

# Best Practice

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## New safety module for sensorless standstill detection of drive systems



If a machine or system is expected to produce potentially hazardous overtravel movements, a combination of safety interlock on the guard and standstill monitor in the switch cabinet can provide the requisite level of safety. The SSW303HV is the Schmersal Group's latest sensorless standstill monitor,

offering a significant improvement over its AZR and FWS series predecessors.

A key development goal was universal application of the new standstill monitor, which in total replaces fourteen variants of the previous product range. This is made possible thanks to use of a wide-range power supply for all common AC and DC operating voltages, from 24 V/DC / 24 V/AC to 230 V/AC. The increased temperature range of -25 to +55°C also opens up additional application potential. A further benefit is its compact design – the SSW303HV takes up just 45 mm of structural width in the switch cabinet. The pluggable, coded connecting terminals ensure rapid, error-free installation, while an additional signalling contact provides information on the error status of the module.

As the standstill monitor operates entirely without sensors, the machine builder no longer needs to intervene with the 'hardware' of the surrounding structure. The safety module is connected directly to a three-phase motor and directly measures the frequency of the induced voltage, at rated motor voltages of up to 690 V. The safety contacts for releasing the locking mechanism close as soon as the motor comes to a standstill.

The SSW303HV can be used in safety circuits up to category 4/ Performance Level e in accordance with EN 13849-1 and SIL 3 in accordance with EN IEC 61508, with all typical safety interlock designs from applicable manufacturers.

Contact [www.schmersal.co.uk](http://www.schmersal.co.uk)

## New funding for manufacturing SME's seeking marketing strategies

If you're needing complete clarity on how to secure more business from your ideal prospects and customers, expert help is now available. Opportunity Marketing was established in 2008, specifically designed to fill the gap in the market for strategic support for SMEs requiring marketing expertise. Opportunity Marketing provides a complete marketing consultancy solution alongside short-term solutions and assistance services to get on track with marketing strategy, marketing implementation and marketing mentoring.

Fiona Ellingham, Marketing Consultant at Opportunity Marketing is a specialist in marketing strategies and implementation. Boasting over 20 years' experience in applying proven and robust approaches, Fiona has the skills to help her clients attract and engage with new prospects and secure profitable business.

"The first step is to gain an understanding of their core challenges," Fiona continued, "From this discussion I will make my recommendations and advise on which package would best suit their needs."

February 15, 2021, Yi Hua a client of Fiona's: "Fiona is very knowledgeable on all things marketing. She takes a holistic yet systematic approach to marketing, making sure that you have all your fundamental marketing needs addressed and taken care of."

Whether you are just starting out as a small business or a successful business looking to reach more potential clients through marketing, Fiona is your go-to person. Working with Fiona has provided me with much-needed clarity on how to market my business."



After the impact on many industries following the effects of the COVID-19 pandemic, obtaining an action plan to recover, build and sustain a business is of the utmost importance. The Manufacturing Growth Programme is a fantastic tool in helping manufacturing SME's to gain a grant of up to assist with the costs of using consultants and external experts to help them grow their business.

"After selecting the right package to suit their business needs, the customer then submits a proposal to the grant governing body online and within 48 hours they will receive a response and can be granted 33.3% of the cost."

The Manufacturing Growth Programme is the only dedicated business support programme for SME manufacturers in England. Using funding allocated from the European Regional Development Fund, the funding provides manufacturing SME's with a discounted rate of service and as the programme uses EU funding and is administered by the UK Government, there are no charges for customers and the application is both quick and simple to complete.

To find out any more, get in touch with Fiona a free no-obligation discovery call: 07534 094932 [fiona.ellingham@opportunitymarketing.co.uk](mailto:fiona.ellingham@opportunitymarketing.co.uk) <https://bit.ly/3dLLGse>

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**University of Strathclyde**  
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see them on pages.....18-19



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# 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](http://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

# Helping to create a sustainable future



We are proud to feature Imtex Controls for our BP Recommends profile.

Specialising in the production and supply of advanced, high integrity valve actuation, communication and control systems for the energy, marine and process industries, Imtex Controls boasts many years of experience within the area of process valve control.

At the forefront of innovation, Imtex Controls' key offerings are its smart monitors and the Valve Diagnostic Monitoring System (VDMS). "For over five years, we have been supplying valve monitoring and testing solutions that are easily implemented into both new and ageing assets, to enable operators to log data from shut down valves. These solutions enable operators to meet their HSE commitments and help improve operational efficiencies," explained Jenny Myers, Marketing Manager.

Imtex Controls has also developed the Valvescan™ Diagnostic System, which is an end-to-end solution that captures data from every valve operation, analyses it and provides targeted alerts on the valve health without any requirement for involvement from plant personnel or any potential impact on the asset real-time control integrity.

This means that the valve will inform the plant personnel ahead of any maintenance or failure, preventing an expensive unscheduled shut down of a plant. It is also technologically ahead of many of its competitors, with a cloud-based application, which allows plant personnel to access the dashboard from wherever they are, not just on the actual plant itself. It is a true IIoT solution for automated valves and it can revolutionise the way plants maintain and run their systems in the future.

In addition, Imtex Controls is constantly working on improving its hydraulic, pneumatic and electro-hydraulic offering, including linear and low power solutions. Its Camtorc Actuators provide a highly efficient, backlash free operation which in turn helps to maintain the lifetime of the seals and components. They provide high actuation efficiency in a compact design, limiting the space envelope and associated costs of an installation. They also have the longest lifetime value of all actuators; Imtex Controls still has products that are operating in the field after 30 years.

Camtorc Actuators, along with Imtex Controls' Valve Communication products, can also 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 Low Carbon market will be a key focus for us this year. Our products deliver greater efficiencies and sustainability for these projects, helping to achieve low emission



targets. There are several low carbon, CCUS and Hydrogen facilities being developed across the UK now, some that will be at procurement stage in 2021 and we feel that our products should be considered.

With our prevalence in this industry and our quality products, this is an area that we feel we can really offer lifetime value for money as well as products that can help these projects achieve

their end goal of a reduced carbon footprint."

