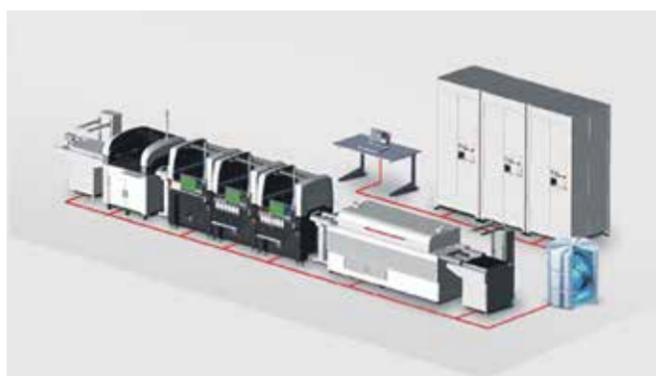


Best Practice



Issue 652 | Oct/Nov 2020 | 0121 725 1587 | www.bestpracticeuk.co.uk

ZEN Production Equipment Ltd

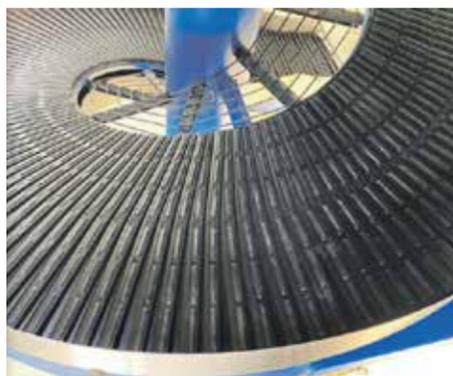


From a single piece of equipment to a full production line, we have some of the world's most renowned equipment for the electronics manufacturing industry.

Zen Production Equipment Limited –
www.zpel.co.uk
 Tel: 0115 972 2733

AmbaFlex launches new slat innovation

Innovation is one of the key values of AmbaFlex. It is in our DNA to design and develop improvements driven by both market-needs and customer-specific requirements.



The latest in line is the development of the AmbaFlex TPO6 slat. This 600mm/24" wide slat with overlapping structure answers several different market-needs in 1 go. It's specifically designed to handle the increased amount of (vulnerable) product variations, expanding the possibilities of our program in all relevant markets. It also answers the ever increasing demands of working safety, especially for the next generation of distribution centres and the increased amount of operators.

The slat is made out of an extremely durable synthetic material and can be fitted with our unique full surface friction option during the 2k moulding process.

Together with the unique Triple-E track build-up (awarded with a patent), they offer unparalleled strength and efficiency with their SpiralVeyor solutions. With belt widths of up to 1,200mm (or 48 inches), they are able to transfer virtually any and all products.

This new development will further enhance and complement the many possible applications offered throughout our program. Interested in the possibilities?

Please see our full program at: www.ambaflex.com or contact us via the contact form.

Download on the App Store

Gold and Wassell Hinges
 see them on page.....3

UNISIG
 see them on pages... 5, 8 & 9

3 SERVICES UNDER 1 ROOF, WITH OUR DEDICATED, SPECIALIST TEAM!

Our philosophy is to provide what the customer needs - We endeavour to seek out machinery & solutions which add value to your products, save time, manpower or both thus improving efficiency and profitability.

What we do:

PERFECT BINDERY SOLUTIONS PRINT FINISHING & BOOK PRODUCTION EQUIPMENT

Stackers/De-Stackers • Book Pressing • Corner Cutting • Board Cutting
 Casemaking • Casing-in • Embellishments • Gathering • Gluing
 Perfect Binding • Stationery • Sewing • Three Knife Trimming

PERFECT BOX SOLUTIONS LUXURY BOX & CARTON PRODUCTION EQUIPMENT

Board Grooving • Corner Taping • Corner Cutting • Box Wrapping
 Robot Spotting • Fully Automatic Lines • Laser Cutting
 Logistics Packaging • Folders & Gluers

RISETEC UK: SORTATION PACKAGING & SORTATION SOLUTIONS

Volumetric Weighing • Barcode Scanning • Labelling
 Modular design Bespoke Sortation Solutions
 Systems can grow with your demand!

Contact us via Perfect Bindery Solutions:

01993 840077
steve@binderysolutions.co.uk • www.binderysolutions.co.uk



Leman Instruments

YOUR NEED OF GAS IS OUR EXPERTISE WE ARE YOUR SOLUTION

SMALLEST FOOTPRINT ON THE MARKET ALL IN ONE FOR GC APPLICATIONS

- Purity
- No Maintenance
- Low Prices
- Stability
- Special Integrations
- Precision
- Safety
- Fiability
- OEM
- Connected



H2
 > 99.9999%, dew point < 0.030 ppm
 HC < 0.02 ppm

ZERO AIR
 dew point < -50°C, HCnm < 0.030 ppm

N2
 > 99.9995%, dew point < -50°C, HC < 0.05 ppm

SWISS TECHNOLOGIE & EUROPEAN MANUFACTURING



THE BEST OF TWO WORLDS
www.leman-instruments.com

Leman Instruments
 see them on page..... 5

V12 Footwear
 see them on pages..... 6-7

Smart Position Transmitters for enhanced plant operational efficiency

Maximum process reliability and constant product quality are maxims in the food industry - whether in the manufacture of beverages, sweets and dairy or in meat processing. The increased usage of automation within the Process Industries has had a significant effect on the nature of valves supplied into the sector. Whilst the functions of the valve and valve actuator are fundamentally the same regardless of whether the automated valve is being used for control (modulating) or for On/Off operation, the equipment that interfaces between the control room and the valve differ depending on the valve function.

Delivering solutions for a sustainable low-emissions future



Shareholder initiatives, climate protests and government net zero targets are all piling pressure on industry to reduce carbon dioxide emissions through new technology and improved monitoring of existing infrastructure to ensure maximum efficiencies are achieved.

Traditional energy companies are also shifting their focus and their investment towards renewable and low emission energy solutions. Diversification into the low carbon market will be big business with an estimated value of \$24 trillion, and uptake of emission friendly solutions is accelerating in a bid to limit the effects of climate change.

At Imtex Controls, our vision is to become a leading diversified valve automation company offering reliability in a low carbon future and we are already delivering solutions in this growing market. Our Imtex Valve Communication and Camtorc Actuator products can already be employed for use in Blue and Green Hydrogen Production systems, Carbon Capture and Storage schemes, Biofuel Production Processes and Waste to Energy projects. The products deliver greater efficiencies and sustainability for these projects, helping to achieve their low emission targets.

We are also developing new products to significantly improve the energy requirements associated with automated valves, helping existing industries reduce their carbon footprint while maintaining and improving their plant controllability.

Imtex Controls is committed to doing our part in helping our customers meet the challenges and opportunities presented by the need for a Low Carbon Economy. We are already in discussion on CCUS projects across the UK and we are keen to introduce how our products to demonstrate how we can help to make these projects sustainable and cost-effective.

Please contact us for a further conversation about how we can assist in the development of this emerging market.

Contact
 T 08700 340 002
www.imtex-controls.com



Control valves will typically employ a Positioner to initiate a valve movement and a Position Transmitter to confirm valve position matches required position. On the other hand, an On/Off Valve will connect using a Solenoid Valve to allow a change in a digital output status in the PCS to operate the valve and a Limit Switch Box to confirm the valve is in the required position.

In contrast, the Position Transmitter on a Control Valve has been largely overlooked and hence many control valves suffer performance issues solely because of the limitations of the position feedback mechanism and can have a significant effect on both plant productivity and plant safety.

The vast majority of Position Transmitter products currently available utilise a potentiometer, which have a number of limitations when used on valve applications. Potentiometers are susceptible to vibration, wear and liable to contamination from foreign particles such as dust, sand or water.

These issues, along with those encountered with other transmitter technologies are often not appreciated by the Plant Operator until the product is already in service and performance is not as expected.

A few specialist companies providing Valve

Position Monitoring solutions, such as Imtex Controls Limited, have recognised both the potential benefits to Plant Operators for using IVPTs on valves but also the severe limitations of the products currently available. For this reason, new 'smart' solutions are now being offered that solve the traditional issues of IVPTs and enable plant operators to maximise their returns from these devices.

