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Q&A: The Future Of Connected Detection With MSA Safety



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Q&A: The future of connected detection with MSA Safety

As connected safety technologies continue to reshape how organisations manage risk, MSA Safety is broadening its portfolio with new innovations designed to give safety managers clearer visibility and greater control. One of the most significant additions is the ALTAIR io™ 6 Multi-gas Detector, which brings real-time data from a pumped multigas detector into the connected safety ecosystem for the first time. Here, Anthony Bafile, Global Senior Product Line Manager for MSA Safety's portable detection devices, gives us the latest insights...

How does MSA Safety's work align with the current direction of industrial safety?

MSA is a mission-driven company with a single focus: helping to keep people safe at work. Everything we develop - whether it's connected gas detectors, head protection, fall protection or software - is designed to support that mission. The broader industry themes we're seeing today around connected safety, digitisation, worker accountability and proactive risk prevention all align strongly with where MSA is heading and how our solutions are built.

What is the ALTAIR io 6, and why is it significant for safety professionals?

The ALTAIR io 6 is our newest portable multigas detector and the latest extension of the MSA Connected Work Platform. It's a six-gas detector designed for confined space sampling, leak detection and general pumped applications where a pump is required - while also being small enough to wear as a personal monitor.

What makes the ALTAIR io 6 particularly significant is that it's the first MSA pumped detector with built-in, out-of-the-box cellular connectivity. This means real-time data from pumped sampling applications becomes accessible through our MSA Grid cloud platform - something the market has been asking for.

It also uses our proven XCell® sensors, has a large high-visibility screen, a removable rechargeable external battery, and an interface that mirrors the ALTAIR io™ 4. That consistency makes training easier and speeds up adoption for safety teams.

How does the ALTAIR io 6 fit into the MSA Connected Work Platform?

The ALTAIR io 6 joins the ALTAIR io 4 on the Connected Work Platform. While the ALTAIR io 4 is primarily a personal, continuous monitoring device, the ALTAIR io 6 is designed for confined-space sampling, leak and spill detection, and emergency response - and is still small enough to wear as a personal monitor.

Both detectors share the same technology, user interface, and MSA Grid software, making it easy for safety managers to integrate them into a single fleet.

Together, they create a powerful Connected Work experience: MSA Grid delivers real-time device location and alerts, along with instant access to data from individual units or an entire fleet.

The devices are complementary, so you don't need to have an ALTAIR io 4 to have an ALTAIR io 6 and vice versa.

How does MSA define connected PPE, and what benefits does it bring to workers and safety leaders?

We look at connected PPE as solutions that can be relied on to provide data and insights to help improve worker and worksite safety. This can include facilitating adequate maintenance programs, keeping inspections and records up-to-date, and identifying issues before they pose a risk to workplace safety.

For workers in the field, it can be about having the ability to take action when seconds count. With connected devices, like wearable gas detectors, for a worker to be able to alert a crew on a worksite, or alert a safety supervisor onsite or offsite, to a potential danger within seconds, that's a huge benefit. We see it as a way to empower organisations to leverage connected technology to help keep their workers and worksites safe.

What operational challenges do customers face when adopting connected detection, and how does the ALTAIR io 6 address them?

We're happy to see that in today's market, more and more companies are leveraging data to drive safety and operational decisions. But, there are those still trying to figure out how to implement and make a connected safety program work for them. That's why we believe it's important to meet customers where they are, whether it's introducing a few connected devices and showing how the data can be impactful

for their worksite or bringing in an entire fleet of connected devices and start generating reports from day one.

Otherwise, we hear a lot about the difficulty of accessing data easily in real time, especially with pumped gas detection. That is why the ALTAIR io 6 will hold a unique place in the detection market. By being a robust gas detector and having an integrated pump, and automatic cellular connectivity and integration with MSA Grid software all in one handheld device, it can ultimately help to address the real-time data challenge customers are facing.

How does MSA Safety balance the complexity of connected features with the need for reliability and ease of use in demanding environments?

We see connectivity as transforming hardware from traditional PPE to a technology-based, future-forward safety solution. For connected devices to have the impact and to provide the protection workers are expecting, the network is an important component to the device. The most advanced wearables feature built-in cellular connectivity and deploy right out of the box in seconds, which is what happens with the ALTAIR io 4 and will happen with the ALTAIR io 6. There is no waiting, and no IT required, making for a better ease of use experience.

For years, we've taken pride in setting the standard for ruggedness and durability with our portable detectors. These devices can go into some of the harshest environments, and that's why our engineers test our instruments to the extremes. From cold environments, hot environments, humidity, dropping from heights, tumble tests, spraying and splashing, they go through all the rigorous tests that every MSA portable gas detector goes through.

Which sectors are showing the strongest demand for connected PPE?

We're seeing strong demand across construction, manufacturing, utilities, oil and gas and increasingly within the fire service. These sectors value real-time visibility, automatic data uploads, digital device assignment, improved accountability and simplified fleet maintenance.

One feature customers particularly appreciate is MSA ID tags. These support digital assignment, allowing safety managers to instantly see who is using what device and where it's located. With the ALTAIR io 6 now able to upload pumped readings in real time, accountability and oversight become even stronger.

Customers also like the ability to identify maintenance needs - overdue bump tests, calibration requirements, sensor replacements - without downtime or manual checking.

Is MSA applying AI or data analytics to help organisations make better safety decisions?

We're actively exploring how AI and advanced

analytics can elevate safety programmes. There's huge potential in using the data already captured in MSA Grid to identify patterns, behaviours and opportunities for improved training or prevention.