Of course, COVID-19 has caused a number of issues for the industry this year, with closed borders and face-to-face business meetings impossible for the foreseeable future. However, as a manufacturer, Imtex Controls are considered key workers, and remain open and operating as usual. "We are not restricted by anything COVID-related and we are set up

to operate a COVID-safe factory and business."

To find out more and stay up to date with Imtex Controls' latest news, head to the website or get in touch using the details below.

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# 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.

But some situations that are getting more

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

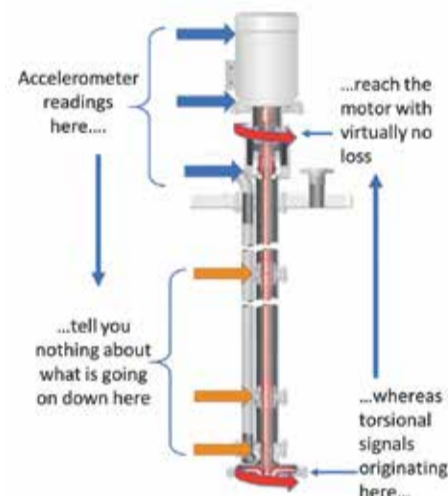
condition than conventional Vibration Monitoring. For a deeper insight into how this technology works, see: [www.faradaypredictive.com/technical-education/mbvi-technology/](http://www.faradaypredictive.com/technical-education/mbvi-technology/)

### 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.



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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.

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# How can you improve your driver and fleet risk management?

Improve your risk and compliance processes with the future of driver & fleet risk management solutions.

Licence Bureau, via its parent company TTC Group, is offering the world-leading driver and employee risk management platform solution TTC Continuum.

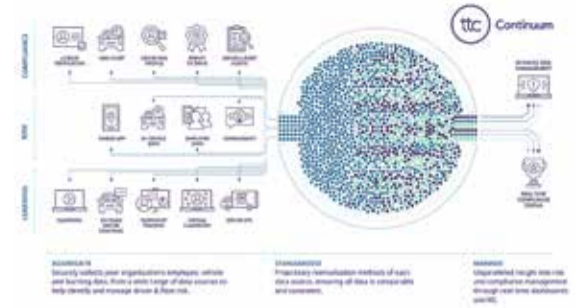
Integrating data from numerous sources, including telematics, driver behaviour and

in-vehicle technology, TTC Continuum delivers comprehensive insights into driver risk and compliance management through real-time dashboards and management information.

By using TTC Continuum, you can easily and quickly manage your entire driving community from a single online platform, ensuring real-time compliance with HSE legislation and that your organisation

is best placed to manage 'Duty of Care' Compliance under current UK legislation.

Thanks to its 24/7/365 delivery of driver and fleet risk data, TTC Continuum makes managing your organisation's fleet far simpler, driving decision making and focusing fleet management resources to where they're needed most.



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- Grey Fleet Management
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- Permit to Drive
- Driver & Fleet Risk Audits



The platform recognises that each driver is a unique individual, ensuring that any training meets drivers' exact needs and adapts as their needs change, lowering collision risk exposure and the related costs you might incur. Furthermore, you can tailor training to match your business needs by starting with compliance and then building a programme to deliver real business benefits, such as collision cost reductions, improved employee retention and stabilised insurance premiums.

The effectiveness of this training can decline over time unless it is reinforced on a regular basis, so TTC Continuum also offers a suite of post-training interventions, such as micro-videos, that keep driver risk at the forefront of every drivers' mind.

What's more, by combining driver-declared driving history with real-time telematics data, TTC Continuum offers customers the opportunity to use multiple data sources to drive fleet and driver risk decision making.

Of course, the risk exposure for drivers changes day by day - it can be increased in poor driving decisions or reduced by targeted and personalised training. TTC Continuum helps to identify changes in risk profile and discovers opportunities for additional remedial action.

Other solutions included within the TTC Continuum include Driving Licence Checks, which feature a digital e-declaration and results within seconds. Results are stored by TTC Continuum and help to identify the highest risk drivers, being a key element of the driver Risk Profile Score. This is in addition to a Driver Risk Profile, with a 40-question Driver Risk Assessment. Scores are produced by market-leading risk score algorithms created by industry experts and validated by data scientists, with an easy dashboard view of Driver Risk Profiles.

This is just a snapshot of TTC Continuum's comprehensive features, and readers are urged to get in touch with Licence Bureau for a demo to discover first-hand how TTC Continuum can improve your driver and fleet risk management.

Interested? Get in touch using the details below.

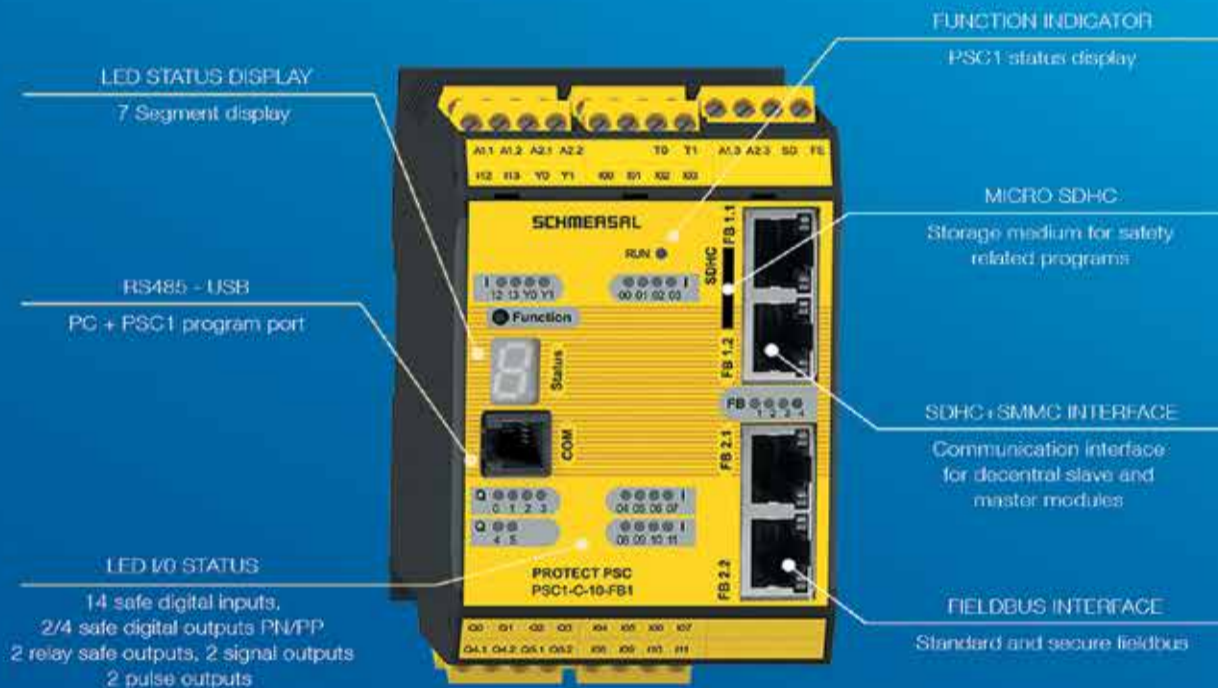
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The PSC1 consists of freely programmable PLCs with IO extension modules for signal processing of mechanical and electronic safety switchgear. In addition you can safely monitor up to 12 axes using the extensive features.

