

# Best Practice



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## How pallet live storage keeps grocery store shelves supplied

An innovative Pallet Live Storage installation can play a key role in supporting grocery retailers as they strive for market leading growth, according to Edward Hutchison, Managing Director of BITO Storage Systems.



Providing up to 50% more storage capacity than traditional racking on the same footprint, a Pallet Live Storage (PLS) system can contribute significantly to accommodating sufficient stock to help grocery retailers meet growing demand.

Supporting a retailer's need to maintain customer service in tandem with achieving sales growth is one of the biggest challenges placed on a distribution centres (DC), particularly when it comes to handling the sheer volumes involved and fast turnaround required by everyday bulk stock lines, such as soft drinks.

Pressure intensifies when these lines experience peaks, such as during a hot summer – particularly in large cities or on the coast. If one store runs out of soft drinks on a very hot day, there's a good chance that others in the region will experience a similar issue. All will want more but storage limitations mean there's a chance that not every store will get the amount they require, which will impact negatively on the grocery retailer's level of customer service.

Maximising the amount of storage that can fit within the constraints of a DC, to provide efficient order fulfilment for retail

stores, will help to avoid such situations. For those grocery DCs that need greater flexibility to meet a variety of demands from customers within a limited space, PLS offers a dense storage and order picking system that contributes to innovative, efficient and agile grocery logistics operations. On a relatively small footprint, pallets can be located 'in the air' on several levels of inclined roller lanes, with delivery lanes for pallet loads of bulk stock lines – such as soft drinks – on the ground floor. This provides dense storage and rapid access to orders.

The flexibility in such a design allows products that need to be sent immediately to stores to be picked directly from the flow lane and transported to Goods Out. If the ground floor delivery lanes are getting close to empty, then stock stored in the lanes above can be brought down and pushed through to the other side of the lane for order pickers to continue their pick.

Operating on the FIFO (First In First Out) principle, PLS ensures product rotation, which is important for grocery store replenishment, ensuring the first product sorted by the 'best before' date is picked. A further benefit is that PLS can accommodate seasonal items on the flow lanes in the upper levels, allowing the grocery DC to take advantage of quiet time to get those products out to stores early.

**For further information on pallet live storage, please visit: [www.bitos.com](http://www.bitos.com)**

## Control Station: Making optimisation easy!

Control Station is the industry-leading provider of monitoring and tuning solutions. The cutting-edge software and solutions empower manufacturers to enhance production efficiency, drive sustained improvements, and integrate digital transformation.



optimised production systems, minimising downtime, and magnifying efficiency."

Spanning across almost 70 countries, the company's global customer base encompasses multiple industry applications including: pharmaceuticals & biotech, manufacturing, mining, chemicals, food & beverage and oil & gas, demonstrating that Control Station is at the forefront of the process analytics field.

In the USA, Control Station operates from Manchester in the state of Connecticut, with the second Irish base in Roscrea in County Tipperary managing the European, Middle East and African markets (EMEA).

"Control Station now licences solutions to over half of the prestigious Fortune 500 manufacturers ranked by largest annual revenues."

"We drive monitoring, diagnostics and optimisation through our Lifecycle Solutions. PlantESP™ monitors plant-wide control systems, identifying production issues, conducting root-cause analysis, proposing corrective actions, ensuring

"The award-winning LOOP-PRO™ is our principal software for process modelling and PID controller tuning, perfect for noisy and dynamic data applications, making it a prized asset for industries with complex processes. It has received leading industry recognition for the Engineer's Choice Award as the best PID Controller Tuning Software and it is a double winner of Chemical Processing Magazine's Vaaler Award."

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"Our Practical Process Control workshops train professionals to diagnose and fix control-related issues, licensed by 200+ global colleges and universities and certified by leading process manufacturers." outlined Damien Munroe: Managing Director Integration EMEA Region | PID Tuning and Monitoring Software for Process Optimisation.

Looking to the future, sustainability will be an ongoing dominant driving force across all the solutions in software and service. This is evident in how the digital lifecycle solutions already standardise work practices, save resources, reduce waste, and minimise energy consumption.



**For more information, please see the website below: <https://controlstation.com>**

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# Editor's Notes

**Liz Dickinson**  
Editor



Welcome to our September issue of Best Practice, with our latest round-up of all the news from across the industry. As we head towards Autumn, our publication covers all the best innovations from across the sector, from drone technology to driver safety.

Lanes Group Rail (LGR) has more than three decades' expertise in the rail industry on National Rail and Transport for London networks. Using an aerial mapping drone, the team was able to recently carry out a detailed survey on a drainage system, in readiness for future development. The drone saved time on a ground-based survey, offered rich data analysis and prevented costly disruption to live rail assets. [Find out more about drone survey services on page 3.](#)

Congratulations to CheckedSafe who has announced an agreement with Pendle Borough Council in Lancashire. All licensed private hire and Hackney Carriages are now mandated to undertake a daily walkaround vehicle check, in a push for greater vehicle safety across the district. Read more about this development on page 13 and read our user-friendly guide to the comprehensive solutions offered by CheckedSafe for safer roads on [page 10-13.](#)

From road safety to beautiful floors, Bona has been providing industry-leading solutions for beautiful floors since 1919. With a reputation for innovation, the team are proud to announce the new lacquer: Bona Mega EVO™ – the next evolution from Bona Mega introduced back in 1996. The non-yellowing formula provides faster curing with excellent resistance to scratches, wear, and chemicals, with VOC levels below 3% for healthier indoor air quality. [Turn to page 22 for more.](#)

There's something for everyone in this issue: pallet live storage installation, monitoring & tuning solutions, remote monitoring solutions of load cells, force, torque or pressure sensors, light commercial vehicle models, and much more.

**Have some news to share?**  
**Email: [liz@bestpracticeuk.co.uk](mailto:liz@bestpracticeuk.co.uk)**

## On the Cover

Control Station is the industry-leading provider of monitoring and tuning solutions. The cutting-edge software and solutions empower manufacturers to enhance production efficiency, drive sustained improvements, and integrate digital transformation.

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# UAV SURVEY LANDS DATA & COST BENEFITS FOR FACTORY OWNER

A drone survey carried out by Lanes Group plc is helping a major manufacturer investigate the drainage system on one of its sites in readiness for future development.

The unmanned aerial vehicle (UAV) survey provided a highly detailed digital map of the factory site near Peterborough, which engineers can use to plot drainage assets with impressive precision.

It was carried out by Lanes Group Rail (LGR), Lanes Group's rail division, in just one day when a conventional ground-based survey would have taken up to four days.

## Significant cost saving

LGR Business Development Manager Bill Waring said: "The aerial mapping surveys we carry out are fast becoming an essential element of site investigations across all sectors, including rail.

"In many cases, they can be carried out by a team of one, rather than the three or four operatives needed to work at height from ground level. It's a significant cost saving, especially when time saved is factored in.

"Drone surveys also provide a hugely rich array of data that can be manipulated in many different ways to more accurately plot and understand the topography and built assets across large areas of land.

"They don't just allow surveys to be carried out more quickly, more safely and with less site disruption. They also allow data

then be prepared more quickly and more flexibly for analysis."

## Eliminates site disruption

LGR's drone survey unit holds the required Civil Aviation Authority commercial operating permission and is on the drone survey framework for Network Rail.

Lanes drone pilot and surveyor Adam Blakesley carried out the survey of the factory site that manufactures ground engineering infrastructure assets.

He flew a DJI Matrice M300 drone fitted with the latest 4K video camera to capture all the required data across an area covering 68,000m<sup>2</sup>. Esri Site Scan software was then used to process the images captured.