For example, AI could help things like spotting recurring alarm trends, identifying improper device use and optimising fleet deployment. The focus is always on thoughtful, responsible innovation - making sure any use of AI truly supports worker protection.

Closing thoughts

The ALTAIR io 6 represents an important step forward in the evolution of connected detection. By combining robust pumped monitoring with instant cellular connectivity, a unified ecosystem and real-time insight, it gives organisations a new level of visibility and confidence in their safety programmes.

Success is not only the technology behind the ALTAIR io 6 but the broader shift toward proactive, connected, data-driven safety. As industries continue to evolve, tools like the ALTAIR io 6 are poised to play a crucial role in helping organisations protect their workers more effectively and with greater situational awareness.




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Hart's Success With Its Range Of Doors

Working through a major developer which delivers high-profile infrastructure projects, Hart Door Systems has supplied 16 industrial doors, ranging from Speedor Storms to insulated shutters for a major Waste Transfer Station.

Hart's chairman, Doug Hart says the scheme is billed as a step forward into a greener future and "we are delighted to be part of this significant project which demonstrates our broad range of industrial door products".

He adds: "Time and again clients tell us Speedor Storm is chosen because of its fast open and close operation. This in turn helps with environmental control and energy use reduction, essential for any major green project. Other Speedor Storm benefits include reliability and technologically advanced features which boost efficiency."

Hart Door System's wind-resistant, high-speed, industrial rolling door, Speedor Storm, is ready for business be it a factory, warehouse, storage facility or any kind of plant operation that has one or more large external openings which must be opened frequently for people and traffic.

With wind resistance available up to 'wind class 5', as defined by DIN EN 12424, in the closed position this high-speed door is ready for openings to a maximum 8 metres width or height subject to 48 square metres. This ability to withstand substantial wind pressure means major entrances open/close automatically so avoiding a less than optimal working environment and the escape of heated air. Speedor Storm is designed specifically to help with several areas of business notably productivity, improving environment in which to work, delivering maintenance of temperature and environment by door preventing penetration by wind born debris.

Made at Hart's Newcastle factory, from where its teams of engineers are available throughout the UK for installation and reliable servicing and maintenance thereafter.

The benefits of Speedor Storm come from its unique guide system in combination with other carefully designed features. Further Speedor Storm's strength and wind resistance comes from its multi-layer PVC and textile, both long-lasting and tear-resistant and its inbuilt horizontal curtain braces and no external cumbersome and noisy external wind bars.

There is a colour choice as well as 'a with or without vision panel' which combine to deliver a good appearance, operational effectiveness and a performance product.

Safety features include a state of the art safety light curtain, anti-fall protection and sensors to activate the door. There is a range of operating methods that include hands free, floor loops, radar, photo beam, radio operation, movement sensors, handheld or vehicle-mounted radio transmitters, or simple push button and pull cords.

The automatic operation can be set to include or exclude pedestrians as desired. If warning lights or klaxons are required, these can be incorporated in a complete door system and control panel which are designed for any conceivable need including integration into a Building Management System if necessary. This is delivered via its unique guide system in combination with other carefully designed features. Little wonder Speedor Storms are so highly regarded.

www.hartdoors.com



EEMUA advocates for an update to the Pressure Systems Safety Regulations 2000

The Engineering Equipment and Materials Users Association (EEMUA) has written to the UK Government and the Health and Safety Executive (HSE) to raise concerns about the ongoing review of the Pressure Systems Safety Regulations 2000 (PSSR) under the Government's Regulatory Action Plan.

In a letter sent to the sponsoring Minister of State with primary oversight of the HSE and the Chief Executive of the HSE, the Association, which represents many of the UK's largest industrial operators across the power, chemical and petrochemical sectors, is seeking confirmation that its evidence has been considered as part of the regulatory review.

EEMUA highlights that major UK operators continue to identify shortcomings in the current regulatory framework, particularly around the recognition of modern inspection methodologies and the operational

realities of complex industrial sites. According to the Association, these shortcomings risk limiting the UK's ability to reduce administrative burden, adopt technology driven inspection approaches, and strengthen industrial competitiveness without compromising safety.

The letter draws attention to three priority areas for modernisation:

- Greater alignment with risk based inspection (RBI) to reduce unnecessary invasive examinations and improve plant availability.
- Reform of the 28 day reporting requirement, which EEMUA says is impractical for large sites and can constrain detailed engineering assessments.
- More flexible postponement provisions, allowing risk based decisions in exceptional circumstances to avoid unnecessary shutdowns.

The Association reiterated its willingness to meet with Government and HSE representatives to support a proportionate and modernised regulatory framework. A copy of EEMUA's detailed position statement has been provided alongside the correspondence.



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Also... **EEMUA Pressure Systems Seminar – Birmingham, UK – 23 April 2026**

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MSA Safety welcomes harmonisation of EN 17235 permanent anchor device standard

MSA Safety, Inc., a global leader in the manufacture and distribution of PPE and safety systems, welcomes this week's harmonisation of EN 17235, a European test standard for permanently installed anchor devices used in horizontal construction applications.

EN 17235 sets out a comprehensive testing methodology for anchor devices that are permanently fixed to a structure, assessing not only the device itself, but also its fixings and the base material to which it is attached. The standard was harmonised on 9 February, 2026, with an 18-month transition period. After the transition period, manufacturers across the UK and Europe will be required to test products to EN 17235 in order to produce a Declaration of Performance and apply CE marking.

The harmonisation of EN 17235 is expected to significantly improve safety levels industry wide by requiring consistent, robust testing across the built environment, and by preventing the use of inadequately tested products on construction projects.

