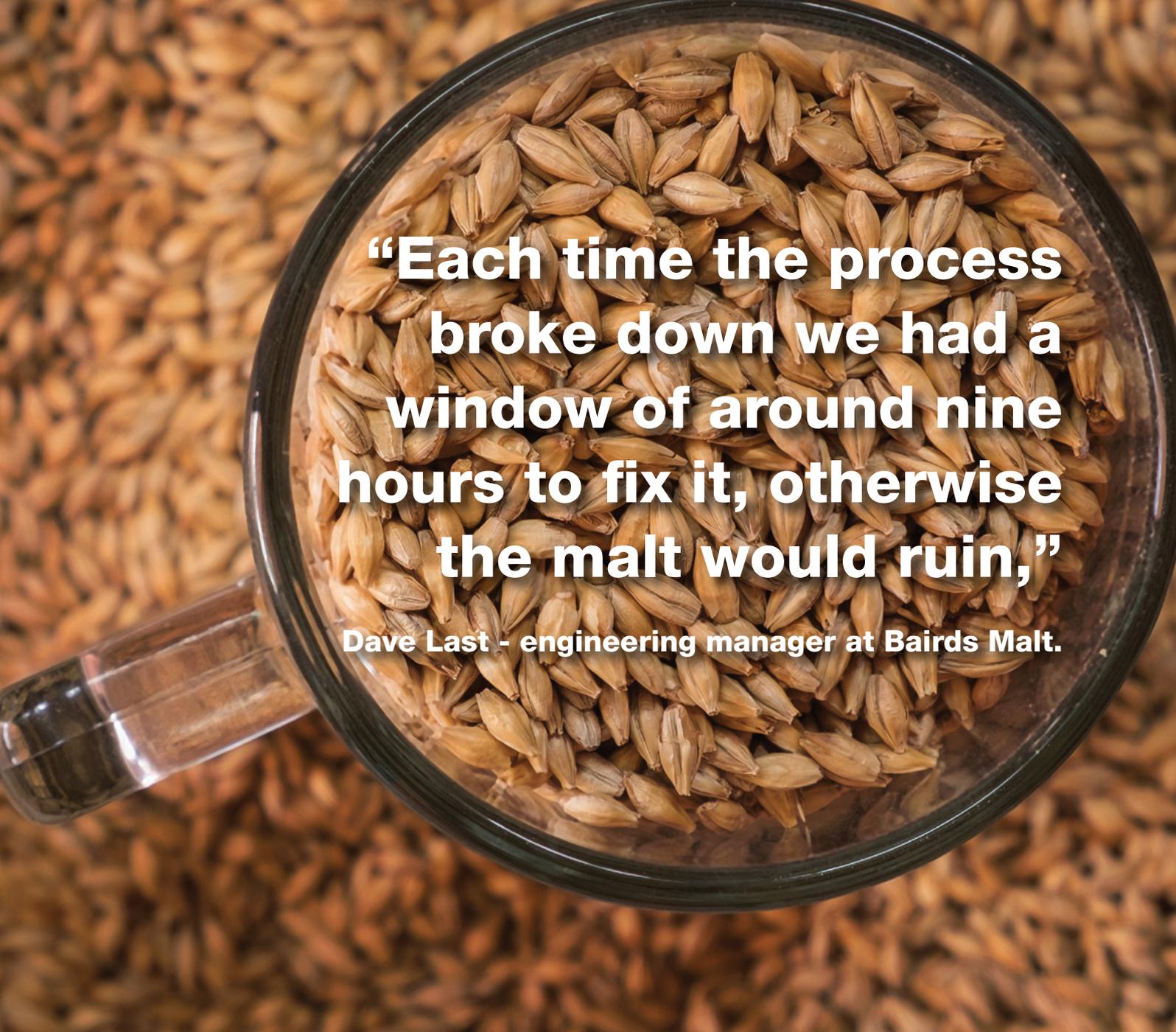
driven by the gear motors on each corner. As the trolley progresses, 12 motor-powered screws turn the barley to break it apart.

In the previous installation, the turner was powered by a single motor operating at a fixed speed. As a result it was unable to slow down to negotiate any blockages, such as hard lumps of barley. The machine would attempt to break up any obstruction by trying to drive through it. This would cause a spike in current, making the machine break down.

"Each time the process broke down we had a window of around nine hours to fix it, otherwise the malt would ruin," says Dave Last, engineering manager at Bairds Malt. "Usually we were able to fix the problem within that timeframe, but as malt is a live product the roots continue to grow and after a while they knit together and become almost like cement. It sometimes got to the point of having to break up the roots with forks."

The blockages also had more serious implications, as the machine's attempts to drive through the restrictions would, on occasion, cause the 15-tonne turner to 'jump' backwards, putting workers at risk of serious injury.

As the turner and box were almost 40 years old and the turner was experiencing regular mechanical failure, Bairds decided to upgrade its facilities with new equipment. It designed the new system itself and approached ABB authorised value provider, Gibbons Engineering Group, which had installed



“Each time the process broke down we had a window of around nine hours to fix it, otherwise the malt would ruin,”

Dave Last - engineering manager at Bairds Malt.

similar processes at other Bairds' facilities, to design and supply the control package.

With the new system, the VSD takes its signal from a programmable logic controller (PLC), which is mounted, together with the VSD, in a stainless steel box on the turner. The PLC monitors the load drawn by the gear motors to detect spikes in current of 20 percent or more that signal a blockage. Should this occur, the drive reduces the speed of the motors to 50 percent, giving the turner time to work through the obstruction. It repeats this process three times. If, after this time, the blockage is not cleared, an alarm is triggered to notify the operator.

Since the new machine was installed, stoppages at the Witham site have been reduced to almost zero. In addition to increasing production time, this has improved safety for staff as there are no longer any blockages that could force the turner to move out of place.

In addition to the VSD, the system also uses ABB switchgear, including a door interlocked isolator, miniature circuit breakers, contactors with thermal overloads and signal transducers.

As the turner no longer has to attempt to drive through blockages, the ABB drive is also expected to cut energy use at the Witham site by reducing the amount of work the gear motors have to do.

