



ENGINEERING MAINTENANCE SOLUTIONS

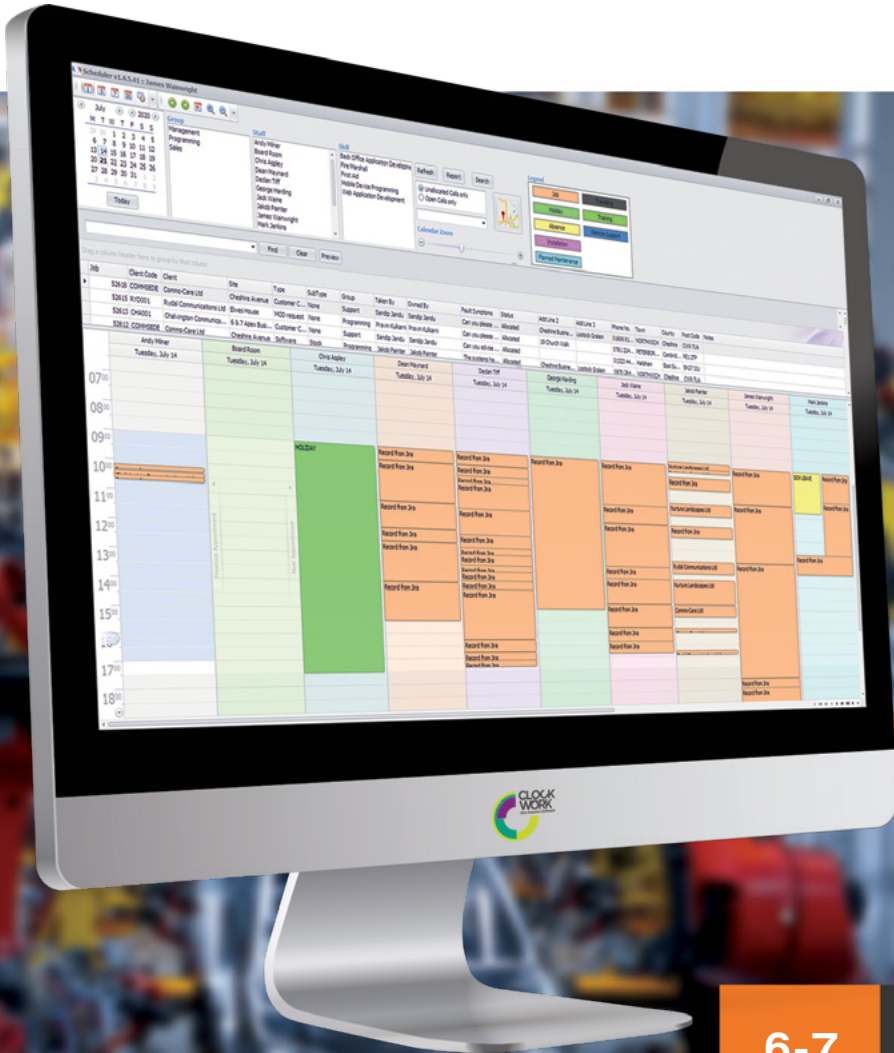
The International Magazine For Maintenance & Engineering Professionals

Oct/Nov 2020

\$6.80

£4.16

€5.00



Complete 'end to end' CRM and Service Management Software

Read More On Page 5



6-7

CMMS

18-20

Compressed Air

30-32

Fumes, Dust & Extraction

Visit Us Online
engineeringmaintenance.info



Protecting Your Plant

Instant Shutdown **Before** Things Go Wrong



Motion Sensor's For All Industries

Rotech Motion Sensor's can be used whenever information or monitoring of shaft rotation, position, direction, speed, slip etc is required!

Rotech Motion Sensor's can be used for indication, control, interlocking, protection, sequencing, alarm initiations and many more functions!

Rotech Motion Sensor's can be used wherever materials are transported or processed
By conveyors, elevators, screws, mixers, etc!



FOOD
CEMENT
STEEL MILLS
ORE
FERTILISERS
ASH
GRAIN
SAND
COAL
WATER TREATMENT
OFFSHORE
ROADSTONE
STONE
MINES
POWER STATIONS
AGGREGATE ...AND MANY MORE!

ROTECH FOR RELIABILITY

Why Accept Anything Less?

ROTECH SYSTEMS

Web: rotechsystems.co.uk

Email: sales@rotechsystems.co.uk

Tel: +44 (0)151 356 2322



Monitoring the world



Complete 'end to end' CRM and Service Management Software
Read More On Page 5

6-7 CMMS

18-20 Compressed Air

30-32 Fumes, Dust & Extraction

CLOCK WORK
One Solution Software

Visit Us Online
engineeringmaintenance.info



Contacts



Publisher

Michael Dominguez



Advertising

Steve Pheasant

stevep@engineeringmaintenance.info

Email

Info@engineeringmaintenance.info

Website

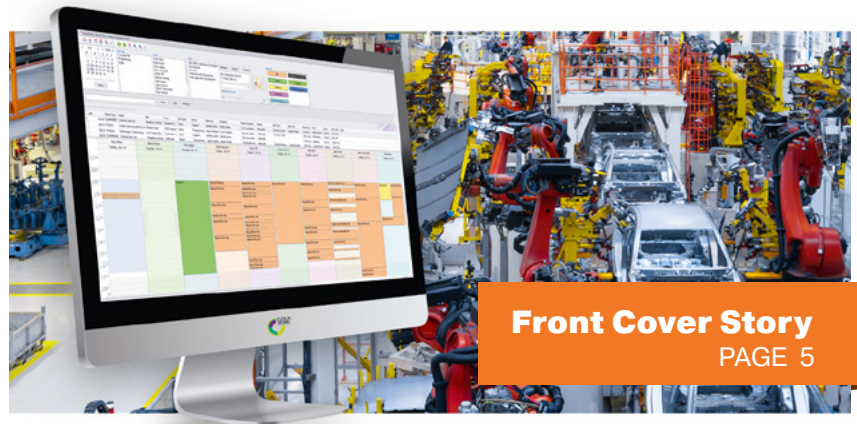
www.engineeringmaintenance.info

Phone

Tel: +44(0)203 575 1170

Contents

In This Months Issue



Front Cover Story
PAGE 5

P:4-5 Front Cover Story

P:6-7 CMMS

P:8-11 News & Products

P:12-13 Plant Hire

P:14-17 Pumps & Valves

P:18-20 Compressed Air

P:21-22 ATEX

P:23-25 Bearings

P:26-29 News & Products

P:30-32 Fumes, Dust & Extraction

P:33-39 Product Spotlight

P:40-45 News & Product Spotlight

P:46-47 Buyers Guide

In the next Issue: Dec/Jan 2021



BCAS Official Media Partners

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

Do you need your
Service Management
Software to run like
Clockwork?



Contact us

T: 03300 577170

E: Sales@clockworkit.co.uk

W: www.clockworkit.co.uk



Complete 'end to end' CRM and Service Management Software

To introduce ourselves, Clockwork IT Ltd is a software Company specialising in Service Maintenance, Scheduling, Planned Maintenance, Ad Hoc Incident Logging, Asset Management and Field based Software.



Client Profile

A typical Client would be Ductbusters Ltd, established in 1996 as the need for specialized ductwork cleaning in a wide range of commercial and medical premises became more apparent. Since its inception, Ductbusters has grown to service all sizes of organization from the smallest fast food outlet to major Hospital projects. Ductbusters have now expanded into Air Handling Unit maintenance, Kitchen Extract cleaning, the provision of Risk Assessments, Fire Damper drop testing and LEV testing.

The Challenge (where does it hurt?)

As their business grew rapidly, the Senior Management team at Ductbusters recognized their need for change. This required a fresh look at software systems that had the flexibility that they needed. They also knew that they needed to engage the services of a supplier that could respond quickly and efficiently to their dynamic environment. After a considered and lengthy search process, they identified Support Desk Pro, from Clockwork, as their preferred choice.

The Solution (Back Office, Scheduling and Field Based)

Due to Ductbusters' changing needs, it was essential that the whole team was consulted to gain a detailed insight as to their current needs and, more importantly, their future 'vision' of how the system could work for them. During these scoping and specification meetings, Clockwork ensured that all members of the Ductbusters' staff were represented and had the opportunity

to contribute to the discussions on what was practically needed. It was only then that we could plan the development that was required for a successful implementation.

The standard back-office software process was more than enough for the current operation although there proved to be several huge time

all aspects of the service required from access doors to necessary equipment for the job. For the engineers, once the work was scheduled, using a 'drag and drop' scheduler, this then translated into ensuring that they could not leave for a job



Gemma Quinn
Managing Director,
Ductbusters.

"Due to the magnitude of the change that we embarked upon, we anticipated that there would be a 6-12 month 'settling down' period after implementation of the new system. We were delighted that our expectations were completely exceeded when full adoption of the system took only 3-4 months."

savers that we could immediately implement such as individual complex quote templates and part payment options that updated the existing Accounts System.

The main focus of the project was to provide the field-based teams of surveyors and engineers the ability to do their job without the need for reams of paperwork that was inherent in their industry.

Creating a workflow that linked a site survey to the provision of differing types of services, we gave the field-based teams a tool that enabled them to plan and work much more efficiently. For the surveyors, this meant the provision of an accurate estimating tool that encapsulated

without checking that the equipment required was allocated beforehand. Further enhancements allowed engineers access to building schematics and the ability to easily identify and capture 'before and after' photos that could be annotated for customer reporting.



Steve Adams

Managing Director, Clockwork IT Ltd.
steve.adams@clockworkit.co.uk
www.clockworkit.co.uk

FastMaint CMMS Software v.11 for Utilities, Manufacturing Plants & Facilities

SMGlobal has released FastMaint CMMS software v.11. It is a computerized maintenance management software program for equipment and facilities maintenance.

Maintenance managers can use FastMaint to schedule and manage preventive maintenance as well as corrective maintenance work. They can send work orders to the maintenance staff and receive their feedback. Managers can track the progress of all outstanding and completed jobs. They can use FastMaint for on-site maintenance programs or field service management.

New features in version 11 include a web API to retrieve and update information via third party apps, more work order scheduling options and user interface improvements. Since many organizations are struggling in the current situation, the previously retired Basic edition has been brought back. The Basic edition is for sites with fewer assets to manage. It has a price to suit smaller budgets.

Software editions:

The CMMS software is available in five editions. This allows customers to upgrade the software as their companies grow in size and complexity.

The Basic and Standard editions are suited for a single user managing the maintenance process. The Standard edition adds purchase management and can handle more assets than the Basic edition.

The Professional and Web editions allow multiple users to use the system at the same time. Cloud edition is the Web edition hosted by SMGlobal. Unlike the other editions, it does not need to be installed in the customer's site.

Pricing:

A single-user license for the Basic edition is US \$500.

Standard edition is US \$1,200. The Professional and Web editions start at US \$3,000. These prices are for downloaded software that customers install on their own systems and are not monthly subscriptions.

Requirements:

The Basic, Standard, and Professional editions need Microsoft Windows 7 or later. The Web edition needs Microsoft Windows 2008 or later for the server.

The Web and Cloud editions allow client access using a Desktop, Laptop, Netbook, Tablet or Smart Phone with a HTML 5 compliant browser such as Microsoft Edge, Google Chrome, Mozilla FireFox or Apple Safari.

For more information or to get a trial, contact SMGlobal Inc.
Phone: (919) 647-9440
Email: sales@smglobal.com
Website: www.smglobal.com

GForge's "Dark Night" Release Solves The Three Biggest Problems with Collaboration Software Platforms

The Industry's preferred on-premises project & collaboration solution is now much more powerful

The GForge Group, Inc. (<https://gforge.com>) today announced a new version of their top ranked collaboration software tool.

The new GForge "Dark Night" includes new features that make the collaboration software much easier to use. Dark Night also adds industry leading power features, which together will make project collaboration much more efficient, saving money and time, and reducing frustration.

Service Desk - Project's can now manage their own groups - allowing you to use the GForge ticketing system as a service desk solution. GForge customers who already use GForge for managing projects will love being able to leverage GForge to manage support tickets as well.

Better Analytics - Users can now create arbitrary reports so they have better visibility within or across projects. GForge administrators now have a new "Summary" report giving them insights into the users and projects within GForge. Similarly, we've added a

"Summary" report to projects giving them the same analytics but at the project level.

Release tracking and management - Once a release is completed and is ready to publish, the project lead can now import the release notes with a click of a button (until now, this was a manual process).

Dark Mode - Users may now change GForge to use Dark Mode. For users using Gmail or Twitter, this feature works the same way.

In addition, the new GForge Dark Night release includes a handful of other useful improvements that were requested by our users. These include:

Menu - We have improved how users can navigate within the system. We have added more options and possible paths.

Document Management - GForge's document management system now allows users to tag documents for improved organization and searching.



Users can now easily also restore a document to a prior version. Also, clicking on videos or images will now preview the image or video inside the project before you decide whether or not to download the file.

Bug Fixes - A number of bug fixes which will be enumerated on the official 19.2 Release Notes (GForge "Dark Night").

GForge is the industry's preferred on-premises project & collaboration solution and is particularly popular in the Defense & Aerospace Industries. For more info about GForge, please visit us at <https://gforge.com>

EMSOnline
www.engineeringmaintenance.info

All of our articles are available to read online today!

VIEW FULL MAGAZINE ONLINE

- + Extra Articles and features
- + Full Business Directory
- + Much More...

Visit Us Today:
www.engineeringmaintenance.info

Elecosoft® Building on Technology

ShireSystem Maintenance and Facilities Management software

ShireSystem

ShireSystem CMMS/CAFM allows businesses to better control assets, maintain visibility across operational locations and keep on top of work orders.

- Robust and easy-to-use system
- Available on-premise, cloud and mobile
- Proven use across a range of industries
- Free up time, reduce cost, meet compliance

Join our webinar to find out more:
elecosoft.com/shiresystem-webinars

www.elecosoft.com | +44 (0) 23 8022 4111 | shiresystem@elecosoft.com

Planon signs partnership with MazeMap

Planon and MazeMap are partnering to integrate Planon's software for real estate, space, and asset management and MazeMap's digital wayfinding solutions. This will enable organisations to offer an improved real-time user experience to building occupants and visitors.



MazeMap specialises in digital in- and outdoor wayfinding for large campuses such as universities, hospitals, offices, and conference

venues. By connecting MazeMap's technology with Planon's Integrated Workplace Management Systems (IWMS), building occupants will benefit from enhanced navigation tools.

Thomas Jelle, CEO of MazeMap – explained, 'We are delighted to partner with Planon and to bring our digital wayfinding solution to the platform. The joint solution enables building occupants to get real-time directions from A to B.'

'Combining MazeMap's expertise with Planon's market leading IWMS allows us to meet the growing demand for an embedded wayfinding solution,' said Pierre Guelen, CEO of Planon. Iwan van Eldijk, VP Partnering & Alliances at Planon, added 'Organisations will benefit from the user-friendly integration of MazeMap's wayfinding solution with their Planon software solutions and will be able to offer a more hospitable experience to building users.'

For more information visit:
planonsoftware.com

Hart Doors on track

Hart Doors has completed another contract at the Wimbledon Traincare depot, the traction maintenance depot servicing South Western Railway.