MSA Safety has long been an advocate for rigorous, up-to-date testing of all safety devices and welcomes the move to make compliance mandatory.

Tim Bissett, technical expert at MSA Safety, is part of the working group that developed this standard. He comments: "This harmonisation of EN 17235 is a major step forward for safety in the construction sector. By making robust testing a legal requirement, the standard helps to level the playing field and helps make sure that anchor devices are properly assessed as complete systems, not just as individual components."

MSA's development approach already reflects many of the principles now set out in EN 17235. For instance, its Constant Force Post range has long been tested as a complete system, looking not just at the anchor device itself, but also its fixings and the substrate it's installed into. That mirrors the standard's focus on assessing products in realistic installation conditions, helping give a clearer picture of how they'll perform in practice.

The company is now progressing a programme to test both new and existing products directly to EN 17235, with its next-generation Constant Force Post among the first scheduled. MSA has historically carried out equivalent testing through the German DIBt approval process, whose methodology aligns closely with EN 17235 requirements, meaning many of its established testing practices are already consistent with the new framework.

"Testing to the latest standards has always been fundamental to how MSA designs and validates its safety solutions," Bissett added. "EN 17235 formalises best practice and provides greater confidence for specifiers, installers and end users alike. Our mission is to send workers home safely to their families at the end of each day, and this helps us to do it."

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Engineering the Conversation: An Interview with Steve Morris on the Future of Maintenance and Reliability

At London Bridge, we caught up with Steve Morris from Mainstream to discuss how the maintenance and reliability landscape is evolving, and why engineers themselves are increasingly shaping that future.

Speaking candidly about his recent visits across the UK, Steve explained that one of the most striking aspects of today's industrial environment is the diversity in maintenance maturity. "The UK is a fascinating mix," he says. "You've got organisations that are really pushing the boundaries with AI, predictive maintenance and advanced asset management. At the same time, there are still operations that are largely reactive, without structured planning or preventative strategies in place."

For engineers responsible for maintaining critical assets, this contrast presents both a challenge and an opportunity. Steve believes that bridging this gap is one of the most important priorities for the industry. "There's a huge opportunity to improve performance, safety and reliability simply by learning from what others are already doing well," he explains. "And that's where community becomes incredibly powerful."

At the heart of Mainstream's approach is a philosophy that places engineers firmly at the centre of the conversation. Rather than dictating content from the top down, the organisation builds its conferences and research around direct input from maintenance and reliability professionals. This "by the people, for the people" model ensures that the topics discussed are not only relevant, but grounded in real-world challenges.

"We bring together heads of maintenance, reliability leaders and practitioners and ask them what matters most," Steve says. "That insight shapes everything we do, from the research we produce to the content delivered at our events."

Recent think tank sessions in Birmingham and Manchester have played a key role in shaping the agenda for the upcoming Mainstream event later this year. These sessions, which bring together industry leaders for open and honest discussion, provide valuable insight into the issues currently facing engineers across multiple sectors.

One area highlighted during these discussions is the complexity of maintenance strategies within multi-site operations, particularly in sectors such as food manufacturing. Morris notes that many organisations in this space have grown through acquisition, resulting in significant variation in maintenance practices

from site to site. "You might have one facility that is highly advanced, using condition monitoring and predictive techniques, while another site within the same group is still largely reactive," he says.

Aligning these approaches is becoming increasingly important as companies look to improve efficiency, reduce downtime and enhance safety. For maintenance engineers, this often means navigating not only technical challenges but also organisational and cultural differences.

Beyond the technical aspects, Steve is particularly passionate about the way knowledge is shared within the industry. He emphasises that while formal presentations and technical papers have their place, the most valuable learning often happens through direct interaction between engineers.

"It's not just about what happens on stage," he explains. "Some of the most important insights come from conversations over a coffee, where people share their experiences and challenges in a more informal setting. That's where real learning happens."

This focus on human-to-human interaction is a defining feature of Mainstream's events, which are designed to encourage open dialogue and collaboration. By creating an environment where engineers feel comfortable sharing their knowledge, the organisation aims to accelerate the spread of best practice across the industry.

Looking ahead to the upcoming Birmingham event in October, Steve is confident that it will build on the success of previous gatherings. With a strong emphasis on practitioner-led content and real-world case studies, the event promises to deliver valuable insights for maintenance and reliability professionals at all levels.

For engineers working in asset management, maintenance and reliability, the message is clear. In an industry undergoing rapid change, staying connected and engaged with the wider community is more important than ever. As Morris concludes, "The answers are often already out there. It's about bringing people together so they can learn from each other and move forward together."

For further information please visit:
www.mainstreamcommunity.com



Steve Morris, Managing Director,
MAINSTREAM UK

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The E2S Warning Signals D1x range represents a continuously evolving portfolio of certified notification, initiation, and detection devices engineered for reliable operation in the most demanding hazardous, industrial, and marine environments. Combining extensive global certification with advanced electronic design and marine-grade aluminium enclosures, the D1x family delivers hi-performance signalling and detection solutions with exceptional durability and operational integrity.

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The D1xC1 and D1xC2 ranges combine hi-intensity audible and visual signaling in a single, factory-configured device, simplifying installation while maximising alarm effectiveness. Xenon strobe beacons are paired with either flare horn sounders or compact radial horns, the latter providing omni-directional sound coverage regardless of mounting orientation.

Strobe options include 5 and 10 Joules outputs delivering up to 260 effective Candelas with seven UV-stable, field-replaceable lens colour options. Whilst sound output reaches up to 123dB(A) for hi-noise environments. Selected 24Vdc variants are approved for fire alarm applications. A threaded flame path, compact internal layout, and ratchet-adjustable stainless steel brackets improve serviceability, wiring access, and installation accuracy.