These compact controllers can be equipped with a universal communication interface. This makes it possible to easily select and setup different fieldbus protocols via software.

The PSC1 offers the advantage that only one single piece of hardware is required to establish a connection to all common fieldbus systems. This is interesting for our customers from a cost point of view.

The universal communication interface allows secure remote-IO communication and a secure cross communication at the same time.

All Schmersal-SD-bus sensors can be connected to this universal communication interface, to transfer their data to different participants. In doing so, the universal communication interface takes on the task of a gateway to the respective fieldbus protocols, set via software.

The SafePLC2 programming software offers users a modern development orientated environment. It has extensive libraries with ready-made functions for safe monitoring of sensors and axes. These can be linked easily via "Drag & drop" to form complex applications.

With the PROTECT PSC1 we can now offer our customers even more holistic safety system solutions, which include also our safety services. See our website for more details.



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# 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

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## 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.

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## Quantum Controls' New Generation Hire Panels



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The new unique design allows for additional modules, each at 160KW rating. So, your power requirements can be matched using the same panel design by simply adding the number of modules to obtain your required design power output.

This is the first design of its kind in the UK VSD rental market but also first for having an outdoor rated unit, up to 500KW and without the need for an additional enclosure or container to house it in. They come with our previous easy to install, cable and set up options and with a genuine 24/7/365 engineer support throughout the whole of the UK.

Our hire fleet is available 24/7 through our Quantum Prime service to help keep your site up and running. With just one call to 0330 9000 247, you can have a hire VSD on the way to your site within 30 minutes.

For more information on our hire panels, call us on 0330 9000 247 or email us at rental@quantum-controls.co.uk and receive a FREE 75 Page guide to Rental VSDs.

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New Rental VSDs

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## New Factory and Equipment as G-DECK Builds on Production Capacity & Quality

G-DECK, the leading manufacturer of construction safety decking systems, has delivered a £1,000,000 investment plan to increase capacity, reduce lead times and underpin quality assurance as the company continues to grow.

Based in Leicester with manufacturing facilities in the Polish city of Walbrzych, G-DECK has experienced such high demand for its safety deck systems that the company has invested in a second factory and a state-of-the-art laser fibre Kimla Power Cut machine. The investment programme will dramatically increase the

company's output capacity, ensuring production remains cost-effective and lead times remain short as demand continues to increase.

Ty Wilson, sales director of G-DECK explains: "We manufacture three G-DECK systems - our standard metal decking system, our G-DECK Dual system, which combines our trademark metal decks and patented brackets with scaffold tubing, and our G-DECK Lite system with plastic coated metal legs. Demand is high for all three systems because they combine high safety standards with ease and speed of installation.

"We are committed to ensuring our customers receive the products they need on site on time so, as we continue to grow, we're reinvesting in the business to keep that promise and maintain the quality standards that have made us first choice for so many construction contractors, housebuilders and scaffolding companies."

The new factory brings G-DECK's total manufacturing operations to 80,000 sq ft, along with 72,000 sq ft of office, fabrication and stockholding accommodation at the company's Leicester headquarters. The new Kimla Power Cut machine will enable precision cutting of

metal G-DECK components up to ten times faster than before, enabling the company to increase the volume of product produced, maintain short lead times and provide exacting standards of quality assurance.



Contact <https://gdecking.com/>

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These systems offer maximum workplace protection and provide a product which is safe in order to get people back working and businesses to operate during the Coronavirus pandemic.

For commercial use, both large and small offices, call centres, gyms, hotels-restaurants-bars-cafes, health care settings, retail, hospitality, property services, schools, colleges, universities. Also ideal for large sports venues, arenas.....the list is endless.

There are products to suit all budgets and facilities. All products are filterless, offering low maintenance and are chemical free. Both systems offer NCC and ozone generation technology.

The Viro Tech Mini can cover up to 279m<sup>2</sup> and offers effective cleaning for living spaces, small offices and small shops. The Viro Tech SO range offers 3 models offering coverage of up to 800m<sup>2</sup> in just 4 hours. This range allows offers an overnight boost control for air purification covering all those hard to reach places in just 2 hours.

The units operate with NCC & Ozone Generation Technology. Natural catalytic conversion is a process that uses UV light to create the same oxidation and ionization as natural sunlight.

As with any powerful oxidant, disinfectant, disinfectant fogger machine, or bleach, Ozone should be used in accordance with the manufacturer's directions. When used correctly Ozone is much safer than alternative methods of cleaning. Viro Tech has CE Approval. The Viro-Tech range has endured vigorous testing to Bureau Veritas accreditation. (Industry and Facilities Division)

Inspection sites include leading global hotel chains, global banking institutes and the training and medical facilities at an Italian Champions League winning Serie A football club. As well as medical clinics in Italy. Inspection certification available on request.