Peter Cairns, Hart's Area Sales Manager, says there are several Hart doors on site already. "This depot is one of the busiest in the country, with an average of 250 carriages maintained there each night. We have several Speedors on site some of which were nearly 30 years old," says Mr Cairns.

The latest contract was to replace the ageing Speedors in this very busy depot with Hart's highly energy efficient, Insulated Roller Shutters. "The installation was challenging requiring specific

bracketing and in-fills for the new doors," adds Mr Cairns.

"Gaps were created with the removal of the Speedor Supers as the typical footprint of the Speedor was larger than the new Insulated Roller Shutter which were 4.5 metres wide and five metres high. Overall the contract took four weeks."

Hart has also provided Insulated shutters in recent years on a new building on the Wimbledon site



working with the contractor, George Osborne and is also active on the Acton Train Care, Gillingham Repair Depot and the Ilford Train Depot.

For more information visit:

www.hartdoors.com

0191 214 0404

Denso P2 System used in refurbishment of old water pumping station

As part of United Utilities water quality improvement programme, JMC North West, on behalf of NMCN, recently completed works to bury the above ground timing loop at the Pex Hill Service Reservoir.

The challenge was to provide a durable, reliable corrosion prevention solution to protect over 90 double flanged joints prior to full encapsulation. To provide this high level of protection, JMC North West turned to Winn & Coales (Denso) for its services.

Winn & Coales recommended its Denso P2 System™, proven to effectively protect ferrous pipes, joints and fittings from the costly effects of corrosion.

Fully compliant with the P2 Civil Engineering Specifications for the Water Industry (7th Edition), this time-proven system can be easily applied on site before the pipe is buried – providing long-term corrosion prevention for the project at Pex Hill.

The Denso P2 System incorporates Denso Primer D™, Denso Profiling Mastic™ and Densoclad™ Tape.



Training on how to apply the system was provided, on site, by two members of the Winn & Coales (Denso) team.

For more information visit:

denso.net

Solution to your containment needs when a standard spill pallet is impractical.

Empteezy Collapsible Bunds are unique bunds designed for the storage of drums, IBCs, plant, machinery or even vehicles.



Our new PVC Eezybund portable bunds, part of our collapsible bunds range, are easy to store, and transport while being quick to assemble. They are also compatible with hydrocarbons as well as a wide range of other chemicals (compatibility information available upon request). These portable bunds are the ideal solution to your containment needs when a standard spill pallet is impractical.

Each bund is a welded PVC construction with aluminium support brackets and turn buckle connectors. The highly durable materials are both lightweight and flexible meaning that the bunds can be easily reused, cleaned, stored and transported with no tools required.

As you can see from the table, our current range covers a wide range of sizes already, however, it may not cover your needs which is why we are also able to manufacture to specification.

They are all useful for various and different reasons. The EB0-EB5 products are all perfect

at acting as temporary liquid storage for small cans, containers, drums & IBC's. Our larger bunds are better equipped and ideal for vehicles and equipment.

Available for each bund are optional accessories including:

- Ground mat underlay to increase longevity on rough surfaces.
- Sacrificial liners to increase longevity or minimize damage from exposure to spill contents.
- Carry bag for easy storage and lifting (EB0 – EB5).

Our liners are each made from 900gsm PVC with the mats being pile carpets classified.

As a manufacturer, we can custom build these bunds to accommodate your specific dimensions, usage and overall requirements.



Liner to be placed on the inside of the bund and therefore protecting the PVC material and increasing longevity.



Maintaining the integrity of the bottom of the bund against rough and uneven surfaces, the mat is made larger than the bund dimensions.

Product	Dimensions (L x W x H mm)	Sump Capacity
EB0	600 x 500 x 250	75L
EB1	1000 x 1000 x 250	225l
EB2	2000 x 1000 x 250	500l
EB3	1500 x 1500 x 250	562l
EB4	2500 x 1500 x 250	937l
EB5	3000 x 2500 x 250	1750l
EB8	13000 x 300 x 250	9750l

Above: Table 1 - Table of our standard set of bunds. We can manufacture to requirements if necessary.

Empteezy has over 30 years' experience designing and manufacturing quality products. We are an ISO 9001, ISO 14001 and ISO 45001 accredited company as well as having memberships with the British Safety Industry Federation and Scottish Engineering. We have also recently become a member of the Made in Britain organisation which includes the best manufacturers from all over the UK.

For more information on Eezybund Collapsible Bunds, or even if you have any other queries, please visit our website or contact us today.

For more information:

T: 01506 894 470

E: sales@empteezy.co.uk

W: www.empteezy.co.uk


Professional Training Solutions

Join our industry accredited training courses
 Plant reliability and condition monitoring professional certifications.
 Discounts available for group bookings. Online courses available.

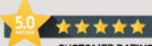
TRAINING COURSES 2020/21

Vibration Analysis (VA)
 VA CAT III, The Stoke by Nayland Hotel, Essex - 2nd to 6th Nov
 VA CAT III, The Stoke by Nayland Hotel, Essex - 16th to 20th Nov
 VA CAT I, The Stoke by Nayland Hotel, Essex - 7th to 10th Dec
See the website for our 2021 training schedule

Asset Reliability Practitioner (ARP)
 Reliability Improvement is an organisation wide effort requiring involvement from Leaders, Engineers and Advocates. Courses are available online, publicly and onsite.

Request the Training Brochure
 The brochure contains the pricing, exam eligibility and an outline of each course. Scan the QR Code or visit bit.ly/rms-ems20

Educational Wall Charts
 Free shipping: Vibration Analysis, Bearing Damage or PeakVue.



- Beginner to advanced
- Experienced trainers
- Innovative simulations
- Incredible animations
- ISO 18436-2 & ASNT
- BINDT or Mobius Exam
- Reference material
- Student software
- Telephone support





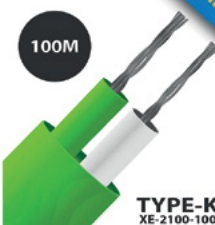





rms-training.com
 +44 (0)1206 791917
info@rms-training.com


TEMPERATURE & PROCESS TECHNOLOGY
 Leaders in temperature measurement

Thermocouple Cables
 In Stock For Immediate Worldwide Despatch




- PVC, PFA, PTFE Glass fibre & PRT cable
- Flat pair or Twin twisted pair in various calibration types
- Available in 10m, 25m, 50m, 100m & 200m lengths
- Available in IEC or ANSI colours

VIEW OUR NEW WEBSITE
www.labfacility.com

Buy On-Line at www.labfacility.com
sales@labfacility.com
 Bognor Regis tel: +44 (0)1243 871280




Leaders in Corrosion Prevention & Sealing Technology, Winn & Coales (Denso) Ltd, Launch New Website

Winn & Coales (Denso) Ltd, specialist manufacturers of corrosion prevention and sealing products, recently announced the launch of their newly updated website – Denso.net – with new product pages, a new Surface Preparation Guide and many more exciting new features.

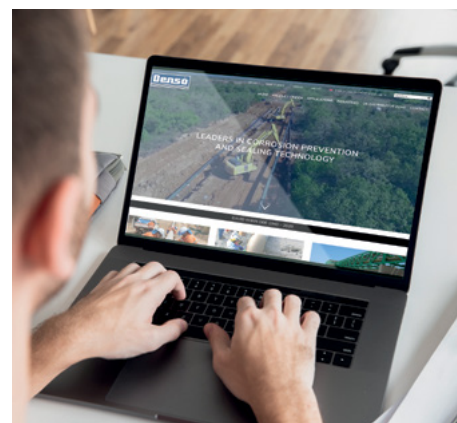
Denso.net is the perfect platform to showcase Winn & Coales (Denso) Ltd's extensive range of corrosion prevention products. The new 'Product Finder' features bespoke and off the shelf solutions, that provide enduring protection against corrosion and chemical attack to buried and exposed pipes, valves, fittings, steelwork, marine structures, tanks and concrete bunded areas.

Each product has its own dedicated page, featuring product details, Technical Data Sheets, Application Instructions and Sales Literature. Users can request Safety Data Sheets by using a shopping cart ordering system on each product page.

The Surface Preparation Guide is a brand new area on the website, which outlines the recommended surface preparation methods for Denso products.

The newly launched website also features an updated UK Distributor Zone, a dedicated 'Latest News' section, and a new, interactive contact page.

For more than 90 years, Winn & Coales (Denso) Ltd have been providing industries with long-term corrosion prevention solutions, whatever their requirements. The new website offers customers



a pleasant user experience and an intuitive way to easily find what they're looking for. For any product queries or quote requests, visitors to the website are only a couple of clicks away from contacting a member of the expert sales team.

For more information visit:
www.denso.net

Hart moves into film

Hart Door Systems, the first specialist door company in the UK to manufacture high-speed doors, has moved into a series of short films to high-light its successes.

The most recent is a profile of Hart's work at Komatsu's 200,000 sq m plant at Birtley, Co Durham, where Hart has installed over 60 doors across a range of door types including Speedor Cleanrooms, Speedor Storms and electric roller shutters.

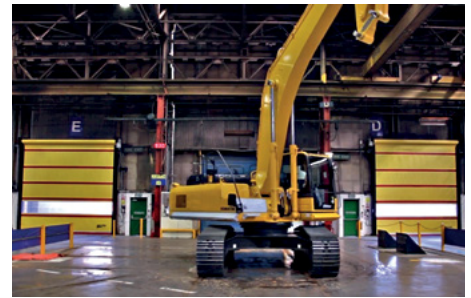
"On analysis Komatsu's operation in the North East is a huge success, manufacturing excavators, dump trucks, dozers and loaders for a global market," says Hart's chairman, Doug Hart. "We have been involved since the 1980s. Such a large facility brings with it many challenges such as the need to ensure an efficient flow of large vehicles associated with production.

"In addition other issues include heat loss and pedestrian safety within the building. This is a fast-

moving, highly efficient, business where safety and reliability are paramount. Though our doors are a small part of the highly efficient facility, which so far has produced over 60,000 units, we play our part through delivering doors that take account of the environment and daily usage," says Mr Hart.

"Our solution has been to provide a first-class service by offering support and parts when required and due to the reliability of the doors, maintaining the safe, efficient running of the facility. Each Hart door is made to measure and each safety device and activator is fitted to suit specific areas, giving Komatsu a safe and secure working environment for its employees."

Komatsu and Hart began their relationship with the installation of one of Hart's earliest prototype



Speedors. Due to the success of the door, four Speedors and four roller shutters were installed in 1992. Over the years, Hart has installed over 60 doors and only recently replaced some of the original doors installed in 1992.

Mark Stephenson, Production Engineering Manager, Komatsu, says "Komatsu has used Hart Doors for many years as we find them reliable in service."

For more information:

[www.hartdoors.com/case-study/](http://www.hartdoors.com/case-study/komatsu)

komatsu

t: 0191 214 0404

SKF factories to be carbon neutral by 2030

Since 2015, SKF has decreased its manufacturing carbon footprint by 36% and is already operating two carbon neutral factories. Today, SKF announces its aim to achieve a fully carbon neutral manufacturing footprint by 2030.

The 2030 target will cover SKF's own manufacturing operations, i.e. SKF's scope 1 and 2 emissions. It will be achieved by a combination of process improvements, energy efficient machinery, and procurement and generation of renewable energy. As a last resort, SKF may also purchase high quality carbon offsets.

Alrik Danielson, President and CEO, says:

"Reducing emissions is necessary to combat the climate crisis and as a global company it is important that we show leadership. We strive to reduce the climate impact in the full value chain, from the raw material we buy, to the customer's use, and beyond. The responsibility to act starts in our own operations – we will act with speed and

purpose to achieve this goal. Carbon neutrality will further improve our competitiveness and aligns the interests of SKF, our customers and the environment."

Patrick Tong, President, Industrial Sales, Asia, says: "Climate change presents the world with huge challenges but also opportunities which we will leverage by delivering both environmental and economic value to our customers and other stakeholders. This is key to SKF's strategy, which is based on sustainable development."

SKF offers a number of solutions and products that contribute to the circular economy. SKF's AI-driven Rotating Equipment Performance offer



is aimed at reducing waste by making assets run as long and as efficiently as possible. SKF offers remanufacturing of bearings, which reduces emissions in the production phase by up to 90% compared with a new bearing. SKF RecondOil's innovative oil regeneration system enables circular use of oil, reducing waste and improving environmental performance.

For more information visit:

www.skf.co.uk

Boiler Hire Short or Long Term You can't beat Byworth



Long Term

Long term hire can be a cost effective alternative to outright purchase.

- Capital outlay for new plant alleviated
- Maintenance and servicing costs included
- Plant designed and manufactured to suit exact needs

Unity - Byworth's unique remote monitoring system available

Short Term

When you need help in a hurry you can depend on Byworth for a rapid response. Temporary boilers provided for:

- Breakdown cover
- Cover for repairs and maintenance
- Urgent need for extra production capacity
- Short term projects and trials

Trust in the UK's leading industrial boiler hire company using the latest fuel efficient boilers, manufactured in our own factory. Byworth Hire gives total flexibility to cover any eventuality with full back-up support.



THE QUEEN'S AWARDS
FOR ENTERPRISE: 2006
BYWORTH BOILERS LTD

NHS
APPROVED
SUPPLIER

Byworth
BOILER HIRE

Tel: 01535 662599 | hire@byworth.co.uk | www.byworth.co.uk

Kings Boiler Hire Work Tirelessly Through The Covid-19 Pandemic

King's Boiler Hire have worked tirelessly throughout the COVID-19 pandemic keeping hospital, care home and food processing clients running during this difficult time.

Offering boiler units ranging from 1,500lb/hr to 17,500 lb/hr with fast, Nationwide delivery available 24/7, King's Boiler Hire is the UK's No.1 choice for emergency boiler hire.

So whatever your business, if you need a temporary boiler call 01992 451629 or visit www.kingsboilerhire.com to see how King's Boiler Hire can help you.


BOILER HIRE SPECIALISTS

The UK's largest provider of industrial Steam and Hot Water boiler plant. Fast, efficient Nationwide service for planned or emergency cover, R & D projects or extra capacity.



- Steam boilers 150-15,880kg/hr
- Hot water boilers 30-8,000kW/hr
- Pressures from 7-17 bar
- Oil, gas or dual fuel
- Long or short term hire
- Full commissioning service
- 24/7 support



SALES • HIRE • EXPORT

+44 (0)1992 451629
www.kingsboilerhire.com



GET TO KNOW JT TOOL & PLANT HIRE LTD

JT Tool & Plant Hire Ltd is a fast growing tool hire service situated in the heart of London.



We pride ourselves in providing outstanding customer service to our customers by putting their needs and demands first. Offering Access Support, Handling, Air Tools and Compressors, Cutting and Grinding, Heating Cooling and Drying systems for hire.

Our aim is to go above and beyond the requirement of our customers in order to allow for the smooth and efficient progress of their projects by providing a wide range of tools on demand.

We know the importance of completing a project on time to our customers and the implications (money, time and extra effort) of falling behind schedule. This is why we provide on site delivery and always make sure that the right person signs for the tools delivered. This eliminates you having to leave your jobsite and allows you to focus your time on the more important job of completing the project.

Check out our website
www.jttoolandplanthire.co.uk

Coatings Cut Pump Energy Costs And Carbon Emissions

Studies collected by the Hydraulic Institute and Europump* reveal that pumping systems account for nearly 20% of the world's electricity energy demand and from 25 – 50% of energy usage in certain industrial plant operations. This highlights the significant potential that exists to cut a company's running costs and put a dent in its carbon footprint too by maintaining or improving pump efficiency.