The new generation of smart IVPTs employ more robust feedback mechanisms. For example, the Imtex NC transmitter range utilises inductive sensor technology in non-contact, solid state feedback devices that are both highly accurate and largely impervious to challenges presented by the environment in which they operate.

Traditional IVPTs are often tricky to calibrate, requiring the use of tools or a laptop to complete the setting of zero and span. Smart IVPTs simplify the calibration by allowing the user to calibrate through push buttons built into the transmitter unit. In addition, where the smart IVPT is equipped with the ability to interface with a digital protocol such as HART, the device might also be calibrated remotely.

When mounting a rotary transmitter on a linear valve, a non-linear output is often generated due to a linear to rotary conversion kit being used. Smart IVPTs have recognised

this issue and provide the means to adjust the output from the device. For example, the Imtex NC transmitter is available with the ability to set up to 20 intermediate feedback points to linearise the output.



Another benefit of Smart IVPTs is that they put intelligence in the field device. The ST-4312 NC Transmitter from Imtex Controls analyses the stroking speed of the valve every time it moves and compares this information with a stored 'as new' profile of the valve. The device is then capable of sending a warning signal via the HART communication interface, flagging when the valve has started to slow down by a user defined amount.

With the ever increasing need to improve plant efficiency and safety, Independent Valve Position Transmitters provide a simple and cost effective method to deliver these demands. By employing the latest generation of 'smart' IVPTs, plant operators are able to dramatically improve their efficiency and safety by gathering information on valves that permits targeted preventative maintenance.

Find out more at: www.imtex-controls.com or call us on: 08700 340002.



Smarten up your Valves

Improve your plant efficiency and safety with Intelligent Valve Position Transmitters
 Call us on 08700 340 002 or visit our website: www.imtex-controls.com



The UK's Number One Manufacturer of Hinges

Within this issue of Best Practice, we have chosen to feature Gold and Wassall Hinges for our Best Practice Recommends Profile.

With an impressive history spanning over 200 years, Gold and Wassall Hinges was first established in 1790. From the company's manufacturing facilities based in Tamworth UK, Gold and Wassall provides a range of services for design, production and manufacture of hinges, all produced in house and distributed throughout the whole of the UK. An industry leader in its trade, Gold and Wassall Hinges has established itself as the UK's number one manufacturer of hinges.

Gold and Wassall Hinges provides a fully comprehensive design and manufacturing service, offering a wide range of hinges including piano hinges, butt and backflap hinges, standard, heavy duty and bespoke made to order hinges.

With an extensive range of stock on offer, Gold and Wassall Hinges is equipped to meet any hinge requirements and all of its stock is available for immediate dispatch.



"All our hinges are UK made; we are the only hinge company in the UK which can offer this. We offer a bespoke design and manufacture service, which means we can create virtually any hinge from a simple idea," commented Scott Bareham, Sales and Marketing Manager.

One of the main focuses of Gold and Wassall Hinges is to provide first class customer service. Ensuring that from initial inquiry to delivery and aftercare, Gold and Wassall Hinges' team engages with each customer to find out their specific requirements, measurements, application and style, to ensure they find the right door hinge for the customer.

While providing an impressive range of off-the-shelf hinges, Gold and Wassall Hinges understands that for some projects a custom built hinge is needed. Whether it's a simple design alteration such as rounded corners or a more complex design with multiple bends, the team at Gold and Wassall Hinges is dedicated to providing the right hinge solution for you, providing a bespoke custom-made hinge solution.

"Our bespoke hinge service is ever



growing in popularity; it really gives the customer flexibility when designing a product," Scott said.

Boasting years of experience and design and manufacturing skills, Gold and Wassall Hinges has created over 250,000 unique hinges and continuously develops new patterns produced on a daily basis. The company is well equipped with the knowledge, skill and tools to create solutions for any application and has the ability to meet mostly any hinge size or shape requirements.

Another example of the company's customisation services, Gold and Wassall Hinges provides a range of finishing options for its customers. Able to customise colour, add branding and create a smooth premium finish. The company's array of finishing options is perfect for increasing protection, matching the application or to create that smooth premium finished look.

In terms of specific finishing services, Gold and Wassall Hinges provides powdercoating, plating, polishing and engraving services.

Powdercoating has grown in popularity within recent years and is a great alternative to using traditional solvent based paints. Better for the environment and creating a durable finish, Gold and Wassall Hinges provides powdercoating in any RAL Colour and offer a choice of different textures.

With a history spanning across centuries, Gold and Wassall Hinges has seen many tribulations for the world and its industry since its fruition and has been able to maintain its production and dominate its industry.

During the uncertainty for many industries during the on-going COVID-19 Pandemic, many manufacturers saw a halt in production and in sales. Demonstrating its renowned manufacturing capabilities, Gold and Wassall Hinges maintained production and were approached for providing hinges for the Nightingale hospitals.

We spoke to Scott about how the COVID-19 pandemic has affected the company; he told us that, "We worked all the way through. We experienced some demand for hinges for the Nightingale hospitals, as well as a customer who is involved in the manufacture of food delivery vans." Scott continued, "Although our sales obviously went down during the pandemic, we feel that we are making steady progress coming out the other side. We have managed to keep our workforce whole, with no redundancies."

Indeed, coming out of the other side of the pandemic, Gold and Wassall Hinges plans to continue its dominating presence in the industry. Scott stated, "We plan to continue doing what we have been for so long - if it isn't broke, don't fix it!"

For any further information on the company or to view its extensive range of products, please see the details featured below.

T 01827 63391
www.goldwassallhinges.co.uk

QUALITY HINGES FOR OVER 200 YEARS

Gold & Wassall have been manufacturing hinges for over two centuries, so it's safe to say we know what we're doing. Our team of experts can design and manufacture almost any hinge, for any application. We have made upwards of 250,000 unique hinge designs, with more designs being drawn up each day.

SEE MORE AT GOLDWASSALLHINGES.CO.UK/BESPOKE

BESPOKE HINGES

GOLD & WASSALL
EST. 1790

01827 63391 - SALES@GOLDWASSALLHINGES.CO.UK - @GWHINGES

The cutting edge of machine knives technology

CAMB Machine Knives has built an enviable reputation for high quality machine knives. With over 30 years of experience, CAMB Machine Knives supplies to companies across the world, with an established network of agents in Spain, Holland, France, New Zealand, South Africa, Australia and Israel, as well as its UK headquarters.

Currently, CAMB Machine Knives supplies and exports its knives to over 20 countries worldwide. Because the company deals with several carrier and freight companies, it ensures it can always get the most competitive prices and best carriage option to its customers' destination.



The company's range of blades includes circular knives, top dished knives, bottom knives, toothed knives, straight knives, anvils, tray form blades, razor blades, shear blades, granulator blades, carpet knives, tobacco knives and confectionary knives.

The range of circular knives is ideal for a wide range of industries, including packaging and rubber. Furthermore, CAMB Machine Knives' range of poultry processing blades cover all the main machines used in the industry, including Stork, Meyn, Systemate, Foodmate, Linco, and many special sizes made to order.



As well as supplying new blades, CAMB Machine Knives can provide a full regrind/re-sharpening service on many of the knives it supplies. This can be arranged on a weekly basis, or booked as and when it is required. This is ideal for increasing the life of circular, straight, toothed and special blades, as well as increasing the efficiency of the machine.

Regrinding/re-sharpening is the ideal way to bring your knives back to an as new condition, and is considerably cheaper than purchasing a brand new set of knives. CAMB Machine Knives can collect and deliver anywhere in the UK within 24 hours, offering competitive shipping rates and a quick turnaround. What's more, if a job is urgent, in some cases the company can regrind the same day.



With its comprehensive product range and excellent customer service, CAMB Machine Knives really is a cut above the rest.

If you would like to find out more information, head to the website or get in touch using the contact details below.