Adam Blakesley said: "We can stitch together many thousands of images taken during the drone flight into highly accurate orthomosaic images of the site. We can also create 3D models and point cloud images.

"These allow clients to view structures in very close detail without having to work at height, which may involve working from access platforms or erecting even more costly and disruptive temporary scaffolding.

"The advantages can be even more pronounced on rail networks. With the right precautions in place, drones can be flown over live rail assets with no disruption to services, negating the need to carry out surveys during engineering possession time."

## Flexible data analysis

The data gathered can be combined with other mapping software to plot assets across large areas with a great degree of accuracy.

This includes WinCan drainage survey software used by Lanes CCTV survey teams, allowing data captured via drones to be merged with digital maps of underground drainage systems.

LGR has more than 30 years' experience of working in the rail industry on national rail and Transport for London networks, while Lanes subsidiary UKDN Waterflow (LG) holds a Principal Contractor Licence (PCL) from Network Rail.

The ability to deliver drone surveys adds significant value to LGR's capabilities and services, which include: conventional CCTV drainage surveys; track drainage and culvert cleaning and replacement; drain, sewer, and culvert lining; and vegetation control.

It also complements engineering services provided to the rail industry by Lanes Professional Services. They include drainage system investigation and design, and hydraulic engineering project management.

Talk to Lanes Group Rail about its drone survey service – for rail, commercial and industrial clients.

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# Gundrilling Cell with Flexible Automation

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The UNISIG 4-Spindle Gundrilling Cell with flexible automation simplifies rapid parts gundrilling. This system employs two UNISIG UNE20-2-1000-CR dual-spindle gundrilling machines, enabling 4x drilling of one part or 2x drilling of two different parts quickly and efficiently. These machines can drill up to 20mm diameter holes to a maximum depth of 1,000mm, while counter-rotating the workpiece for maximized hole concentricity.

In this cell, a 6-axis robot picks two parts at once to load or unload, utilizing dual parts staging stations to maximize spindle uptime. Laser verification technology assists the robot's use of dual sets of pallets. UNISIG's Automated Cell Controller (ACC) centralizes the controls for both machines, and a moveable inspection station allows for on-call part inspection. Variations of this manufacturing cell can be configured as needed.

The versatile UNE standard gundrilling machines balance high-performance components with a lower overall investment, making it easy for machine shops to bring their deep hole drilling operations in-house. Machine models



have maximum drilling diameters ranging from 12 to 40mm and depths up to 3 meters, with the horsepower and coolant control to efficiently run indexable, brazed or solid carbide gundrills.

Twin spindle UNE machines can be configured as independent spindles, allowing two drilling operations to be run on a single machine. Available counter-rotation of cylindrical workpieces minimizes hole drift and ensures drilling accuracy. Engineered for automation, these precision deep hole drilling machines bring next-level productivity to any shop floor. UNISIG UNE manufacturing cells with flexible automation combine precision, repeatability, and reliability for an unbeatable machining resource.

UNISIG applies decades of engineering expertise to create deep hole drilling solutions specific to its customers' requirements. Browse: [www.unisig.com](http://www.unisig.com) to learn more about the realm of possibilities.

**Link:** <https://unisig.com/news-and-events/technical-articles/gundrilling-cell-with-flexible-automation>

**Further information on all machines of the UNE series and the complete UNISIG machine program is available at: [www.unisig.de](http://www.unisig.de) or follow the company on LinkedIn and Twitter (@UNISIG).**



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# Elevating Machine Safety: Inside Safety Systems Technology's Innovative Solutions



In this issue of Best Practice, we are honoured to feature Safety Systems Technology as our Machine Safety Company of the Month, for its years of knowledge and experience in industrial safety that has enabled them to design, install and validate a wide range of safety solutions.

Machine safety is critical in industrial settings to protect workers, ensure operational efficiency, and comply with legal regulations. Recognising that each machine and operations have specific demands, Safety Systems has designed and delivered a diverse range of safety solutions that comply with current machinery safety legislation including PUWER, BS, EN & ISO Standards.

"All our projects focus on enhancing the safety of often aging machinery, and updating both guarding and electrical systems to meet current standards. As safety regulations have advanced significantly since many of these machines were originally constructed, our work ensures they comply with today's stringent requirements," stated Allan Harris, Director.

Safety Systems, in its current form, has been operating since 2014 when Mark Smailes took over as Director after the company was divested from TUV SUD Ltd. However, the roots of Safety Systems trace back to 2001, when Roger Scott founded the company as a supplier of machinery safety components, including interlocks, safety relays, and light curtains. Since then, the company has grown organically, evolving from a component supplier to a full-service provider, offering design, supply, installation, and validation of comprehensive safety solutions using products from a wide range of leading safety component manufacturers and innovators.

"We are a specialist engineering company dedicated to upgrading the safety of both new and existing machinery to ensure full compliance with current UK and EU machinery safety standards and regulations. This includes modernising older machines with outdated safety devices and adapting new machinery, often manufactured outside the European Economic Area, that does not meet UK/EU standards. Recently, we successfully re-

engineered three new machines built to American standards, bringing them into compliance with key UK regulations such

as EN60204-1, EN ISO 13849, and EN ISO 14120, ensuring they can be safely put into service," added Allan.

Safety Systems are experts in delivering bespoke machinery safety solutions and effectively act as a one-stop shop for machinery safety issues, offering everything from initial assessments such as PUWER and CE/UKCA audits, design and implementation of safety upgrades through to final signoff and validation. Unlike other machinery safety companies that only focus on guarding or electrical safety, Safety Systems offer a full package with complete turnkey solutions.

Recently, the company has invested in a couple of upgrades to its test equipment, enabling them to offer Stop Time Testing for ESPE devices. Stopping time is crucial for machines with dangerous motions when positioning protective devices like light curtains, safety scanners, and two-handed controls because it determines the safety distance needed to prevent the operator from reaching the danger point before the machine stops. Using the HHB Safeyman® DT2 time meter means stopping time and distance can be tested to ensure safety devices are correctly positioned and functioning. The company's Functional Safety Engineers can perform this testing on-site, or provide the equipment for hire if you prefer to conduct the tests yourself.

What's more, Safety Systems also provide testing of permanently installed electrical systems to machinery in accordance with EN60204-1. Section 18 of EN60204-1 outlines the need to verify the safety of a machine's electrical equipment through inspection, testing, and proper documentation. This includes checking for compliance with electrical documentation, examining equipment for damage, ensuring protection from electrical contact, and conducting tests like continuity of the earthing system, insulation resistance, and functional performance. Using the company's advanced GOSSEN METRAWATT ProfITest Prime testing machine, they can thoroughly check and validate the electrical safety of your machinery, ensuring it meets the required standards.

Safety Systems is dedicated to enhancing workplace safety with its expertly designed and supplied machine guarding solutions. We asked Allan, how do they tailor machine guarding solutions to meet the unique needs of different industries. He responded, "With extensive experience across various industries, we design tailored safety solutions that meet specific requirements, such as hygiene standards for food and pharmaceuticals or corrosion resistance for chemical and saline environments. Our skilled Design Engineers use the latest Autodesk Inventor Professional 3D software to custom design all guarding systems. This advanced modelling allows us to visually represent machinery and solutions, helping to ease operator concerns by demonstrating how the guarding will impact their interaction with the equipment. This visualisation is also valuable for business leaders when implementing safety upgrades."



Of course, every industry comes with its own challenges. We asked Allan what are the current compliance challenges companies face and how does Safety Systems help businesses to overcome them. He answered, "Understanding how to address issues in a timely, cost-effective, and compliant way is crucial. While many companies have on-site engineering teams, these teams are often focused on keeping machines running and may not have the time to delve into the complexities of machinery safety standards. Since we work with these standards daily, we are well-versed in interpreting them and can quickly develop solutions that align with the latest guidelines, ensuring their machinery stays safe and compliant."