There are several ways to improve the energy efficiency of an industrial pump and the application of a protective coating is one of easiest and most effective. This is typically a ceramic reinforced epoxy that can extend the life of new pump components and restore the worn surface of old ones. They create a sacrificial and renewable working surface, protecting the structural integrity of the original substrate.

Castings impellers and volutes all wear due to corrosion, erosion, cavitation and mechanical damage but all these outcomes can be significantly delayed or prevented with the application of a protective coating. The time it takes to apply is much lower than other remedial methods, such as an installation overhaul and impeller trimming and it also achieves the shortest return on investment, typically 4 – 12 months.

30% energy reduction

A UK automotive manufacturer provides an excellent illustration of what can be achieved. To demonstrate potential gains in pump energy costs a 22kW

ELPO pump, used for handling process water, was selected for analysis and it was found to be under-performing by a minimum of 30% against the manufacturer's original test data.

The unit was then dismantled and all components examined for wear. The pump was heavily corroded and pump impeller worn, burred and imbalanced. The mechanical seal had seized and the pump was out of alignment with the motor. The volute was cut-water worn, the bearings showed evidence of fretting and corrosion and the motor was not inverted.

All components that required coating were first steam cleaned to remove any residue and salts and then bead blasted to achieve a surface roughness of 75 microns. LOCTITE® 7515 was used to pre-treat the substrates to prevent corrosion and improve adhesion between the metal parts and the polymer composite coating.

Next, LOCTITE 7177 was applied as a 'hold coat' to smooth the surface imperfections and provide a key

for the thicker layers required to return the pump to its original dimensions. A 'build coat' of LOCTITE 7226 was then used to replace many years of wear and create a tough surface, resistant to future wear. This was followed by another coat of LOCTITE 7177 to achieve a finish that would reduce friction within the pump and improve its energy efficiency.

The pump was then fitted with new bearings and both oil and mechanical seals. The impeller was dynamically balanced, the pump re-assembled and a new 22kW high efficiency motor fitted. Motor and pump were finally installed on the bedplate and laser aligned.

The second performance test was then conducted and the results were outstanding. The remedial work had restored the pump to original specification, increasing its efficiency by 30%. The cost of the repair amounted to £5,542. But offsetting this, in the first year alone, was an estimated energy reduction of £3,936. This was calculated at £0.08/kWh at 12 hours per day with an 80% load.

The 'before' and 'after' analysis from other manufacturing companies confirm similar findings. One reported a 19.9% energy efficiency increase with 4.55 months payback and a carbon emission saving of 10.2 tons per year and another a 12.67% energy efficiency boost, a 5.11 months payback time and carbon savings of 49.5 tons per year.

Ceramic reinforced epoxy coatings are available in a choice of grade for fine particles through to coarse and also specific products for pure chemical attack, corrosion and high impact.

For more information on the LOCTITE® range and advice on surface treatments in general, please visit our website: www.henkel-adhesives.com

Eaton's new CMT mobile valve section increases design flexibility and reduces valve bank size with two-service control capability

CMT expands the CMA advanced mobile valve family

The power management company Eaton has announced the launch of the CMT mobile valve section, a streamlined new section option for the CMA advanced mobile valve. With the capability to control two bidirectional services from one section – an industry first – the CMT valve section increases design flexibility and reduces CMA valve bank size, weight and overall system cost.

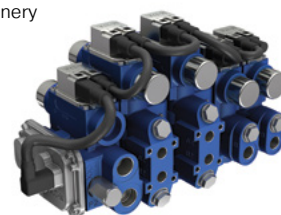
Like the existing CMA mobile valve section, the new CMT section is software-configurable and features CAN communication, on-board sensors, digital flow-sharing and electronic load-sensing to provide precise flow control and high responsiveness. While the CMA section features independent metering, the CMT section utilises the twin-spool architecture to control two services instead of one. This can reduce the total number of sections needed in a valve bank by as much as 50 per cent, minimising valve-bank size and weight.

CMT mobile valve sections are stackable with CMA sections, which increases the design flexibility of the CMA advanced mobile valve. Original equipment manufacturers (OEMs) can optimise the valve for all vehicle requirements by specifying sophisticated CMA sections for services that demand superior precision and control and streamlined CMT sections for standard machine functions. The availability of two stackable section options simplifies the use of the CMA valve on high-end and mid-range machines without parts proliferation, due to shared components and procedures.

"The new CMT mobile valve section reduces overall system cost without sacrificing performance," says Jiri Foukner, EMEA Product Manager, Advanced Mobile Valves, Eaton. "OEMs can merge the next-generation performance of CMA sections with value-oriented CMT sections to create the optimal valve solution

for new mobile machinery designs."

The CMA advanced mobile valve significantly improves machine performance and operator productivity. Featuring on-board electronics and sophisticated software algorithms, the CMA valve can optimise for conditions such as oscillation and vibration to deliver better stability, controllability and fuel efficiency. The software-driven set-up eliminates hardware replacements and enables performance optimisation in minutes instead of months, speeding time to market.



To learn more about the CMA advanced mobile valve and CMT mobile valve section, visit Eaton.com/CMA and Eaton.com/CMT.



Supplying quality products & service since 1975



www.dualpumps.co.uk

Call 01664 567226 for more information

New vacuum pump ECODRY 25 and 35 plus – compact, ergonomic, energy-efficient

Leybold strengthens the trend towards smart solutions in research and laboratory applications



Leybold expands its ECODRY plus product family of dry multi-stage Roots vacuum pumps for laboratory, research and development and analytical applications. The current ECODRY 40 and 65 plus models are now joined by the new, smaller pump sizes ECODRY 25 and 35 plus. Leybold thus completes its range of quiet, low-maintenance and economical fore-vacuum pumps and fills the gap between SCROLLVAC 18 plus and ECODRY 40 plus.

Ergonomic advantages

A characteristic of ECODRY plus, which is particularly important in research facilities and in analytical laboratories, is its low noise level. "Customers have already appreciated the existing models for this ergonomic advantage. The new ECODRY 25 and 35 plus also have a particularly compact design," says product manager Alexander Kaiser, naming another important feature. Thanks to technical optimizations, the vacuum pumps are smaller and more energy-efficient than competitive products. "As a result,

we achieve very high pumping speeds with relatively little footprint, which means that a chamber can be evacuated more quickly and a lower ultimate pressure is achieved," summarizes Kaiser.

Pleasant background noise

Above all, the new ECODRY 25 and 35 plus are particularly quiet, with a noise level of 52 dB(A). "A normal conversation is at a noise level of about 55 dB(A)," says Alexander Kaiser. So it's easy to stay close to the pump and have a normal conversation with the pump noise just fading into the background," Kaiser explains.

Clean operation

A further advantage of the new ECODRY 25 and 35 plus: it emits neither oil vapor, nor particles. This is particularly important in research institutes and laboratories where a clean working environment is essential. The oil-free multi-stage Roots pumps ECODRY 25 and 35 plus also have

a maintenance interval of five years, during which time they run without any servicing. No oil to check and change so users can devote themselves fully to their research and laboratory work.

Pressure gauge optimizes energy consumption

While the ECODRY 40 and 65 plus are still available in the two voltage variants 200-240 Volt for Europe and Asia and 120 Volt for North America, there is only one variant required for each of the new ECODRY 25 and 35 plus worldwide. Equipped with an integrated pump controller, they are suitable for all voltage ranges. Customers also have the option of connecting a pressure gauge directly to the vacuum pump. "This integration is interesting because it allows the pump performance to be adapted again specifically to the respective requirement," explains Product Manager Kaiser. With the help of the gauge, the pump determines the pressure: If this is low enough, the pump can reduce its speed and becomes even quieter and more energy-efficient. What's more, the ECODRY plus is emitting less heat, which means the air conditioning system has less work to do.

Various interfaces for the smart laboratory

This means that ECODRY plus does not simply run through, but achieves exactly the required performance level. In addition, the ECODRY has connections for easy integration of the pump into external control systems and for reading all data from other systems. With its various interfaces such as USB and RS485 as well as the new intuitive LEYASSIST software, the new ECODRY 25 and 35 plus is thus ideally equipped for all sustainable, future-proof industrial 4.0 applications.

For more information visit:
www.leybold.com

TRUST ARI

ZETRIX®

The premium process valve



Reliably tight, durable and versatile even in harsh industrial environments

- Permanently tight seal and zero leakage with the triple offset principle
- Combines all the benefits of a metallic sealing process valve with a butterfly design
- Used for isolation and control
- Can also be set up as a double block and bleed arrangement
- Range includes double flanged, fully lugged and butt weld end versions
- Suitable for liquids, gases and vapours in a wide range of applications
- Available in cast or stainless steel, ranges up to DN1200

Contact the UK sales office on **01684 275 752**
or email enquiries@uk.ari-armaturen.com



zetrix.ari-armaturen.com/uk

Compressor upgrade earns energy-saving bonus for custom design and prototyping specialist

When Fabricon Design Ltd replaced its existing compressor installation with an Atlas Copco VSD+ unit to sustain the air supply of its state-of-the-art CNC machining operation, it also gained the benefit of annual energy savings in the region of 51%.

Starting life in 1984 as a design-led steel fabrication company by founder and managing director, Mark Bushdyhan, Fabricon Design has expanded over the last 30 years to include rapid prototyping capabilities and full-scale production, with all services embracing the latest advances in fabrication technology.

This capability combined with traditional skills and working practices enables the company to develop innovative singular design solutions for its customers as well as produce a diverse range of aluminium, steel, and plastic custom-engineered items in volume from its base in Ashton-under-Lyne.

The small footprint and low noise level of the GA VSD+ compressor means that it can be installed next to the shop floor.

In its manufacturing role, the company machines tens of thousands of components on its 4-axis CNC centres each month, products destined for a wide variety of industry sectors and projects. The components can be as varied as metal fittings for stairlift equipment assembly, corner fixings for airport lighting systems, or essential aluminium parts for architectural fenestration systems.

Essential air supply

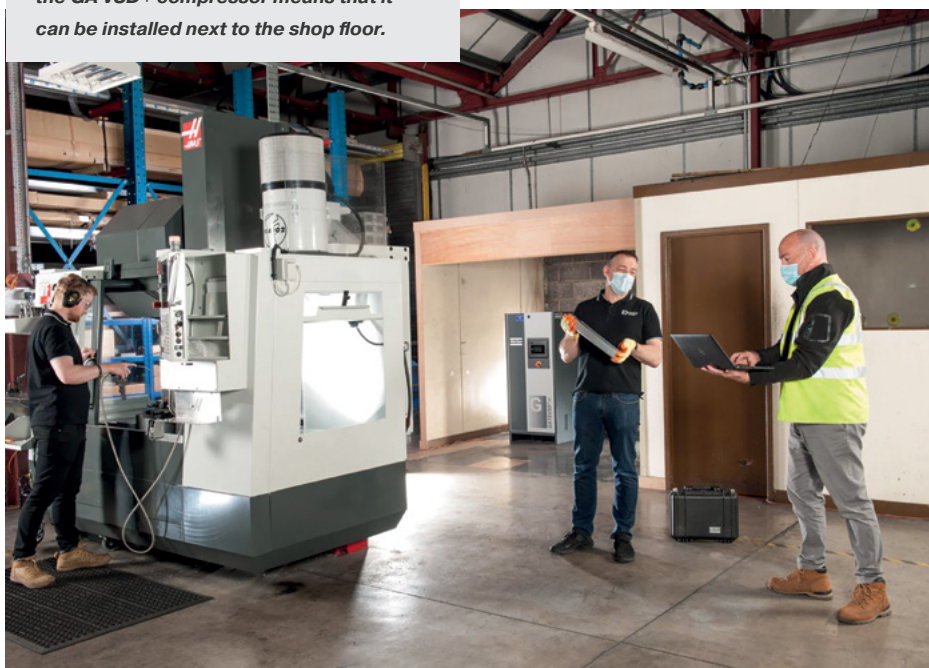
To maintain this versatile output, Fabricon Design operates an investment strategy of continually upgrading to the latest developments in CNC milling machines. But, to fully exploit equipment capability, a reliable and adequate supply of compressed air must always be available as an integral part of the machines' operation.



A compressed air supply is required to operate the clamps and valves on the CNC machines and to control equipment temperature during dry cutting procedures.

The air supply is required to operate the clamps and valves on the CNC machines as well as provide motive power for a battery of auto saws. At the same time, compressed air is used to control equipment temperature during dry cutting procedures.

This air requirement became even more critical when new production equipment was installed. As Fabricon Design's compliance manager, Rebecca Lee-Panton explains: "We needed to replace the existing old, fixed-speed 11kW compressor because it didn't have sufficient capacity to meet the demands from the new CNC machinery. We studied the compressor market, and invited Atlas Copco to come to the site, look at our existing installation, monitor the system's performance and report back with their recommendations."





Wet cutting components on the CNC machine, which is powered by compressed air.

The upgrade plan

A week-long iiTrak study of the regular compressed air usage pattern revealed the need for the existing compressor's replacement and its relegation to standby duty. Calculations indicated long term savings with a 5-year payback from an upgrade plan recommending a new compressed air system. The installation would include an Atlas Copco GA15 VSD+FF rotary screw compressor with integral refrigerant dryer, together with a 900 litre-air receiver, quality air and condensate treatment ancillaries. It also advised a modification to the distribution pipework system to form a complete ring main, connecting two manufacturing areas with new AirNet pipework, in order to improve air pressure and flow throughout the workplace.

Rebecca Lee-Panton stressed that the integrated dryer feature of the GA machine was particularly significant: "The air supply needs to be bone dry when in contact with electrical equipment to prevent any potential corrosion problems." The compact, full-feature Atlas Copco GA15 VSD+

compressor, delivering between 7 and 41.8 ls of quality air at 7 bar, is designed with innovative features to increase efficiency, cut energy consumption, lower noise levels, and reduce operating costs.

The VSD+ compressor's vertical aspect design means that it occupies only the minimum shop floor footprint. This space-saving feature was an important issue in Fabricon Design's purchase decision.

There are environmental benefits, also. The Atlas Copco compressor will save the company approximately 51% of its energy consumption, a figure which equates to £2479 per annum based on 10p/kWh for the electricity supply. Moreover, the VSD+ compressor qualifies for an Enhanced Capital Allowance (ECA) tax-back claim.

The compressor now installed is factory fitted with Atlas Copco's SmartLink – a remote data monitoring programme for compressors. SmartLink provides connectivity that intelligently gathers, compares, and analyses data off-site to

help compressed air users increase maintenance and service efficiency. For added peace of mind, the Fabricon Design installation is also protected by a Total Responsibility full-service maintenance contract with Atlas Copco.

A seamless transition

The efficiency of the upgrade project operation has earned praise from founder, Mark Bushdyhan. He commented: "We are an agile organisation; we innovate and constantly adapt to stay abreast of the rapidly changing technology needed to meet the demands of the marketplace. So, we were impressed with the seamless transition at every stage of the new compressor installation to improve productivity, right from the initial audit through to commissioning, without interruption of our workflow at any time. What's more, the impressive energy savings were a bonus."

For more information visit:
www.atlascopco.co.uk/compressors

Reavell launches new nitrogen boosting system

High-pressure compressor manufacturer, Reavell, part of the Ingersoll Rand Group, has launched Boost, a plug-and-play range of four nitrogen boosters.