Want to find out more about this revolutionary new product?

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# The AI enhanced CSR matchmaking platform helping companies meet requirements of the Social Value Act



UK tech start-up whatimpact is an innovative platform that matches companies and grant-makers with charities and social enterprises in a strategic, efficient and transparent way. It sets a new precedent in how Company Social Responsibility (CSR) and social value is established, managed, and reported on

– all hosted on the whatimpact platform. The platform is a solution for organisations that want to deliver social value and make a difference.

Companies are increasingly committed to engaging with societal issues in a meaningful way and whatimpact is a tool to help manage the hard work. The platform matches companies according to their goals for social impact, offers easy to use due-diligence

templates and streamlines impact reporting. The platform is also a solution for companies who want to implement strategic CSR or have to meet the requirements of the newly enhanced Social Value Act via the Procurement Policy Note 06/20.

**AI matching for companies donating money, skills, products and services**

The platform matches organisations based on shared values, UN Sustainability Development

Goals (SDGs) and geographic needs across the country so that companies can direct donations and skills to the organisations that need them most. The whatimpact innovation caters to the needs of companies looking to strategically engage with charities and social enterprises as part of their wider mission to make a positive difference alongside their usual operations.



whatimpact can help enable any size or type of company to deliver social value based on their strategy and goals. Companies involved in the initiative include EY, McLaren, Brewin Dolphin and Engie, alongside a number of SME's. They are all offering very different forms of support through whatimpact either in order to fulfil UN SDGs, meet the Social Value Act requirements, or simply engage in good practice.

**Organisations across the country are benefitting from skilled EY volunteers**

EY is the latest company to sign up to whatimpact's platform, and will offer a series of business clinics to charities and social enterprises grappling with business challenges. Based on research conducted with whatimpact on the most significant pain points facing organisations, EY has developed clinics on managing finances, achieving scale and growth, and building resilience in times of uncertainty. EY will also look to offer one-to-one coaching to help those involved continue to solve their business challenges.

**Meeting the requirements of the Procurement Policy Note**

The recently enhanced Procurement Policy Note requires companies that work on Government contracts to have a social value delivery plan\*, and to report back on their impact in local areas. The legislation has changed the way companies linked to the Social Value Act must report on their past, present and future impact and whatimpact also caters to these needs.

**Open data and transparency**

whatimpact is an advocate for transparency with public profiles on its platform for all users and with information on donations, partnerships and the impact being made together. Supporters (companies and grant-makers) can post resource offers (money, skills, product and service donations) on their public profile. Recipients (charities and social enterprises) can then apply for the resources they need. Both Supporter and Recipient profiles offer transparent data pulled from the Charity Commission, the OCSR, 360Giving and Companies House. whatimpact membership packages offer companies a targeted matching process with due diligence procedures and globally valid impact reporting tools, which provide evidence and communicate the impact of a company's contributions.

You can sign up your SME on <https://whatimpact.com/> and begin making an impact with organisations that share your vision of a brighter, more sustainable future.



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the progression of experienced technicians, into engineering roles. Unrivalled experience working with employers and industry-based students, combined with the industry developed Science Industry Plant and Process Engineer Standard (SIPPE), has resulted in a Degree Apprenticeship in Chemical Engineering that is perfectly suited to employer's needs.

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The course is taught by a world class team of academics and



industrialists, and industry experience is integrated within the curriculum. The Programme Director, Dr Kenneth Moffat, has over 10 years' experience managing distance learning industry focussed degree programmes, and 20 years of industry experience prior to this.

As a former apprentice and distance learning student, he is in tune with the needs of



industry and can relate directly to the experience of industry-based students.

**Employers or Employees who would like to know more about the opportunities available through Degree Apprenticeships in chemical engineering, or any of our programmes and services to industry, should contact Kenny Moffat at [Kenneth.moffat@strath.ac.uk](mailto:Kenneth.moffat@strath.ac.uk).**



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# Dubai Airport keeps Storm Water under Control.

Dubai International Airport (DBX) is the world's busiest airport by international passenger traffic and the sixth busiest cargo airport in the world.

Located in the Al Garhoud district, some three miles east of Dubai it plays a vital role in connecting the Emirates to the world.

During January 2020, the region was hit by several days of unprecedented heavy rain fall which overwhelmed the airports storm water management system, resulting in submerged runways, taxiways, and aprons - consequently hundreds of flights were delayed or cancelled.

Engineers have been working tirelessly to upgrade the storm water management system to reduce the likelihood of future disruption during heavy rain fall events. Cheshire based T-T Flow secured the contract to supply several custom high-performance valves for the demanding environment.

The scope of supply included DN600 & DN700 metal seat wedge gate valves with weld overlay seats, controllable hydraulically damped DN600 & DN700 tilting disc check valves, DN1000 double-eccentric butterfly valves and DN350 swing check valves with weld overlay seats. Additionally, the project

required several non-standard bespoke-manufactured DN750 double flanged centric butterfly valves with vulcanised EPDM seat, stainless steel disc and worm gearbox.

T-T are proud to support partners in the UAE and our association with high-profile projects. Further demonstrating our ability to undertake the manufacture and supply of custom valves exceeding rigorous specifications.

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# New Lanemark process gas burner installations bring clear gains to dumper truck manufacturing

The latest process gas burner technology from Lanemark Combustion Engineering Ltd. is now helping one of the country's leading manufacturers of construction equipment to benefit from optimised energy usage and minimised emissions. Warwickshire-based Thwaites Ltd., who provide a wide range of dumper truck designs particularly to the construction industry, have replaced two well-proven existing Lanemark FD5EP-3 burner installations with the company's latest force-draught gas and air FD5CAP-3 models. The result is a combination of excellent heat control and an anticipated, significant saving in gas usage.

"The two new burners have been fixed to two separate drying ovens, both of which receive products via an overhead conveyor - one for an epoxy primer preheat facility and the other for a polyurethane top coat drying installation," says Jeff Foster, Lanemark's Sale Director who says up to 60 different components for 1 - 10 tonne machines are handled each day.