Safety Systems is a tight-knit group made up of colleagues that have worked together for between 10-30 years. Evolving from a safety component supplier to a comprehensive safety solutions provider, their combined deep industry knowledge and adaptability underscores their expertise in the industry. Their proactive approach to solving safety issues ensures that solutions are both timely and compliant.

"When collaborating with clients, we begin with a comprehensive risk assessment of their machinery, conducted by a qualified professional to identify potential hazards in accordance with relevant standards. Following this assessment, we apply innovative engineering to develop tailored safety solutions. This often involves integrating various technologies to create a robust and effective Safety System that addresses the identified risks," said Allan.

Looking ahead, Safety Systems is currently investing in new software to help its internal processes and to streamline workflows. "From this, we will hopefully see an improvement in our productivity and reduction in our paper work," added Allan.

In conclusion, Safety Systems exemplifies excellence in machinery safety through its unwavering commitment to innovation and compliance. By seamlessly integrating advanced technologies and tailoring solutions to meet specific industry needs, they not only enhance safety but also ensure operational efficiency across diverse environments.

For more information, please see below:  
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# Goupil Range

*An ideal alternative to combat ongoing charging shortage*

The EV LGV fleet market is growing, with volumes tipped to expand from 5.9% of the market last year to 9.4% across 2024.

However, issues such as a lack of sufficient charging stations across the country is impeding growth, says the SMMT.

Without further investment being made into charging infrastructure, there is a concern this could incite a lack of confidence due to limited access, and therefore restrict sales.

In the case of utility vehicles, which traditionally operate in urban centres or on large-scale sites, the ongoing charging conundrum offers a frustrating dilemma for organisations in the public and private sectors.

A range of vehicles which has become increasingly popular across these sectors in recent years that remove the irritation of sourcing available charge points or investing into expensive charging stations, are the all-electric Goupil light commercial vehicle models.

The Goupils, which are supplied exclusively in the UK by leading electric utility vehicle supplier and manufacturer Bradshaw Electric Vehicles, are equipped with a single-phase onboard charger and can be conveniently plugged into any standard 230-volt domestic socket, which eliminates the requirement for costly or specialised charging infrastructure.

Bradshaw Electric Vehicles has witnessed

an increasing transformation and shifting attitudes towards electric vehicles over the past four decades, with the rising popularity of its all-electric Goupil range within the private and public sector being a personal testament to this accelerating paradigm shift.

Specifically designed and categorised as low-speed electric vehicles (LSV), the Goupils are homologated for road use making them ideal for start stop and last mile applications, while also being particularly suitable for sites connected by public highways.

With an increasing emphasis on sustainability in towns and cities across the UK, they also offer a safer and more versatile option to access car-free zones, cities, and areas with low emissions. Alongside this, as urban areas become increasingly pedestrianised, the Goupils' compact size and generous payloads mean that they are able to operate seamlessly in areas where LGVs cannot.

While a key barrier to entry into the EV market for a number of operators is a lack of available charging infrastructure, Ramsy Labassi at Bradshaw Electric Vehicles has suggested that the Goupil range can still provide businesses and local authorities with a viable option to make the switch without the concern of sourcing or investing into charging stations.

Ramsy commented, "Addressing this infrastructure gap is of course paramount in empowering fleet operators to embrace



electric vehicles and unlock the full potential of a cleaner, greener future. However, a lack of available charging stations shouldn't mean that operators must grapple with the uncertainty of where and when they can recharge their fleets if they choose to adopt electric options over their petrol or diesel counterparts.

"In suitable environments, the versatile Goupil light commercial vehicle range, which come with a number of configurations, acts as an ideal, alternative solution to meet the diverse needs of industrial and commercial operations across a wide range of capacities – and most importantly they don't require charging infrastructure in place to be powered as they can be charged in the same manner as any electrical device.

"Since their introduction into the UK, the Goupil range has become a vital component of an operator's commercial fleet in recent years, enabling them to conduct tasks such as grounds maintenance, waste and litter collections, deliveries, street cleaning, final mile delivery, as well as several other unique applications – and their flexible and convenient charging capabilities has played a significant role in this, which is why they continue to be a vehicle of choice across a wide range of sectors."

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# Common Control Wiring Schemes for Variable Frequency Drives (VFDs)



Variable Frequency Drives (VFDs) are electronic devices used to control AC (alternating current) electric motors. They work by adjusting the frequency and voltage of the power supplied to the motor, which changes the motor's speed, direction, and torque.

Most VFDs have screw terminals or pin headers labelled for both analog and digital input/output functions. Despite the prevalence of advanced network capabilities, many VFDs, particularly those used in smaller or remote settings, rely on digital input devices to drive their operation.

Typically, these digital inputs are generic and not dedicated to specific functions such as starting or stopping. However, you can assign functions to these signals by adjusting programmable parameters.

INDUS Engineering are the South's leading providers of electrical engineering solutions. We specialise in a wide range of engineering services, including **control panel manufacturing, special purpose machinery, and machine maintenance**. Below, we explore some of the most common wiring control schemes for digital inputs.

## What are the main types of VFD Control Wiring Schemes?

### 2-Wire Start-Stop Wiring

The two-wire circuit is the simplest wiring scheme for VFD control. It involves one signal to start a function and removing that signal to stop it. This is different from the three-wire start/stop latching functions, which we will discuss later.

There are two forms of two-wire functionality in a VFD: unidirectional and bi-directional. A single input can be used to drive the motor in either the forward or reverse direction, or two inputs can be used to choose between the two. These inputs are momentary, like a jog function, and are considered two-wire.

The basic wiring concept for 2-wire forward control involves connecting a single digital

input device to one of the digital inputs on the VFD, typically one of the first I/O terminals.

- ▲ For 2-wire reverse control, the single digital device is wired to the same or another input, and the parameter values are set to select the direction of motion when the run command is given.
- ▲ For bi-directional 2-wire control, two different digital input devices are used and wired to two digital inputs on the VFD, with the parameters controlling the method of operation and wire placement.

### 3-Wire Start-Stop Wiring

The 3-wire control scheme is similar to the 2-wire scheme, but slightly more complex. This scheme is derived from a common circuit known as 'latching' or 'seal-in,' in addition to 3-wire. Both start and stop buttons are provided for convenient latching control, with the signals not needing to be sustained like in 2-wire.

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# How are YOU prioritising the safety of your commercial fleet?

Let's face it – how confident are you that your commercial drivers are truly prioritising safety on the roads? Can you be certain that daily walk-around checks are performed accurately? How do you know your drivers are actually getting out of their cabs to inspect their windscreens and tyres before ticking every box and going on their way? For many commercial fleets, the truth is that you don't.

It is well-documented that driving for work is one of the most dangerous things you can ask your employees to do. A staggering 33% of road deaths and 20% of serious injuries involve someone driving for work. So what are you doing about it?



## The reality of road safety in commercial fleets

Managing a fleet of commercial vehicles is no easy task. The logistical challenges are immense, and ensuring the safety of each driver is paramount. However, safety protocols can often become mere checkboxes in a long list of daily duties. When the pressure is on to meet delivery schedules and performance targets, it's easy for thorough inspections to fall by the wayside.

But this isn't just about meeting regulatory requirements or avoiding fines. The human

cost is significant. When a driver skips a safety check, it could lead to severe consequences – an accident that could have been prevented, injuries, or even fatalities. These incidents not only affect the driver and their family but can also have a profound impact on your business, from increased insurance premiums to the potential loss of contracts.