The D1xC1F series extends the range to fully certified explosion-proof public mode fire alarm solutions for Class I Division 1/2 and Zone 1 to UL/cUL installations. It includes 15W and 25W loudspeakers with 25/70V line transformers or hi-output alarm horns, combined with Xenon strobes up to 190 Candelas, with automatic synchronisation as standard.

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The D1xB2 Xenon beacon range provides configurable outputs of 5, 10, 15, or 21 Joules, achieving peak light intensities of up to 1250 effective candelas. LED beacon variants are available for low-power applications.

D1xS alarm horn sounders are offered in both flare and radial configurations, supporting up to 64 selectable primary alarm tones via internal DIP switch configuration and sound levels of up to 128dB(A). Remote activation enables up to four alarm stages or channels. The D1xS1 24Vdc variants are certified for public mode fire alarm applications.

The D1xL loudspeaker series includes 15W and 25W models with both low-impedance and 70V line configurations. DNV type approval confirms suitability for offshore PAGA and fire voice alarm systems. High Q-factor transducers, controlled directivity, and factory-fitted line transformers ensure superior speech intelligibility in hi-ambient noise and corrosive marine environments.

The D1xCP1-PS manual call point is UL and UL Marine listed, SIL2 compliant, and rated to NEMA 4X, providing robust and reliable manual initiation in hazardous and corrosive conditions.

The D1xH1 heat detector range incorporates Detect-A-Fire® rate-compensated sensing technology within rugged marine-grade enclosures. Certified to ATEX/IECEx for Zones 0 and 1, and to UL/cUL for Class I/II Divisions 1 and 2, and SIL2 compliant to IEC 61508, these detectors deliver precise and dependable fire and over-temperature detection in critical environments.

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Further information is available at e2s.com.



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Waste Transfer success for Hart

Hart Door Systems has received further orders for its Speedor Storm following successful operation at a waste management facility west of London.

Hart's managing director, Nick Hart, says the first doors were installed 18 months ago "and to get further orders, which would bring the total Hart doors on site to five, from the major, transnational, company for Hart's Speedor Storm is testimony to the quality of our leading brands."

"Waste and Water management are very important issues facing the country," says Mr Hart. "Waste transfer is subject to strict controls and in the UK the process is formally recorded using a Waste Transfer Note (WTN).

"A WTN is a legal document that tracks each movement of non hazardous waste from the point it is produced to the point it is collected, transported, or received by another party.

"This ensures there is a clear audit trail and that waste is only passed to authorised carriers or facilities. Where doors are involved in the process, clearly reliability is essential."

Mr Hart adds: "Hart's door systems are active in over 20 industrial sectors in the UK and across the globe in Europe, Scandinavia, the Far East and North and South America, Africa and the Middle East.

www.hartdoors.com



Low Height Skidding Up To 400t Just Got Easier And Quicker

Enerpac has announced the new LHS4-2, a skidding system that is easier and quicker to deploy for skidding loads up to 400T (362.9 tonnes). Backwards compatible with the earlier LHSS400 skidding system, the LHS4-2 features a new track coupling system - no tools needed - and longer tracks allowing quicker track assembly.

The Low-Height Skidding System's modular design comprises a series of skid beams, skid track and hydraulic push-pull units. Loads travel over special PTFE-coated pads placed on the skid tracks to reduce friction. The push-pull cylinders are powered by a standard Enerpac split flow pump to ensure each skid beam travels synchronously. It also allows bi-directional operation - avoiding the need to reposition cylinders when switching skidding direction.

The LHS4-2 uses a simple hand twist motion to connect the track together in place of the bolting joint used for the earlier skidding system. While track lengths have increased from 955 mm to 1433 mm. Both features, taken together, allow the skidding system to be assembled and disassembled more easily and quickly. Enerpac has developed new skid track handling hooks for a more ergonomic assembly. For ease of transport and storage, the LHS4-2 skidding system is supplied in a steel transport frame, allowing the complete system to be transported and stored safely.

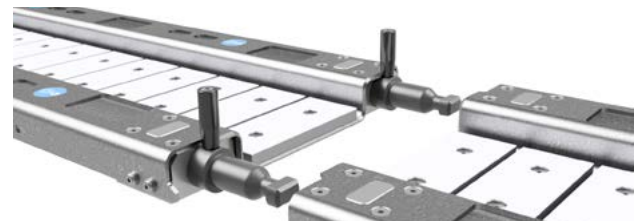
Quick to deploy LHS4-2 Starter Kit

The LHS4-2 Starter Kit includes 10 skid track units, enough for two lines of 7m each, two push-pull units, four skid beams, handling tools and the transport frame. A Skid Track Kit is also available comprising a transport frame and 14 skid tracks for two 10m lines.

"The new LHS4-2 skidding system marks a step change in efficiency and productivity for skidding loads up to 400T," says Pete Crisci,

Commercial Manager - Americas, Enerpac Heavy Lifting Technology. "With the LHS4-2 we're setting the benchmark for ease of deployment, handling and storage of skidding systems for heavy lift projects."

For more information on the Enerpac LHS4-2 skidding system, visit www.enerpac.com



Silence, Power, Performance – Reimagining Industrial Cleanup with the Heavy Duty Dry Vac

Engineered for industrial power and quiet efficiency, the Heavy Duty Dry Vac™ System delivers fast, high volume dry material clean-up—moving more in less time than ordinary vacuums. Its expanded drum capacity reduces changeouts, keeping productivity high while its wear resistant, no motor design tackles abrasive materials like steel shot, garnet, metal chips, and sand with ease, yet remains versatile enough for everyday cleanup tasks.