"In both cases the burners, which here operate with a Propane gas source, fire through the wall of the oven into a combustion chamber with a recirculating fan then distributing the heat evenly around the oven chamber," he adds.

The replacement of the two existing Lanemark burners - both hi/lo units which have delivered reliable performance since 1998 - have allowed Thwaites to gain from the latest designs and technology. Lanemark's FDGA burners utilise the latest 'air pressure lead' mono-bloc gas valve technology which is central to ensuring safe and



efficient gas/air ratios are always maintained even under variable plant operating conditions. These offer significant benefits compared with alternative fixed gas/air valve linkage control arrangements while the absence of mechanical linkages between the gas and combustion air control valve and dampers means the need for adjustment or the risk of sticking are avoided.

"We have ensured that the mounting flanges have remained unchanged over the period so the removal of the old and the connection of the new burners proved to be a very straightforward exercise," adds Jeff Foster. He points out that the work was completed in just two days during a shutdown maintenance period.

Thwaites' Paintshop Supervisor highlights the importance of the new installations - "Temperature control and stability are vital for the paint adherence process to be optimised and this is fulfilled by the Lanemark burners," he says. "Typically, we set the oven temperature to 90°C but the burners can operate at up to 110°C - a useful factor during winter months when ambient temperature can, of course, be somewhat lower."

Thwaites decision to install the two new Lanemark burners was partly based on the company's long term association with the burner manufacturer. Apart from the burners that were replaced meeting operational requirements for more than 20 years, Thwaites had also, more recently, benefited from a further FDGA unit installed on a new stand-alone oven. "The performance here meant we had no hesitation in opting for the two additional Lanemark burners for the paint drying facility," adds the Paintshop Supervisor.

With the ongoing support of the Lanemark BurnerCare service package - which offers a range of benefits from installation, commissioning and service plans to spare parts supply and rapid engineer call-out, if needed - the new installations at Thwaites are set to deliver reliable, long term process heating efficiency for many years to come. Central to such an important element of the production process, this translates into significant, ongoing peace of mind for the dumper truck manufacturer.

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# T-T Pumps supplies essential components for Arbroath (Brothock Water) Flood Protection Scheme

T-T Pumps supplies essential components for Arbroath (Brothock Water) Flood Protection Scheme. As one of the largest flood protection schemes undertaken in the UK, Arbroath's £12 million project needed professional and efficient supply of essential components. T-T Pumps won the tender based on our expertise, supply efficiency and our understanding of the valve technology the contractor would install.



The effects of climate change have been impacting the UK for several years. Last year, the government published its plans to tackle one particular consequence of the dramatic weather events the UK now suffers - flood defences.

Part of the overall strategic plan an investment of £5.2 billion will create around 2,000 new flood and coastal defences to better protect 336,000 properties in England by 2027.

Environment Secretary George Eustice said: "The devastating impacts of last winter's flooding were an important reminder of the need to continue to invest and accelerate action to reduce the impact of flooding on our communities. Working closely with the Environment Agency, local authorities, business and the third sector we will create a better protected and prepared nation."

One of the largest flood defence projects is Arbroath's £12 million flood protection scheme. The original flood defence from the Brothock Water will see the new defences protect more than 500 people and their homes from flood risk. The scheme is being delivered by SEPA (Scottish Environment Protection Agency) and Arbroath (Brothock Water) Flood Protection Scheme. Currently, the area sustains on average £840,000 of flood damage each year.

**Professional service**  
 One of the Brothock Water's essential components is ensuring that water overflow can be efficiently and safely managed. T-T Pumps won the tender from the principal contractor who contacted T-T Pumps to supply the hinged valves they need to complete the Angus Council project.

The supply of technologies like the Double Hinged Flap Valve has changed with increases in flood defence projects. T-T Pumps has always been able to react to these changes in the market need. With a diverse array of products ready to ship, project co-ordinators have come to rely on T-T Pumps for flawless supply they can count upon.

Any business that needs efficient support for their project can count on T-T Pumps to deliver. The Arbroath Flood Protection Scheme is an excellent example of how world-class service coupled with robust product design is recognised by contractors again-and-again.

If your business is struggling to find the right supplier, call our experts today:

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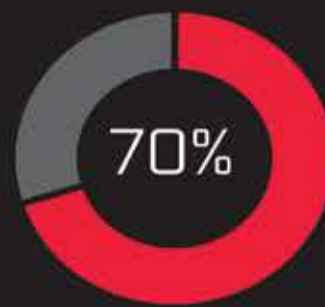


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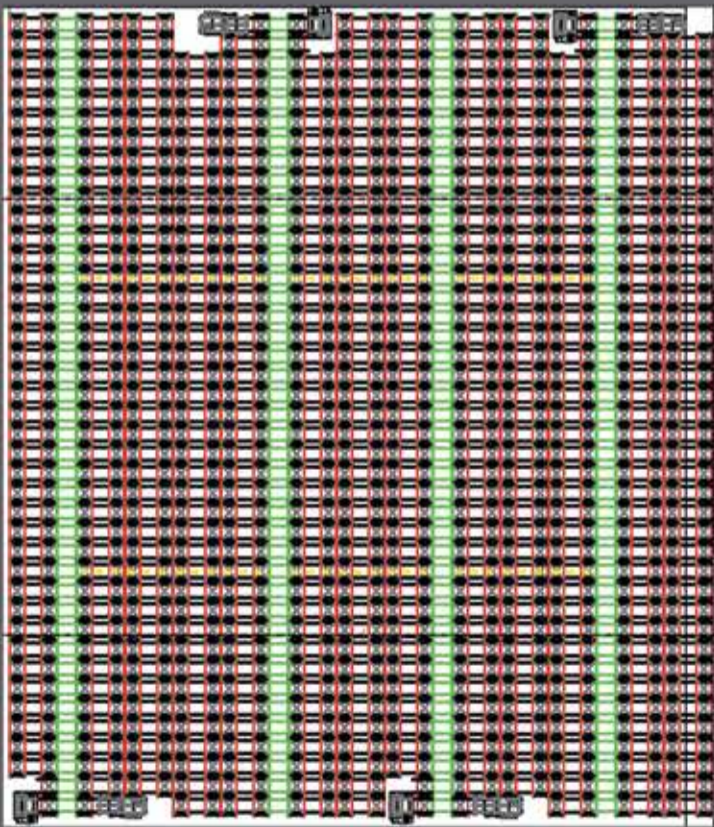