## The importance of thorough walk-around checks

Daily walk-around checks are a crucial part of ensuring vehicle safety. These inspections are designed to catch potential issues before they become serious problems. A cracked windscreen might seem like a minor issue, but it can obstruct the driver's view and become a major hazard. Worn tyres can lead to blowouts, especially at high speeds, putting the driver and others on the road at risk.

Ensuring that these checks are carried out properly is vital. This means making sure that your drivers are not just ticking boxes but are actually getting out of their cabs and performing the inspections thoroughly. However, manual checks can be inconsistent. Fatigue, complacency, or simple oversight can lead to missed steps, and without a robust system in place, these errors can go unnoticed until it's too late.

## Choosing CheckedSafe for safer roads

This is where CheckedSafe comes in. CheckedSafe is a comprehensive SaaS



solution designed to ensure that your fleet's safety checks are carried out accurately and efficiently. With our system, you can digitise your inspection processes, making it easier for drivers to complete checks and for you to monitor compliance.

We provide a user-friendly app that guides drivers through each step of the inspection process, making sure that no item is overlooked. We do this by dating, timestamping and geolocating every time they press a button, so you can see if they have raced through the checks in two minutes or carried it out properly. The software also uses an accelerometer to make sure they're walking around the vehicle to do the checks, not just sitting in their cab.

Meanwhile, from your offices, you'll be able to monitor user activity, view comprehensive maintenance reports in real-time, identify outstanding tasks and vehicle defects, and schedule services with our intuitive system. We also offer secure data storage and a clear end-to-end audit trail, so that you can protect your business in the event of investigations.

## Don't just tick boxes, commit to comprehensive safety

Don't wait for a serious incident to highlight the gaps in your safety protocols. Act proactively to mitigate risks and ensure that every journey your drivers make is a safe one. With CheckedSafe, you gain peace of mind knowing that your fleet is compliant, your drivers are protected, and your business is safeguarded against avoidable accidents and their associated costs. Prioritise safety, protect your drivers, and ensure the longevity of your business with CheckedSafe.

Take the first step towards a safer fleet today by visiting our website at: [www.checkedsafe.com](http://www.checkedsafe.com) or ring us on: 01282 908429.





## Licence Checks Service

### A cost-effective and user-friendly solution

Conduct remote licence checks using our innovative technology **for just £1.60 per check.**

With a direct link to the **DVLA ADD service** our new Drivers Licence Checking Service offers a completely remote solution to streamline your fleet management and compliance requirements in one cost effective, user-friendly app!



**Simple to use:** It's the same platform as you use now, fully integrated into the existing staff area of the app!



**Pay-as-you-go:** Add as a pay-as-you-go service based on a risk evaluation of drivers



**Remote use:** Remote use of software makes this ideal for businesses with dispersed workforces.



**OCR technology:** The app uses Optical Character Recognition (OCR) with over 95% accuracy rate.

[checkedsafe.com](https://checkedsafe.com)



# CheckedSafe App given the green light with Pendle Borough Council

## OVER

# 10 YEARS

## of compliance excellence

We are delighted to announce that we have just reached an agreement with Pendle Borough Council wherein the Council have mandated the use of the CheckedSafe App. Now, all Private Hire and Hackney Carriages issued with licences in the borough of Pendle are

required, as a condition of their licence, to undertake a daily walkaround check, using CheckedSafe. This is to improve the standards of the vehicles and importantly it is backed up with the imposition of sanctions if checks are not undertaken or undertaken properly. The importance of this change cannot be overstated. We have been advocating for some time for all such vehicles to be

subject to a pre-use daily walkaround check and now Pendle Council have taken the bold move of mandating the same. We anticipate that other local authorities will watch this with interest and hopefully follow suit.

We are also just about to launch our GB Domestic Hours App. We believe that we are the 1st company in the UK to do this. – it's a highly complex area but also very exciting and again a huge industry game changer. Most companies still record data on paper in the W20 books so the move the digital is a huge leap forward.

Finally, we launched our Driver Licencing Checking service last year and had our first audit this year – the auditors told us that we are the only company offering remote licence checking, wherein we read the data on the driving licence by taking a picture of it and parsing the data. The makes the whole process fully remote.

T 01282 908429  
[info@checkedsafe.com](mailto:info@checkedsafe.com)  
[www.checkedsafe.com](http://www.checkedsafe.com)

01:02  
 Windows open/close and no damage to front and rear windscreen. Pass Fail  
 Wipers and Washers work correctly. Pass Fail  
 Mirrors are fitted, secure and free from obstruction. Pass Fail  
 Any dashboard warning lights. Fail if dashboard warning lights are present. Pass Fail  
 Internal signage clearly displayed (i.e. Internal obs., no smoking/pre-booked stickers etc. Pass Fail  
 Parking Fare charge sheet  
 TAKE IMAGE  
 Take Image(s)  
 Previous Next

02:01  
 GENERAL PHOTOS  
 General Photos  
 Additional Notes No Yes  
 I CONFIRM THAT THE ABOVE CHECKS HAVE BEEN CARRIED OUT AND I CONSIDER THE VEHICLE FIT FOR USE  
 Yes  
 I hereby confirm that I am fit to drive/use this vehicle. I am not aware of any health conditions or prescribed medications which might impair my ability to safely operate this vehicle. I am aware of the company policies and the LAW on Alcohol and Drugs. I am fully aware of my driving hours/WTD/Tachograph rules Yes No  
 Previous Submit

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 1ST ACTIVITY TYPE  
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 Break  
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 SELECT APPLICABLE DATES  
 Thu - 15 Aug 2024  
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 Sun - 11 Aug 2024 Tick which days  
 Sat - 10 Aug 2024  
 Fri - 09 Aug 2024  
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 Next



# DMS technologies

At DMS technologies, we pride ourselves on being able to complete projects based on your unique specifications. We recognise that today's engineers require more than just a battery supplier. Organisations require a battery partner to fully understand their requirements and provide appropriate solutions. As an independent provider, we will evaluate your requirement and look to balance quality, performance, and cost to provide you with the best solution for your needs.

more and more technologies and suppliers. Using lithium, alkaline and NiMH cells, we design and build packs for bespoke applications ranging from Oil & Gas to Emergency Lighting, offering a basic shrink wrap solution to a fully moulded plastic casing.

As a Yuasa, Energys and Tadiran distributor we offer batteries for several different industrial applications, including, but not limited to:

- ▲ Emergency lighting
- ▲ Fire and Security
- ▲ UPS
- ▲ Telecom

Our team will work with you from conception through to design, build and release keeping you in touch at every stage of development.

Do you have projects in 2023 and beyond? Come and talk to the professionals.

Our range of batteries is also available on our online shop: <https://dmsshop.co.uk>. Our brands include Red Flash, Procell by Duracell, Skyrich and many more.

**Call us on: +44 (0)1794 525400, email us on: [sales@dmstech.co.uk](mailto:sales@dmstech.co.uk) or visit: [dmstech.co.uk](http://dmstech.co.uk)**

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We started 30 years ago as a battery pack manufacturer and remain a leading UK pack builder, still manufacturing large numbers of our original 'Cyclon' battery packs. Gradually adding



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As a leading provider of process analytics and optimization solutions, Control Station commits to the development of innovative solutions that meet industry's challenges head on.

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### LOOP PRO

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# Aeronautical standards in Fire Safety

"AF-X Fireblocker Nano fire suppression systems have a 30-minute hold time, verified by third-party accreditation body KIWA, three times longer than the required 10 minutes for UK and European standards. When it comes to Lithium-Ion battery fires we offer an extended hold-time of up to 90 minutes," explained Director Paul Parkes.