Powered entirely by compressed air, it mounts to any 30, 55, or 110 gallon open top drum and operates at an impressively low 82 dBA, bringing powerful performance without the noise. A high efficiency filter bag captures fine dust to maintain clean air, and with no motors or impellers to clog or fail, reliability comes built in—reinforced by a five year warranty.

Each system arrives ready to work, complete with a lever lock drum lid, shutoff valve, reusable filter bag, static resistant hose, hanger, compressed air hose with swivel fittings, pressure gauge, and heavy duty aluminum chip wand. Deluxe Systems add a drum dolly, robust tools, and a tool holder, while Premium Systems include a full 30, 55, or 110 gallon drum for maximum convenience.

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– blended learning, live online

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Pressure Systems Seminar
Coventry, UK – 23 April 2026



More choices, information and
registration at www.eemua.org



Hoist & Winch Provides The Lift For Modern Flour Mill Build And Maintenance

When constructing a modern high-speed flour mill, efficient installation and long-term maintenance of plant equipment demand a carefully planned lifting solution. For a recent project, the main contractor turned to Hoist & Winch Ltd, one of the UK's leading lifting equipment companies. Hoist & Winch specified, supplied and installed a two-phase hoisting solution capable of supporting both the plant installation phase and ongoing maintenance activities once the facility became operational.

The project required a flexible approach. During installation, contractors required a high-capacity hoist capable of lifting heavy process equipment through a dedicated lift shaft. Upon completion of plant installation and commissioning, however, the requirement shifted to a permanent, high-speed lifting solution to support routine maintenance of the mill's processing equipment.

Following site meetings and consultations with plant designers and project managers from the main contractor, Hoist & Winch proposed a turnkey lifting package that could meet both requirements.

For the short-term installation phase, Hoist & Winch supplied a 10t safe working load (SWL) JDN air-powered chain hoist offering 30m of lifting height. Mounted in an air motor-powered trolley, the hoist was complemented by a portable diesel-powered air compressor and air hoses. Hoist & Winch also undertook installation and commissioning of the hoist, along with load testing and LOLER certification of the customer's pre-installed hoist runway beam. Operator handover training was subsequently provided for plant installation contractors.

Installing the temporary hoist system formed phase 1 of the project. To facilitate this work, the site scaffolding contractor constructed a platform over the lift shaft in accordance with Hoist & Winch specifications. The 10t air-powered hoist unit was raised to installation level using a temporarily mounted 2t SWL JDN air-powered chain hoist fixed to the underside of the runway beam.



Once positioned beneath the beam, installation of the 10t hoist took place using a dedicated lifting arrangement comprising a pair of T-shaped lifting frames and four 1t SWL manual chain blocks. This configuration enabled engineers to mount the hoist trolley safely to the runway beam by initially opening and then closing the trolley width around the beam section.

Following installation checks and connecting the air supply, Hoist & Winch performed dynamic load testing of both the hoist and runway beam using a 10t test load over the full 30m lifting height. This process was followed by a 125% static proof load test at low level. With testing successfully complete, Hoist & Winch delivered operator handover training to the installation contractors responsible for lifting the mill's process plant equipment into position.

Phase 2 of the project involved removing the temporary air-powered hoist and installing the permanent lifting solution: a 3.2t SWL Stahl electric wire rope hoist with 30m lifting height. Mounted on a motor-powered trolley and operating with a single rope fall, the hoist unit delivers a very high main lifting speed of 16 m/min to minimise plant downtime during maintenance lifts through the access shaft and 2.6 m/min slow lifting speed for precise load laydown at the load landing level.

Hoist & Winch conducted installation, commissioning, load testing and LOLER certification of the permanent hoist system, before providing handover training for the mill's maintenance personnel.

"Projects like this demonstrate the value of careful planning and technical collaboration to deliver safe, efficient lifting solutions that support both the construction and long-term operation of complex industrial facilities," says Hoist & Winch Director Andy Allen. "We subsequently secured the contract for annual hoist inspection and maintenance."

Visit www.hoistandwinch.co.uk for further information and to view recent case studies.



Safe & Efficient Drum Handling In Hazardous Areas

Do you have a need to lift or move drums, de-palletise or just generally move drums around a workshop or factory site in Hazardous Areas.

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The popular and versatile Grab-O-Matic DLR range of rim grip fork attachment drum handlers are suitable for all types of steel drums, plastic 'L' ring drums and most fibre drums.

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We also have a range of Drum Cages for off-shore use and fork attachment Whiskey/Wine Barrel Base Grippers for use in the drinks industry.

We have also developed a Quick Attach/Release drum handler fork attachment for use in ATEX hazardous areas.

All Grab-O-Matic models can be Quick Attach/Release units and are securely attached to the forks and released without the need for the truck driver to dismount from his cab, saving time and increasing safety!

The drum handlers can be manufactured completely from stainless steel or part stainless steel to suit customer requirements and the spark proof area the units are operating in.

All Grab-O-Matic fork attachments are issued with Test Certificates, CE marked and manufactured entirely in the UK to ISO 9001:2015 and will be certified for use in ATEX spark proof areas.