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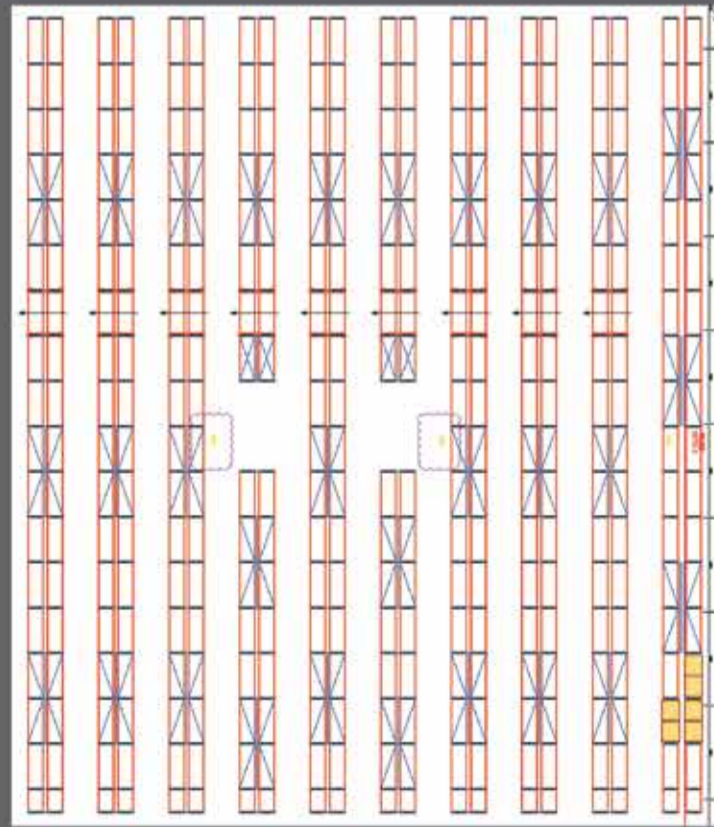


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# 48" TFT-LCD Display Spanpixel series

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.

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## Material Science applications using an NMR Time-Domain Spectrometer

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# Time-Domain NMR Spectrometer for Materials Studies & Process Measurement & Control

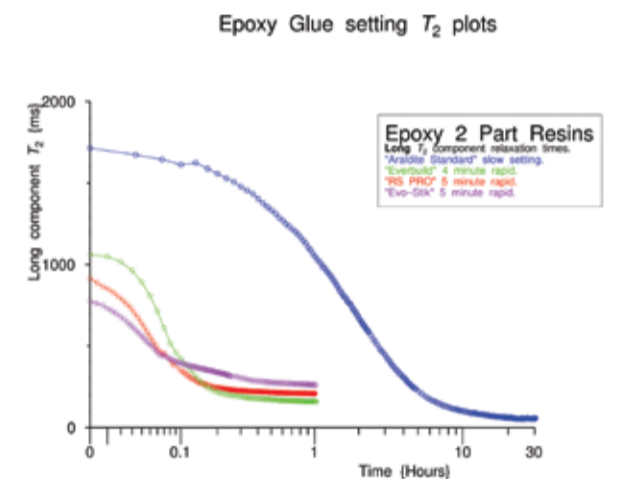
Time-domain NMR Relaxation is an extremely useful quantitative technique for material science and process measurement & control.

This time-domain NMR spectrometer can be used to study solids such as polymers and porous materials. This gives data on sample component masses and movement of the atoms and molecules, which lead to qualities which are variously described as mobility, dynamics, stiffness, viscosity or rigidity.

Designed by a British company active in the NMR field for decades, this highly compact Mk3 low-field time-domain NMR relaxation spectrometer provides physical information on liquid and solid samples in the lab and in the field, at a size, cost and complexity typically 1/10th to 1/100th of that of typical high field chemical analysis NMR systems.

The Graphical User Interface has extensive software for on- and off-line analysis of material and sample data, and built-in modules for process on-line monitoring and control. The signal-to noise is excellent, and digital R.F processing on a Field-Programmable-Gate-Array gives high long-term stability. This spectrometer is robust, and compact enough for use in the field. It has a 3D printed solid metal case, gold flashed, and weighs just under 1kg.

To aid sample analysis and nano-pore-size measurements an optional Peltier thermo-electrically cooled variable-temperature probe is available, that precisely controls temperature from -35C to +80C, with additional gas-assist available down to -80C.



Here are some typical measurements monitoring the setting of two-part epoxy resins over more than a day, measuring the changes in the motion of the atoms in the polymers as the setting process proceeds and the resins become more rigid.

There are many such systems where this NMR spectrometer can provide useful process information, and a Finnish university has just purchased four for industrial process monitoring and control.

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# Manage Your Assets with RFID

Major operations involve hundreds or thousands of different assets and it's easy for valuable equipment to be misplaced or lost. Taking inventory of your assets is a time-consuming and sometimes inaccurate process. That's where RFID Asset Management comes in. With all of your assets monitored by RFID tags and readers, you can know exactly what equipment you have available in real-time. That information helps prevent losses and helps you make informed business decisions. But the benefits don't stop there.

With RFID, you can track not only the location of the asset, but also its condition. RFID tags enable you to instantly see when equipment was last inspected and when it's due another inspection or to be replaced. This reduces downtime because you can repair or replace important equipment at the right time. It also streamlines your maintenance process.

You can also track the movement of assets, so you get alerts when a piece of equipment has left its designated area. People can also be tagged with RFID bracelets, which can be vital when moving heavy equipment, to improve safety by ensuring each worker is out of the way.