The industry-leading AF-X Fireblocker Nano aerosol fire suppression system is designed, developed and manufactured by AF-X international in partnership with APP (a division of the European Ariane Group, responsible for launching satellites) working to aerospace QA standards. Our second-generation Fireblocker Nano aerosol fire suppression system is designed to prevent fire quickly at the source and comply with the environmentally sustainable era.

Fireblocker Nano extinguishing generators are harmless to the environment, Non-Toxic, Non-Ozone Depleting and Zero Global Warming. We're at the coal face of fire suppression systems that are not only industry-leading but forged to protect our planet too. The dry compound aerosol sends a fire suppressing mist into confined spaces, making it ideal for small or large sealed

rooms with high value assets and is proving to be extremely popular for HV sub-stations, Battery Energy Storage Systems (BESS), Containerised Generators, Transformer Rooms and directly inside electrical switchgear cabinets. Our wide selection of independent AF-X Authorised Partners can supply, install and service all of our products throughout the UK & N.I.

Exhibiting at The Fire Safety Event 2024 this year was a tremendous success, meeting authorised partners and new end-users across differing applications. A new application is the inland and offshore marine environment for which, "We're proud to announce that BSI recently issued IMO 1270 certification (the worldwide standard for marine applications) for Fireblocker Nano."

From our premises in Bromsgrove, Worcestershire, we support our authorised partner network with a large stock holding and firsthand product training for their installation engineers.

**Find out more about AF-X Fireblocker UK below:**  
<https://www.af-xfireblocker.co.uk>



**AF-X Fireblocker is an Environmentally Friendly, Non-Toxic, Automatic Fire Extinguishing System that uses Aerosol Technology**

#### Approved to Suppress Industrial Fires:

- HV Sub-Stations – Battery Energy Storage
- Lithium-Ion Battery Charging – BESS
- Packaged Generators – Wind Turbines
- Test Cells – Transformer Rooms
- Marine Engine Rooms – Robot Cells



#### AF-X Fireblocker Offers Many Advantages Compared to Other Extinguishing Systems:

- **No Water, No Foam, No Powder:** Reduced consequential damage.
- **No Gas:** Oxygen content remains unchanged, safer no pressure relief venting.
- **Fully Electrical, Non-Mechanical:** No high-pressure pipework, water pumps, salmonella checks.
- **Solid Compound:** No pressure leaks, no wasted space for gas bottle storage, low maintenance.
- **Easy Installation:** Simple cabling, no complex piping, quick to install.



**Please visit: [www.af-xfireblocker.co.uk](http://www.af-xfireblocker.co.uk) or contact: 0330 055 3413.**





## Specialist Training for the Storage Tank Industry

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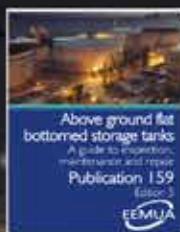
### TankAssessor courses\*

9-12 September 2024 – in English  
classroom – Manchester, UK

30 September - 3 October 2024  
– in French – classroom – Lyon, FR

14-17 October 2024 – in Dutch  
– classroom – Rotterdam, NL

4-7 November 2024 – in German  
– live online



### TankInspector courses\*

16-18 September 2024 – in French  
– classroom – Paris, FR

16-18 September 2024 – in English  
– live online – for Houston time

23-25 September 2024 – in Dutch  
– classroom – Rotterdam, NL

28-30 October 2024 – in English  
– classroom – London, UK



### TankBasics courses

16 September - 25 October 2024  
– in English – blended learning  
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### Storage Tanks e-learning

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**Storage Tanks Seminar**  
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More choices, information and  
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## Sibor: Committed to engineering excellence since 1992

Sibor has a long history, spanning over thirty years providing leading process control, engineering and project management expertise.

Established in 1992, to originally provide process control systems and industrial automation to many industrial applications, such as large blue-chip companies, the company has been focusing on the energy sector more recently, notably the anaerobic digestion renewable energy sector.



(SCADA), Sibor ensures streamlined services across all customer applications.

We caught up with Managing Director: Rob Mockridge to find out more,

“We have always enjoyed organic growth and over the last 12 months, the company has gone through a major transition and has now been accredited with ISO 9001 and 14001 and we have also been accredited by safe contractor.

Sibor provides turnkey design and build service solutions across manufacturing and automation control, including the following services:

- ▲ EIC/mechanical design and installation services
- ▲ Process control services
- ▲ Process instrumentation services
- ▲ Atex design and installation services
- ▲ Project management services
- ▲ Software development services
- ▲ Support services

With a vision for providing automated control systems that provide manufacturing benefits and added assurance throughout, Sibor are trusted professionals throughout the project. From initial requirements analysis, expert software engineers define user-needs from the offset, through to application design and software, component selection and assembly for a successful outcome.

Sibor runs applications as local stand-alone systems or alternatively, as Ethernet/IP networked solutions. Utilising cutting-edge Supervisory Control and Data Acquisition

We have gone from strength to strength completing many major upgrade projects for the MOD and several renewable energy companies, ranging from replacing old for new to major electrical infrastructure and controls installations.

We have seen a 40% increase in business over the last 12 months – an accolade to our strong team.

We are very excited for the year ahead in the anaerobic digestion renewable energy sector and are in the process of signing two contracts with major renewable energy companies to provide LV power distribution design and installation combined with control and instrumentation design and installation. With a pipeline of projects to follow, allowing us to keep investing in our staff and business activities.

Our growth in control and automation projects is a tribute to our innovative approach to design and comes from our long history in many industrial sectors.”

**For further information, please see the website below:**  
**T 0844 504 7124**  
**enquiries@sibor.co.uk**  
**[www.sibor.co.uk](http://www.sibor.co.uk)**





# Shedding further light on LED terminology



The last 10 years has seen an incredible shift in lighting technology as LEDs continue to dominate the market and penetrate new applications and industries.

This has bought a range of challenges, one of which is how to choose the correct supplier and product for your company's lighting needs.

The first step, inevitably, involves unpicking the myriad of terms which LED product suppliers use to describe their products.

Purchasing professionals involved in the procurement of lighting products will have observed the transition from the use of the Watt (a measure of electrical power) to the Lumen (a measure of emitted light). However, there is a further range of concepts and terms that are also essential to understanding products that emit light. What follows is a brief explanation of two of the most useful.

### LED Life & Lumen Maintenance

Historically, the longevity of traditional light sources was classified using 'average life.'

In incandescent filament lamps this was the average time for 50% of the lamps under test to catastrophically fail under laboratory conditions.

It is important to note that this means that some of the lamps would have failed before the quoted figure for their average life.

LEDs tend not to fail catastrophically. Instead, LED light output degrades gradually over time. In many applications therefore, it is essential to understand what happens to the light output of a product over time.

This leads to the concept of lumen maintenance which, for an LED, is the elapsed operating time over which an LED light source maintains a given percentage of its initial life output.

Lumen maintenance can vary based upon many factors including operating temperature and drive current. It can also vary between manufacturers due to the selection of different materials and packaging methods.

This makes it increasingly difficult for purchasing professionals to compare and select products, however, the need for a standardization of how such information is presented has long been recognized by the lighting industry. The Illumination Engineering Society of North America (IESNA) has published guidelines regarding the testing of LED components and LED lighting products.

IESNA LM-79-19 details the approved methods for taking electrical and photometric measurement of solid-state lighting products. IESNA LM-80-08 details the approved methods

for measuring lumen maintenance of LED packages, arrays and modules.