For more information on our extensive range of drum and materials handling equipment please contact Andy Bow on 02380 643402 or email sales@stclare-engineering.co.uk



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Drum Rotator (SC10-St/St)

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St Clare Engineering Ltd (Grab-O-Matic)

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Tel: 02380 643402 Fax: 02380 642189 Email: sales@stclare-engineering.co.uk Web: www.stclare-engineering.co.uk

MTX 3297 Ex – Certified for Zone 0 Environments

In industries such as chemical plants, pharmaceutical production facilities, oil refineries and mining - precision, reliability, and safety are paramount! The MTX 3297 Ex digital multimeter from Chauvin Arnoux is built to improve how professionals work in explosive atmospheres. Certified under European directive 2014/34/UE, it meets strict safety standards for hazardous zones, including gas zones (0, 1, 2), dust zones (20, 21, 22), and M1 mining applications.

This allows technicians to perform essential tests and troubleshoot with certainty and reduced risk. But offering safety is just the starting point!

Maintenance teams face increasingly difficult challenges, for example, dealing with stray voltages, fluctuating signals, and the need to quickly pinpoint faults in high-risk industrial systems. The MTX 3297 Ex offers advanced measurement capabilities, including low-impedance voltage readings and a low-pass filter for PWM signals, which minimise interference and provide accuracy in tough environments. Its features, such as Min/Max, Peak, and differential measurements, enable specialists to perform detailed diagnostics, quickly identify anomalies, and make informed decisions to prevent equipment failures.

This digital multimeter stands out for its detailed measurement capabilities! Its broad range, including capacitance measurement and extended frequency coverage, makes it suitable for a range of industrial applications. For businesses, this leads to faster problem-solving, improved reliability, and reduced downtime.

The dual display allows users to view two measurements simultaneously, reducing mode changes and enabling technicians to identify issues more quickly. This saves time, eliminates errors, and streamlines maintenance tasks.

The MTX 3297 Ex is also built for use in harsh industrial conditions. With an IP67 rating, it is protected against dust and can withstand exposure to water, making it reliable in dusty, wet, or tough environments. Its high safety ratings (1000 V CAT III / 600 V CAT IV) mean it can be used confidently on high-energy electrical systems commonly found in industrial plants. ([RL1.1][GU1.2])The CAT rating indicates suitability for specific electrical zones.

CAT III applies to distribution-level equipment with lower fault currents protected by miniature circuit breakers (MCBs) and is used

downstream of the incoming fuse. CAT IV is intended for use upstream of the distribution board (DB) for utility operations and/or systems.)

For companies operating in hazardous environments, the MTX 3297 Ex improves safety, enables faster, more accurate fault detection, and helps preserve seamless equipment operation.

Visit www.cauk.net to learn more or book a free demonstration.





MTX 3297 Ex

**CERTIFIED
FOR ZONE 0.
TRUSTED
EVERYWHERE.**

**Intrinsically Safe
Digital Multimeter.**



IIC (gas) 0, 1 and 2



IIC (dust) 20, 21 and 22



Mines M1





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To learn more visit www.cauk.net

Passion and Curiosity Driving Innovation at SPM Special Machine Srl

SREX690: High-Performance ATEX/IECEx Slip Ring for Hazardous Areas

In heavy industry, oil & gas, and offshore applications, ensuring continuous power transmission to rotating equipment is not only a technical necessity — it is a strategic requirement for safety and productivity.

Within this context, the SREX690 stands out as an ATEX/IECEx certified slip ring developed by SPM Special Machine Srl, an Italian company specialized in the design and manufacturing of high-performance slip rings for harsh and demanding environments.

A Company Founded on Technical Expertise

SPM Special Machine Srl was founded by Ilir Biba, Saverio Anzelmo and Artur Biba, professionals with extensive experience in the electromechanical sector and in the design of solutions for complex industrial applications.

The founders bring together strong backgrounds in:

- Electrical engineering design
- Industrial mechanical engineering
- Project management for regulated markets such as oil & gas and ATEX/IECEx environments

Their shared vision was to create a company capable of combining:

- High manufacturing quality
- Advanced technical customization
- International regulatory compliance
- Fast decision-making and engineering flexibility

This engineering-driven entrepreneurial approach is clearly reflected in products such as the SREX690.

What Is a Slip Ring and Why It Is Essential

A slip ring is an electromechanical device that enables the continuous transmission of:

- Electrical power
- Control signals
- Analog, digital and fiber optic data

between stationary and rotating parts of a machine, without restricting motion or interrupting operation.

Slip rings are essential components in:

- Cranes and lifting systems
- Rotary tables
- Drilling rigs
- Mining machinery
- Offshore and petrochemical systems

SREX690: Power, Safety and Reliability



The SREX690 is specifically designed for high electrical power applications and potentially explosive atmospheres.

Electrical Performance

- Rated current up to 2000 A
- Rated voltage up to 24 kV
- Customizable configurations: SREX690, SREX691, SREX692, SREX693, SREX694
- High short-circuit current withstand capability up to $I_{cc} = 60 \text{ kA}$

Innovation in Sliding Contact Technology

A key innovation introduced by SPM Special Machine concerns the sliding contact system between ring and brush.

Significant R&D investment has led to a contact solution that is:

- Mechanically robust
- Electrically safe
- Capable of withstanding high short-circuit currents

Unlike traditional carbon-graphite sliding contacts, where short-circuit capability is typically limited (I_{cc} approximately 2–3 times the rated current I_n), the SREX690 provides substantially higher short-circuit resistance, improving overall safety and operational reliability.

These characteristics make it ideal for high-power industrial plants and complex machinery requiring superior material reliability and electrical performance.

ATEX / IECEx Certifications and IP66 Protection

The SREX690 is designed with:

- Ex db protection method
- IP66 enclosure rating
- ATEX certification: II 2G Ex db IIB T5 Gb
- IECEx scheme: Ex db IIB T5 Gb
- Mining certification: I M2 Ex db I Mb

The unit complies with international standard IEC 60079-1, ensuring safe operation in potentially explosive atmospheres.