Contact
 T 01454 322178
 sales@camb-knives.co.uk
 www.camb-knives.co.uk



CAMB MACHINE KNIVES

"A Cut Above the Rest"

Our range includes many types of blades, but not limited to:

- ANVIL
- BAGGING KNIVES
- BOTTOM KNIVES
- CARPET KNIVES
- CIRCULAR KNIVES
- CONFECTIONARY KNIVES
- GRANULATOR KNIVES
- POULTRY PROCESSING KNIVES
- POULTRY UTILITY BLADES
- STRAIGHT KNIVES
- TOBACCO KNIVES
- TOOTHED KNIVES
- TOP DISHED KNIVES
- TRAY FORM KNIVES
- COFFEE GRINDER BLADES (INSTANT COFFEE)

We have been supplying our knives worldwide for over 30 years.

We deal with carrier and freight companies so we always remain competitive for price on any destination.



CAMB MACHINE KNIVES INTERNATIONAL LTD

Tel: 01454 322178 | Fax: 01454 321172

Email: sales@camb-knives.co.uk

www.camb-knives.co.uk

MANUFACTURERS AND DISTRIBUTORS OF MACHINE KNIVES TO ALL INDUSTRIES



Leading manufacturer of high technology gas instruments

Best Practice is proud to announce that Lemman Instruments has received our Gas Instruments Company of the Year award.

Sitting close to the border of Switzerland, a stone's throw from Geneva, there is a manufacturing company nestled away in the idyllic region of Archamps. This is the home of Lemman Instruments, the French manufacturing company specialising in high quality gas generators and custom calibration systems.

With over three decades of experience in the industry, Lemman Instruments makes some of the most advanced gas calibration and generator systems in the world. Combining the best of Swiss technologies and French manufacturing, Lemman Instruments manufactures both standard and bespoke systems for high technology gas analysis,



generation and calibration.

This level of experience is something which cannot be bought, only earned through many years of manufacturing products to the highest possible standards. From design and creation, to

development and production, all the way through to marketing of components and modules of scientific equipment, Lemman Instruments ensures that its products are of the highest quality.



Not only this, Lemman Instruments' product range is incredibly diverse, including anything from systems intended for use in the laboratory, to those intended for industrial purposes, all the way

to systems built to monitor air quality. The gas generator systems come in two lines: Discovery and Ultra, with six products included in the Discovery line including hydrogen, zero air and nitrogen generators.

advanced technologies available, including PSA, PEM, Hot Catalysis and SMART PSA. These devices are some of the most efficient available and leave a smaller footprint than other competitors' products on the market.



What's more, Lemman Instruments' gas generators are robust and reliable, as well as being able to seamlessly fit into the workplace. Discrete and elegant, the user interface is easy to use, fully integrated into LCD touchscreens ranging from 4.3" to 7.5". Each generator also comes fitted with Ethernet and WLAN connections, allowing for local and worldwide control of the systems. Lemman Instruments is also the only manufacturer to produce an oxygen generator using SMART PSA technologies.

If you would like to find out more information on Lemman Instruments' entire product range, head to the website or get in touch using the details below.

Contact
T +33 4 50 39 49 22
info@leman-instruments.com
www.leman-instruments.com

The Ultra line of products was designed with simplicity in mind, as it is not always necessary to have the highest of purities in these systems, and annual maintenance costs for this range are next to nothing. Lemman Instruments offers gas calibration systems, which can be made bespoke for the client depending on their needs and are also available in standard models.

Lemman Instruments' gas generator systems use some of the most



Deep Hole Drilling News



Gundrilling and BTA deep hole machining systems, designed for the complexity of aerospace components

Machine complex contours in deep bores, and achieve close tolerances that are impossible with your standard CNC machines.

UNISIG machines are designed specifically for the challenging profiles and materials of landing gear, shafts, actuators, and other

Take your aerospace manufacturing further - learn more at UNISIG.de

UNISIG TAKES DEEP HOLE MACHINING FOR AEROSPACE FURTHER



Machines • Tools • Automation
UNISIG machines, engineered and manufactured in the USA

UNISIG adds five new models

With the new range of UNISIG's USC-M deep drilling and milling centres, mould makers now have



seven powerful and versatile solutions for workpiece diameters of up to 3,600mm and workpiece weights of up to 30t. All machines combine several processes in one machine: the deep hole drilling and milling on all four sides of a workpiece, while at the same time reducing setup times and increasing accuracy for mould makers. All machines support the high feed rates of modern indexable gundrill tools.

In addition to the use of gundrill deep hole drilling tools, some models can even support the more effective BTA deep hole drilling tools for the high performance drilling of waterline holes. A CAT50 quill allows you to perform all deep hole drilling and machining operations within the machine's working range. The machines are equipped with a 360-degree rotary work table and a programmable deep drilling and machining spindle.

The machines can be equipped with an automatic tool changer with up to 120 tool positions, a laser tool presetter, workpiece probes, Heidenhain glass scales for increased accuracy, as well as an automatic pallet changer.

T 0049 7125 968 7590
sales@unisig.com
www.unisig.com



MukGuard®



**THE MOST ENVIRONMENTALLY FRIENDLY
& COST EFFECTIVE REUSABLE OVERSHOE**

75% 
MORE GRIP THAN
PLASTIC OVERSHOES
PROVEN THROUGH LAB TESTING

 **14** **14 KG**
WEIGHT OF PLASTIC OVERSHOES
ONE ENGINEER WILL USE IN A YEAR

50 MILES
DISTANCE TRAVELLED
IN TEST LAB WITH
ONLY MINOR ABRASION 



Want to see the revolutionary MukGuard® for yourself?

Call us on **+44 (0) 1249 651 900**

Full product information is available on our website V12footwear.com

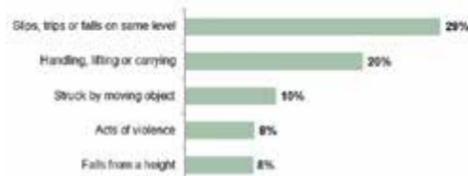
Slips: Still the biggest workplace danger

by Charlie Turner, V12 Footwear Marketing Director

We can't escape the facts

You don't have to do much research to stumble across some shocking figures that show the contribution slips, trips and falls have on fatal and non-fatal workplace injuries. Sadly many employers do not give slips and trips the priority they deserve and treat them as being outside their control, inevitable or simply the employee's fault. Often the measures needed are simple and low-cost, but they will bring about significant reductions both in human suffering and costs. It also comes as no surprise that the Health and Safety Executive (HSE) have been doing some great work raising awareness for the past few years with their 'shattered lives' campaign.

Slipping and tripping are the most common causes of major injuries within UK workplaces.



The latest information on non-fatal injuries reported under RIDDOR for 2018/2019 shows a massive 29% of all workplace injuries are as a result of slips, trips and falls. Around 90% of these accidents involve broken bones and 42% of work related fracture injuries result in absences from work between 1-3 months. Slips and trips are often the initiators of accidents attributed to other causes, such as some machinery accidents, scalding and an estimated one-third of falls from height. Falls from height are the cause of 26% of fatal injuries and in 2019/2020 resulted in 29 fatalities. The human cost I don't believe you can put a figure on but in pounds and pence they cost UK businesses over £500 million a year!

(Source: www.hse.gov.uk/statistics/causinj/index.htm)

It is all very well looking at country-wide data but how does this relate to my company or my industry? Below is a list of industries in risk order (most high risk at the top) from the HSE 2009/2010 data showing slips, trips and falls per 100,000 employees:

- Recycling
- Sewage & refuse disposal
- Land transport
- Post and telecoms
- Supply of water
- Food & beverage manufacturing
- Other mining and quarrying
- Water transport
- Air transport
- Construction

What can you do?

For slip and trip risks to be adequately controlled you need to undertake a risk assessment. Similar to other topics, there is a hierarchy of controls:

- Contamination
- Flooring
- Cleaning
- Footwear

Firstly it is important to try and prevent contamination getting on the floor to remove anything coming between the wearer's foot and the floor surface. To use an analogy: when you get water on the road the car is highly susceptible to aquaplaning and footwear is no exception as the sole needs to make contact with the floor to get any grip.