As it is not reasonable to expect LED and lighting manufacturers to test products for years prior to release, IESNA also published TM-21-11. This document provides guidance on projecting long term lumen maintenance based upon initial test results.

In combination, these 3 documents have led to many leading LED manufacturers providing 'L' values for their product. For example, an LED module with a rating of L70 = 25,000 hours indicates that the luminous flux of the module will be 70% of the initial value after 25,000 hours.

Whilst such data may not be available for legacy products, many LED users – such as CML Innovative Technologies – now insist upon receiving the aforementioned data for lighting products to be considered in new designs.

Contact Roger Neal, Commercial Manager, [www.cml-it.com](http://www.cml-it.com)



## High Quality Panel Mount Indicators

CML IT continues to be the number one supplier of panel mount indicators, LED lamp replacements and LED tower lamp solutions, PMI highlights include:

- Plastic and metal bezels with a wide range of options in stock.
- Development of custom solutions
- UK Manufacturing facility
- IPN40 and IP67 ratings



### Fast supply chain & global distribution



Contact our Customer Services department to discuss your requirements today:  
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## Oliver Twinsafe Valves Supplied for MEG Injection Pump Systems

Oliver Twinsafe is to supply Double Block and Bleed pipeline valves for use on Monoethylene glycol (MEG) injection pump systems. MEG is a widely used hydrate inhibitor designed to reduce the risk of hydrate formation in pipelines that could cause blockages.



The order includes a batch of 2 1/16" API 6A 5,000psi Double Block and Bleed valves in A182 F55 Super Duplex material that have been dynamically tested to meet the requirements of API 6A PSL level 3. In addition, the valve designs were pre-qualified to API 6A PR2 Appendix F, which involves multiple cycle testing at low, ambient and high temperature with zero leakage allowed across the valve seats throughout these cycles.

A number of Oliver instrumentation valves have also been ordered, taking the total number of valves supplied for this offshore project overall to over 300 with more valves in the pipeline.

**For information on how Oliver Twinsafe can provide pipeline valve solutions for your project, telephone: +44 (0)1565 632636 or visit our website at: [valves.co.uk](http://valves.co.uk)**

## SIL 3 Certification for Oliver Twinsafe's Single Isolate and Double Block & Bleed Valves

Oliver Twinsafe Trunnion Mounted valves and Floating Ball Valves have successfully been SIL certified at level 3. This new and important milestone provides operators with safety assurances at the highest level and has resulted from many months of engineering design, QA reviews, and audits.



A SIL (Safety Integrity Level) is a measure of safety system performance, in terms of probability of failure on demand (PFD). The higher the SIL level, the higher the associated safety level, and the lower probability that a system will fail to perform properly. SIL 3 is the highest rating that can be given to a valve.

High Integrity Pressure Protection Systems (HIPPS) and remotely located well-head manifolds are normally associated with SIL certification. Operators are to gain additional safety assurances from installing our ball valves, in that, when the valve is required to perform its fail-safe function, the

probability of it not performing is extremely low.

SIL 3 certification has been awarded by Exida, a third-party safety assessment organisation. The certification covers our range of Single Isolate valves, and Double Block and Bleed valves comprising two separate isolates within the assembly. Bore sizes for Trunnion Mounted valves range from 1"-16" and 1"-3" on Floating Ball valves.

[www.valves.co.uk](http://www.valves.co.uk)

 **RMIG SOLUTIONS**

Passion for perforation

### Industrial Processing

Industrial Processing includes a vast range of potential applications for perforated products. RMIG Solutions has extensive experience in the chemical, pharmaceutical, paper, and offshore industries, to name a few. From small, high precision perforation in thin materials to large holes in thick sheets used in the mining industry, RMIG Solutions has the knowledge, versatility, and tooling to deliver products according to customers' requirements.

One particular area of Industrial Processing is dealing with waste water. The water industry presents a number of unique challenges in the use of perforated products. A key consideration here is the aggressive nature of the water towards the materials being used. RMIG Solutions has vast experience in servicing the waste water industry, and produces high flow, burr-free perforated waste water screens, offering accurate screen tolerances and effective separation.



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# BITO Storage Systems

*Edward Hutchison, Managing Director, BITO Storage Systems, answers questions about the company*

### How have the past 12 months been for the company?

BITO has maintained a consistent growth trend over the years and this continued during 2023. All of BITO's routes to market are performing well, the bito.com web shop enables customers to order standard items, many from stock. A regionally based team of designers travel the country to understand clients' needs and pain points in order to design a solution that helps improve their business. Finally, a national key accounts team work on the larger scale projects, often with systems integrators. We are seeing growth in a number of sectors including food & beverage, e-commerce, fashion retail, and pharmaceutical.

### What were the biggest challenges the company faced in 2023, and how is the company addressing these challenges going forward?

Many companies today are challenged by increasing order volumes, labour availability and cost pressures. Companies know their business best and often have their own great ideas for solutions to their particular issues. Turning a client's ideas into reality requires a considerable amount of expertise. BITO works with



clients on projects to turn their ideas into reality through innovative, high quality and reliable solutions that address these challenges and can also contribute to the increasingly important task of helping companies to demonstrate their sustainability credentials. Many projects involve designing bespoke solutions to successfully overcome a specific operational challenge.

### How has the industry evolved over the past 12 months and how did you adapt?

Consumer expectations for greater choice and shorter lead times are driving the need to store a broader range of SKUs as well as ensure rapid and flexible order fulfilment. We are seeing a particular

trend towards lower cost storage and order picking solutions to help meet such requirements.

These might include multi-tier shelving, adapting pallet racking for picking small items, installing live storage flow shelves to give greater pick face density, investing in bins and containers for efficient storage and delivery, and adopting technology that allows staff to spend their time more productively picking orders.

Pallet and carton live storage systems are an efficient means for providing dense storage for rapid, efficient and accurate order picking. Compared with fully automated systems and traditional racking, these 'mechanical' solutions strike the right balance between investment, storage density and speed for fast moving goods picked on a First In, First Out (FIFO) basis. Adding simple automation technologies such as pick-to-light and voice picking can further improve accuracy and throughput speed.

**Contact Edward Hutchison,**  
**T +44 (0)24 7638 8850**  
**info-uk@bito.com**  
**www.bitocom**



## Simplify your shipping with SmartFreight.

SmartFreight automates the management of product shipping and tracking. Our Freight Management Solution lets you manage multiple carriers as if they were one and gives you visibility of your own fleet, all on one system.

We make it easy to choose between multiple shipping options. You can optimize your last mile philosophy based on best rate, fastest route or least environmental impact.

- Efficiently manage you own fleet of vehicles
- Compare own fleet vs carrier delivery for hybrid last mile systems
- Track & Trace across multiple carriers on a single branded portal



Whether you are focused on shipping costs, customer service or environmental impact, SmartFreight let's you customise your shipping options to your shipping needs

**Please visit [www.smartfreight.com](http://www.smartfreight.com)**





# Measurably better Chemiluminescence analysers

Nitrogen Oxides (NO<sub>x</sub>) are chief villains in the battle for climate control; belonging to a family of gases that are formed during the combustion of fossil fuels. When Nitric Oxide (NO) reacts with other gases, for example with Ozone, it forms Nitrogen Dioxide (NO<sub>2</sub>), which is considered highly toxic to human health.

The reaction with Ozone is also an indicator for why Nitric Oxide (NO) is considered a climate active gas, that interacts with Earth's protective Ozone layer. Human exposure to high levels of Nitrogen Dioxide (NO<sub>2</sub>), but also Nitric Oxide (NO) can cause airway inflammation, susceptibility to allergens and exacerbate pre-existing lung or heart conditions.