Why Choose the SREX690?

In critical industrial environments, unplanned downtime leads to significant financial losses. A slip ring must guarantee:

- Continuous operation
- Resistance to dust, moisture and aggressive agents
- Long-term electrical stability
- Reduced maintenance requirements
- Compliance with international regulations

The SREX690 has been engineered specifically to meet these demanding requirements.

SPM's Approach: Tailor-Made Engineering

One of the key strengths of SPM Special Machine Srl is its customization capability. Each slip ring can be configured according to:

- Number of rings
- Power loads
- Auxiliary circuits
- Installation method
- Specific environmental conditions

This engineering approach ensures perfect integration of the device into the customer's system.

Conclusion

The SREX690 represents a technologically advanced solution for power transmission in complex and explosion-hazard environments. High electrical capacity, certified safety, and robust construction make it a strategic choice for industries where reliability and operational continuity are non-negotiable.

If you would like, I can also prepare a more commercial sales-oriented version or a highly technical datasheet-style version suitable for international tenders.



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ExVeritas are the leading CompEx provider with international practical training centres around the world. We have more experienced lecturers and more benefits than any other Ex training provider, including free software tools and pre-and post e-learning. Our unique speciality courses include 'advance' level Ex Inspector and 'Advanced Intrinsic Safety Circuit Design'. Only a company with ExVeritas depth of experience can deliver courses at this level.



The Explosive Atmosphere Safety Specialist

The ExVeritas Group provides Product Certification, Management System Certification, CompEx Certification and Site Safety Services. We are a UK Government Appointed Body for UKCA 'Ex', an ATEX Notified Body and an IECEx Certification Body and Test Laboratory

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ExVeritas are one of only a handful of companies in the world that can offer a time and cost saving combined audit. We can certify UKAS (ILAC) ISO9001 and other QMS systems, UKCA QAN, ATEX QAN and IECEx QAR audit in one visit. In addition, we can combine other audits such as INMETRO, FUS (for North America) and even IECEx Service Facility Certification for further cost savings. We have redefined the 'one stop shop' for QMS Certification with the customer in mind.



SITE SAFETY

ExVeritas conduct electrical and non-electrical 'Ex' Inspections. We also offer explosion risk assessments, fitness for purpose assessments and even 'on site' UKCA, Notified Body or IECEx Certification. All of this makes us uniquely positioned to deliver full compliant explosion safety solutions, including our unique online and tablet based 'iEx Inspection & Management' solution.



www.exveritas.com
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ATEX in Context, Part 1 – Reframing the Foundation of Hazardous Area Compliance

ATEX has been part of the industrial safety landscape for more than two decades. For professionals working with hazardous areas, it's familiar territory—equipment marking, zone classification, Ex certification. But familiarity can sometimes lead to oversimplification. And that's where problems begin.

In 2013, ExVeritas published a guide to demystify the fundamentals of ATEX. The goal then was clarity—what the directives mean, how they apply, and where responsibilities lie. Ten years on, the core framework of ATEX remains intact, but the environment around it has evolved. Today, ATEX needs to be understood not in isolation, but as the foundation of a broader compliance system.

Why ATEX Still Matters

At its heart, ATEX is about managing the risks of explosive atmospheres. It does this through two complementary directives:

- 2014/34/EU – for manufacturers, covering equipment design and certification
- 1999/92/EC – for employers and site operators, covering safe use in the workplace

Together, they govern both the products used in hazardous areas and the environments they're used in. One sets the baseline for safe equipment. The other sets expectations for safe operation.

In practice, however, these two parts are often treated separately. A site may buy certified equipment, only to install it in the wrong zone. Or zoning documents may not reflect real conditions on the plant floor. These aren't minor errors—they're points where compliance and safety can break down.

Two Directives, One Challenge

The issue isn't with the directives themselves, but how narrowly they're applied. ATEX draws a line between product and workplace

responsibilities, but that line is rarely so clear in reality—especially in dynamic operations where conditions change and equipment evolves. Certified equipment is only part of the story. To ensure long-term safety, it must be installed, maintained, and used correctly—supported by clear procedures, competent people, and responsive management systems. ATEX assumes this integration happens, but it's often where gaps appear.

Hazardous Areas as Systems

Hazardous areas aren't defined solely by equipment. They're shaped by how people interact with processes and how risks are managed over time. Compliant equipment today might not be tomorrow if it's modified, misused, or applied outside its intended use.

That's why ATEX is often misapplied as a product compliance checkbox. But both directives, covering equipment and workplace, require much more. True compliance involves:

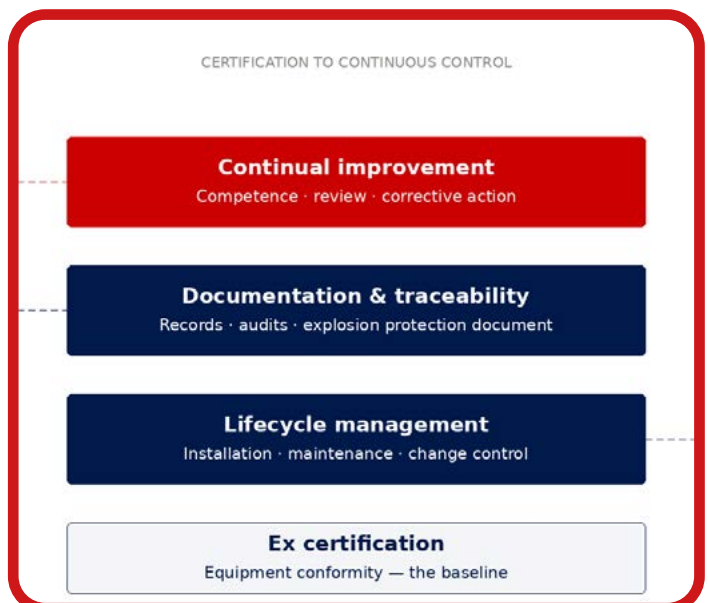
- Equipment lifecycle management
- Zoning and documentation
- Competence and procedural control
- Ongoing inspection and verification

When these elements work together, ATEX becomes part of a living safety system—not just a certificate on file.