Designed for easy integration with any nitrogen generation system, the four models (H075, H110, H150 and H185) deliver up to 350 bar pressure outlet and flow rates up to 56 m³/hour on the H185 model.

On-site nitrogen generation has been gaining popularity over recent years, using existing compressors to convert air to guaranteed purity nitrogen. The process can save operators up to 90 per cent of the cost of bought-in gas with payback in less than two years for a company using liquid nitrogen, or as little as one year where gas cylinders are being used.

Traditionally, customers will purchase nitrogen from a supplier, either as gas in small high-pressure cylinders or in liquid form, stored in mini-tanks or bulk storage vessels.

However, obtaining and maintaining a readily available supply of nitrogen is not without its drawbacks. As well as finding a reliable vendor and arranging deliveries and payment, companies require sufficient space to store the gas; alongside a thorough procedure to monitor and manage the supply safely.

This is where the Boost package with its sophisticated control logic can pay dividends, as Dan Harper, Product Manager from Reavell explains:

"Nitrogen is generated typically at around 7 bar pressure, but there are many applications, such as laser cutting or injection moulding for example, which require the gas to be available at much higher pressures, up to as much as 40 bar.

"Not only does the new Reavell Boost system fulfil this demand for higher-pressure gas as required, but it also enables customers to store nitrogen at maximum required pressures up to 350 bar, to

help meet peaks and troughs in demand.

"This offers numerous benefits. Surplus gas can be generated and, because this is stored at a higher pressure than the application demands, it requires less storage space. This is a key benefit for users as site limitations, particularly around available floor space and installation costs are often of prime concern.

"Additionally, unlike many conventional nitrogen boosting systems, which need to top-up the gas levels constantly, Reavell Boost's higher capacity means that the nitrogen stored can deliver up to two days' supply, helping to improve efficiency."

High-pressure connection

The Boost system can be connected directly to the high-pressure hose, helping those customers currently using bottled gas to save considerable time in disconnecting and re-attaching the gas supply.

Intelligent logic controller

A sophisticated control system monitors both the nitrogen inlet and outlet pressures continuously, to ensure that there is always sufficient gas stored at the required pressure. By constantly controlling the target pressure in this way, energy consumption is reduced, for lower cost of ownership.

Data including average run times and on load hours can also be accessed remotely, to ensure performance is maintained.

Range of options

The system is available with medium and high-pressure options, ranging from 25.9 m³/h flow rate on the 7.5 kW H075 model to 56 m³/h on the 18.5 kW H185.



It is compatible with a wide range of nitrogen booster compressors, filtration and dryer options, to complement the company's OneAir range of nitrogen generation equipment.

Market-leading final delivery temperature of just 11°C above ambient helps to maximise carbon filtration life, for reduced service and maintenance intervals.

Easy maintenance

Ease of maintenance has been considered at every stage of the design. With reduced service points and plenty of space for filter changes, routine service is quicker and simpler.

Peter Satchwell, Global Sales Director from Reavell concludes:

"The new Boost system from Reavell, offers a standard, off-the-shelf product from a brand normally associated with bespoke solutions. We can now offer our customers the high reliability, functionality and quality associated with the Reavell brand in a readily-available packaged solution."

For more information visit:
www.irco.com

Explosion proof ATEX Zone 1 iPad for ATEX and IECEx

Atexxo Manufacturing has released an Apple iPad mini 5 which is suitable for use in Zone 1 and Zone 2 hazardous locations. The explosion proof iPads are originally manufactured by Apple then converted and certified according to ATEX and IECEx by Atexxo Manufacturing.

This makes the ATEX and IECEx tablets suited for safe use in gas/vapour Zone 1 and zone 2 hazardous areas. Sim-card can be installed by the end-user themselves, or eSim can be used. The devices are suited for Apple (open) DEP enrollment program.

All features of the original product are preserved. Including all pushbuttons and home-button.

The ATEX/IECEx iPad mini 5 comes with an aluminum case finish and is available in both WIFI only and WIFI + 4G. Beside safe use as a tablet both versions are excellent for use explosion proof

camera or RFID scanner.

For Middle East countries, versions with blocked cameras are available.

Features:

- Explosion safety level: II 2G ; ATEX & IECEx Ex db IIC T4 Gb
- 64Gb or 256 Gb WIFI+4G
- eSim or Self Sim-Card Installation
- Suited for Apple (open) DEP enrollment

Explosion Proof ATEX/IECEx Zone 1 & Zone 2



Applications:

Hazardous material storage, petrochemical plants and oil and gas extraction sites.

For more information, visit:
www.atexxo.com

Exrobotics' EXR-1 Unmanned Facilities Surveillance Robot Incorporates Falco For Autonomous Gas Detection

ATEX & IECEx Zone 1 accredited robot incorporated with the ION Science Falco for the detection of VOCs in flammable and explosive environments

Throughout unmanned facilities within the oil and gas industry, a human presence is generally still needed for regular inspection work, so deploying Ex certified robots (ATEX and IECEx Zone 1) incorporated with the ION Science Falco, can have a significant positive impact on safety by minimising worker field trips, which in turn reduces operating costs.

ION Science's Falco VOC (volatile organic compound) monitor boasts fast response times and several innovative design features. The instrument's typhoon technology prevents condensation forming on the sensor making it ideal for use in high humidity and harsh weather conditions.

Ian Peerless, Operations Director at ExRobotics comments: "Our robots are used in the oil and gas industry mainly for first response, fugitive emission

and preventative maintenance. The introduction of more stringent fugitive emission regulations and the subsequent opening up of new markets prompted the need for a fixed gas detection instrument that could be incorporated into our remotely operated ExR-1 robot.

"The ION Science Falco VOC monitor was recommended by a significant player in the oil industry who conducted extensive performance tests and trials at a large refinery where the Falco came out on top. When ExRobotics did testing of its own, we also found the detector to be robust and reliable."

The ExRobotics ExR-1 robot is equipped with camera's for visual inspection, microphones for sound monitoring and the Falco gas detector for leak detection. It sends an alarm to the control room if a leak is detected.



ExR-1 with Falco navigates autonomously through installations and find its way back to its docking station to recharge. This means that inspectors and operators can reduce their visits to remote or hazardous locations, greatly improving their work safety.

Learn more, watch the video and read the full article to see how the ION Science Falco VOC detector is helping a valued customer, ExRobotics!
www.ionscience.com/case-studies/exrobotics

ECOM Presents World's First 10" Android Tablet for Hazardous Areas

The Tab-Ex® Pro from the Pepperl+Fuchs brand ECOM expands the Tab-Ex series as the world's first 10-inch Android tablet for Zone 2/22 and Div. 2 hazardous areas. The Tab-Ex® Pro's large display is ideal for demanding applications and for accessing web-based content. In addition, it allows employees to easily transition from working in the field to working at the office.



Flexibility for Mobile Workers

ECOM developed the Tab-Ex® Pro to keep up with Industry 4.0 and the associated demands on mobile devices. The new tablet enables customers to meet the challenges of digitalization while simplifying the way employees work in increasingly complex environments.

The tablet's 10-inch screen is perfectly suited for displaying and interacting with interactive, web-based, and augmented reality content and apps, even in hazardous areas. This is helpful, for example, when the device is used to call up a construction drawing or to receive instructions for certain work steps. The tablet is lightweight and easy to use despite its large screen and rugged construction.

Added Safety with New Technology and Industry Standards

The Tab-Ex® Pro is based on Samsung's Galaxy Tab Active Pro tablet, with features such as Google AR Core, facial recognition, and a Qualcomm SDM670 Octa-Core 64 bit 2.0 GHz, 1.7 GHz processor. Samsung KNOX and Android 9 (Android 10 is planned) guarantee high data and device security. With the help of Samsung DeX mode, users can connect the tablet to a large screen and keyboard for a complete desktop experience.

Pogo pin charging and a powerful replaceable battery with a capacity of 7,400 mAh ensure smooth operation and 15 hours of runtime in

the field. Peripherals such as headsets, remote speaker microphones, and a smartwatch enhance the practicality and functionality of the Tab-Ex® Pro. The tablet is also available without a camera upon request.

Additionally, the Tab-Ex® Pro supports applications for lone worker protection, which are especially necessary for industrial use and in hazardous areas. Like all ECOM devices, the Tab-Ex® Pro is equipped with a programmable button for fast and effective emergency calling. The microphone and loudspeaker connections designed for Zone 2/22 and Div. 2 always ensure effective communication.

Designed for Industry 4.0

The Tab-Ex® Pro is perfectly tailored to applications in the oil and gas, chemical, pharmaceutical, food and beverage, and aviation industries. Fast data access and management enhances worker efficiency and productivity, and the possibility of direct communication with colleagues and experts at other locations means that maintenance and servicing can be carried out more effectively. The tablet can also be operated with gloves.

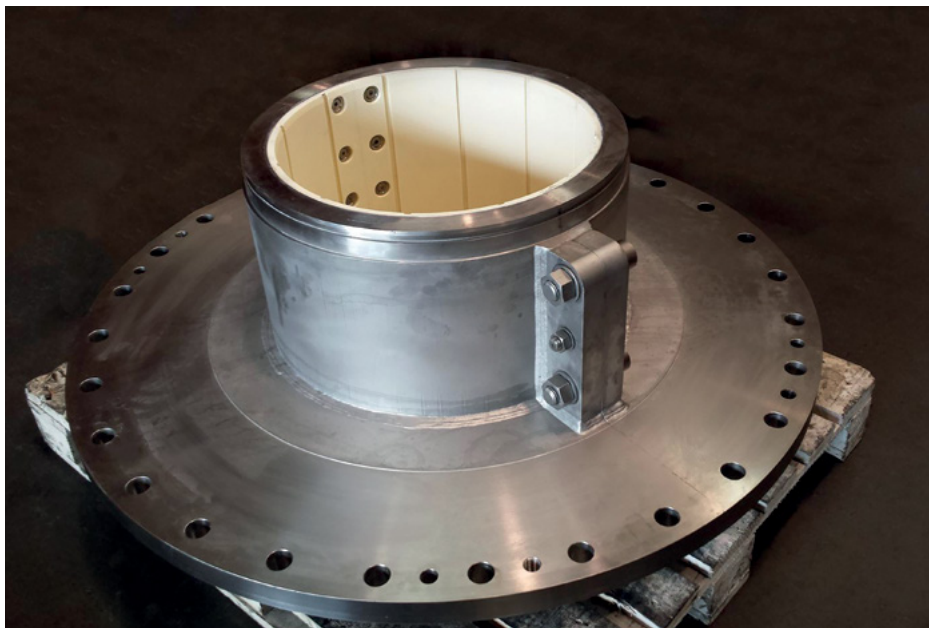
With ARCore, the Tab-Ex® Pro is designed for augmented reality applications and other Industry 4.0 tasks. This makes the device a useful tool today and for the applications of the future. The device also supports the lone worker concept, which means it can protect employees distributed across a wide geographical area.

Whether plant management, inventory management, process automation, maintenance, or applications in transport and logistics, the Tab-Ex® Pro simplifies processes and minimizes risk in industrial environments. The new product will be available with NEC/CEC approval starting in September and with ATEX/IECEx approval starting in October.

www.ecom-ex.com

Venables Machine Works To Support Thordon Bearings' Expansion Into New Industrial Sectors

Venables Machine Works Ltd., a large manufacturing and machining firm based in Saskatoon, Saskatchewan, Canada, has been appointed as an authorised distributor and service provider for Thordon Bearings' industrial bearings portfolio.



The formal agreement follows a ten-year collaboration in which Venables provided sales and engineering support to Thordon's customers across Manitoba, Saskatchewan and Alberta.

Scott Groves, Regional Manager, Thordon Bearings, said: "We have enjoyed a partnership with Venables in the Canadian Prairies for several years, manufacturing Thordon finished parts and providing excellent service and value to our customers. Because of this service and capability, Thordon looked to Venables when the territory became available. We are very pleased to have Dustin Maffin and his team handling our pump and industrial business in the area."

The company, which will focus on Thordon's SXL and XL polymer bearings and engineered thermoplastics, ThorPlas-Blue and ThorPlas-White, has a successful history providing custom pieces for Canada's steel mills, the region's mining industry and generally supporting industrial pump and machinery repairs.

"Venables is adept at machining and engineering

Thordon's elastomeric material and, therefore, a logical choice to further develop the area and create new opportunities in new markets that Thordon has not traditionally had access to," said Groves.

Axel Swanson, Business Development Manager, Thordon Bearings, concurred: "Non-traditional applications that utilise our family of products can prove lucrative in heavy industries, as the wear rate of traditional materials can be excessive, requiring frequent bearing replacement.

"Gaining access to the correct decision makers in a mine or mill, and subsequently convincing them of the value we offer, can take months or years. We are confident that with Venables expertise, machine shop service offering, and its established presence in the heavy industries across the Prairies, this relationship will be rewarding for both parties."

"We have always had great product support from Thordon for over 20 years in our pump rebuilds. Since formally coming onboard with Thordon we have the opportunity to further develop the relationship and enhance the great service they

provide," said Venables' Machine Shop Supervisor and Managing Partner Dustin Maffin.

"Venables has been in business for almost 100 years and it's been our goal to build long lasting relationships with our customer and vendors. Thordon presents a great opportunity for Venables to provide a superior product beyond the industry we have traditionally supported while providing improved options to a vast list of customers.

"We are confident that Thordon will be well received by our customer base and beyond across a variety of different industries, including hard and soft rock mining, power generation, oil and gas, agriculture and hydro, to name a few."

The company has recently completed several pump retrofit projects with Thordon's bearings and has been involved in a bid for large turbine bushings and fabrications. "We are currently in discussions with our customers about the commercial and technical possibilities available with Thordon products, which we hope should yield favourable results in coming months," said Maffin.

With over 40-years' experience supplying non-metallic bearings across a variety of industries, Thordon Bearings designs and manufactures the most complete line of oil- and grease-free, self-lubricating journal bearings, seals and wear pads.

Typical applications where Thordon's technology is used includes waste water and sewage treatment systems; grapples or grabs; vertical pumps; hydro turbine bearings; mining systems, such as car rocker arms and wheel bearings; agricultural systems; doctor and mixer bushings in the pulp and paper/forestry sector; cranes and hoists; stackers, reclaimers and bucket scoops; and gate and door bushings.

For more information visit:
thordonbearings.com

The fight against fake bearings

– unique data matrix codes make investigations easier

Counterfeit bearings are a frequent cause of personal injury and material damage to vehicles and industrial machines. The best way for buyers to protect themselves and their customers is to purchase only direct from the manufacturer or through a certified distributor.



As a purchaser of bearings, you need to be sure that the products you are buying are genuine and will perform as the product datasheet states. Most don't need to worry because they buy these products either direct from the manufacturer or via a certified distributor. These methods guarantee that any technical problems with the product can be resolved quickly and efficiently.

"Brand and product piracy is not a phenomenon that is limited to Asia or South East Europe. It also takes place right on our doorstep," says Ingrid Bichelmeir-Böhn, leader of the Global Brand Protection Team at Schaeffler. "The German and European markets are no longer only flooded with counterfeit luxury or consumer goods,

there is also an increase in counterfeit industrial products that are relevant to safety such as rolling bearings."