RFID Asset Management is a solid investment for any business that has a lot of valuable assets to track. Benefits of RFID Asset Management include:

- ▲ Gaining real-time visibility of your assets
- ▲ Saving time over manual stocktakes
- ▲ The ability to locate assets using RFID
- ▲ Tracking the movement of assets
- ▲ Improving maintenance
- ▲ Improving compliance

Examples of companies who have used RFID to gain a great ROI with asset management include a US government agency, which tracks 250,000 assets with



100% accuracy. They have reduced their stocktaking time by 80% and achieved a positive ROI in 18 months. Another example is a technology company that stocktaking used to take two weeks and it now takes just four hours and they have increased their inventory accuracy from 46% to 99.8%.

If you have valuable fixed assets and are having trouble keeping track of them, an RFID asset management solution can not only save you time with manual tracking, but also save you money by reducing lost assets and improving maintenance.

RFID Asset Management is suitable for large or small businesses, with flexible monthly plans available.

Ready to get started with RFID asset management? Contact TEC-RFID for a free consultation and online demo.

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**SUPERTOUCH™**

# Specialists in protective workwear

Supertouch is a leading manufacturer and supplier of workwear and personal protective equipment. Established in 1996, Supertouch is renowned as a specialist in protective workwear and has built a strong reputation for both its quality and excellent value.

Proud to be described as a one-stop-shop solution, Supertouch provides suitable protective workwear for a multitude of different industries. In terms of construction, manufacturing and engineering, Supertouch provides its high-quality innovative range of hi-vis, workwear, protective gloves, footwear, and PPE. As a supplier with a market-leading range of disposable products, Supertouch also provides protective disposable products for medical, pharmaceutical, food and beverage and clinical industries.

"We manufacture and import safety and workwear products and we distribute those products through our national network of safety equipment resellers." Matt Rushton, Head of Marketing.

In terms of noteworthy feats within its range, Supertouch is extremely happy to be supplying its range of cut resistant gloves by Pawā®. "We are now launching three new cut resistant gloves in our Pawā® gloves range." Matt continued, "We have three pillars that we work to within our Pawā® range, these are: protection, performance and comfort."

Pawā® is a new brand of premium quality safety gloves comprised of cut-resistant gloves, thermal gloves, high dexterity gloves and breathable



handling gloves. Pawā® Gloves have been specifically designed to improve performance, efficiency and longevity. With quality in mind, they incorporate a durable design and boast the ability to provide protection for all working environments. Suitable for a variety of applications, the range is diverse in its capabilities, from 360° breathability



and dexterity to water-repellency and cut-resistance, there is a glove to meet all work environments and application needs.

"The gloves can be used in a variety of hazardous environments and we have gloves that offer one, or several of the following levels of protection; heat resistance, oil resistance, cold protection, cut resistance and water-resistance. The concise range covers a wide spectrum of requirements making specification far simpler." Matt stated.

A couple of notable products within the Pawā® range of cut resistant gloves, is the PG550, PG530 and PG353.

The Pawā® PG550 is a breathable, high-performance anti-cut heavy duty glove. The glove provides cut level F protection and features a black nitrile palm enhancing grip and oil resistance, making it ideal for use in manufacturing.

"For manufacturing, the PG550 provides great cut resistance and as a level F cut resistant glove, it provides the highest level of cut resistance you can achieve under EN388 certification against mechanical hazards. Not all

tasks require this high a level of cut resistance and the disadvantage with this resistance is it allows less dexterity in the glove." Matt explained, "What we have developed is a range of gloves that comes down from that grade and improves dexterity while still maintaining high levels of cut resistance for the end-user."

An example of one of these gloves is the PG530, a breathable Anti-Cut Glove that is highly durable and provides Cut level D protection. Its design benefits from a reinforced thumb crotch, high-performance anti-cut yarn and breathable nitrate coating, which is proven to increase durability for even the most demanding of mechanical tasks.

The PG530 has been designed using a special breathable coating on it," Matt expanded, "This makes it comfortable for wear for long periods. Hand injuries are one of the most common workplace injuries; this is generally due to gloves being removed because of lack of comfort. The PG530 creates less of a desire to remove a glove from your hand through its comfortable, efficient and breathable design."

Another addition to the range is

the most recent glove, the PG535 Ultrafine Anti-cut Gloves. "Our newest glove the PG535 provides Level D cut resistance and is made with an 18 gauge liner, making it thinner but still offering a high level of cut protection. Performance-wise, it's ergonomically designed and reduces hand fatigue which increases both productivity and safety. It features a durable PU coating with nitrile thumb crotch and can perform any intricate task within manufacturing and engineering." Matt said.

With regards to the on-going COVID-19 pandemic, Supertouch has been able to continue working throughout lockdowns, providing safety solutions to all industries and as one of the largest safety product importers in the UK, the company is continuously looking into new innovative solutions in protective workwear for its customers.



For any further information on Supertouch's impressive range of products, head over to their website or give them a call on the number stated below.

T 0345 130 9922  
[www.supertouch.com](http://www.supertouch.com)



# 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](http://GOLDWASSALLHINGES.CO.UK/BESPOKE)



# BESPOKE HINGES



**GOLD & WASSALL**

EST. 1790

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# 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**

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SEE MORE AT [GOLDWASSALLHINGES.CO.UK/BESPOKE](http://GOLDWASSALLHINGES.CO.UK/BESPOKE)

**BESPOKE HINGES**

**GOLD & WASSALL**  
EST. 1790

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## NE Fasteners Celebrating 35 Years 1985-2020

NE Fasteners Limited, a family owned company is celebrating their 35th year of business. With Nigel Elliott setting up in his garage in Halesowen, it soon became apparent his in-depth knowledge and expertise of the trade was invaluable and is still very much involved on a day to day basis. This would not have happened without loyal and supportive customers, suppliers and staff alike.

We primarily specialise in screws fixings & fasteners for the DIY, hardware, building, joinery and furniture manufacturing sectors. NE Fasteners prides itself with offering expertise, competitive prices from local and internationally sourced standard and bespoke products.