Secondly, although usually one of the most financially costly, assess the floor surface and look at ways to improve the surface grip. To understand the level of slip resistance your current floor provides you are able to get a co-efficient of friction (CoF) test. A number of companies provide this as a service and they use something called the pendulum test to give you a Pendulum Floor Test (PTV) value.

Third on the list is cleaning and well planned cleaning regimes will not only have an effect on flooring appearance and hygiene, but should also reduce the likelihood of slip accidents. When selecting an effective cleaning programme, speak to flooring manufacturers and cleaning equipment suppliers who can provide advice on cleaning methods for your floor, then decide when to clean - out of hours for example.

Fourth and finally my passion - footwear (no surprises there)! Highly slip resistant footwear is often one of the most overlooked, lower cost and effective ways of reducing slips. I once went on an advanced driving course and the instructor (who happened to be ex-police) said, "Never save on your tyres" and the reason was because they are your only contact with the road. Similarly footwear is your only contact with the ground and highlights the importance of good slip resistant footwear. Footwear will also be the only constant in measuring slips as often production facilities have to have different floor surfaces. There are also other far reaching impacts that footwear can have on staff welfare and help in reducing fatigue if they are well fitted, cushioned and supportive.

When the hierarchy is put on its head

A couple of years ago I posted a survey on LinkedIn, specifically requesting feedback from people in Health and Safety roles on what they would look at first to reduce slips. Almost without exception they responded with flooring! I don't disagree with that, however there are often times when this is not the right answer. A large part of the UK workforce works in locations and on surfaces they cannot control or influence. For example, someone working in the Facilities Management sector has no control over the floor surface of the property they are entering and if working outside, can't influence the weather. In many cases they also have no control over the cleaning programme and this is when the hierarchy slips up. If you cannot control or influence each part of the hierarchy of control then the priorities change and in the case of facilities management, footwear becomes THE most important factor in reducing slips. This also applies to people employed in refuse collection as they cannot influence the surface they need to walk on to access the refuse bins. This sounds simple but in many years of experience is all too often a revelation when this is explained to people.

Choosing the right grip

When choosing footwear do not rely solely on marketing claims for 'slip resistance' or the published SRA, SRB or SRC European slip ratings. Although these are a good guide to the level of slip resistance there are a number of factors to consider. The below slip rating guide describes the test method used to assess slip resistance:

The first point I would like to make is that it is very rare for a large percentage of the UK workplaces to have either tiled floors with water on them and I certainly don't know many that have steel floors with oil on. Secondly you need to consider clogging. If people are working where contamination is on the floor or the surface is loose (ie. mud) then often an SRC performing sole with a close tread pattern will become clogged and vastly reduce its slip performance.

Sole technology is actually very closely aligned to tyre technology and it is important you choose your sole/tyre with the surface in mind. Usually a tight sole pattern with lots of channels will work well on a smooth man made floor surface as it effectively channels liquid away and has maximum surface contact like your car tyre. On the flip side a sole with larger, chunky lugs with more open channels will grip better on natural and loose surfaces such as mud and ballast - like a tractor tyre.

Additionally you can check if there is any other testing on the sole unit. The HSE have developed a test called the 'GRIP'



scheme which simulates a walking cycle and footwear can achieve a star rating. Some manufacturers have also tested footwear on industry surfaces such as scaffold board and Kennedy grating.

As well as the grip pattern it is important to assess how the sole would provide grip on ladders or steps where the surface area of contact is small. Highlighted in the data in the first section of this article ladders and falls from height are a great risk. We now live in an age where ladder training, anchoring the ladders, harnesses and good ladders are now a regularly used. If the shoes have little or no heel breast and the profile is flat like a trainer sole the risk of slipping off or through the rungs is very high, especially when contaminated with mud or water. When looking for footwear that will be used on ladders check if they have any specific standards (as there is a ladder grip standard) or check if the heel is a minimum of 10mm.

Balancing wear with grip is super important as again with tyres, a sports track tyre would only last a few laps due to the soft density to give the car maximum grip but if the tyre is too hard it will have a lower grip rating. Wear trials are important here to assess how long the product lasts and check manufacturer's warranties, giving you confidence in a cost effective and lasting solution.

Why trial?

I can't word it better than the HSE when it comes to this point so I have quoted them: "The HSE recommends that you consider asking your supplier to provide trial pairs to help you make the right choice, and do not select footwear on the basis of brochure descriptions or laboratory test results alone." Source: HSE

Trialling footwear not only ensures you are providing the correct footwear for your workforce but it also helps get their buy-in as often it can be assumed a footwear change is to save costs rather than improve safety. The footwear is tested in real environments and not only the slip resistance, but comfort and user experience can be identified here. This is very important as you can have the most slip resistant boot but if it is not comfortable, compliance will become a challenge as people purchase their own or just don't wear it. Documenting the trial process will also help give substantiating evidence on footwear selection if anyone is ever unfortunate enough to have a slip accident in the workplace.

If anyone agrees or disagrees, please get in touch as I would love to discuss this and offer our unique audit and trial process to give you peace of mind and minimise your slip risks.

T 01249 651900
F 01249 447459
sales@V12footwear.com
www.V12footwear.com





UNISIG

UNISIG TAKES MOLDMAKERS FURTHER

Increase your mold manufacturing versatility using the power of gun-drilling with the leaders in deep hole drilling, UNISIG. Offering complete solutions for everything from simple to complex mold components, UNISIG machines help moldmakers improve efficiency, throughput and precision with outstanding part-processing versatility at an exceptional value.

TAKE YOUR MOLDBUILDING OPERATIONS
FURTHER WITH UNISIG TODAY.

Find out more at www.UNISIG.com



Boost process efficiency and production output with automation

When David Rybacki founded DRG Manufacturing in the Chicago suburb of Lake Zurich in 2015, he started off with nothing except a commitment to manufacture total solutions for his customers. Since he was not basing his production process on existing equipment, he set out to incorporate automated systems and processes that would provide him with the highest levels of productivity.

DRG serves the firearms component industry, and the shop's commitment to quality has yielded dramatic results. In three years, it has grown from six to 40 employees and has increased its business eightfold.

"Business has been very good to us," Rybacki said. His commitment to making parts that exceed expectations has much to do with that success. DRG creates parts to three specific, equally stringent sets of specifications: their own internal specs, MIL-SPEC prints that constitute industry standards, and custom OEM prints supplied by individual customers.

The company approaches every new product and component build as an opportunity to produce it with the most effective process possible. One of the keys to that productivity has been DRG's fully automated gundrilling and reaming cell from UNISIG.

Before Rybacki invested in this cell, he evaluated several other gundrilling machines. "Most were limited to manually operated equipment that would not accomplish Rybacki's objectives. Only UNISIG offered a robotically run cell that could provide the functionality and flexibility DRG required," said a company spokesperson.

"Many companies in our industry put an operator in front of every machine," Rybacki explained. "Instead, our UNISIG automated cell gives us about a 150% production increase over such manual operations."

DRG's automated cell runs barrel blanks with chamfers at each end. A robot picks up a blank from an infeed system and loads it into a dual-spindle UNISIG UNE12-2 gundrill machine with a 12mm maximum part diameter capability. After the drilling process is completed, the robot moves the blank to a dual-spindle UNISIG UNR20 reamer.

Once the automatic reamer completes its part of the process, the robot moves the blank to a blow-off station to clear oil from inside the barrel. From there, the robot transports the blank to the outfeed station, where it exits the cell to be rifled. All aspects of the cell are automated, including the vision system with automatic compensation that allows the shop to quality check every part before human hands ever touch them.

DRG's completed automated gun drilling process simplifies completion of large orders with long delivery schedules. Most of the shop's workflow involves long-term contracts



DRG approaches every new product and component build as an opportunity to produce it with the most effective and productive process possible. One of the keys to that productivity has been DRG's fully automated gundrilling and reaming cell from UNISIG



At DRG Manufacturing, a dual-spindle UNISIG UNE12-2 gundrilling machine, with 12mm maximum part diameter, drills barrels for the shop's automated operations

and multi-month purchase orders for 1,000 or more barrel blanks. That workflow makes production planning easy because the company can establish shipping dates and work backward to create the build schedule. To meet their commitments, DRG normally runs three shifts-two attended by an operator and one unattended at night. Including the UNISIG cell, DRG has a total of five automated cells within the factory that operate a full 24 hours of every day.