So why do some companies still continue to purchase counterfeit bearings? Cost is almost certainly the overriding factor here. However, although the offer price for the bearings may initially look attractive, buyers must ask themselves what the potential hidden costs are in terms of product liability and credibility with their customers if the product turns out to be counterfeit and things inevitably start to go wrong. These could, for example, be critical bearings on high value machinery in a production plant. The buyer therefore needs to take into account the

cost of any production downtime if the bearing fails early.

In addition to lost sales and significant loss of image through inferior-quality goods that may affect future business, there have been enormous costs arising from the investigation, seizure and professional disposal of counterfeit bearings. The disposal requires tight security, as only fully destroying the counterfeits will eliminate the danger for the consumer.

But the damage affects not only those companies that produce brand-name goods and invest heavily in research, development and quality assurance. It also affects those companies that install these components. Rolling bearings are used in virtually every piece of rotating plant and safety-critical machinery and vehicles, from machine tools, robots and wind turbines, through to passenger cars, trucks and rail vehicles.

Whenever customers or sales partners have reason to believe that a Schaeffler bearing they've purchased may be a counterfeit, they can contact the Brand Protection Team (BPT) directly or via one of Schaeffler's national companies. The BPT – the central department responsible for inquiries related to counterfeiting – can be contacted at piracy@schaeffler.com

The BPT receives many of these types of inquiries. In the last six months, the following events show that counterfeit products are commonly found on a global scale.

Spectacular destruction of goods in Spain

During a raid that took place in Spain in 2010, large quantities of counterfeit Schaeffler bearings were identified. The subsequent legal proceedings



took nine years to complete, and it was not until December 2019 that the goods that had been seized could finally be destroyed. Those who might have purchased these counterfeit bearings were therefore saved from both technical damage in potential applications and financial losses.

Italian customs stop counterfeits destined for Morocco

At the start of January 2020, the BPT received an inquiry from the customs office in La Spezia, Italy, where a container of suspicious Schaeffler-branded rolling bearings had been stopped in transit. Once the BPT specialists saw the photographs of highly suspicious goods submitted via the OriginCheck app, they headed to La Spezia to check for themselves. Their suspicions were confirmed: 1,236 counterfeit Schaeffler rolling bearings were on their way to Morocco. The BPT then requested the seizure of the goods, thus setting proceedings in motion to ensure the destruction of the counterfeit rolling bearings.

One data matrix code but several cases?

Schaeffler sales partners regularly send inquiries regarding suspicious products to the BPT, who thoroughly review every single case. The data matrix code (DMC) – a unique code for each Schaeffler bearing – plays an important role here. Schaeffler has been able to identify duplicated codes on counterfeit products that had originally been applied to original Schaeffler products. These can of course only be counterfeits.

A strategic approach – the first case

The first of these duplicated DMCs was identified by the BPT at the end of 2019. This code was immediately tagged in the system and reported as suspicious to the OriginCheck app's users. Once a DMC is marked as a counterfeit in the system, all subsequent inquiries relating to that code trigger a red warning message. Soon after blocking the code, Schaeffler received inquiries regarding the very same code from several countries including Greece, Brazil and Russia. It therefore became clear that this code had been used worldwide for

different products. The counterfeiters have clearly been at work – and Schaeffler is investigating.

How you can help us

Should you come across a similar case, please send photographs of the suspect products to Schaeffler, who can then establish beyond doubt whether the code in question has been copied and used for counterfeit products. Schaeffler recommends using the OriginCheck app to draw on the experience that the Brand Protection Team is continuously gathering to help you detect suspicious and counterfeit goods.

The OriginCheck app is available free of charge for iOS and Android operating systems in German and English: https://www.schaeffler.com/content.schaeffler.com/en/news_media/mediathek/apps/apps.jsp

To report any suspicious counterfeit bearings, please contact the BPT via piracy@schaeffler.com



WATER JETTING ASSOCIATION

Celebrating 40 years of setting standards and promoting safety

JOIN THE WATER JETTING ASSOCIATION

Find out about the many benefits of being a WJA member

Call today +44 (0) 208 320 1090



For **SAFE** and **SKILLED** use of water jetting equipment

Courses Offered

- › Safety Awareness
- › Pressure Washing
- › Tube & Pipe Cleaning
- › Surface Preparation
- › Hydrodemolition
- › Drain & Sewer Cleaning

Key Benefits

- › City & Guilds Accredited
- › WJA-Approved Instructors
- › New Recruits & Refresher
- › Written Compliance Test
- › Certificate & Photo ID Card

Contact us for details of WJA-Approved Instructors in your area

TWO NEW WJA COURSES AVAILABLE

- › Water Jetting Competency
- › Leadership & Management

Find out more about our pressure washing training

Ensure your cleaning and maintenance teams are operating safely and productively

Water Jetting Association – The Engine House, Veridion Way, Erith, Kent, DA18 4AL, UK

City & Guilds Accredited Programme

✉ info@waterjetting.org.uk ☎ +44 (0) 208 320 1090 🌐 www.waterjetting.org.uk

IMPROVE PRODUCTIVITY • MAXIMISE SAFETY • ENHANCE REPUTATION

WJA celebrates 40th birthday with invite to join the party

The Water Jetting Association is marking its 40th anniversary by inviting more contractors and service users to join its drive to promote water jetting excellence across all industrial sectors.



The WJA, the UK's trade association for the water jetting industry, was founded by a group of 21 contractors during a meeting held in the Metropole Hotel at Birmingham Airport on 9th October 1980.

Since then, it has gone on to build an international reputation for promoting water best practice across all industries, including petrochemicals, drainage, marine maintenance, highway maintenance, industrial cleaning and manufacturing.

WJA President Ron Heward said: "The WJA was founded specifically to promote safety and that purpose is still central to our mission today. Our codes of practice are recognised internationally for setting the highest standards.

"Our members - contractors, equipment suppliers and trainers, plus many others - have played vital roles in promoting change for the better in the water jetting industry, and we'd like to invite others to join us in this valuable work."

The WJA has two codes of practice - the 'Blue Code' for industrial high pressure and ultra high pressure water jetting, and the 'Red Code' for sewer jetting - which the Health and Safety Executive use as a reference for water jetting practice. This is vital as operational water jetting pressures can now reach 60,000psi (4,138bar).

The WJA is also the biggest provider of water jetting training across all industrial sectors. John Jones, WJA Vice-President and Chairman of its Training and Safety Committee, said: "WJA water jetting courses give contractors a



benchmark upon which they can develop their in-house training and skills development, and give operatives a recognised qualification, accredited by City & Guilds."

Two new courses have been added in 2020: a competent water jetting qualification that provides additional assurance of an operative's capability; and a management and leadership course for people overseeing water jetting.

In 2019, the WJA also issued new Water Jetting Injury Management Guidelines, based on groundbreaking research it commissioned from a team of eminent NHS trauma physicians.

For the first time, the guidelines include an algorithm for effective injury response, from giving first aid to hospital treatment, which promises to save lives and reduce the long-term impact of injury.

The research findings have been published in the European Journal of Trauma and Emergency Surgery, so the good practice can be shared with medical specialists throughout the world.

Contact the Water Jetting Association:
tel: 020 8320 1090
email: info@waterjetting.org.uk
web: www.waterjetting.org.uk

Rotamec And JPS Reliability Combine To Boost Plant Uptime

Rotamec has announced a new association with JPS Reliability Ltd, a supplier of specialist reliability services, to boost equipment uptime and plant reliability for its customers. JPS' reliability technologies will dovetail with Rotamec's electromechanical maintenance resource, with customers able to benefit from the expertise of both organisations in a combined service.



An expert in rotating equipment, Rotamec is a leading UK service provider to the food and beverage, facilities management, utilities and manufacturing sectors. The business specialises in the repair and sourcing of motors, gearboxes, pumps, generators and associated power transmission equipment. Providing a 24/7, 365 days-a-year maintenance service - supported by highly responsive on-site teams, machining and repair facilities across the UK – Rotamec's customers have the support required to secure equipment uptime.

JPS Reliability provides a professional service to enable proactive maintenance with over

40 years' experience in this specialised field. Utilising vibration analysis, thermal imaging and ultrasound – the business offers comprehensive condition monitoring for an array of equipment. Additionally, a maintenance engineering capability incorporating planning, management, mechanical repairs, lubrication, dynamic balancing and laser alignment ensures that maintenance work is streamlined and asset reliability enhanced.

Simon Brooks, Managing Director at Rotamec, said: "Our new association with JPS Reliability will allow Rotamec customers to further improve equipment reliability. The on-site condition monitoring and maintenance services provided by

JPS Reliability will seamlessly integrate with our rotating equipment expertise, including in-house repair and sourcing capabilities. We are excited to begin this new combined service."

Amanda Graves, Business Development Director at JPS Reliability, added: "Both Rotamec and JPS Reliability share a desire to enhance the reliability of customer equipment. Our specialist reliability services are designed to boost plant uptime, so our new association with Rotamec will mean combining and developing our services to maximise this benefit."

For more information visit:
www.rotamec.com

Interfaces for Machine Vision

Machine vision interfaces typically come in two flavors: dedicated and consumer.

Dedicated interfaces; Useful for applications where extremely high-speeds or ultra high-resolution necessitate the use of such interfaces; for example, line-scan cameras used to inspect continuous flow processes like paper or plastic film production where cameras frequently work in the kHz range. However, these interfaces tend to be significantly more expensive, less flexible and add to system complexity. CameraLink (supports up to 6.8Gbit/s of data) and CoaXPress (supports up to 12Gbit/s) are dedicated machine vision interfaces typically used in such applications. In addition to the cameras, systems using these interfaces require frame grabbers. These are

specialized adapter cards to receive image data and assemble it into usable images. Dedicated machine vision interfaces also use proprietary cables, making integration with other peripherals a little more challenging.

Consumer interfaces; These interfaces enable machine vision cameras to connect with host systems using widely available USB and Ethernet standards. For most machine vision applications, the USB 3.1 Gen 1 and Gigabit Ethernet consumer interfaces provide a winning combination of convenience, speed, simplicity and affordability.



Furthermore, consumer interfaces support widely available hardware and peripherals for machine vision implementation.

Both consumer and dedicated interfaces are used across many machine vision applications.

For more info visit: www.flir.com

Halliburton & Baker Hughes CEO's join Reuters Events: Energy Transition 2020

Reuters Events have announced that CEO's of two of the world's leading energy service companies, Halliburton and Baker Hughes, will join the speaker faculties for their flagship Energy Transition Summit.

The event will explore the creation of the future energy ecosystem and offer companies, from across the asset spectrum, a definitive guide to their net-zero strategies. The alignment of the two biggest O&G global service companies, Halliburton and Baker Hughes, represents a significant step in the transition to low-carbon energy.

Alongside their CEO speaker representation, Halliburton join as Platinum sponsors of the North American edition. Baker Hughes join as gold sponsors for the European edition of the flagship energy transition program.

The Energy Transition team report an industry leading speaker faculty for 2020, including:

- Lorenzo Simonelli, Chairman & CEO, Baker Hughes
- Jeff Miller, CEO & President, Jeff Miller
- Tristan Grimbert, CEO, EDF Renewables
- John Pettigrew, Chief Executive, National Grid
- Pratima Rangarajan, CEO, OGCI Climate Investments
- Alex Schneider, CEO & President, Lundin Energy
- Gretchen Watkins, President, Shell Oil Company
- Calvin Butler Jr., CEO, Exelon Utilities

- Francis Fannon, Assistant Secretary ERB, U.S. Department of State
- David Lawler, Chairman & President, bp America
- Andreas Schierenbeck, CEO, Uniper

Governance & Cooperation – Does the energy transition face a 'governance deficit'? To understand how the energy transition will develop over the next decade, it is crucial to understand the driving governing forces behind it. Will the Green Deal provide the first domino, how can we ensure progress in the shadow of Aberdeen and ensure that we translate targets into action?

Financing Energy Transition – We must address the elephant in the room; who is going to pay for it all? An understanding of where the funds are likely to come from is key to staking claim to the infrastructural projects that will redefine the modern world in the 21st century.

New Energy Infrastructure – Low-carbon energy supply and consumption will need a radical overhaul of infrastructure. As well as revamping the old, we'll need entirely new assets and new systems of energy delivery. It's an unprecedented opportunity with estimated spending at \$70 trillion over the next decade. Knowing which technologies are ready to be scaled first is the key to understanding opportunity.

Business Model Innovation - Who will provide leadership through the age of transition and how do we want our future energy system to look?

Speed and timing will be crucial if you are to stay on the right side of the transition. Join us in setting business led, evidence based, targets as industry drives towards net-zero.

More information on the Europe and North America editions can be found below. Registration for the LIVE stream is free.

- <https://reutersevents.com/events/energy-transition-north-america/>
- <https://reutersevents.com/events/energy-transition-europe/>

"At Reuters Events, we're committed to tackling the Energy Transition head on; to shed light on the defining issue of our time and help energy companies meet a uniquely difficult challenge. That is, to be both an energy company of today, and the energy companies of tomorrow. In a period that will be defined by uncertainty we can, together, lighten the way forward." – Owen Rolt, Head of Energy Transition, Reuters Events

For more information Contact

Owen Rolt

Head of Energy Transition

Reuters Events

UK: +44 (0) 207 375 7596

E: owen.rolt@thomsonreuters.com

EMSOnline
www.engineeringmaintenance.info

All of our articles are available to read online today!

VIEW FULL MAGAZINE ONLINE

- + Extra Articles and features
- + Full Business Directory
- + Much More...

Visit Us Today:
www.engineeringmaintenance.info



Airbench Releases Downflow Workstation For Fume Control

AirBench is pleased to announce the release of the new DF range. DF down flow workstations are designed for light duty fume extraction applications, particularly in situations where installation of a full AirBench downdraught bench system is not convenient.

Available with a range of filters to suit a mix of fume extraction applications,

AirBench DF is also available in 3 alternative sizes.



Contact AirBench Ltd for an on-site assessment of your fume control issue. Visit: www.airbench.com

New Chairman and Deputy Chairman appointed at Winn & Coales International Ltd

On the 6th of October 2020, the board of Directors of Winn & Coales International Ltd were delighted to announce that Mr Chris Winn, the great grandson of the founder of the company has succeeded his father, Mr David Winn OBE, as the Chairman of the Group.

Chris Winn becomes the fourth Chairman of the Company since it was founded in 1883. He has extensive and broad experience within the Group and holds the position of Managing Director of Winn & Coales (Denso) Ltd and Executive Director of Winn & Coales International Ltd.

Dr Keith Erskine, the grandson of the second of the two company founders, Mr Frank B. Coales, has assumed the role of Deputy Chairman of the Group. Dr Keith Erskine brings a wealth of

knowledge from his professional career to the role and holds the position of Non-Executive Director of Winn & Coales International Ltd.

Winn & Coales International Ltd remains a privately-owned family business after 137 years of trading. The company has specialised in the manufacture and supply of corrosion prevention and sealing products for over 90 years. The well-known brands of Denso™ and Premier™ offer a cost-effective and long-term solution to corrosion



on submerged or exposed steel or concrete, pipes, tanks and structures. Through their seven subsidiary companies, they are able to provide tailor made solutions to challenging corrosion problems all over the world.