Further savings are likely as a result of reduced maintenance costs. “With the drive, inrush currents are heavily reduced and the torque control assists with stresses on components, reducing breakdowns as a result of snapped screws and belt chains,” explains Barry Horsfall, Gibbons' contracts director.

Following the success of the system at Witham, Gibbons has recently completed a similar installation at Bairds Malt's facility in Pencaitland, Scotland.

For more information, visit <http://bit.ly/ABBUKEnergyProductivity> or call ABB DRIVES (that's 07000 374837).

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Mechan Makes Grade At High Tech Rail College

Equipment manufactured by Sheffield-based Mechan is being used to train the next generation of skilled rail industry workers.

The depot maintenance specialist has supplied a bogie press and a set of lifting jacks to the National College for High Speed Rail in Doncaster.

Working with the college's main construction contractor, Willmott Dixon, Mechan has created a bespoke 30-tonne bogie press to help with training. It will provide students with an opportunity to see how a bogie's suspension is settled after maintenance, by mimicking the loads imposed by the rail vehicle.

A set of eight 15-tonne jacks has also been installed at the college to demonstrate how they are used within depots to service carriages without decoupling. Mechan's flagship jacks are specified

in workshops across the world, as up to 48 can be synchronised to allow just one operator to lift a 12-car train.

Lindsey Mills, Mechan's sales manager, said: "This new teaching facility in Doncaster is furnished with cutting-edge rail technology and it is testament to the high regard in which our products are held that we were asked to contribute. Our jacks and bogie press will enable students to familiarise themselves with equipment they are likely to encounter in depots, giving them invaluable real-world experience."

Clair Mowbray, chief executive of the National College for High Speed Rail, added: "Our new

college is led by employers and it's thanks to the incredible support from businesses like Mechan that we can lead the way in training the next generation of rail engineers and technicians. Having access to industry equipment and the latest technologies is extremely important; it makes a real difference for our learners."

For more information about Mechan's wide range of rail depot maintenance products, email info@mechan.co.uk, telephone (0114) 257 0563, visit www.mechan.co.uk or follow the firm on Twitter, @mechanuk.

Training Provider Opens Doors To Promote Skills In Energy Sector

Construction and utilities specialist Develop Training Ltd (DTL) is opening the doors of its Midlands and Scotland based centres throughout July to promote skills in the energy sector.

The company, which is a strong advocate for greater investment in training and apprenticeships by industry and the government, is running three open days in Derby and Linlithgow near Edinburgh.

The free-to-attend events are designed for organisations with an interest in training for gas, mechanical and electrical engineering, smart metering, mechanical and electrical engineering training.

Open day visitors will be given a tour of the company's top-of-the-range facilities in Derby and Linlithgow with live demonstrations of the company's control rig, medium pressure apparatus and smart metering equipment.

Visitors will also have the opportunity to give their views on the content of DTL's extensive range of training courses in gas/energy.



There has been strong interest in the events already from DTL's customers, who include household names in the utilities and construction sector, with spaces filling up quickly.

Further details with information on how to book can be found here: www.developtraining.co.uk

Barrett Steel Offer STEM Support to Schools

Encouraging children to study STEM subjects (Science, Technology, Engineering and Maths) is something that Barrett Steel Ltd feel extremely strongly about.



Following an approach from a secondary school asking for steel to use in lessons, Barrett Steel were honoured to be asked to get involved and are keen to support the education of young people nationwide, where they can.

Donating excess product to help with the education of the future engineers seemed like an excellent idea, and a way in which this long-established family

company could have a positive impact on their local communities.

Mr Jason Brister, Head of Art, Design and Technology at Sir John Nelthorpe School in Brigg, North Lincolnshire, was the one to first make the approach. "Starting in September 2018 we are introducing a new Engineering course for our GCSE students and I reached out to local companies that

may be able to support our faculty with charitable donations of steel, copper, brass or aluminium offcuts."

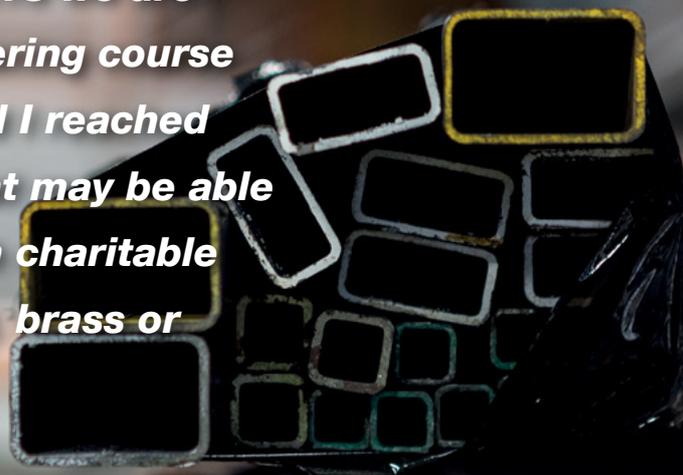
Barrett Steel's depot in Scunthorpe, Kass Steel Stockholders were put in touch and invited school staff to visit and examine some suitable pieces for their project needs.

"We were delighted to be put in touch with Kass," continues Mr Brister, "and are confident that their input will have a positive impact on our students' learning. We have fought for two years for Engineering to be included in the curriculum, so this support is invaluable to help our engineers of the future."

Tom Barrett, Commercial Director of Barrett Steel, said, "STEM subjects are the core of our business and our customers'. Anything we can do to assist the skillset of our local communities is fundamental to the industry's advancement."

Barrett Steel have 27 depots nationwide, (including Northern Ireland and Scotland) and will aim to support similar courses and initiatives where they can. Please contact their marketing team directly for more information marketing@barrettsteel.com

"Starting in September 2018 we are introducing a new Engineering course for our GCSE students and I reached out to local companies that may be able to support our faculty with charitable donations of steel, copper, brass or aluminium offcuts."



6500 trainees and counting – BFPA training courses provide the right skills for the job

A correctly trained workforce increases the value of a company, and with over 6500 trainees, the BFPA Training Academy's reputation as a leading fluid power industry training provider, is growing.