"UNISIG offered a robotically run cell that could provide the functionality and flexibility DRG required, and the cell resulted in about a 150% production increase over manual operations," said a company spokesperson

When DRG receives a purchase order, it processes half the part total up front so larger volumes can enable them to amortise set-up costs over longer runs. In addition, DRG's Kanban inventory system enables the shop to maintain a replenishable inventory of high-demand parts for same-day shipping. Because the shop must be highly responsive to changing customer demands, inventory makes it possible to source smaller orders that DRG otherwise would refuse.

Originally, DRG outsourced profiling and barrel manufacturing work. But large orders and stringent specifications called for specialised equipment. For this reason, DRG acquired its UNISIG drilling and reaming cell in 2017 to produce raw rifled blanks.

Although DRG has the option of running the UNISIG R-2A rifling machine as part of its automated drilling and reaming cell, that is one process Rybacki prefers to keep manual. "We run rifling manually so we can QC it and make certain that all aspects are perfect," he said. "DRG's QC department air gauges everything the company makes, although the cost of the QC equipment is steep: about \$12,000 per caliber."

Among the other attributes that set DRG Manufacturing apart from its competitors is its commitment to automated equipment. Rybacki realises that some companies may shy away from implementing automated cells because of the



DRG relies on its UNISIG equipment to achieve the shop's quality targets with part materials such as 416R pre-hardened chromium stainless steel and 4150 Chrome-Moly Vanadium (CMV)

upfront time involved in development and set-up.

"It is about being patient to achieve the results you want," Rybacki said. "We can buy machines from UNISIG, put them on our floor and run them manually - or we can wait about six months longer and buy a fully automated turn-key system that runs perfectly." He noted that the extra time investment enables DRG to double its production without adding personnel or shift hours.

When it comes to workpieces, DRG works with some challenging materials and tight part tolerances. It manufactures most of its parts from 416R pre-hardened chromium stainless steel and 4150 Chrome-Moly Vanadium, or CMV. On a 17" rifle blank, for instance, total indicator runout is kept to under 10 thousandths, with diameters at under one thousandth and size within a couple of 10 thousandths.

UNISIG's application support plays a key role in DRG achieving its quality targets with tough part materials. As Rybacki pointed out, "They are experts in deep hole drilling, and they taught us everything we needed to know. The learning curve was just a matter of mastering tool life, which they gave us suggestions on. After receiving guidelines on how to start we just took it from there. It is not trial and error because of UNISIG's expertise. It is only trial and error if you do not listen to them."

For the immediate future, further expansion at DRG will have to wait. Although DRG has not reached volume capacity, its growth and success has led to no available shop floor space. Automation has enabled DRG to increase its process efficiency and boost production output. But Rybacki is quick to point out that robotics only work in a shop with the right people to operate them. "You still need people," he noted. "People can grow into new opportunities. Robots do not take over completely."

UNISIG is also exhibiting at the EMO show in Milan, Italy from 4-9 October 2021. Further information on all machines of the UNI, UNR and R-2A series and the complete UNISIG machine program is available at: www.unisig.com or follow the company on LinkedIn and Twitter (@UNISIG).



The user-friendly UNISIG deep hole drilling system control helped DRG shorten its learning curve

Rapitainer® from Maxim

If your business uses high volumes of single trip corrugated packaging, such as FEFCO 0201 cardboard boxes, then Rapitainer returnable transit packs (RTP) could significantly reduce both your costs and environmental impact.



Rapitainer is a heavy duty corrugated plastic, reusable transit box, offering a cost per box per trip from 25 pence to as little as 10 pence. This is compared with equivalent corrugated cardboard boxes typically costing £1.50 for a single use. Early adopters are now reporting in excess of 200 trips and reductions in transit packaging spend in excess of 75%.

What's more - Rental Options mean no upfront cost, low cost monthly payments and immediate savings, compared to ever replaced single trip corrugated cardboard boxes. Rapitainer boxes are superbly durable and robust, providing enhanced protection for your items in transit and reduced levels of product damage. Rapitainer incorporates an innovative tapeless closure for improved packing and decanting efficiencies, reducing labour costs and eliminating the need to purchase and apply tape.

Additional benefits include:

- Fully recyclable at end of life with a guaranteed take back for recycling
- Lightweight and folds flat for efficient low cost return volumetric
- Smooth surfaces allow for easy cleaning as required, further extending lifespan
- Excellent stacking strength - in excess of 100kg dynamic load per box
- Stock sizes compatible with standard pallets
- Bespoke sizes allow customisation to your exact requirements/application
- Choice of colours/print allows brand recognition throughout your supply chain

Rapitainer is much more cost effective, sustainable and environmentally friendly compared to using high volumes of single trip corrugated cardboard boxes.

For further information or a free appraisal of the potential financial benefits to your business, email: andy@maximproductsolutions.com or call Andy Lomax (Dir.) on 07954 214378.

New Titanium swivel produced by Rotaflow

For over 40 years, Rotaflow has produced thousands of swivel joints that are designed to cope with high water pressure in hoses, deep sea oil wells, sub-zero climates, strong winds, long term sun exposure and a variety of corrosive chemicals. The latest swivel joint designed to operate in difficult conditions is a heavy duty Titanium swivel, forming part of a fire suppression system on a North Sea oil rig. The swivel is a bespoke design with 3 inch nominal bore size and additional bearing races to handle the high loads required by the end user. The swivel also has integral flanges for easy installation and to allow

the swivel to carry the high pressure and flow rate.

Titanium has excellent corrosion resistance properties, especially when dealing with long term exposure to sea water. It is light weight yet incredibly strong & able to cope with the extreme water pressure and weather conditions it'll be exposed to over many years. The customer advised the swivel absolutely had to be constructed from titanium. It was in May 2020 that the order was agreed. The swivel was manufactured in house, fully tested and delivered to the customer early July. Installation & full use occurred shortly after.



T +44 (0)1663 735003
www.rotaflow.com

Still buying one trip cardboard boxes ?

You could be saving a fortune !

Maxim's extensively reusable transit packaging is providing **HUGE SAVINGS FOR CUSTOMERS RIGHT NOW**

Compared to a cardboard box at around £1.50
Maxim's 'corrugated plastic' cases will do many trips
at just pence per trip !

Rental option provides immediate savings with no up front cost

Other benefits include -
Rapid tapeless closure (no taping or residue)
Superb product protection
Bespoke formats available
Efficient flat pack volumetric
100% recyclable at end of life



Call for a chat or e-mail today to find out more

Andy Lomax (Dir.), Maxim Product Solutions Ltd.
07954 214378 - andy@maximproductsolutions.com

www.returnabletransitpackaging.co.uk (or search rapitainer)

Fluid Carrying Flexibility Swivel Joints

- Swivel joints allow pipework to rotate whilst carrying fluid under pressure 1/4" to 40" and beyond.
- Vacuum to over 20,000psi.
- Stock and bespoke production.
- Unique bearing / seal design for longer life.
- ISO 9001 CE marked where applicable.

Rotaflow
the swivel joint specialists

Tel: +44(0)1663 735003
E-mail: sales@rotaflow.com
www.rotaflow.com

Rotaflow FV Limited | Rotec House
Bingswood Trading Estate
Whaley Bridge | High Peak | SK23 7LY | UK

Ventilation News

How to effectively protect your workplace

Is following the government's advice enough? It's all good and well washing hands regularly and maintaining a 2 metre distance but is there anything further we can feasibly do to protect our office spaces and workforces?



The simple answer is yes there is actually a lot of cost-effective equipment that could be put in place quickly and easily to actively assist in lowering or eliminating the viral risk in offices and shared spaces.