For more information visit:
www.denso.net

Trade In, Trade Up – Casella Supports Air and Noise Monitoring Equipment Upgrades with New Offer

As employees begin returning to work, maintaining a safe and socially distanced workplace is at the forefront of everyone's mind. Statistics have shown that 32% of those surveyed were anxious about catching or spreading Covid-19 in their normal workplace. HSE guidelines advise that workers maintain a safe distance of 2m apart at all times, or 1m apart with risk mitigation measures in place.

area at the start of a shift that allows a restricted number of socially distanced employees to collect equipment at one time. This process can then be reversed at the end of a shift so units can be collected and be thoroughly cleaned and disinfected.



Trade In, Trade Up

Any noise dosimeter or air sampling pump for up to 25% off a **CASELLA** Bluetooth enabled unit



Once the body-worn units have been issued shift managers and industrial hygienists can check real-time results remotely throughout the day from a distance of over 25m away, over 12 times the recommended 'safe' social distance, minimising both worker disruption and potential close contact. The AirWave app allows a wide range of data to be viewed and downloaded across multiple devices, giving managers full, accurate and downloadable exposure data for multiple workers at a distance.

"When designing our personal monitoring devices we included remote monitoring advancements like integrated Bluetooth and App connectivity to address the challenges employers and employees faced with workplace hazard monitoring at that time," explains Tim Turney, Casella's global marketing manager.

Health hazards such as from noise and dust continue within the workplace, so personal monitoring must continue. However, it can be difficult to deploy personal monitoring equipment while maintaining social distancing. World-leading environmental monitoring manufacturer Casella is enabling companies to overcome social distancing challenges with a new initiative to provide equipment that allows monitoring to continue whilst maintaining social distancing.

For a limited time, occupational monitoring specialist Casella is supporting socially distanced working through its 'Trade In, Trade Up' offer, giving workers access to Bluetooth enabled monitoring equipment which can help to make practicing social distancing while undertaking monitoring.

The offer allows customers to 'Trade In' any Noise

Dosimeter or Air Sampling Pump of any age and from any manufacturer* to qualify for a discount on a Bluetooth enabled Casella Noise Dosimeter or Air Sampling Pump. This enables customers to 'Trade Up' to a newer unit that can be used to allow more socially distanced workplace hazard monitoring. Casella will also responsibly recycle all equipment that is traded in.

Bluetooth enabled personal monitoring equipment, such as the Casella dbadge2 Noise dosimeter and Apex2 Personal Sampling Pump, provide a degree of connectivity that enable socially distanced monitoring to be enacted practically at every stage – from issuing equipment to data capture and reporting.

Monitoring equipment can be set to run, connected to the Casella AirWave app, and left in a demarked

"We couldn't have predicted the challenges that Covid-19 would bring to those making workplaces safe, but we've given users the ability to adapt to socially distanced working and for personal exposure monitoring to continue for these traditional workplace hazards. Our 'Trade in, Trade Up' offer will give our partners greater access to monitoring solutions that will help them to work with employees to ensure a socially distanced, healthy workplace environment as industry begins to open up once again."

To find out more about the Casella range of monitoring solutions, visit www.casellasolutions.com

*Full terms and conditions for 'Trade In, Trade Up' can be found on the Casella website: www.casellasolutions.com

One extraction system for all: VacuFil places the focus on the extraction capacity for each torch

Optimally matched to the welding torch at all times: The new VacuFil series of extraction units from KEMPER is a unique unit for torch extraction that combines easy handling with needs-based extraction capacity.

The VacuFil 125i, 150i and 250i digital unit variants automatically and continuously adjust the required air volume flows according to the individual torch characteristics. W3 approval now certifies that the digital VacuFil versions embody the highest level of protective welding equipment. Also, international machine manufacturers are already successfully using the new high-vacuum technology.

To ensure that the protective gas layer is not destroyed, the correct extraction capacity is important for torch extraction. Extraction torches from any manufacturer require an individual volume flow for this. The new EN ISO 21094 DIN standard now fundamentally defines exactly how this is to be determined. "With VacuFil, we are creating a hitherto unique solution for torch extraction in accordance with these specifications," says Björn Kemper, CEO of KEMPER GmbH. "Our new high-vacuum units are convincing not only due to their simple operation. Thanks to the automatic speed control, welders do not have to laboriously determine the extraction capacity manually. They act in accordance with the standards at all times and the protective gas layer is maintained."

Select the torch and the extraction system adjusts itself permanently

VacuFil can be combined with any conventional welding torch. When welders couple their torch technology with the digital extraction units of the series, they intuitively select the torch of their choice on a touch display. The units then automatically adjust their output to the torch

parameters stored in the unit's software. The integrated extraction volume control ensures that the extraction systems continuously adjust their performance during the welding process. This means that the highest possible air volume flow is always used for extraction.

Depending on the danger intensity of the welding process used, the VacuFil 125i, 150i and 250i versions are available with different maximum extraction capacities. The W3 certification from the Institute for Occupational Safety and Health certifies that the systems meet the best possible protective welding equipment standards. Even the extraction of welding fumes during the processing of chrome-nickel steels is possible. VacuFil is eminently suitable for detecting high levels of smoke and dust during industrial welding. The automatic filter cleaning system enables uninterrupted continuous operation.

Unique torch database assembled

During the development of the VacuFil series, KEMPER has built up extensive torch know-how regarding the necessary extraction capacity. In its own test positions, the manufacturer determined the necessary torch parameters and built up a unique torch database over months. If torch manufacturers change their systems, KEMPER adjusts the parameters in the master data and also adapts the individual extraction capacity. The units are then simple to update using the KEMPER Cloud over the Internet.

All units are also available as analogue VacuFil 125, 150 and 250 versions. Here, welders set



the required extraction capacity manually. All new VacuFil variants are suitable as mobile extraction units for use at changing workplaces or when working with large work pieces. Welders automatically carry the torch-integrated extraction unit with them while they are welding.

Earthmoving machinery manufacturer orders 90 units

Shortly after the market launch, the VacuFil solution has already convinced several international machine manufacturers. For example, one of the world's largest manufacturers of earthmoving machinery has ordered the first 90 VacuFil 125i and is using them successfully in a production facility in the UK. Further orders have since been received almost weekly. "The companies usually have torches from different manufacturers for changing welding applications. A single system lets them achieve a high level of occupational safety when using different torches" says Marc Crawford, Sales Manager UK at KEMPER.

More information at: www.kemper.eu

The ZARGES® PAXTower: One solution for all your work at height needs

Complicated and time-consuming scaffold structures are now part of the past: The new PAXTower with folding base by ZARGES UK, the leading access equipment specialist, is equipped with a raft of timesaving and safety-enhancing new features and is fully compliant with the latest safety regulations.

The ergonomic and sturdy design, in accordance with the latest EN1004 specification, ensures safe working at height at all times. The new ZARGES PAXTower range will be available from October 2020.

Assembly of the base pack is astonishingly simple; to get started users simply fold out the structure until it clicks into place. When building the tower to higher levels, a specially designed slot-in spigot with interlock clips prevents tilting when connecting the end frames, enabling a smooth build. Once constructed, components stay securely and firmly in place and can be released using simple mechanisms. Its sturdy, flexible construction and quick assembly make the PAXTower the perfect product for frequent and trade users.

Joost Knapen, Head of Product EMEA at WernerCo, said: "At the outset of designing the new PAXTower, we wanted to fulfil our commitment to continually making our products safer and easier to use. At the same time, we wanted to make sure our latest products adhered to the latest British and European standards.

"We believe we've met and exceeded our goals; not only is the PAXTower fully compliant with existing standards, we've included a litany of new and useful features with the aim of increasing safety, all while letting users spend more time doing their job and less time setting up equipment. And we've achieved this all in a package that

represents exceptional value for money."

New features

The PAXTower will be available in two build methods: Through the Trapdoor (3T) and Advanced Guardrail (AGR), with the option to build up to a platform height of 5.6m to 7.65m. Its 1.80 by 0.72m platform can withstand loads of up to 208 kilograms.

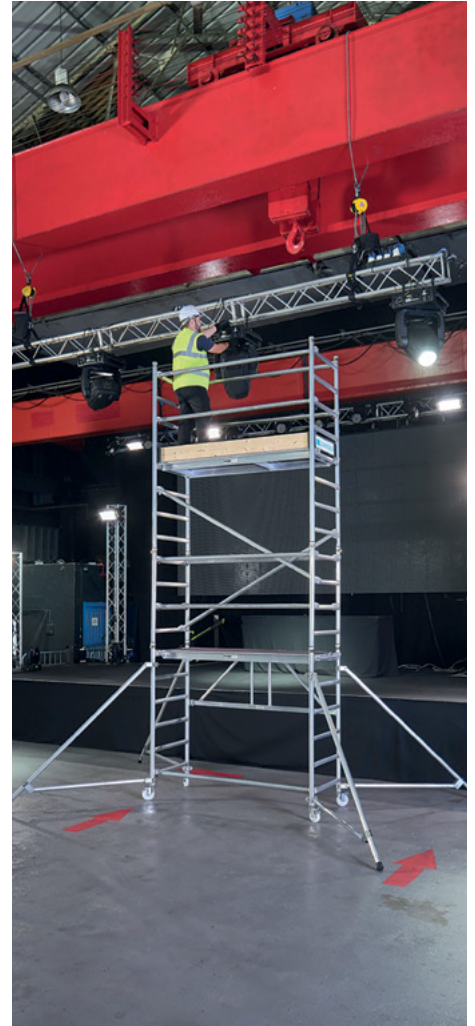
The AGR PAXTowers contain fewer components to allow for a quick and safe build, while the specially designed guardrail features foldable arms to make the component compact for easy storage and transportation.

The 3T braced version provides 360° protection at all times and ensures complete stability.

Colour coded claws on the tower's braces make identifying the correct brace simple, helping to ensure a safe and correct build.

Three new features enhance the folding frame's ease of use and speed, as Joost explains: "Smooth running slip-on guides made of hard plastic, known as spigots, make connecting push-on frames a cinch. Through a clever mechanism, the toe board moves into the right position almost by itself. And set-up is just as easy; simply fold it out – the frame gives a satisfying click when secured into place."

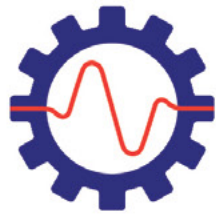
The PAXTower comes with stabilisers as standard



as well as stabiliser extensions in the 5.6m version, alleviating the need for a second set of larger stabilisers and maximising ease of use, without sacrificing safety.

For more information about these products – and ZARGES' wider portfolio of access solutions – please visit: www.zarges.co.uk

For more information on the full range of products and services offered by WernerCo, please visit: www.wernerco.com/global



FARADAY PREDICTIVE

**ENABLING SOLUTIONS IN CONDITION-BASED MAINTENANCE
TODAY FOR A BETTER WORLD TOMORROW**

**Specialists in the application of Model-Based
Voltage and Current (MBVI) systems**



**info@faradaypredictive.com
(+44) 0333 772 0748**

Providers of portable and permanently installed condition monitoring and energy monitoring and optimisation systems. Faraday Predictive systems require no sensors to be mounted on your plant equipment, instead we use the electric motor driving your equipment as the sensor. Simply by measuring the voltage and current drawn by the motor we can identify an astonishing amount of information about developing problems in your equipment, giving you an indication of current condition and predicting future condition for up to three months in the future. We provide easily understood advice on the nature of the fault, how we have diagnosed it, the effects it is likely to have, and what you should do about it. We also quantify the energy being wasted by faults, allowing you to cost-justify corrective work on energy saving grounds.

For more information see our website or contact us direct.

Make Vibration monitoring on complicated equipment easier – take the Nuclear option!

Vibration monitoring on equipment such as cranes, hoists and screw jacks has traditionally been difficult. These are often driven by an electric motor rotating at perhaps 1500 rpm, but the final hoist drum or travel wheel rotates far slower – perhaps only a few rpm- with intermediate shafts rotating at speeds somewhere between these values.

Conventional vibration monitoring is difficult because you need to place sensors in line with each of the bearings on each of these different speed shafts, which is not only time consuming, it can be very difficult to access – especially to try and take readings when the crane is in operation.

A solution can be found through Torsional Vibration measurements – effectively using the drive motor as a torsion sensor, enabled by a Model-Based Voltage and Current system, such as the Faraday Predictive S200 system. This is a small box that fits inside the motor starter cabinet, and measures voltage and current

whenever the machine is in operation. The S200 automatically identifies distortions to the current that have not come from distortions on the voltage supply, and therefore must have been caused by phenomena in the machine. Because shafts transmit torque very efficiently from one end to the other, the motor can “see” signals throughout the machine, with different characteristic frequencies clearly identifying faults from the different speed components.

Recent applications in the nuclear power industry have detected faults on cranes, screwjacks and other complex equipment including rubbing



brakes, misaligned drive shafts and rubbing screwjack nuts as well as faulty motor winding insulation. Even the best vibration system would struggle to do all of that!

And the best news is that these are not “Nuclear priced” but are inexpensive units accessible to all industries.

For more information see
www.faradaypredictive.com

Hart active at Acton

Hart Door Systems has completed the installation of seven insulated roller shutters at London Underground’s Acton Works maintenance facility in west London.



Kyle Pendergood at Hart Doors says the contract included the installation of a three tonnes shutter which was 11.8m wide and 4.4m high.

“Its weight alone was significant as was the width,” says Kyle. “We had a detailed lifting plan to make this work. The Hart team again rose to the challenge.”

Hart is familiar with Acton site having installed three of its Speedor Storm doors last autumn. The ‘Storm’ door is a high-speed door capable of withstanding winds up to 90 mph when closed and is designed for frequent use in high traffic situations.

For more information:
www.hartdoors.com
T: 0191 214 0404

C.K Magma – The Best Premium Tool Storage Solutions for Professionals

Working with trade professionals gives C.K Magma great insight into what works best to make tasks much easier. Its range of innovative tool storage products do just that, offering the very best options for high quality, efficient tools and test equipment storage solutions.



Hardwearing, strong and durable, C.K Magma's wide range of cutting-edge products are built to protect and organise valuable toolkits, with great features and benefits designed to suit everyone's needs.

New C.K Magma Test Equipment Case Plus

The current C.K Magma Test Equipment Case has proved a big hit with consumers, but C.K Magma has listened and made the best test meter storage

solution even better. By listening to feedback and its focus and commitment to working closely with trade professionals, this has allowed the C.K Magma range to evolve and develop which, in turn, has led to the introduction of new features in its Test Equipment Case Plus (MA2641). Perfect for those who need to easily transport and protect valuable diagnostic test equipment and essential tools in one handy case, the premium Test Equipment Case Plus offers a host of enhanced features and benefits.

This includes: Improved access with easy-opening lid and two retaining straps; a bigger/deeper overall design, suitable for the latest generation of test meters; adjustable padded compartments for the safe transportation of test equipment and accessories; a convenient storage compartment to hold all the essential tools needed, plus 27 easily accessible pockets and a handy business card and document holder. Featuring a durable polyester construction, this quality test equipment case has a 100% waterproof polymer base for increased durability, plus a red inner lining for easy visibility of stored items.

Transportability is a key feature of the C.K Magma Test Equipment Case Plus, which can be incorporated with any C.K Magma Wheeled Technician's Case thanks to an integrated trolley strap. This makes transporting tools and test equipment easier than ever, particularly where vehicle access is restricted. Once onsite, portability is hassle-free with a robust carry handle and separate padded shoulder/neck strap, which also allows hands-free operation of test equipment. There's also a heavy duty lockable zip system for added security.