The one-day Foundation Course in Working Safely with Hydraulic Hose and Connectors course shows the correct practices needed to work safely with hydraulics. It's an ideal induction for people new to the industry or technicians who work with hydraulics and pneumatics.

Our two-day Hose Assembly Skills Training Programme is carried out in both a classroom and shop floor environment and is designed to enable the attendee develop into a quality hydraulic hose technician.

The Hose Integrity, Inspection and Management Training Programme aims to establish best practice among those responsible for hose inspection and management from many different industries.

The Small Bore Tubing Integrity Course covers the theoretical, practical and safety elements involved in the manufacture of small bore tubing assemblies using twin ferrule compression fittings.

All trainees are registered on the BFPA's training database and qualify for a training passport.



For more information please visit The BFPA Training Academy website www.bfpatrainingacademy.co.uk



INDUSTRY RECOGNISED COURSES FROM THE BFPA

The BFPA have for many years been passionate about raising standards within the fluid power market and industry as a whole, with this objective in mind we have created a suite of valuable training courses now available.

FOUNDATION SAFETY COURSE

This course has been developed to provide an introduction into hydraulic hose, connectors and the safe assembly of these components for industry use. During the day the attendee will gain a knowledge and understanding of safe hose assembly and if applied will only enhance the safety within the hydraulic industry and the attendee.

HOSE ASSEMBLY SKILLS COURSE

The skills course will take the candidate through the many techniques and considerations essential for the safe production of a quality hose assembly and ultimately leading to installation. This two day course involves both the theoretical and practical elements in working with hose and connectors.

HOSE INTEGRITY, INSPECTION & MANAGEMENT

The key themes covered during the one-day course include: hose life expectancy; risk analysis; competence by way of a robust competence assurance system; identify, inspect & record; hose register – recording of a hose assembly prior to it going into service; and visual hose assembly (installation) inspection check list.

SMALL BORE TUBING INTEGRITY COURSE

Candidates are offered a valuable understanding of the complexity surrounding small bore tubing and compression fittings. The course covers generic manufacturers twin ferrule compression fittings, thread awareness, tube and pipe differences and the preparation process, tube manipulation (bending) principles, common installation and routing techniques.



For more information about any of our courses or to check availability please visit:

www.bfpatrainingacademy.co.uk

Please call 01608 647900 or email info@bfpatrainingacademy.co.uk



Engineering: Not just a man's world

A skilled engineer in a senior hands-on role, Libby Peacock shares her story to encourage more women and girls to enter the engineering profession.



As Product Manager for Pneumatics at Brammer Buck & Hickman, Libby has around twenty years' experience in the pneumatics industry. Starting her career in a small engineering company making appointments for the sales team, Libby's manager encouraged her to cement her on-the-job knowledge by attending night school.

Libby explains, "The class was full of men who were in fairly senior roles with lots of technical experience. I knew my company's catalogue and products inside out and could recite their technical details by rote, but I didn't have the experience or knowledge of my class mates."

What Libby did have, however, was a desire to learn. That, combined with having no fear of asking what might be deemed 'silly questions', saw Libby

discover an appetite for engineering, finish her course top of the class and excel in her chosen profession.

In her role at Brammer Buck & Hickman, a leading supplier of industrial supplies, Libby is directly involved in working with the end user. It was through this customer interaction that Libby developed a real passion and understanding of how her knowledge could offer customers solid business benefits and cost efficiencies.

Libby commented, "I've found the best thing about working in this industry is that there's always an opportunity to do things better, abandon fixed ideas and reinvent the wheel. That keeps work very exciting! I thrive on building relationships with customers. I was used to going on site

visits and helping customers to identify the parts and the products that might help them to realise efficiencies, but it was the added value advice I was able to offer that really seemed to resonate and helped to build relationships with customers. I think one of my proudest moments was saving an automotive factory £130,000 on their energy bills by recommending a small tweak to their production line."

Asked whether she has ever felt that being female has held her back in a male dominated environment, Libby is pragmatic, "To be honest, the only person who has ever doubted my ability is me – but we all do that, don't we? If anything, I've found that people appear more open to my advice than they might be to the same guidance being given by a male colleague. There's no getting away from the fact that men and women may approach a situation in a different way – whether it is practical problem solving or a different communication style – which is exactly why having a gender balance is important."

Females represent 1 in 5 senior roles at Brammer Buck & Hickman, a significantly higher proportion than in the engineering sector, which stands at 11%. With the annual shortfall of engineering skills anywhere between 25,500 and up to 60,000 people, there's still an urgent need to encourage young people, whatever their gender, to consider engineering roles.

Libby concludes, "The biggest barrier to young women entering engineering roles is still that there's a lack of visibility of women doing traditionally 'male' jobs. I think it is important to raise awareness of engineering as a career in order to build the talent pool for the UK engineering sector. My advice to people considering a technical career is to just go for it. Do what you're good at and don't be put off by stereotypes."

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BEKO announce the launch of the METPOINT® OCV compact

METPOINT® OCV has been available on the market for eight years and has proved itself in numerous application fields as the go to device for measuring oil content.

"Our new compact version retains all the basic functions which were available in the METPOINT® OCV, although the new model now impresses even more with reduced measuring intervals as well as its modular structure. This makes the new device a compact, as well as simultaneously high-performance, alternative for companies which place increased importance on simple assembly and operating capabilities but, at the same time, expect the highest measuring accuracy for the residual oil content in the compressed air.

By utilising reduced measuring intervals, the METPOINT® OCV compact can now record any alterations in the compressed air process even

quicker and recognise peaks when measuring better than previously. Measurements are executed every 0.4 seconds.

Another new benefit with the METPOINT® OCV compact is its simple and more flexible handling: The measuring device can be simply adjusted via a regulator to set it to various working pressures in a pressure range between 3 and 16 bar.

Controlling and operating are executed as menu-guided and intuitive, which therefore obviates time consuming familiarisation courses or special training. The measurement device indicates the operating status via red and/or green illuminating LEDs and



the compliance with the ISO 8573 oil classes. Alarm contacts can be configured individually to be able to receive information about increasing residual oil vapour content immediately.