More air changes, more ventilation, whether this is in the form of opening windows or increased mechanical ventilation, diluting the viral load with this method will lower the risk but obviously not eliminate it and does nothing for anything that may be hiding on surfaces, door handles, keyboards or other office equipment with a surface capable of transferring pathogens between individuals.

Air Filtration, again similar to above, anything captured in the filter will be removed and eliminated providing the filtration is up to the correct standard. HEPA filters should be of medical grade H14.

T 01782 349439
sales@axair-fans.co.uk
www.axaironline.co.uk

AXAIR
FANS UK LIMITED

Wellisair

Air disinfection performance

A patented device with an innovative technology to disinfect, purify and clean the air and surfaces.
Perfect for any indoor environment.

Kills 99% of all existing

- Viruses
- Bacetria
- Odours
- Allergens
- VOC's
- Mould

Contact us for more information
sales@axair-fans.co.uk
www.axair-fans.co.uk
01782 349430

AIRVENT
TECHNOLOGY

infinity
Heat Recovery
Acoustic Cabinet Fans
- Twin
- Single
Compact AHUs
- EHB
- LPHW
Internal External
Efficient
Economical
EC motors
ErP Compliant

Air Vent Technology Ltd - Tel: 01264 356415
Email: sales@airventtechnology.co.uk
www.airventtechnology.co.uk

IFL increases its warehouse storage facilities in the Midlands

Storage Availability!



Call now for a competitive quote

INTERNATIONAL FORWARDING LIMITED

Safes Team • Tel: 01675 434 690 • Email: sales@internationalforwarding.co.uk

From our 27,000 sq. ft. warehousing facility based in Birmingham, West Midlands, we are offering long or short term flexible warehousing and storage solutions. Fully alarmed with CCTV monitoring. We have a range of modern handling equipment including 2.5 tonne capacity container spec forklifts. This is in addition to a 2,000m² secure warehouse storage facility which opened in the Midlands last May as part of the company's growth plans and quickly filled up.

The now full unit opened in May 2019 and almost doubled IFL's warehousing space at the time. The storage facility is part of a larger two acre site, which the company took over in April.

International Forwarding Ltd has added a new and sorely needed 27,000ft² storage facility in the centre of Birmingham, West Midlands, to its portfolio of warehousing space, offering long or short term flexible warehousing and storage solutions. The site has a range of modern handling equipment including 2.5 tonne capacity container spec forklifts. This is in addition to a 2,000m² secure warehouse storage facility which opened in the Midlands last May as part of the company's growth plans and quickly filled up.

The site includes 24 hour security and yard space for vehicle parking and trailer storage. It is located next to IFL's existing offices and hub in Coleshill, Birmingham, close to the M1, M5, M6 and M42, and 10 minutes from Birmingham International Airport.

Extra warehouse storage at Birmingham hub
The timing of this major expansion in the company's facilities is particularly opportune as several existing customers require additional warehousing to protect their supply chain against Brexit-related issues. It also gives the sales team the tools to acquire additional forwarding and pallet distribution contracts from new UK and overseas-based customers. The existing management team will control the

physical freight handling and the back-office functions for the new site.

30 years of IFL in the Midlands
IFL is a Midlands-based independent freight forwarder specialising in European groupage services, sea and air freight, UK haulage/pallet distribution, and warehousing. The company started trading in 1989 to fill a niche in the West Midlands to provide a personalised bespoke freight forwarding service to local exporters and importers.

For fast, flexible quotes and competitive storage rates, or to discuss your warehousing needs, call us on 01675 434690 or email: enquiries@internationalforwarding.co.uk

Plantcraft Limited

STORAGE TANK HIRE

CALL 01724 850224

We supply to:

- Waste Management Industries
- Chemical Industries
- Petro Chemical Industries
- Liquid Fertiliser Industries
- Oil Industries
- Water Industries & Authorities
- Aggregates Industries

WE ARE CURRENTLY HELPING RAILWAYS WITH WATER STORAGE FOR THE REMOVAL OF LEAVES ON THE LINES

www.plantcraft.co.uk
sales@plantcraft.co.uk







UL-500



Introducing the new UL 500 mezzanine conveyor. An innovative, cost effective solution for ground to first / second floor warehouse movement.

- Reduce manual handling.
- Simple to maintain.
- Reliable 3 phase motor.
- Bidirectional.
- Integrate with existing conveyors.
- Tailored to your specific installation requirements.
- Boost site and staff productivity.

MACE INDUSTRIES LIMITED
PORTABLE CONVEYORS FOR EVERY ASPECT OF MATERIAL MOVEMENT

+44 (0) 1536 206600
www.maceindustries.co.uk
sales@maceindustries.co.uk

Protect your stock with Abbos



Hundreds of millions of pounds of stock is damaged every year, with little available to help prevent it.

Now, thanks to Abbos, you can get an innovative, easy-to-use and practical solution to protect your stock, saving money and time and creating a safer warehouse environment. "Our Stock Protector is an excellent way of improving warehouse and logistics processes," explained Carolyn Svahn, who is Abbos' Director along with her husband Gunnar, the brains behind the company's invention.

The Abbos Stock Protector is ideal for any company that stores or distributes delicate stock. As a reusable, sturdy and flexible solution, the Stock Protector stays within your warehouse racking with stock delivered directly to it. "It protects the stock on three sides, stopping any spillages. It also helps to improve picking time and accuracy, and reduces the risk of slips, trips and falls thanks to a cleaner environment.

"Furthermore, when an empty pallet is removed the sides of the unit widen, making a guide to deliver the next pallet. It's a patented product, unique to us, and offers a fantastic return on investment - it will pay for itself within the year!"

With the COVID-19 pandemic this year and all its repercussions, businesses will certainly be looking at ways to save money in any way they can. As industry deals with the cost of COVID, the Abbos Stock Protector can help companies to tighten up their operating costs and minimise money lost through damaged stock.

The Stock Protector is available in two sizes to fit the height of standard racking, but can also be customised to suit your requirements if needed. So, whether you're storing food and drink or pharmaceuticals and cosmetics, Abbos' innovative solution will keep your stock safe, your warehouse clean, and your costs low.

Want to find out more? Head to the website to download Abbos' brochure or get in touch directly using the details below.

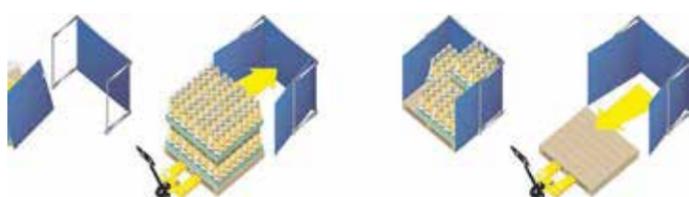
T 01604 210775
sales@abbos.co.uk
www.abbos.co.uk

Abbos Stock Protection

Hundred of millions of pounds of stock is damaged every year and very little is done to prevent it. Abbos Stock Protection works for any organisation that stores or distributes delicate stock.

Re-usable, sturdy and flexible - the cost-effective way to protect your investment - our stock protection is unique as it stays within your warehouse racking and stock is delivered to it instead of lifting the stock into a unit.

Call 01604 210775
Email sales@abbos.co.uk
Visit www.abbos.co.uk



New & used machine tools from all the major manufacturers



Simmonds Machinery boasts over 35 years' experience in the machine tool industry, supplying high quality new and used precision engineering machinery and tools throughout the UK and Europe.

The company's stock of machine tools covers an extensive range of key manufacturers and products, including CNC machines, turning



centres, milling machines, drilling machines, machine centres and all of the most popular workshop machinery available on today's market.

If customers would like to see the products working first hand, Simmonds Machinery also offers 'under power' demonstrations and full inspection of all of its used machine tools, and delivery, installation and commissioning of machinery can be arranged if required.

In addition to this, Simmonds



Machinery also offers a range of preventative maintenance services. Its breakdown cover and repairs service uses specialist engineers who are experienced in repairing a wide range of machine tools from major manufacturers. Simmonds Machinery's machine tool service contracts are highly flexible, and can be arranged and designed around its customers' machinery to ensure the most appropriate cover. Indeed, yearly service contracts are a common necessity to help prevent unexpected breakdowns and to keep machinery running for longer, and Simmonds Machinery ensures its customers have access to this requirement.