For further information please visit
www.carlkammerling.com or call
01758 704704

Fast Cure, Surface Tolerant, Abrasion Resistant System for Emergency Patch Repairs - New Product Belzona 1818 Officially Launched

Belzona Polymeric, one of the world leading providers of high-performance polymeric repair composites and protective coatings is excited to announce the launch of a new product to add to their comprehensive portfolio of solutions for industrial maintenance.



This new product, Belzona 1818, has been specially formulated for emergency patch repairs in highly abrasive environments typically found in industries such as mining, cement, pulp & paper, biomass, amongst others where equipment is commonly exposed to extensive erosion and abrasion from excavated or processed materials of varying type, size and shape.

What is easily identifiable about this new product is its distinctive blue colour. This vivid blue serves as a good mixing indicator and provides contrast where an application is carried out in poorly lit conditions or against dark background surfaces where the repair area should be easily identifiable. These conditions can be common in typical industrial applications where Belzona 1818 is likely to be used.

Belzona 1818 is the newest addition to the highly erosion resistant Belzona 1800 series product range and bridges the gap between surface tolerance, fast cure and high abrasion resistance.

It's fast curing properties means minimal downtime for damaged equipment, so much so that the product can experience full mechanical loading and heavy abrasion just two hours after application, depending on cure temperatures.

In these abrasive environments, surface preparation can also be an issue and contamination is common, therefore the equipment cannot always be fully cleaned or ideally profiled as required for many repair materials. The desire to deal with adverse application conditions creates a need for a not only fast-curing, but also a surface-tolerant material. As a result, Belzona 1818 has built in surface tolerant technology, enabling it to bond tenaciously onto steel substrates even when surface preparation is minimal or if the substrate is heavily contaminated with oil or water.

The product can even be applied and cured underwater.

Kristine Savicka, Belzona R&D Technician

explains: 'Belzona 1818 builds on our knowledge and experience of producing highly abrasion resistant systems, and combines this technology with our know-how and expertise in producing fast-cure and surface-tolerant products for application in non-ideal conditions. Belzona 1818 offers the high erosion resistance expected of the Belzona 1800 series with added application benefits, offering ease of use and a fast return to service'

This new product is supplied in convenient 1kg units where base and solidifier can be easily combined on a Belzona work surface. Belzona 1818 is easy to mix and apply and offers a good working life (16 minutes at 20°C/68°F) whilst still offering fast cure and a rapid return to service. The product is suitable for emergency repairs where downtime must be kept to a minimum and optimal surface preparation cannot be achieved due to accessibility or environmental and application constraints.

As with all Belzona products, Belzona 1818 is made to the highest quality and safety standards and has undergone rigorous performance testing. Belzona 1818 is user friendly and can be applied without the need for hot work or specialist tools. In addition, Belzona 1818 is formulated without solvents and is free from CMR classification and labelling, whilst maintaining cure speed and performance to give a durable and long-lasting repair.

Based on initial research and feedback from Engineers in the field, it is envisaged that this product will be used on various types of equipment within abrasive environments such as slurry pumps, grinding mills, screw conveyors, chutes and hoppers, hydrocyclones, wear plates, dust extraction pipe work, agitator shafts, hubs and blades.

For further information on Belzona 1818, please visit belzona.com/1818.

Linear Actuators The Preferred Solution For Agricultural OEMS

In the past, agricultural OEMs had two choices when it came to selection of actuators for applications such as folding sprayer booms: hydraulic or pneumatic. However, the latest generation of linear actuators, such as the H-Track from Thomson Industries, a leading brand of the Altra Industrial Motion Corp., is offering the required performance without any of the traditional drawbacks of hydraulic or pneumatic actuators.



Pneumatic and hydraulic actuators require supporting systems to operate. Naturally this takes up space on a vehicle platform, space that is often at a premium as manufacturers move to improve vehicle packaging. Pipes make installation more difficult, which takes up time on the production line and during maintenance work.

Traditional hydraulic actuators pose even more problems, as any compromise in the integrity of pipework can cause leakage of hydraulic fluid onto crops, rendering them unusable. Hydraulic systems are also inherently expensive - a cost that is passed directly onto the vehicle manufacturer. The considerable power consumption of hydraulic actuators must also be considered.

The H-Track electro-hydraulic actuator from Thomson offers the performance of a traditional hydraulic actuator while overcoming the

shortcomings. Its motor, pump and valves are integrated into a mini 'Power Pack' mounted onto the cylinder. This allows completely self-contained hydraulic actuation without the need for external pipework. Able to exert forces up to 22 kN and designed to withstand punishment that would destroy many other electric actuators, the power-dense H-Track offers the required performance too.

In terms of installation, the H-Track is connected via two wires. All external pipework is eliminated, expediting installation and maintenance. All H-Tracks are lubricated for life, which further minimises maintenance requirements. This simple arrangement ensures that the H-Track offers considerable time savings on the production line and in the field.

Eliminating pipework also negates the risk of crop

contamination due to fluid leakage. This ensures that harvested material is not wasted, protecting the quality of produce.

Space efficiency is also enhanced, as the self-contained H-Track combines all of its required features within the power pack and cylinder. Packaging is consequently improved as well as overall weight - all important in improving vehicle efficiency.

Another advantage is the reduced power requirements of the H-Track. Without the requirement to power external systems, the H-Track is less power intensive. Energy efficiency is consequently improved.

The H-Track offers inherent value too. Rather than specifying an expensive pneumatic or hydraulic actuator with supporting systems, agricultural OEMs can instead specify the self-contained H-Track at a reduced comparative cost, helping to improve the value of a vehicle.

Additional capabilities include an immunity to vibrational drifting and hydraulic self-locking when load is reversed. The compact pump and valves can also be configured to the requirements of each application. To withstand the outdoors, the H-Track can be specified in either IP67 or IP69K ingress protection ratings, with a standard operating temperature range of between -40°C to 82°C.

Agricultural OEMs are moving to heavy duty electric actuators as they provide a host of advantages. The H-Track, for example, offers the strong performance of a hydraulic actuator while removing external pipework, easing installation, maximising value and reducing power consumption. For these reasons, electric actuators are replacing their pneumatic and hydraulic forebears.

For more information visit:
www.thomsonlinear.com

Norton Clipper launches new blades for multiple applications



After increasingly high demand, Norton Clipper's coveted range has broken new ground with movement into four new application sectors:

- **Wood and composites:** Built for power, precision and durability, these tools encompass solutions for hard and soft wood, wooden panels, OSB, MDF, and HDF.
- **Multi-materials:** These blades are designed to cut construction timbers, pallets, nails and non-ferrous metals, without damage to the blade itself.
- **Veneer and laminates:** Whether cutting melamine faced boards, plywood, laminated panels or sheets of HPL, this range has a professional blade to suit.
- **Aluminium:** This is Norton Clipper's specialist range of blades, suited to cutting aluminium, brass, and copper.

Renowned as the cutting product of choice in the construction and building industries, products in the Norton Clipper range are known for their durability, quality and expert finish – and these new additions are no exception.

Designed with the professional, the hobbyist and the DIYer in mind, the new blades are suitable for all types of cutting machinery. Within each application sector, users can find a variety of different Tungsten Carbide Tipped (TCT) circular saw blades, hole saws, jigsaw blades, reciprocating saw blades and planer blades to suit a wide variety of processing requirements.

The optimised gullet shape on the circular saw blades ensures a reduction in blade vibration to offer a more precise cut every time, whilst the reduction in noise and heat build-up on the steel centre increases safety for users.

To help contractors quickly and easily choose the correct tool for their project, the packaging in the new range is colour coded in order to help identify which materials it can be used for, as follows:

- Light Blue: Wood and Composites
- Purple: Multi-materials
- Yellow: Veneer and Laminates
- Dark Grey: Aluminium

Adrian Hough, Country Manager at Saint-Gobain Abrasives comments: "We are very excited to be entering into these new sectors and applications. This is a progression which was very much driven by customer demand, and one which will continue the legacy of high quality and durability attached to the Norton Clipper brand."

"We are confident that both professionals and DIYers alike will be thrilled with these new blades, which prioritise user safety and deliver excellent results, time after time."

For more information on the new Norton Clipper blades, visit www.nortonabrasives.com, or contact Saint-Gobain Abrasives UK at sga-uk@saint-gobain.com for more details, pricing, or to find a stockist.

Winn & Coales International Ltd announces the death of company Chairman Mr David Winn OBE.

It is with profound sadness, that the board of Directors of Winn & Coales International Ltd, announce the death of Company Chairman Mr David Winn OBE.

David Winn, the grandson of founder Paul Winn, joined the company 55 years ago in 1965. He had a long and distinguished career at Winn & Coales, serving as Deputy Chairman from 1968-1991 and Managing Director from 1988-1995. When Frank Coales passed away in 1991, he became Chairman of the company and held this position for 29 years until his passing on the 21st of September 2020.

During his time as Chairman of Winn & Coales International, the Group grew substantially with seven subsidiaries around the world and a network of dedicated distributors and agents. In the last decade, the Group won three Queen's Awards for Enterprise in International Trade, recognising its growth in world sales. These notable successes were achieved in 2010, 2015 and 2017.

David Winn had many wonderful and notable qualities, one that shone through was his charitable nature. He was awarded an OBE on the 12th of May, 1995 by His Royal Highness The Prince of Wales for being a Governor of West Norwood College for 24 years and for successful fund raising for Eastbourne College. He was also Chairman of the Trustees of the

National Missing Persons Helpline for many years. David Winn hosted a variety of fundraisers at his residence in Twickenham, London for The Missing Persons Helpline and contributed a great amount of his time and resources to the Charity.

One of his passions was for his old school, Eastbourne College. He served as College Governor from 1982-2015, College Vice-President from 2016-2020, Chairman of the OEA from 1980-2001, President of the OEA from 2002-2012, and President of the Eastbournian Society from 2012-2020. He remains one of the College's greatest benefactors and recently had a building on campus named after him in 2019. The Winn Building is a new, purpose-built facility featuring an array of state-of-the-art amenities.

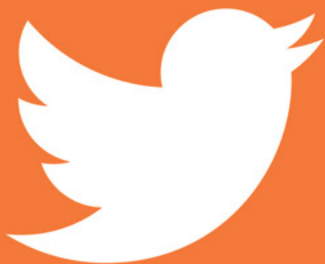
David Winn had a large, joyful and generous personality with a fantastic sense of humour. He made the time for everyone in the company and enriched the lives of all who knew him. He was a truly remarkable man who leaves behind a great legacy and his much loved children and grandchildren. He will be deeply missed by his colleagues, friends and family.



Winn & Coales International Ltd specialise in the manufacture and supply of corrosion prevention and sealing products. The well-known brands of Denso™ and Premier™ offer a cost-effective and long-term solution to corrosion on submerged or exposed steel or concrete, pipes, tanks and structures. Through their seven subsidiary companies, they are able to provide tailor made solutions to challenging corrosion problems all over the world.

After 137 years of trading, Winn & Coales International Ltd remains a private, family owned company and the family are fully committed to ensuring the memory of Mr David Winn OBE will live on through the business as they continue to follow his lead and take the company from strength to strength.

For more information visit:
www.denso.net



Stay Up To Date!!!

Follow Us On Twitter

@EngMaintSol



How to create value that improves machine reliability, productivity and profitability

When it comes to bearings, NSK has a proven and practical way to enhance the reliability of machines, the productivity of people and the overall profitability of the business.



The company's Added Value Programme AIP offers a combination of engineering and commercial services that allows bearing users to improve the performance of their production machinery, people and processes, making their maintenance function more efficient and effective. Money can therefore be saved at every step of the process to help maximise market competitiveness.

Bearings are used to drive machinery and keep production lines running the world over. Despite their importance, purchasing decisions for bearings are often based on price alone. This strategy overlooks the fact that the unit cost of a bearing typically represents just 15% of its lifetime cost, with the remaining 85% accruing due to factors such as frequent replacements, breakdowns, high energy costs and downtime. Adopting the AIP approach helps customers to specify the optimum replacement bearings, while at the same time reducing or eliminating any troublesome issues.

AIP has recently been re-launched with the strapline 'improvement pays'. For bearing users, this 'payment' arrives in the form of enhanced machine reliability, productivity and cost savings. So how does it work? Well, AIP is set out in five distinct steps known as the value cycle.

Staying one step ahead

The first step is 'evaluation', where NSK experts visit the bearing user's site to collect relevant data and understand the challenges. Once complete, the second step – 'recommendation' – sees the specialists propose a solution based on what has been learnt, as well as their knowledge and experience. Importantly, this step includes a full breakdown of the anticipated savings.

Step three is 'implementation'. Here, assistance is provided with the installation and testing of the recommended solution, refining it further for even greater optimisation where appropriate.

In the fourth step, which is known as 'validation', machine performance is monitored to ensure that the predicted results are being achieved. There are no vague promises with AIP, which is purpose-designed to define NSK's all-inclusive approach to improvement. Finally, step five is 'extension', where the potential for expanding the service to further applications is assessed. An overview of the five steps can be viewed at: www.youtube.com/watch?v=aQGge0DTtHQ

Proven NSK services

By applying AIP's five-step value cycle it is possible to increase machine efficiency, effectiveness and reliability, while simultaneously boosting safety and productivity. Within all five steps there are a number of proven NSK services based on best practice methodology. These services include surveys, process maps, application reviews, machine design support, diagnostics, training, condition monitoring and failed bearing analysis. Armed with these services, AIP provides incremental and sustainable improvements over the long term, significantly reducing TCO (total cost of ownership). But the benefits do not stop there, particularly for the wider business. For instance, personnel



can expect to gain more skills, while inventory becomes optimised, releasing working capital.

Delivered through a global network of highly skilled and fully authorised distributors, this customised value creation programme facilitates the identification and quantification of process improvements and tangible cost savings.

50% cost reductions

Many companies have already benefited from AIP as it can be applied to any type of machine, system or equipment that uses bearings, including: machine tools; industrial gearboxes; pumps; fans; electric motors; paper mill machinery; trains; cement, mining and aggregates machinery; steel mills; and machinery for the food industry, to list but a few. Bearing users participating in AIP regularly see costs reduced by 50% or more.

NSK has invested significant resources in taking AIP to the next level, and is confident it can help bearing users take their business to the next level too. After all, improvement is a journey without a final destination – it never stops. NSK, via AIP, will never stop looking for better ways to support its customers.

For more information visit:
www.nskeurope.com

C.K Lighting the Way with an Exciting Range of New Products

C.K is set to extend its successful lighting range, with a fantastic selection of innovative new products, including a range of high performance site lights and head torches, that offer a host of advanced features and benefits, including the very latest in LED lighting technology.



C.K T9735USB 10W Rechargeable LED

Site Light. One of the most compact site lights available, this powerful rechargeable site light offers a 700 Lumen output, 2 lighting modes and a run time of up to 4 hours. This premium quality site light can be focused at any angle, thanks to its full 360° tilt mechanism, with the option to mount on a tripod, or a variety of metallic surfaces via a magnetic base. The site light can also act as a power bank, making it ideal for charging mobile phones etc.

This includes: The C.K T9613 Head Torch, a feature packed, powerful LED head torch, available in a USB Rechargeable model or battery operated option; and the C.K T9735USB 10W Rechargeable LED Site Light, one of the most powerful compact site lights on the market.