BEKO TECHNOLOGIES
01527 575778

NEW PRODUCT: Stainless Steel Air Jets Resist Corrosion & Heat

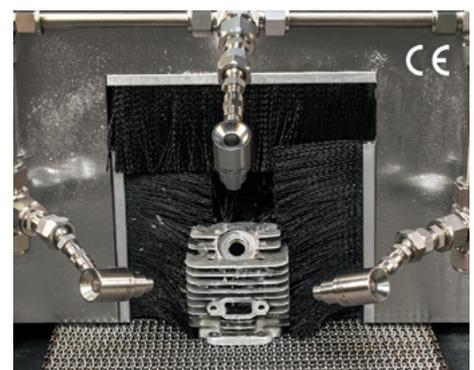
EXAIR's new 303SS Air Jets provide reliable and efficient blowoff and cleaning within corrosive, high temperature, or washdown environments.

These 1/8 NPT Stainless Steel Air Jets replace open tubes and pipe nipples on parts cleaning, drying and cooling operations. With temperature rated up to 400°F, they will produce up to 1.25 pounds of force upon your target.

Available in two styles, the High Velocity Air Jet provides maximum force with a confined and directed airstream. The Adjustable Air Jet style allows you to easily control the air upon your target

with its micrometer air gap indicator. EXAIR Air Jets utilize the Coanda effect to pull in the surrounding ambient air and increase the total volume of air impacting your target area. Both the outlet and inlet can be ducted for remote positioning.

Air Jets require a small amount of compressed air which can be less than half that of open air lines in your plant. Typical noise level reductions are 8-10 dBA. Stainless Steel Air Jets complement our



complete line of engineered air nozzles which reduce energy use and noise levels while increasing safety. All EXAIR Air Jets and Nozzles meet OSHA static pressure requirements and CE safety standards.

For further information visit:
www.exair.com/ssaj.htm

Compressed Air Use

Compressed air should be a concern in every manufacturing or processing facility. Commonly referred to as the “fourth utility”, compressed air is very common as a resource within manufacturing, mining and processing environments.

Employees or contractors in every industrial setting are exposed to compressed air's effects regularly and it should be handled with responsibility and care. Beyond safety concerns, compressed air should be used as efficiently as possible by using engineered products which optimize compressed air performance and save money.

The primary dangers from compressed air come from high pressure and noise exposure. Personnel being exposed to compressed air which exits an open-line or non-safety nozzle at a higher pressure than 30 PSIG risk the air entering the bloodstream and causing an air embolism, a serious health risk.

Improper use of compressed air commonly exceeds OSHA's noise exposure standards and causes noise induced hearing loss (NIHL). The CDC reports NIHL is one of the most common occupational diseases and the second most self-reported occupational illness or injury. According to the National Association of Manufacturing there are 12.3 million people working in the manufacturing sector, which accounts for approximately 9% of the U.S. workforce. The bureau of Labor Statistics states occupational hearing loss is the most commonly recorded occupational illness in manufacturing, accounting for 1 in 9 recordable illnesses. More than 72% of these occur among workers in manufacturing.

Compressed air use is also regulated. In the U.S., OSHA has two important standards relevant to compressed air. Standard CFR 1910.242(b) is specific to compressed air use for cleaning and states – “Compressed air shall not be used for

cleaning purposes except where reduced to less than 30psi and then only with effective chip guarding and personal protective equipment”. OSHA's own interpretation goes on to state “the downstream pressure of the air at the nozzle (nozzle pressure) or opening of a gun, pipe, cleaning lance, etc., used for cleaning purposes will remain at a pressure level below 30psi for all static conditions. The requirements for dynamic flow are such that in the case when blockage of the air exit (dead-ending) occurs a static pressure at the main orifice shall not exceed 30psi”.

And because compressed air can be loud and result in hearing loss when it is used through poor nozzles, open tubes and pipe, or home-made blow-offs, their noise exposure standard is important. This standard 29 CFR 1910.95(a) outlines the allowable time a person can be exposed to a specific decibel level as follows:

Limiting pressure and noise is effectively done by using products which are purposefully designed to meet these strict OSHA safety standards. There are many different options for using compressed air within a machine or out on the plant floor but many of them do not take these two important OSHA standards into account. Engineered compressed air products, made for end-use compressed air applications, should possess the ability to prevent blockage of the compressed air orifice and keep noise below allowable thresholds.

Intelligent use of compressed air also results in dollar savings. Engineered compressed air products increase safety and save money.

For Example:

This specific example, from a bakery, used a home-made compressed air nozzle to de-pan rolls from their baking pans.

They made their own nozzle by capping off a 3/8" pipe and drilling a 9/64" hole in the cap. It used 25.4 SCFM at 80 PSIG. An engineered air nozzle replaced the homemade solution and the result was 17 SCFM at 80 PSIG, a clear savings of 8.4 SCFM. There were ten nozzles used for removing rolls from the pans and it was a two shift per day operation.

- Savings = 8.4 SCFM per nozzle (ten total)
8.4 x 10 = 84 SCFM total
- Two Shifts per day = 960 minutes
250 working days per year = 240,000 minutes
- Yearly Air Savings = 20,160,000 ft³ saved

Using the average compressed air cost of \$0.25/1000 ft³ we can further quantify the savings.