Simmonds Machinery can also provide a comprehensive machine tool valuation service onsite. Whether this is for insurance sales or financial reasons, the company will travel to a customer's premises to accurately provide evaluations on all machine tools and workshop machinery.

Indeed, Simmonds Machinery boasts a wealth of knowledge, experience and capabilities, helping customers across the UK and Europe to reduce downtime and save money. The company is always looking to buy second hand machine tools, and encourages anyone to get in touch if they have machinery for sale.



For more information on the company's full range of products and services, head to the website or feel free to get in touch using the contact details below.

T +44 (0)1580 819137
sales@simmomach.co.uk
www.simmomach.co.uk



Paints & Sealants News

HMG launches Colour Box for distributors and customers

Colour choice has never been easier for HMG Paints' distributors and customers thanks to the launch of the new ColourBase Colour Box. The new paint colour identification tool presents over 2,400 colour chips, displayed in chromatic order within 20 fan decks. The ColourBase Colour Box is a multi-function tool, in the sense that each colour not only has a chromatic code that identifies its position in the colour sequence, but it also corresponds to a colour existing on the market for reference.

HMG Paints innovative Unit Lite Colourants and ColourBase have been a key tool for the company and its nationwide distributor network for the last decade, and combined with the new ColourBase Colour Box, distributors can provide even more outstanding colour choice



across a number of HMG systems. The Manchester-based business has invested over £150,000 into the Colour Box project, helping its distributor network add increased value and providing fast and easy colour identification, ensuring the right colour every time.

"Ever since 1930, HMG Paints has been obsessed with colour, we still even have our first ever colour formulation book in the archives, we truly understand its importance to the customer and the ColourBase Colour Box is a great new resource for our distributors and their customers," commented Danny Cleary, HMG Sales Director.

The colours contained in the box, available in a counter top version

or carry case, are sourced from a number of popular colour systems, including RAL, British Standard, Commercial Vehicle Fleet Colours, Agricultural, Industrial, Afnor and more. Additionally, the box contains colours with chromatic continuity to ensure that distributors can find the perfect colour for every customer.

The ColourBase Colour Box has already been put to good use by a number of customers who are using HMG's Acrythane 4C. Up and down the UK vehicle fleets are using colours from the ColourBase Colour Box and seeing exceptional results using the high gloss, high solids acrylic polyurethane coating developed to meet and exceed the stringent requirements of the commercial vehicle market.

As the UK's largest independent paint manufacturer, HMG Paints Ltd relies on a loyal, countrywide distribution network to supply and service previously unreachable customers and expand the HMG Paints brand.

Contact
 T 0161 205 7631
www.hmgpaint.com

MADE IN BRITAIN

HMG Paints Ltd

THE UK'S LARGEST INDEPENDENT PAINT AND COATINGS MANUFACTURER

See our full product range at www.hmgpaint.com

0161 205 7631
sales@hmgpaint.com
 @HMGPaints

Optimise your marketing potential with Fiona Ellingham at Opportunity Marketing



Opportunity Marketing was first established in 2008, designed to fill the gap in the market for strategic support for SMEs requiring marketing guidance. Opportunity Marketing delivers an array of marketing focused services, tried and tested and applicable to help virtually any business.

assistance services. Opportunity Marketing offers a selection of marketing packages, designed to assist clients with marketing strategy, marketing implementation and marketing mentoring.

plan and full marketing strategy.

"The marketing packages enable businesses to understand their marketing challenges and help them to create, implement and execute strategic marketing plans," Fiona said. "Our services cover key areas of business and, depending on the service and packages that the customer wants, we can build reports, 12-month plans and even analyse

their website and give them input on website structure." Fiona states that constant organic growth is something Opportunity Marketing strive to continue and that "for me personally, my aim is to continue to help businesses deliver the results they need to be successful."

Providing a complete marketing consultancy solution alongside short term solutions and

Delivering an extremely personal consultancy service, the company provides a varied selection of services including marketing consultancy, marketing health check audit, fast track marketing

<http://bit.ly/33CEEOJ>

New distributorship for Cinderella eco solution

LeeSan continues to support Cinderella as the sole UK distributor of Cinderella Eco Solution incinerating toilets.

Cinderella Motion represents an entirely new concept for waste handling in Off-the-Grid locations, Marine craft, mobile homes and recreational vehicles. It is now possible to get rid of toilet waste in a hygienic and simple manner.

The end product is just clean ash. The toilet may be used around 70 times before emptying is required. Cinderella Motion is a further development of the popular Cinderella incineration toilet currently installed by over 60,000 users worldwide.

An incineration toilet is a toilet in which waste products, urine and excrement, are incinerated at a high temperature, leaving only an insignificant amount of ash.

Available around the world for decades, incineration toilets are a commonly used alternative in mountain cabins, remote



areas, tiny homes, off-grid structures and other residential and commercial applications without easy access to public utilities.

Since incineration toilets do not require the installation of a water supply or costly septic systems, and do not demand ongoing and messy work to process waste, their slightly higher unit price is heavily offset by lower maintenance over time, providing a substantially lower total cost of ownership than other solutions, both in terms of money and headache.

T +44 (0)1295 770000
info@leesan.com
www.leesan.com

Zen Production Equipment

Zen Production Equipment Limited is a leading supplier of world-renowned manufacturing equipment for the electronics industry.

Whether it's solder paste deposition, depaneling, component placement, reflow, cleaning or laser marking, we have got you covered.

Latest additions to the range of equipment we can supply the electronics manufacturing industry are Essemtec for dispensing, pick & place, and component storage. Essemtec have just released their new solder paste. Dispensing via the VDST valve gives our state-of-the-art machine platforms the ability to jet solder paste with dot sizes from 200-800 microns. This valve can be installed on the Spider or Tarantula dispensing systems or on the Fox and Puma pick and place systems. <https://essemtec.com/en/news/news-detail-en/-/you-missed-our-live-webinar-about-solder-paste-jet-printing/>

Being able to have solder paste dispensing (and or glue for that matter) incorporated into a pick and place platform



gives you a truly flexible and cost-effective system. Where time to market and high accuracy is paramount, Essemtec can offer the perfect solution.

The second new addition to the Zen portfolio is from Systemtechnik Hoelzer in Germany which has over 30 years of experience and innovation in depaneling and laser technology. From tabletop to full inline systems, Systemtechnik Hoelzer has a system to fit your budget and throughput requirements. <https://hoelzer.de/nutzentrennen/int-4646/>

For more information or to discuss your requirements on either of the above or Heller Industries reflow ovens, Asscon vapour phase, Inertec selective soldering solutions or PBT-Works cleaning systems, give us a call on 0115 972 2733 or drop me an email at: peter.clearke@zpel.co.uk and we look forward to working with you.

www.zpel.co.uk

Health & Safety News



Summit Systems' defence screens

The MP for Tamworth has described a unique new range of protective plastic screens being produced by Summit Systems as "a fantastic example of some clever innovation and skill".



Christopher Pincher MP visited the manufacturer, located on the town's Vanguard Industrial Estate, to find out more about how the 'Summit Defence' range of screens, designed to keep social settings safe from - & even prevent - COVID-19 are produced as lockdowns ease. The screens are made using a special type of flexible film and a unique magnetic click-release mechanism to enable easy attachment to desks, walls or workspaces.

Unlike many of the existing protective screens on the market, they are not made from rigid plastic and use a material that is in ready supply, making lead times shorter. Summit has so far supplied variations of the screens to schools, NHS trusts across the country and businesses overseas.

During the visit, Mr Pincher heard from Summit's Managing Director, Mike Jordan, who came up with the idea for the screens, about plans for further expansion, as a result of orders increasing week-on-week. The MP then had a tour of the company's assembly line and shared ideas as to how he could help boost business.

T 01827 214844
www.summit-defence.co.uk

X-Ray inspection service

Based in Basingstoke, Cupio Services provides one of the most comprehensive electronics X-Ray inspection services, utilising the top of the range Nordson Dage Quadra 7 system with full tomosynthesis & CT capability. With resolution down to 100nm, images and reports can be generated for most electronics inspection applications.