Great Features and Benefits

C.K T9613 LED Head Torch & T9613USB

Rechargeable Head Torch. Available in either

a rechargeable or battery operated version, this powerful head torch, features a 270 Lumen output, has a choice of 7 lighting modes and a run time of up to 9 hours. Other features include: An 80° tilt ability; a 90m beam distance; and a motion sensor that allows for a quick and convenient way to turn the head torch on and off, with just the wave of a hand. The C.K Head Torch is also comfortable to wear, thanks to its lightweight and durable construction.

Whatever the task in hand, the new C.K lighting products, are designed to offer trade professionals a great choice of innovative products that combine versatility with the quality and reliability they have come to expect of the C.K brand.

Find out more at:

www.carlkammerling.com

Snickers Workwear – Superior, Ergonomic Knee Protection With D30®.

World-leading certified Kneeguard™ solutions to save your knees.



Hard work all day, every day means that some craftsmen and craftswomen put more pressure on their knees than many top athletes. So, the risk of long-term knee injuries and chronic pain can be far higher among trade professionals than most other occupations.

For years, Snickers Workwear has had the market-leading solution with its trousers and kneepad combination that it invented over thirty years ago. That solution has now become the patented Kneeguard™ and unique Kneeguard PRO system which delivers advanced knee protection for frequent kneeling on site, as well as those annoying knocks and bumps around the workplace.

Designed specifically for the increasingly popular street-smart, slim fit stretch work trousers, the newest slim fit D30® Ergo kneepads are made of durable material that moulds around your knee to provide enhanced impact protection.

It has an EN 14404 Type 2 Level 1 rating to guard against pebbles, nails and various floor debris. There's also superior cushioning and protection as standard with D30® - a high-tech material that's flexible, durable and cut-resistant.

For more information on Snickers Workwear's NEW Kneeguard™ and unique Kneeguard PRO system, call the Hultafors Group UK Helpline on 01484 854788, checkout the website and download a digital catalogue at www.snickersworkwear.co.uk

Dress For Windy Weather with Snickers Workwear's GORE® WINDSTOPPER® Jackets

Delivering great wind protection and efficient ventilation.



Snickers Workwear jackets are well known for delivering performance and comfort at work - integral features of this new range of Windproof Jackets.

Sharp, stylish looks and market-leading GORE® WINDSTOPPER® and stretch CORDURA® fabric technology to make this jacket a must for winter on site or outdoor leisurewear.

This great-looking jacket has a fleece-lined interior for warmth and climate control fabric to keep your body warm or comfortably cool when you most need it. With a water-repellent fabric, it can be worn on its own or combined with Snickers' Mid and Base Layer garments.

Fashionable and functional, this jacket has long arm cuffs with thumb grips for warm comfort and a high collar that delivers extra wind protection. It's also got stretchable side panels in for comfort and flexibility with stretch CORDURA®-reinforced elbows for durability.

With street-smart, contemporary designs, all Snickers Workwear Jackets are packed with must-have features that focus on fit, comfort and freedom of movement as well as using innovative fabrics that deliver long lasting protection.

For more information on Snickers Workwear Jackets, call the Hultafors Group UK Helpline on 01484 854788, email sales@hultaforsgroup.co.uk, or checkout the website and download a digital catalogue at www.snickersworkwear.co.uk

Saft's new Compact nickel batteries

to streamline footprint and maintenance budgets for industrial sites

Saft's new Compact range of maintenance-free nickel technology industrial backup batteries can be fitted in the same footprint and share the same charging protocols as lead-acid batteries. As a result, operators can upgrade to nickel technology in their existing cabinets and immediately improve reliability and Total Cost of Ownership (TCO).



The Compact nickel batteries are directly compatible with valve-regulated lead-acid (VRLA) battery chargers. Normally, nickel batteries require a boost charge to reach a fully charged state. However, the new Compact range requires only a single step charging voltage of 1.39 Volts per cell. This makes it possible to use them as a direct drop-in replacement for existing VRLA batteries. This development builds on Saft's successful introduction of similar innovative features in its Uptimax block batteries.

Olivier Amiel, Global Marketing Director for industrial standby batteries at Saft, says: "Saft's Compact nickel batteries only need a single step charging voltage, so industrial operators can upgrade their backup batteries from VRLA to nickel technology on a plug and play basis without upgrading their battery charger and while keeping the same footprint. Moreover, they can reduce maintenance budgets."

The Compact maintenance-free nickel batteries

are designed to support essential control systems and other critical equipment in remote and hard-to-access locations in offshore oil and gas, utility, manufacturing, and rail trackside sites.

Manufactured in Valdosta, GA (USA), the Compact batteries have a smaller footprint and are up to 30 percent lighter than VRLA due to their exceptional energy density of 100 Watt-hours per liter (Wh/l). In addition, they are available in capacities from 83 to 185 Amp-hours (Ah), and operate in temperatures from -20 to +50°C and tolerate -50°C to +70°C.

Nickel electrochemistry is proven to help operators achieve the lowest possible Total Cost of Ownership (TCO). This is thanks to a long life of 20 years or more, predictable performance and high reliability.

Lead-acid batteries are more expensive over the long term due to replacement and maintenance costs. In addition, they need regular testing and can suffer poor reliability due to 'sudden death', where they can lose all capacity unexpectedly.

In contrast, Saft nickel battery technology ensures a long, sustainable, and totally predictable service life that enables operators to focus on running their installations.

For more information:
www.saftbatteries.com

New Siemens 3WA air circuit breakers now upgradable from the web

With the new 3WA series, Siemens Smart Infrastructure is updating its Sentron portfolio of air circuit breakers.



As a core element of low-voltage switchboards, they reliably protect electrical installations in buildings, infrastructures and industrial facilities from damage caused by short circuits, ground faults or overload faults. At the same time, the new 3WA circuit breakers meet all low-voltage power distribution requirements in digital environments. They support software-based planning and engineering, digital testing and monitoring, and seamless integration in automation and IoT systems. For the first time, upgrades can be completed 100 percent digitally. Users simply download new features from the Internet and add them using an app.

Siemens circuit breakers are designed for 30,000 operating cycles while requiring only one inspection per year. With a potential service life in excess of 100 years, their practical life averages approximately 10 years.

"Distributed energy systems, digitalization and the Internet of Things will all place ever higher and more complex demands on electrical power distribution," said Andreas Matthé,

CEO of Electrical Products at Siemens Smart Infrastructure. "Our new circuit breakers are well equipped to handle these challenges. They are flexible enough to adapt to the tasks of tomorrow without needing to be swapped out."

When technological requirements change, it is easy to add new features to the electronic trip unit (ETU600) installed in the 3WA air circuit breakers using the Sentron "powerconfig" commissioning software and a USB or communication port. The features are available online and are continually expanded by Siemens. Users benefit from high investment protection.

High reliability in distributed energy systems

Today, a third of all energy generated worldwide comes from renewable sources. By its nature, wind and solar energy can cause the grid voltage to fluctuate, which in turn can lead to costly failures in industrial and building operations. According to the European Power Quality Survey Report, 30 to 40 percent of all unplanned

equipment downtimes can be traced back to inadequate supply quality. The new 3WA circuit breakers can handle voltage fluctuations of up to 10 percent, reliably preventing false tripping and failures.

As active grid participants, infrastructure and industrial systems produce, store and use their own energy or feed it into the grid. This requires technology capable of handling bidirectional power flows. The 3WA air circuit breakers are now able to automatically adapt their protection algorithms to the actual direction of flow, thus maximizing the protection they offer for smart grid prosumers.

End-to-end digital lifecycle

For easy and error-free engineering, CAx data can be used to create digital twins of the 3WA air circuit breakers. The intuitive "powerconfig" software is used for parameterization. Just like the associated app, the "powerconfig" software allows for remote monitoring of the current contact states and sensors of all switches and hence early fault detection. Integrated communication and measuring functions capture energy data and transfer it to automation and cloud-based energy management platforms as well as medium-voltage systems. Switched Ethernet functionality makes it possible to use multiple communication protocols such as Profinet and Modbus TCP at the same time, allowing users to benefit from fast and powerful data transfers.

The 3WA air circuit breakers are available in three sizes with nominal currents from 630 to 6,300 A for AC applications and in one size with nominal currents of 1,000, 2,000 and 4,000 A for DC applications.

For more information on Siemens Smart Infrastructure, see

www.siemens.com/smart-infrastructure

For more information on 3WA air circuit breakers, see

www.siemens.com/3WA

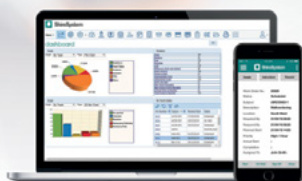
Asset Management/CMMS



ShireSystem

"The complete CMMS"
Chris Drury, Ferrero

Helping businesses to increase productivity and reduce downtime



Contact us today for your free trial
023 8022 4111
shiresales@elecosoft.com

Elecosoft®

Interested in Advertising here?
Contact: Steve Pheasant
Media Manager
Tel: 07962 666987
Email: stevep@mslmedialtd.com



VALUEKEEP

Powerful Maintenance Software (CMMS)

Start reducing maintenance costs and saving time with an easy-to-use, affordable CMMS solution.

020 8068 9242
www.valuekeep.com
info@valuekeep.com

-  Web-based & Mobile (Android, iOS and Win10)
-  Easy-to-use
-  Quick installation & customisation
-  Integrates with Corporate Systems
-  Real-time reporting & dashboards

Book a free demo!

Boilers & Burners



Babcock Wanson

**Modern Coil Type
Steam Generators
& Fire Tube Boilers**

- 100Kg/h – 25,000Kg/h
- High efficiency - up to 96%
- Low overall emissions
- Improved safety
- Simplicity of control
- Quiet, clean & cool in operation

Tel: 020 8953 7111
info@babcock-wanson.co.uk
www.babcock-wanson.co.uk

Interested in Advertising here?
Contact: Steve Pheasant
Media Manager
Tel: 07962 666987
Email: stevep@mslmedialtd.com

Boilers & Burners

**Built for the future.
Ready now.**



- Leading burner technology for over 90 years.
- Meeting the climate challenges of today and tomorrow.
- Maximising Efficiency and Minimising Emissions.
- The perfect choice for all process applications.
- Full product support from concept to completion and beyond.
- An extensive range to cover 10kW to 30,000kW.

Visit rielloburners.co.uk to find out more or phone on 01480 432144




Boilers & Burners



Twin Industries International

Leading
BOILER BROKERS
for all
INDUSTRIAL BOILERS

Steam ♦ Hot Water ♦ Thermal Fluid
New ♦ Reconditioned ♦ Hire

Contact us or visit our website for

The largest selection of
Reconditioned Steam Boilers
available –

all with different suppliers,
who will quote you direct

SELLING A BOILER – contact us

01252 845521

sales@twin-industries.co.uk

www.boilerbrokers.com

Compressed Air

Leak Detection Spray



At the press of a button - **GOTEC LDS** is instantly ready to locate even the smallest low pressure leaks from compressed air, natural gas, LPG, refrigerant and every other gas - quickly, reliably, safely and conveniently.

- 400ml contents per can
- Non-flammable • Non-corrosive • Biodegradable
- Free from oils • solvents • halides • salts
- Spray can at any angle - 360° - upright to inverted
- NATO Stock No: 4910-99-930-4489
- VOSA & DIN EN 14291 compliant
- ISO 9001 Approved Manufacturer
- For sub-zero temperatures down to -45°C use GOTEC LT45



Gotec Trading Limited
Boulton Road, Pin Green
Stevenage, Herts SG1 4QL
Tel 01438 740400
Fax 01438 740005
enquiries@gotectrading.com
www.gotectrading.com



INDUSTRIAL
BOILER
HIRE & SALES

STEAM • HOT WATER
• MOBILE • CONTAINER • STATIC



HIRE • SALES • 24/7

+44 (0)1992 451629
www.kingsboilerhire.com

Condition Monitoring

ROTECH SYSTEMS



FOR ALL YOUR INDUSTRIAL
MONITORING SOLUTIONS

Why Accept Anything Less?

- ENCODERS
- CONTROL MODULES
- VIBRATION SENSORS

www.rotechsystems.co.uk
Sales@rotechsystems.co.uk Tel: +44 (0)151 356 2322

Tank Storage

KING STORAGE TANKS



HORIZONTAL CYLINDRICAL TANKS

From 27,250 litres to 54,500 litres
(6,000 - 12,000 gallon)

Single and twin compartments, with cradles

BUNDLED TANKS

From 10,000 litre to 27,000 litre
(2,000 - 6,000 gallon)

with cabinet, gauge and alarm

All suitable for fuel, water & effluent
Call today for details

01638 712328 | tanks@thekinggroup.co.uk

Gas Detection



GfG Gas Detection UK Ltd
Manufacturer of
Portable & Fixed
Gas Detection Equipment

smart
GasDetection
Technologies

We've got you covered

WITH OVER 500 DIFFERENT GASES DETECTED

We've got you covered

GfG TotalCare®
TAILORED SERVICING

FOR TRUE COST OF OWNERSHIP WITH NO HIDDEN EXTRAS

We've got you covered

Do you need Professional Gas Detection advice?

Do you need more Gas Detection cover?

Do you need a review of your existing Gas Detection System?

FREE NO OBLIGATION ON-SITE GAP ANALYSIS



GOOD FOR GAS

UNIT 4 BRIGGS BUSINESS CENTRE WEST STREET COSSHAM ESSEX CO11 1NT
sales@gfggas.co.uk www.gfggas.co.uk Tel: 01376 561463

Temperature Sensors



LABFACILITY

TEMPERATURE & PROCESS TECHNOLOGY

www.labfacility.com

Phone: 01243 871280 Email: sales@labfacility.com

Labfacility are the UK's leading manufacturer of
Temperature Sensors and Thermocouple Connectors.

- * Thermocouple Connectors (IEC, ANSI, JIS)
- * Thermocouple Cable (IEC, ANSI, PRT)
- * Temperature Sensors (Thermocouple & PRT)
- * Sensor Installation Fittings
- * L60 Thermocouple & Fine Wire Welder



In addition to stocked
items, Labfacility also
offers bespoke
Temperature Sensors.



Thermal Fluid



Thermal Fluid Heating

Technology now for the future

- Up to 50% energy savings
- Compact size
- Easy & safe to use
- Works up to 350°C
- Low exhaust emissions
- High efficiency
- Requires no specialist knowledge
- Corrosion free operation
- No chemical treatment

Tel: 020 8953 7111
info@babcock-wanson.co.uk
www.babcock-wanson.co.uk

YOUR PARTNER IN ULTRASOUND



INSTRUMENTS

Leak Detection | Bearing Condition Monitoring | Bearing Lubrication
| Steam Traps & Valves | Electrical Inspection



TRAINING

CAT & CAT II Ultrasound Training | Onsite Implementation Training
| Application Specific Training



CONTINUOUS SUPPORT

Free support & license-free software | Online Courses | Free access
to our Learning Center (webinars, articles, tutorials)



SCAN AND CHECK:

Should you be using Ultrasound at your Company?
Scan the code and do the survey to understand if an
ultrasound instrument is a good fit for your workplace.

CONTACT US FOR AN
ONSITE DEMONSTRATION

UE SYSTEMS UK & IRELAND

CHRIS HALLUM

+44 (0) 7930 352 188 | chrish@uesystems.com