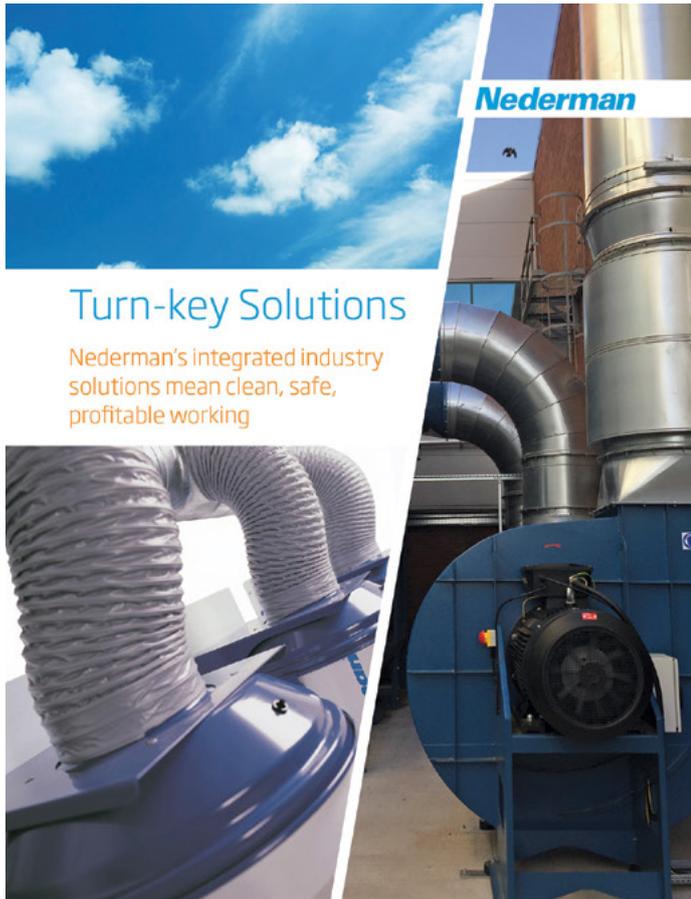
- 20,160,000 ft³/1000 = 20,160
20,160 x \$0.25 = \$5,040.00 total savings per year (\$20.16/working day)

The total investment for the engineered compressed air nozzles (EXAIR Model 1100) was \$370.00, for a simple ROI of 19 working days!

EXAIR products excel at using compressed air safely and efficiently for applications such as blowoff, cleaning, drying, cooling, ventilating, circulating, part ejection, part manipulation and environmental separation. Learn more at <http://www.exair.com>.

OSHA Maximum Allowable Noise Exposure*							
Hours per day (constant noise)	8	7	4	3	2	1	0.5
Soundlevel dBA	90	91	95	97	100	105	110

*OSHA Standard 29 CFR - 1910.95 (a)



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Nederman

Nederman Targets Growth

Nederman has expanded its UK team with two new appointments.



Building upon its impressive performance in both product sales and the provision of technical solutions in 2017, Nederman has appointed a new Product and Solutions Sales Manager for Ireland and a Sales Manager for Solutions for the North of England.

The two key appointments will strengthen the position of Nederman in key geographical areas whilst enhancing support for the existing network of customers and supply chain partners. Aiming to extend the already impressive foothold that Nederman has in Ireland, Clive Dalglish joins Nederman armed with decades of expertise in the HVAC, ATEX, vacuum, and dust and fume extraction sectors. This expertise is backed by a technically advanced career history that has seen Clive serve 20 years with the Navy as a weapons engineer that proudly served in the Falklands.

Aiming to increase market share and brand awareness in the North of England, Nederman has appointed Graham Murray as the new Sales Manager for Solutions in the area. A time served engineer with extensive expertise in project management, design engineering and filtration systems; Graham's applications experience will undoubtedly prove a huge asset for both Nederman and its customer base as the global brand targets growth in the flourishing manufacturing area.

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

Fraser Anti-Static secure additional ATEX certification

Fraser Anti-Static, one of the world's leading experts in static elimination and management, has secured additional ATEX dust certification for its latest generation of EX1250 static elimination bars.

Although the current EX1250 bar has had an ATEX gas rating for a number of years, this additional certification gives what Fraser CEO, Bruce Clothier, describes as "market leading performance and flexibility."

Bruce adds "our latest generation of EX1250 bars can now be used in a much broader range of manufacturing environments, from food processing, through to machining and timber processing. This will give customers peace of mind, knowing

that they can still achieve the same high levels of production performance, without the inherent risk of explosion that comes with static electricity and gas or dust environments."

The latest EX1250 bar is also approved for use in environments where there are flyings, combustible dust and fibres.

"The risk of explosion is particularly high in environments such as food processing which



involves dust such as sugar, tea, animal foodstuffs or similar powder processing operations. This issue can often be overlooked, so we're very pleased that the EX1250 will be making a significant impact upon reducing health and safety risks."

For further details on the EX1250 or the type of products needed within gas or dust environments, please contact Fraser Anti-Static on Tel: 01398 331 114.

Impressive Efficiencies in Fume Extraction

A common control within laboratories for the prevention of explosive and hazardous substances is by using a fume extraction system. The most commonly used fan for hazardous fume extraction is a centrifugal fan. This is large due to the fact they can generate large differences in pressure and can produce air flows against considerable resistance.

Axair Fans has a wide range of corrosion resistant polypropylene fans for use within industrial, commercial & educational fume extraction. There is nothing more exciting for our technical engineers than seeing the largest fan in their range leave the building, especially into an application perfectly suited to its main features.

Powerful, energy saving and quiet; the S50 is taken from Axair's S range of fans supplied by SEAT. Fitted with a backward curved impeller, the S50 can produce high pressure but with low noise and impressive efficiencies. Our team of specialist

engineers advised that the S50 was the ideal choice for our client. Requiring the safe control of pollutants from twelve fume cupboards within the building, they needed a fan that could deliver the duty required when all were in use in addition to being suitable when not at full capacity. The S50, available in LG handling options, removes the air along the duct and through a carbon filtering system which removes a wide spectrum of atmospheric pollutants and acid gases. This is then vented out as required.

When coupled with an inverter to facilitate enhanced speed control and an easy stop/start function, the



S series fan was the perfect component to exhaust fumes from the hazardous process. A year later, the customer is extremely pleased with the performance of this powerful machine.

For more information on the Axair range of fume extraction fans visit www.axair-fans.co.uk, email sales@axair-fans.co.uk or contact us on 01782 349 430

SKF reaches out further to solve hydraulic seal problem

SKF comes to the aid of a leading manufacturer of hydraulic cylinders for mobile applications who had been experiencing problems with leaking seals on a cherry picker application.

The manufacturer had been appointed to design and manufacture a rotary union that would be capable of transferring oil to the hydraulic controls on a range of cherry pickers via eight pressure ports. Unfortunately, the seals supplied for this system were tending to fail as a result of excessive friction between the sealing elements and their mating surfaces, leading to hydraulic fluid leakages.