Nitric Oxide (NO) is a biological marker of inflammation and is also produced by cells involved in the inflammation process. It is typically used to diagnose allergic/eosinophilic asthma. Legal ambient air limit value (annual average value for the European Union) for Nitrogen Dioxide (NO<sub>2</sub>) concentrations is 40µg/m<sup>3</sup>. Maximum occupational exposure limit is 950µg/m<sup>3</sup>. Indoor air limit value for maximum exposure is 250µg/m<sup>3</sup> but the precautionary value 80µg/m<sup>3</sup>. The WHO defines 40µg/m<sup>3</sup> as precaution limit.

The Department for Environment, Food & Rural affairs (DEFRA) has also reported soil chemistry and biodiversity changes across many UK habitats, through gas (dry deposition) and precipitation (wet deposition.) Anthropogenic Nitrogen Oxides (NO<sub>x</sub>) influence tropospheric chemistry, which directly cause photochemical smog and concentrated levels of urban ozone.

ECO PHYSICS AG offer world-leading measurements of Nitrogen Oxide (NO<sub>x</sub>), through trailblazing chemiluminescence analysers. These innovative analytical solutions are unprecedented in speed and sensitivity, with a cutting-edge range of sensitivities from 1% down to 1 ppt (part per trillion). Chemiluminescence Analysers use a unique thermally-stabilised semiconductor photodiode, to measure light intensity produced by reactions between Nitric Oxide (NO) with Ozone (O<sub>3</sub>). The light intensity correlates to the proportion of Nitric Oxide (NO<sub>x</sub>) converted to Nitrogen Dioxide (NO<sub>2</sub>) by the reaction.

We caught up with Dr Grischa Peter Feuersänger, Head of Sales & Marketing, to find out more about ECO PHYSICS, "ECO PHYSICS was founded in 1990



perfected analytical technique in speed and sensitivity. Today we are proud to claim world leadership in the fastest and most sensitive chemiluminescence analysers and the broadest commercially available range."

This Swiss-based innovative company has EN ISO 9001: 2015 quality management and EN ISO 13485: 2016 medical devices-compliance, offering quality assurance to customers across many industries. There is a new range of gas analysers and boxed set gas analysers available: nCLD AL, nCLD AL2, nCLD AL3/8555, nCLD EL and nCLD EL2.

The nCLD AL3/8555 is a next-generational modular gas analyser, offering state-of-the-art simultaneous measurements of NO, NO<sub>2</sub>, NO<sub>x</sub>, NH<sub>3</sub> and NO<sub>x</sub>-Amines. Even lower detection limits can be detected through the newly designed reaction chamber, enhanced gas flow paths, improved pressure and temperature stability. This analyser is adaptable to non-standardised applications, with the unit calibration running smoothly on an automated basis.

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through a management buy-out, by co-founders Dr Matthias Kutter and Dr Werner Moser and we now operate from our base in Duernten, Switzerland. We offer innovative analytical solutions for measurement tasks in the fields of environment, health and process control. With our interdisciplinary research and development team, we are delivering customer-oriented and tailor-made products and services. The initial know-how focus was centred on the principle of the chemiluminescence, thus developing and manufacturing analysers for the ambient pollution and emissions. We have

**Kelio**  
GLOBAL WORK-LIFE SOLUTIONS

**Workforce Management and Access Control** in one solution!

- Workforce scheduling** based on skills and projects
- Clocking in** systems for different environments
- Cost centre tracking** for specific projects
- Automated alerts and attendance reviews** at a glance
- Automatic **building access reports**

[www.kelio.co.uk](http://www.kelio.co.uk) | 01442 418800 | [enquiries@kelio.co.uk](mailto:enquiries@kelio.co.uk)

## Global Solutions



With expertise spanning over 35 years, Kelio Ltd offers comprehensive and modular based solution simplifying workforce management with all of the data in one place to underpin internal processes, such as onboarding, clocking in, remote working, activity against cost centres, scheduling and absence management.

Kelio UK is part of six subsidiaries across Europe, the latest of which is Kelio's new team in Germany. Having this new team enables Kelio to support more and more customers locally and to provide a Pan-European offering, which is available in 13 languages. Furthermore, in addition to the

offices across Europe, Kelio also have 60 partners worldwide who can implement the Kelio Workforce Management Solution and tailored to the needs of each customer.

Kelio relocated to a new, modern office in Hemel Hempstead, Hertfordshire last Summer and enjoy an open-plan working space, with sound-proofed meeting room and social area for staff. Making the decision to buy the new office, rather than rent it, signals a long term move for the company.

Contact  
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# Adhesives & glue guns



AdCo UK is one of the largest manufacturers of shaped hotmelt adhesives and water-based adhesives for use in packaging and product assembly markets for over 21 years, from its Head Office and manufacturing facility in Liphook Hampshire with additional distribution facilities based in Leeds UK and a network of approved distributors based throughout the UK.

As well as supplying adhesives for all requirements, AdCo supplies a wide range of specialist applicators – from ProFlex industrial, heavy duty and professional glue guns to total melt, cartridge and bulk systems, we also manufacture and supply UF resins, PVA Adhesives, PU Adhesives, Tapes and much more

As part of our commitment to offer our customers the correct solution for their needs AdCo are continually investing in research and development along with new state of the art manufacturing equipment to ensure we continue to meet the ever changing needs of all types of industry.

Thanks to our unrivalled knowledge of adhesives and application techniques, our highly skilled technicians can offer a 'find and supply' service to all our customers. With a combined industry experience of over 120 years, our technicians can ensure that any bonding problem can be solved quickly and efficiently.

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**AdCo's HD 250 NV** is a true standout among industrial-grade hot melt glue guns, and a go-to tool for contractors and tradesmen in many fields of work.

The "NV" stands for "needle valve," an exclusive AdCo design feature which allows the user to lay down precise, uniform glue lines, with perfect cut-offs and no more dripping and stringing!

This exceptional quality tool sports outpion-padded grips, an easy-squeeze trigger, and a removable wire base stand which makes it easy to use in any work environment.

The 225 watt PTC heating system allows for quick heat-up times to its preset temperature of 210°C, and the ability to dispense upto 1.5 kilos of glue per hour.

**Patented Dripless Nozzle**

**Output / Hour 1.5 kilos**

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43mm

**FEATURES & HIGHLIGHTS**

- Needle valve nozzle
- Uses 1 1/2mm glue sticks
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- Operating temp: 210°C
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# The British Adhesives & Sealants Association (BASA) launches a new awards programme with a gala event in November



companies' achievements and excellence in these and a number of other areas is an exciting development," says Lorna Williams, BASA CEO. "We are looking forward to maximum engagement and of course we look forward to receiving members' entries and seeing everybody in November!"

BASA has been representing the adhesives and sealants sector since 1983, and a new initiative open to all BASA member companies will recognise excellence and achievement within the adhesives and sealants industry.

Award categories include Manufacturer of the Year, Excellence in Supply & Services, Marketing Campaign of the Year, Best Product Packaging, Process Safety, Excellence in Training & Development, Community Engagement, Young Achiever, Environment & Sustainability Initiative, and Innovation.

"Sustainability and Innovation is really important to BASA and formally recognising our member

If you are interested in sponsoring the event, please contact us.

The event, to be held at East Midlands Conference Centre, Nottingham on 22nd November, will be hosted by comedian Jimmy McGhie and will include dinner and entertainment. Tickets are now available for purchase online; please visit the BASA website for details under the BASA Awards Night button on the homepage.