Our warehouse is situated in a 7,000sqft warehouse in Cradley Heath in the West Midlands, we are able to provide a wide range of finishes, including zinc, electro brass, black chrome, satin chrome, bronze and nickel, and packaging options, ensuring that many buyers consider us to be a key and valued supplier. More recently, Screwshop has evolved from

its established sister company NE Fasteners and has also proven a huge success with its online shop.

After 5 years in operation, we have grown year on year and seen an increase in sales with the recent lockdown. We are now looking to increase stock and make it even easier for customers to order.

With friendly and experienced staff, our aim is to offer excellent service with our next day deliveries and give an opportunity for our customers to let us manage all fixings, fasteners and component requirements competitively.

Have a look at our online shop [www.screwshop.co.uk](http://www.screwshop.co.uk), or give us a call on 0121 559 8866 with your enquiries and we will give you our best attention and prices at all times.



## CocoonFMS™ Ltd

We are delighted to announce the office launch of CocoonFMS™ Limited.

CocoonFMS™ is a UK based Logistics software company providing innovation, tools and systems that increase productivity, create cost savings and operating efficiencies to both logistics companies, freight forwarders, as well as providing accurate data and greater connectivity to their clients.

The CocoonFMS™ team is made up by industry and digital experts who bring over 60 years of experience within logistics industry. The management team consists:

Glen Tapper - Managing Partner  
Gareth Walrond - Technical Partner  
James Blackman - Managing Partner  
Anthony Quinn - Commercial Partner

CocoonFMS™ products bring a range of partners together to form a one stop shop for Logistics software SMEs with our FMS portal at the very core of our product offering.



"CocoonFMS™ presents an exciting proposition to the logistics industry. Digitalising the supply chain by offering affordable software solutions which can allow the SME Logistics providers to compete with the larger freight forwarders. Our expertise in Logistics is second to none and our 'hands on' knowledge of how clients interact with their data will be critical in providing the right software to enhance and improve our customers operations and customer loyalty". Said James Blackman.

Contact  
[sales@cocoonfms.co.uk](mailto:sales@cocoonfms.co.uk)  
[www.cocoonfms.co.uk](http://www.cocoonfms.co.uk)  
LinkedIn: /@cocoonfms  
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## Optimise your pipework with swivels

Rotaflow have 35+ years experience in designing and manufacturing Swivel Joints. We solve and resolve engineering problems where fluids need to be transferred across rotating interfaces, without leakage.

Rotaflow have produced Swivel Joints for many applications within most areas of engineering and all over the world: From Brewery, Dairy, Food & Drink, Process & Plant, Drilling & Mining, Oil, Gas and Subsea, Nuclear and Chemical.

Through design and in-house manufacture our swivel joints can allow one or more different flows through a single unit, enabling the pipework to rotate 360 degrees whilst carrying fluids (including hydraulic and pneumatic) of different pressures without cross-contamination or leakage.

Some applications require articulated pipe work or hoses to allow fluids; such as Hydraulic Power, Air (pneumatic) control lines, or mixed process fluids to be used on moving machinery. Swivel joints will allow the movement on a slowly rotating drum or remove the damaging effect of twisting on hoses. By fitting a Swivel Joint you reduce the torsion in a hose/pipe so it can move more freely thus extending its life.

And there are many different forms of Swivel Joint... from very straight forward designs of our F and FS series, Compact swivels or Heavy Duty to Articulated Pipework configurations, Floating Suction Arms, Jacketed, High-pressure.

A Swivel Joint reduces costs by reducing the risk of leakage with its associated downtime. And by fitting a quality designed swivel you are improving your production capacity.

We are specialists in taking your bespoke requirements and being able to design a solution that can fit your budget, dimensions, materials, FAT/witness testing; hygienic and pressurised environments. We regularly test to Hyperbaric, Seal Life and conduct Temperature/Pressure/Load Cycle Testing.



We are ISO 9001:2015 certified.

We have off-the-shelf solutions that are ready to go, or we can redesign and in-house manufacture to enable a quick turn-around with minimal fuss and maximum design experience.

Rotaflow have built up a reputation for providing reliable and quality designed products that resolve your engineering needs and we are proud to say many customers request our services over and over again.

To find out more please visit our website and/or give us a call.

Contact  
T +44 (0)1663 735003  
[Sales@rotaflow.com](mailto:Sales@rotaflow.com)  
[www.rotaflow.com](http://www.rotaflow.com)

**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  
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Reduces breakages
- Six reaming nibs under head  
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No burrs
- Coarse serrated thread  
Unique SAWFIX design  
Extra quick drilling

**35**  
Years

**NE Fasteners Ltd (Screwshop)**  
Unit 2, Waterfall Lane Trading Estate, Waterfall Lane, Cradley Heath, West Midlands B64 6PU  
T: 0121 559 8866 • [sales@screwshop.co.uk](mailto:sales@screwshop.co.uk)



## Polar Pod

The Polar Pod range of pallet shippers has been introduced to complement our reusable pallet shipper range. The range has been developed to reflect customer demand for a single use modular system that provides excellent performance. The systems combine a number of technologies ensuring safe transport, by land and air, of perishable products in 3 categories:

- + Deep Frozen: -18 to -14°C
- + Chilled: +2 to +8°C
- + Ambient: +15 to +25°C



Polar Thermal Packaging Limited is a UK manufacturing company based in Warminster, Wiltshire. We have an excellent track record in developing solutions for the medical, military and retail sectors.



## Capacity Options

The system comes in 3 sizes:

- 1500 x 1200 x 1000  
(1.5 m3 internal capacity)
- 800 x 1200 x 1000  
(1 m3 internal capacity)
- 400 x 1200 x 1000  
(1/2 m3 internal capacity)

The tri-wall cardboard shell combines with a liner made from insulated foil wrapped Polartherm™ fibre and appropriate coolants/gel packs/phase change packs to deliver fantastic results over 30, 48 and 72 hours. The Deep Frozen system has an additional thermal foam wall.



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### Contact

01985 214111

### Email

info@polarthermal.com

### Website

www.polarthermal.com



# STORAGE PROBLEMS?

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Better yet, we've solved it all.

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