SKF, which is able to provide both machined and moulded seals on short lead times, was invited to help solve this problem, and suggested that a custom machined seal kit, based on its R10-XS, S01-P, A02-A and F01 seals, be prototyped and tested on the rotary union. Tests were duly carried out on the machined prototypes, which proved successful. Orders were subsequently placed for production quantities of the equivalent moulded seals.

SKF was able to provide this solution in just two weeks, thanks to its ability to respond quickly to custom seal requests. Moreover, it was able to demonstrate the advantages of producing prototype seals using machining techniques and then manufacturing them in production quantities by moulding, ensuring tight control of costs.

By making use of its unique capabilities in materials selection and CNC machining techniques, SKF is able to offer machined seal solutions for a wide range of fluid power, fluid handling and power transmission applications. Partnering with customers from the earliest design stages of a project, the company is able to react quickly to requests for custom seals and components up to 4,000 mm in diameter in single pieces, or larger using a special welding technique.



The innovative SKF SEAL JET production system, with six strategically located centres in operation across the UK, and more than 90 globally, is capable of manufacturing virtually any kind of seal, for any conceivable application, in any dimension, design and specialist material.

For further information visit:
www.skf.com

Trelleborg Embarks On A European Roadshow To Share Its Expertise

Specialist engineers from Trelleborg Sealing Solutions will be providing free advice during a European tour organized to “share best practice” in sealing technology.

The 14-stage ‘Industrial Roadshow Tour 2018’ began in France on June 4 and culminates in Bulgaria on November 9.

The roadshow will offer existing and potential customers a chance to learn more about the innovative products that Trelleborg Sealing Solutions has to offer and allows them to explore new options and techniques through media and interactive hands-on displays. Design engineers and sales experts local to each country will also offer on-the-spot consultation, answering questions and providing specialized technical training sessions for applications.

David Brown, Managing Director of the Trelleborg Sealing Solutions marketing company in the UK, said: “Trelleborg is a world leader in engineered polymer solutions that seal, damp and protect critical applications in demanding environments. This positions us perfectly to share both useful and

essential information with engineers working across a variety of industries.

“We are taking our knowledge and expertise on the road to share good practice in sealing technology. Our experts will be providing displays and presentations designed to give visitors an overview of how working with us can accelerate their business and add value to their products and processes.”

The knowledge, expertise and presentations will be delivered from the Roadshow Cube, a sophisticated trailer offering 37m² of space. There will be a presentation of highlight areas and displays, including innovations (material and process competences), hand-in-hand engineering examples, Service PLUS (logistics, packaging and assembly services) and product range and industry-specific solutions. Other topics covered range from manufacturing capabilities and digital services for application engineers (apps, virtual reality) to customized training sessions.



The roadshow will be visiting Germany from June 18 to 22, Poland between June 25 and 29 before heading back to Germany July 2 to 13 and going onto Turkey on July 24. The roadshow will also visit Denmark, the Czech Republic, the UK and Bulgaria.

Companies wanting a visit, can enquire by emailing Trelleborg Sealing Solutions European Marketing Manager Barry Clough at tssuk@trelleborg.com. An outside space of 50m² is required.

New grease filling filter for automatic lubrication systems

SKF announces the introduction of its Lincoln small grease reservoir filling filter.

Installed as an inline component in the reservoir's fill line, the filling filter helps to ensure that clean grease enters the reservoir and the system. As grease enters through the inlet, it passes through the filter and then exits into a hose that is connected to the grease reservoir's fill port. As the filter element becomes clogged, the unit's clogged-indicator pin starts to retract, signalling that filter element cleaning is required. If the clogged filter element is not cleaned, grease will vent safely to a catch container but will not bypass to the reservoir.



The easy-to-install Lincoln small grease reservoir filling filter is available with either a 250- or 500-micron, crush-proof filter element, which is simple to clean. It has a fill rate of up to 8 litres/min and operating pressure of 344 bar.

For further details visit: www.skf.co.uk

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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

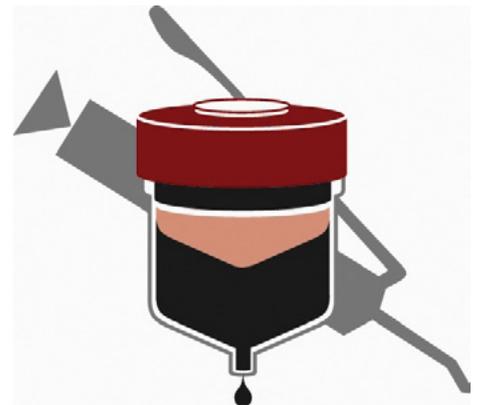
where there is high back pressure at the bearing. The innovative new Jack-Luber incorporates

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.



Jack-Luber Model 125 & Replacement Cartridge

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

NSK Molded-Oil bearings offer long life at food plants

In the food industry, comprehensive cleaning regimes are commonplace as companies look to meet stringent sector requirements on hygiene.

However, such practices can prove detrimental to production line components, not least the bearings that provide motion in critical machinery, equipment and systems. Here, spraying with hot steam, high-pressure water jets or very strong cleaning agents can cause two principal problems: foreign objects entering the bearings; and lubricant being washed out of the bearings. For these reasons, NSK offers a comprehensive range of Molded-Oil bearings that is purpose-designed to deliver extended operating life in harsh food industry environments.

The lubricant within Molded-Oil bearings is durably incorporated inside a stable carrier medium, namely an oil-impregnated polyofin resin. This type of lubricant cannot be washed away by steam or liquids, and prevents contamination from entering the bearing. Moreover, as the carrier only releases the lubricant slowly, sufficient lubrication is maintained over a long operating period.

A wide range of Molded-Oil bearings is available, including deep groove ball bearings, spherical roller bearings and tapered roller bearings, in several product series and in special forms such as housed bearing units. The range also includes Molded-Oil bearings made of stainless steel.

These advanced products are suited to a broad range of food industry applications, where many manufacturers of machines and systems install Molded-Oil bearings as part of the original equipment. However, they are also ideal for retrofit applications.