Ultrasonic inspection for delamination and disconnection is also available with the Nordson Sonoscan CSAM systems, as is

detailed optical inspection with the Nordson Yestech M1m and counterfeit detection with the ABI Sentry equipment.

The newly opened laboratory area also doubles as a demonstration area and training facility for the equipment and, with plenty of room, social distancing isn't an issue.

We have also set up remote connections to the systems so that demonstrations can be run from the meeting area rather than at the

system itself.

If you require inspection for production, new product introduction or failure analysis, we can offer turn round times to suit, and if you would like to see how one of our systems would fit within your facility, we would be happy to arrange a demonstration.

Contact
T 01256 262800
www.cupio.co.uk



48" TFT-LCD Display Spanpixel series

New from Litemax, the SSD4805-Y from the Spanpixel (LCD resizing) series. The 48" TFT-LCD display offers a very wide screen, suitable for sunlight readability and displaying informative messages, promotional content and high resolution imagery.



Standard LCD displays come with standard aspect ratios, which would not fit in spaces such as on-board train cars, taxi tops and much more. The 48" wide screen features aspect ratio 16:4 and resolution of 3,840 x 720. The screen works to 1,000 nits and has improved power efficiency LED backlighting.

The new model has an operating temperature of 0°C-50°C making it suitable for an enclosed environment like transportation displays.

The SSD4805-YNU offers a display area of 1,194.048mm (H) and 223.884mm (V) and measures 1,223 x 253.4 x 72.2mm with a viewing angle of 178° (H), 178° (V). Available interfaces via AD board are DVI, HDMI and DP.

If you would like further information on this product or any of our Litemax displays, please feel free to contact us with details on your next project or click here to find out more about Litemax.

T +44 (0) 1480 411600
info@displaytechnology.co.uk
www.displaytechnology.co.uk

Don't be held back by a part number



With an impressive selection of over 25 industry-leading brands and several new product ranges added to Rhopoint Components' portfolio in 2019, they have taken steps towards serving the ever-growing demand for customised solutions in the electronics industry. Off-the-shelf products no longer sufficient and using a close-enough part often means a compromise elsewhere.

Rhopoint Components represent carefully selected manufacturers who can satisfy this market shift, while continuing to serve the industries where the flexibility and high quality have always been important. Whether an unusual package, resistance value, tolerance beyond the datasheet values or specialist terminations,

Rhopoint Components offer customisation on the vast majority of their range of passive and active electronic components as well as pressure, temperature and liquid level sensors. Custom components can be surprisingly cost effective – often in line with the standard models, in addition to saving cost elsewhere in form of saved board space or eliminated need for an additional component.

To see how Rhopoint can help equip your design with the right components, contact their technical sales team or visit their website.

Contact
www.rhopointcomponents.com

• Resistance value • Tolerances • TCR • Package • Terminations • Lead lengths and more...

Fully customisable electronic components and sensors with low MOQ

Call 01342 330 470 to discuss your requirement today

sales@rhopointcomponents.com
www.rhopointcomponents.com

Vibration Monitoring News

Minimise downtime, optimise plant efficiency

Rotech Systems manufactures shaft encoders, speed relays and vibration sensors for monitoring and measuring the speed, position and direction of rotating shafts. Supplying the global market place, Rotech is well-known for its high quality, high reliability and high durability equipment, boasting an unrivalled reputation across the world.

Thanks to the equipment's tough, strong and heavy-duty construction, users benefit from years of maintenance free operation, even in the harshest industrial environments such as quarries and mines. With simple, quick installation, this equipment is found frequently in the bulk handling and processing industries, protecting conveyors, elevators, screws, crushers, mixers, and much more.

The heavy-duty sensors are installed on the end of the shaft or belt being monitored. They send an electrical signal proportional to the speed of the shaft/belt to a control unit. The alarm level of the control unit is set to just below the normal running speed of the shaft. Should the shaft/belt slow down to below this set level, the control unit can be connected to give an audible or visual alarm to the operator, and/or shut down preceding items of plant.

Contact
T +44 (0)151 356 2322
sales@rotechsystems.co.uk
www.rotechsystems.co.uk



ROTECH SYSTEMS

Manufacturers of Shaft Encoders, Speed Relays and Vibration Sensors, UK

- ENCODERS
- CONTROL MODULES
- VIBRATION SENSORS

Tel: +44(0)151 356 2322

rotechsystems.co.uk sales@rotechsystems.co.uk

A new twist on vibration monitoring!

Turn your motors into vibration sensors with Model-Based Voltage and Current (MBVI) systems to reveal hidden benefits

By Geoff Walker, Operations Director, Faraday Predictive

Condition Monitoring of rotating equipment can bring big benefits through avoiding unexpected breakdowns and enabling more efficient maintenance, with one of the most widely used techniques being Vibration Monitoring.

common in industry such as variable speed drives, with the resulting varying loads and electrical distortions, can make vibration monitoring more difficult. And hidden problems in sound-proof enclosures, remote-mounted, duct-mounted or submersible equipment can all make it difficult taking a vibration reading using a conventional accelerometer.

A new way of getting vibration readings in

all these difficult situations can be provided by turning your electric motors into vibration sensors by using Model-Based Voltage and Current (MBVI) Systems. They detect the torsional vibration that is excited by a wide range of phenomena inside equipment, not just rolling element bearing faults. They also monitor energy consumption and calculate the energy being wasted by these faults. So your motor can actually tell you more about your equipment

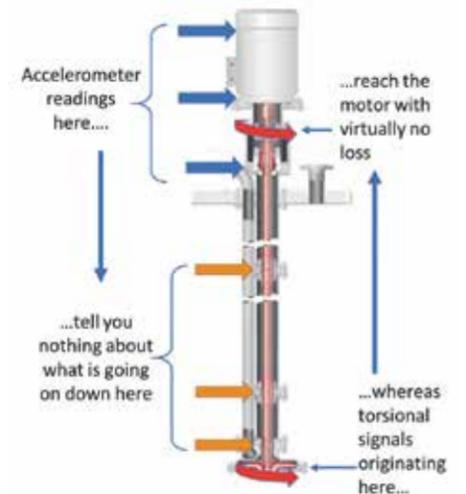
condition than conventional Vibration Monitoring. For a deeper insight into how this technology works, see: www.faradaypredictive.com/technical-education/mbvi-technology/

Torsional vibration

Conventional vibration sensors measure radial or axial movement of the shaft whereas torsional vibration is movement of the shaft twisting along its axis. The motor driving the equipment 'sees' this vibration as subtle variations in the torque required to drive the equipment, which in turn results in subtle variations in motor current relative to voltage. This can be detected and automatically analysed by an MBVI system to provide a broad range of fault diagnostics and condition monitoring.

These systems also detect electrical faults and operational problems, eg is it being damaged by being overloaded or stopped and started too often?

Because a shaft is designed to transmit torque from one end to the other, the motor can pick up signals coming from bearings anywhere along the length of the shaft. So even with a long shaft submerged pump like that illustrated, problems at the bottom bearing or any of the intermediate bearings can be detected. The different bearings can be discriminated by their different characteristic frequencies.



Faraday Predictive provides both fixed ('S200') and portable ('P100') units as shown here.



They also provide on-site service so you can 'try before you buy' using a P100 portable kit, giving you a risk-free way to prove the benefit before investing in buying kit of your own.



T 0333 772 0748
info@faradaypredictive.com
www.faradaypredictive.com



**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.

COVID-19 has affected us all

Your workspace needs to be more organised than ever to ensure you can not only run to maximum efficiency but also keep your team safe.

We're experts in space utilisation and our business services team can help support you.

Get in touch with our team today to book your FREE consultation.



**FREE
SITE VISITS**



**FAST
QUOTATIONS**



**3D
DRAWINGS**



**NEXT DAY
DELIVERY**



**INSTALLATION
SERVICES**



**NATIONWIDE
COVERAGE**



BiGDUG[®]

WWW.BIGDUG.CO.UK 0800 141 3380