Contact Lorna Williams, Chief Executive Officer, British Adhesives & Sealants Association, T +44 (0)330 223 3290 lorna@basa.uk.com www.basa.uk.com

**WWW.EVENTCREATE.COM/E/BASA-AWARDS-NIGHT**

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## Anua Clean Air: Air pollution control specialist

Anua Clean Air UK Ltd are a specialist Air Pollution Control company with expertise in the field of biological treatment of air and Biogas. Anua are established leaders in the fields of high performance, low-cost emission abatement primarily based on our Patented Biofiltration and Bio scrubbing technologies.



Our Monashell™ and CrumRubber™ use recovered materials as the critical filtration component. The unique properties of these materials enhance capture and treatment which in turn provides multiple environmental benefits in terms of Circular Economy, Carbon Footprint (low water and energy requirement and no consumables) and removal of harmful atmospheric pollutants.

During the past number of years along with its parent Company Anua Clean Air International limited and Italian Sister company Air Clean SRL we have been very active in the UK, Ireland and in overseas markets including Italy, France, the Middle East, China and the US. International Reference projects include Dual Pass Monashell Installations in

Riyadh, Jeddah, Laguna Lake in the Philippines, Coimbatore in India, and Sindos in Greece. For our new CrumRubber technology we have supplied new installations in the Canary Islands, China, Oman and UK and Ireland. We are also currently working with Air Clean USA on the delivery of a number of new installations for the US market.

Anua Clean Air International also specialise in Equipment Health Checks and process optimisation and media replacement services. Over the past number of we have continued to perform System Health Checks and media replacement services on the many hundreds of Worldwide Monashell Installations.

[www.anuacleanair.co.uk](http://www.anuacleanair.co.uk)

## Intelligent ventilation systems

Industrial ventilation systems play a critical role in maintaining a safe and comfortable working environment, protecting workers from exposure to harmful substances, and preventing the buildup of contaminants.

Founded by Mark Ashby (Son) and Bob Ashby (Father) in June 2017, Clean Air Environmental is extremely committed to quality and as such, imports equipment from all over Europe and the UK, to ensure successful solutions are achieved every time.

Clean Air Environmental specialises in the engineering of industrial ventilation systems and provides a comprehensive service consisting of consultancy, design, supply, installation, and commissioning of industrial ventilation systems and services. The systems are engineered to integrate seamlessly into a facility and is predominantly designed for use in industrial manufacturing (automotive, aerospace, food manufacturing etc.), universities, colleges and schools. Offering intelligent designs and creating effective results, Clean Air Environmental systems enhance air quality, providing healthier clean air for students, workers and operatives.



"Our services are solutions led rather than product led, so we can design the best ventilation systems that will meet our client's exact needs," mentioned Mark.

Clean Air Environmental places meticulous attention to detail in the design and site installations, ensuring that the company only use the best products, equipment and installation engineers.

**For more information, please see below.**  
**T 07715 432051**  
[mashby@cleanairenvironmental.co.uk](mailto:mashby@cleanairenvironmental.co.uk)  
[www.cleanairenvironmental.co.uk](http://www.cleanairenvironmental.co.uk)



# Bona: Enhancing the beauty of floors since 1919

Welcome to Bona – your go-to expert in floor care. Possessing over a century's worth of knowledge and innovation, we proudly stand at the forefront of the hardwood flooring sector, enhancing the beauty of floors since 1919. Our dedication to sustainable practices, groundbreaking solutions, and unparalleled excellence has solidified our reputation amongst both homeowners and professionals worldwide. With a comprehensive global footprint, Bona offers an extensive range of products and systems for the installation, restoration, and maintenance of flooring. Our commitment is to provide solutions that maintain the beauty and functionality of floors, throughout their lifetime.

For over a century, Bona has been a household name in floor care, and we are eager to continue on this path to a brighter future. Driven by our passion for flooring and a commitment to high standards, we aim to supply only the finest solutions for preserving and augmenting the beauty and resilience of various floor types.

Since its establishment in 1919 by Wilhelm Edner – a small grocery store owner in Malmö, Sweden where he discovered his affinity for coffee and sold bonvax, a product that polished and protected wood floors – Bona has been at the pinnacle of the hardwood floor industry. Today, backed by more than a century of innovation and expertise, Bona is a leading figure in floor care, committed to showcasing the natural beauty of your floors. Our Swedish heritage and history have sculpted our company's identity, fueling our drive towards sustainable business practices and ensuring

that every facet of our operations considers the impact on our planet's precious resources. Our trailblazing spirit has led to significant industry advancements, notably our early move to eliminate toxic chemicals from our finishes and our pioneering of dust containment systems to protect the air quality during floor sanding processes. Bona's high-quality products meet rigorous standards set by national and international environmental bodies.

Being the provider of choice for the world's most trafficked and prestigious buildings, Bona's solutions cater to floors that endure significant daily stress, ensuring sustainability and performance meet the highest standards. By offering the industry's most durable finishes and a complete system of eco-friendly products for floor care and maintenance, alongside a unique global network of Bona Certified Craftsmen, we enable our customers to achieve optimal results for their floors, earning the recommendation of professionals since 1919.

As we move forward into the next century, our values as a family-owned company remain unchanged; we are wholly focused on innovation, not only in hardwood but in all superior flooring materials including stone, laminate, resilient, and parquet. Our team is dedicated to identifying trends and delivering the best possible flooring solutions. Opting for Bona means choosing safe state-of-the-art products that achieve exceptional outcomes while enhancing the beauty of your flooring.

Reflecting on our rich heritage and accomplishments, we pay tribute to the heart of Bona – our team. With over 600



staff members and a presence in around 90 countries through direct subsidiaries and distributors, our success is built on the tireless effort, dedication, and commitment of our personnel to embody and uphold our company's core values every day. Their unwavering passion, commitment to excellence, and curiosity for innovation continue to drive our success.

Our commitment to sustainability and innovation has consistently been recognised, earning Bona numerous accolades and certifications for our environmentally-friendly practices and superior-quality products, including the Nordic Swan Ecolabel, Greenguard Gold Certification, and the European Business Award for the Environment.

Contact <https://www.bona.com/en-gb>

## Announcing the launch of Bona Mega EVO™



state-of-the-art crosslinking technology that activates when applied.

The unique, non-yellowing formula delivers faster curing with excellent resistance to scratches, wear, and chemicals. With VOC levels below 3%, the lacquer contributes to healthier working conditions with a lower impact on indoor air quality.

Bona Mega EVO™ is the next evolution of Bona Mega, which was first introduced in 1996 and offered an industry-first oxygen crosslinking technology and, at the time, was considered a top choice among flooring contractors for use as a one-component topcoat for wood floors in environments requiring medium to light commercial wear resistance.

Bona Mega EVO™ is the next generation that incorporates a completely new and significantly faster technology that is unique to Bona. The self crosslinking occurs entirely within the lacquer without the use of any external components, making it a next generation coating.

[www.bona.com](http://www.bona.com)

**Next generation lacquer with innovative crosslinking technology offers high durability with faster curing**

Bona, a global, sustainably driven company that supplies products for installing, renovating, maintaining, and restoring premium floors is announcing the launch of its new lacquer, Bona Mega EVO™. This next generation lacquer offers a new



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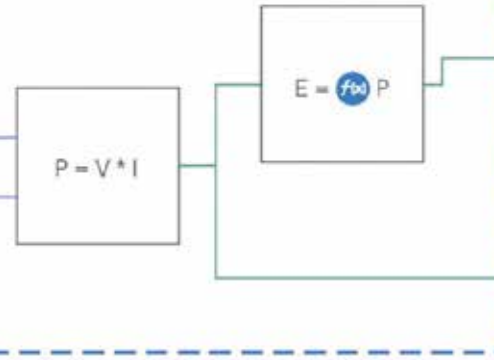
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