A case in point can be seen at a British food manufacturer, where the standard deep groove ball bearings in a seven-track conveyor system were only lasting for a period of four months. The reason was water penetration within the bearings during daily washouts, which resulted in costly maintenance

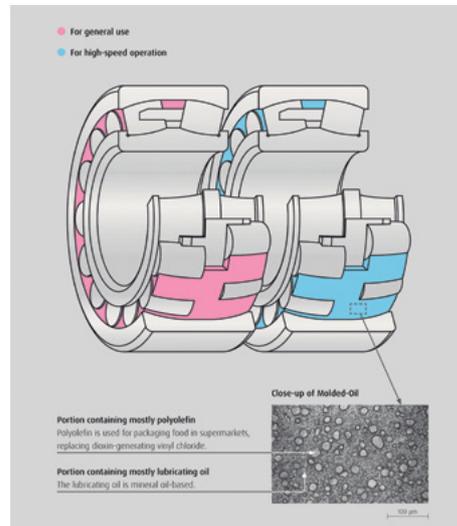
work and damage to the conveyor belts. Each time there was a failure, the company had to endure downtime of 24 hours, creating a considerable dip in productivity.

After inspecting the bearings, NSK recommended using stainless steel bearings with Molded-Oil lubrication and DU seals on both sides. Subsequently, bearing operating life increased three-fold, to 12 months, while bearing-related maintenance costs (including downtime) were reduced by more than €52,000 annually.

The story was similar at a manufacturer of frozen pizzas, where failures were being experienced every four weeks on the belt tensioner serving one of the company's food conveyors. Regular cleaning of the production line with water had led to corrosion. Moreover, the grease lubricant had been washed out of the bearings, and the seals were damaged. NSK inspected the application and again recommended the use of Molded-Oil bearings made from stainless steel. This resulted in a significantly prolonged operating life, plus annual cost savings of approximately €15,700.

Elsewhere, the bearings of belt pulleys within the cake-cutting machines at a large bakery were failing on a constant basis. Each year, approximately 20 sets of bearings had to be replaced due to failures every 4 to 6 weeks. After analysis by NSK, it emerged that the primary cause was water and dust infiltrating the bearings. NSK therefore recommended replacement with Molded-Oil bearings. A test was run and the operating life of the bearings increased to 26 weeks. This significantly boosted the productivity of the manufacturing line, helping the user to save approximately €9,400 annually in maintenance and downtime costs.

In a final example, a vegetable processing company



had installed a biogas plant in order to ferment organic waste from production and transform the resulting methane into electricity and heat for self-consumption. However, problems had been found with the rotary screen, which filters-out coarse and non-fermenting material prior to the fermentation stage. Failures were occurring repeatedly in the bearings of the rotary screen and disrupting the overall operation of the biogas plant. Every six weeks on average, the deep groove ball bearings with contact seals had to be replaced. Each rotor has two bearings and there are two rotors per rotary screen. Replacement time was one hour each.

Experts from NSK found that the breakdowns were caused by contamination penetrating the bearing raceways. The customer subsequently followed NSK's recommendation to install Molded-Oil deep groove ball bearings made of stainless steel with DU seals on both sides, a move that has led to far fewer replacements.

This yet again confirms one of NSK's "rules of thumb": in applications where the environment is contaminated by moisture and dust, the service life of Molded-Oil bearings in stainless steel is more than twice that of bearings with conventional grease lubrication.

For more information, visit www.nsk-europe.com

Freudenberg Seals Help Minimise Flavour Transfer Problems

Beverage bottlers know the problem of flavour transfer all too well. If the wrong elastomer is used, a new batch can taste like the previous one, even though the facilities were cleaned between batches.



The problem being the flavour is transferred from the beverage to the sealing material and then, far worse, back to the (new) beverage. With the right choice of sealing material from Freudenberg Sealing Technologies, this problem can be minimised or avoided completely.

From flavoured waters to fruit concentrates – the number of beverages on the market is immense. The major difficulty in beverage production is the rapid changeover from one product to the next, which makes well thought-out process optimisation and batch sequences indispensable. This involves not only efficient planning of the bottling process, but also guaranteeing the desired taste of the individual batches. Freudenberg Sealing Technologies can provide sealing materials optimally suited to the process media, to help prevent unnecessary

downtimes caused by constantly changing seals. These products are available from Dichtomatik UK Ltd, the exclusive provider for Freudenberg's food and beverage related products in the UK.

The different flavourings consist of a variety of aromatics, whose effect on elastomers has not been researched in depth to date. Depending on the composition and chemical characteristics of these individual aromatics and the mixture ratios, the resistance of the elastomer to these substances, as well as its absorption and release rates with regard to them, can be assessed; the assessments can in turn be reinforced by the results of the exposure tests.

In the processing industry, elastomers should ideally be able to withstand corrosive cleaning

media, be resistant to all products offered by the bottler in question, and offer a long service life – criteria some perfluoroelastomer products certainly fulfil. These sealing compounds are used in the chemical industry for applications where, for example, concentrated corrosive chemicals are used. In contrast, the food and beverage industry primarily uses cleaning media that are diluted and can therefore be satisfactorily withstood by more economical materials.

Investigations into the chemical resistance in CIP/SIP (Cleaning-in-Place/Sterilisation-in-Place) media have revealed two outstanding materials. Freudenberg's 70 EPDM 291 provides very good resistance to nearly all conventional cleaning media. Cleaning at 82°C in CIP media and sterilisation at 149°C is possible, while heat resistance in water up to 180°C (short-term to 210°C) provides a substantially higher resistance to water steam compared to other EPDM compounds. This material is best suited for mineral water production, meeting a variety of drinking water standards worldwide.

The Achilles' heel of EPDM materials however, is their poor resistance to fatty media, which can cause rapid swelling. The alternative material for the production of non-polar products is Fluoroprene XP 41, a material suitable for the entire processing industry. This combines very good performance in cleaning media with unsurpassed resistance to oils and fats, remaining stable in temperatures ranging from -15 to +200°C.

Whatever the beverage being bottled, seals from Freudenberg Sealing Technologies help to minimise or even completely avoid flavour transfer between batches.

Freudenberg Sealing Technologies
Dichtomatik UK Ltd
01332 524422
fst-food-beverage@dichtomatik.co.uk
food-beverage-seals-uk.fst.com

Fluke 279 FC TRMS Thermal Multimeter Now Includes A Flexible Current Probe At The Same Price

Combination of full-featured digital multimeter plus thermal imager with iFlex current probe, plus an optional discounted price kit with a second rechargeable battery



Fluke is now including an iFlex® flexible current probe with its 279 FC TRMS Thermal Multimeter with no increase in price. The iFlex flexible current probe allows users to work in tight, hard-to-reach spaces and make current measurements up to 2500A. Thermal imagers are invaluable to help quickly troubleshoot electrical equipment, panels and transformers but electricians and maintenance technicians often do not have access to one when they need it. The Fluke 279 FC TRMS Thermal Multimeter integrates a full-featured true-RMS (TRMS) digital multimeter (DMM) with a thermal camera in one device to speed troubleshooting.

The Fluke 279 FC now allows users to save, recall and review saved images on the meter. It is also a member of the Fluke Connect® family of wireless test tools allowing users to transmit results wirelessly to a smartphone and save time reporting to validate work is complete. Fluke is also offering a kit, which includes the 279 FC, the iFlex and a spare re-chargeable battery, all at a special discounted kit price. More information about the new offerings can be found via the DMM page at www.fluke.co.uk.

The Fluke 279 FC allows technicians to quickly and safely check for hot spots in fuses, wires, insulators,

connectors, splices and switches with the imager, and then troubleshoot and analyse issues with the DMM. By combining two powerful test tools into one, electricians and technicians can carry fewer tools and have a higher level of confidence they have the tools handy to solve problems.

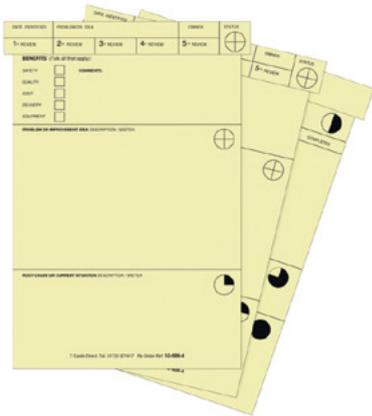
The 279 FC TRMS Thermal Multimeter features 15 electrical measurement functions including AC/DC voltage, resistance, continuity, capacitance, diode test, min/max and frequency, with advanced capabilities such as motor drive measurements, min/max recording and display hold. The 3.5inch (8.89cm) full-colour LCD screen makes for easy, clear viewing of images.

The wireless 279 FC is part of Fluke Connect - a system of wireless test tools that communicate via the Fluke Connect app, or Fluke Connect Assets software, a cloud-based solution that gathers measurements to provide a comprehensive view of critical equipment status - allowing technicians to record and share both thermal images and electrical measurements in real time via their smartphones or tablets and automatically upload them to the cloud. Reports can be created and shared right from the job site via email, allowing technicians to collaborate in real time with other colleagues with ShareLive™ video calls, which increases productivity in the field.

The CAT III 1000V, CAT IV 600V safety rated thermal multimeter has a rechargeable lithium ion battery that lasts up to a full work day (10+ hours) under normal conditions.

For more information about all Fluke products, please visit the Fluke web site at www.fluke.co.uk.

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SSG Insight Announces Launch of Innovative Business Intelligence Tool Alongside Agility 9

SSG Insight has announced the launch of a disruptive new business intelligence tool capable of translating operational data into clear strategic insight for business decision makers.

In doing so it provides access to enterprise quality data analytics to businesses of all sizes.

Agility B.I. is a business intelligence tool that facilitates the ability to analyse business trends over time, tracking long-term KPIs to help businesses achieve optimum performance and profitability across all areas of operation. The data suite includes the ability to build, configure and share customisable reports relating to the business' assets, resources, people and processes, in addition to providing a menu of instant access analytics to support confident decision making. The sophisticated software can also connect top-tier trends with access to detailed source data for precise

clarifications and ensure accuracy with steps taken to make business improvements.

As a result of faster and smarter decision making, businesses can reduce downtime and increase reliability. The solution can also be used to extend the life of assets and achieve more predictability, improve efficiency of operations, lower cost and achieve optimal output.

The launch of the business intelligence tool sits alongside the release of Agility 9 – the latest evolution of the CMMS/EAM provider's popular asset management solution. Agility 9 takes significant strides forward in improving the overall



user experience, with an innovative interface and smart widget-based dashboard to provide an at-a-glance view over daily KPI tracking.

Both products have been brought to market following the rebrand of The SoftSols Group to SSG Insight, as the software provider cements its commitment to delivering world-class insights to help businesses better compete globally.

For more information, simply visit:
www.ssginsight.com/agilityBI.

NERO are now stocking a full range of Stainless Steel Press Fittings.

The range stocked includes Elbows, Couplings, Bridges, Adaptors, Tees, Valves & Reducers, from 15mm up to 108mm. To complement this range we are stocking all sizes of tubes to suit. The full product range can be seen on our website www.nero.co.uk.



The comprehensive range of Tube and Fittings are 316L / 1.4404 Stainless Steel and WRAS / DVGW approved which means they are suitable for use in Industrial and Domestic applications. They have a maximum operating pressure of 16bar and a temperature range of -35°C to +135°C, higher temperatures can be achieved using the optional FPM seals.

All the fittings come with a blue press indicator which will break off once a full seal has been achieved and as it is a press system there is no risk of fires as with welding or soldering and can be assembled in situ.

All products are available from our central warehouse based in the Midlands which offers a next day delivery on all stocked items if placed before 4:30pm. Orders can be placed at www.nero.co.uk or by speaking to one of the Sales team on 0121 665 3900.

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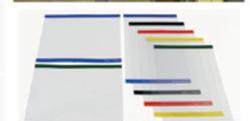
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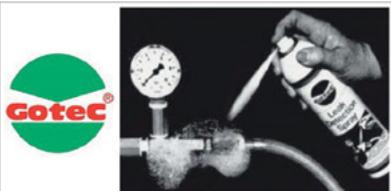


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