From Certification to Continuous Control

Today, ATEX intersects with broader obligations: DSEARISO 14001, and quality management systems that demand traceability, change control, and continual improvement. Certified equipment is essential—but how it's managed, maintained, and documented is what sustains compliance.

In Part 2, we'll explore how ATEX fits into this wider ecosystem—and what good looks like when hazardous area compliance is embedded into quality, safety, and environmental governance.



i.safe MOBILE launches IS380.1: The bridge between traditional radio and mobile networks

Lauda-Königshofen, 19 February 2026. i.safe MOBILE today announced the launch of the IS380.1. This 4G Radio device runs on the i.safe MOBILE operating system "IS OS 16" (based on Android™). It is certified for Zone 1/21 hazardous industrial areas. The device seamlessly bridges the gap between conventional radio IS380.1 in use communication and modern mobile networks. Companies in logistics, rail transport, port operations, manufacturing and construction benefit from this ideal transitional solution.

Emergency services public and safety/ defence organisations also gain significant advantages. Users don't need to switch to new devices or workflows. The IS380.1 offers the familiar ergonomics of radio devices. With compatible applications and network infrastructure, the device unlocks advanced digital capabilities including Push-to-talk over Cellular and Mission Critical Push-to-talk. Effortless Digital Transformation The IS380.1 represents a significant milestone in professional communication technology. It serves as the ideal link between conventional PMR (Private Mobile Radio) systems and modern cellular-based Push-to-Talk solutions.

The device combines the familiar look, feel, and operation of traditional two way radios with the advantages of mobile networks. This enables organisations to embrace digital network transformation without disrupting established workflows. Extensive user retraining becomes unnecessary. Field workers can continue using the same intuitive radio-style interface they've relied on for years. Meanwhile, they benefit from the worldwide coverage and advanced features of 4G networks. IS380.1 "We've removed the barrier to adoption by maintaining the familiar radio design and operation that users know and trust," comments Javier Esparza, Sales Manager Critical Communication Europe at i.safe MOBILE. "The IS380.1 simply extends their existing capabilities beyond the limitations of conventional radio infrastructure. It's the natural first step towards comprehensive digitalisation in professional communications." Seamless Integration into Existing Device Landscapes The IS380.1 is specifically engineered to integrate effortlessly into existing communication ecosystems.

The device runs on the i.safe MOBILE operating system ISM-OS 16. It supports 2G, 3G, and 4G networks. The touchscreen-capable IS380.1 features classic two-way radio design elements. A large, tactile PTT key is positioned on the side for natural thumb operation. A programmable rotary switch enables quick channel selection or volume adjustment. An emergency SOS button is located next to the external antenna. This familiar configuration ensures users experience no learning curve when transitioning from traditional radios. The device's housing replicates the stable form factor of conventional two-way radios.

This allows secure placement on work surfaces. Comfortable handheld operation is guaranteed throughout extended shifts. The front-facing amplified loudspeaker delivers exceptional audio clarity even in the noisiest industrial environments. Advanced noise



cancellation technology enhances performance further. The 13-pin ISM interface maintains compatibility with professional audio accessories. These include the IS-RSMG2.1 remote speaker microphone, IS-HS1.1 headset, and IS HDHS1x.1 heavy-duty headset. Existing accessory investments remain fully functional. Various charging options such as multi charger and desktop charger round off the available accessory package. Unified Communication Across All Networks The IS380.1 seamlessly integrates into unified communication solutions through third party RoIP (Radio over IP) gateways. This enables organisations to connect their existing VHF/ UHF radio networks with cellular Push-to-Talk applications. A unified system bridges traditional radio infrastructure and modern broadband networks. Field workers using the IS380.1 can communicate seamlessly with colleagues using conventional two-way radios.

Simultaneously, they benefit from the extended range and advanced features of cellular connectivity. This dual capability means organisations can gradually modernise their communication infrastructure. Existing radio equipment doesn't become obsolete. Previous investments remain protected whilst enabling a phased approach to digitalisation. The IS380.1 supports both traditional telephony and Push to-Talk communication modes. This offers unparalleled versatility for diverse operational requirements.

The device is optimised for professional deployment. It comes pre-installed with the system-integrated i.safe MOBILE App World. This curated platform enables the use of applications for PTT (Push-to-Talk) and LWP (Lone Worker Protection). It provides secure access to tested and verified applications. p. 2/3 Purpose-Built for Professional Environments The IS380.1 is designed to meet the demanding requirements of harsh industrial environments. The device is certified to IP68 standards for dust and water ingress protection. MIL-STD 810H certification covers shock, vibration, and extreme temperature performance. The IS380.1 delivers the same rugged reliability that professionals expect from traditional radio equipment. The removable battery design enables continuous operational readiness through quick battery swaps. Comprehensive charging solutions include desktop/multi charger support. The IS380.1 is ideally positioned for companies across multiple sectors.

These include logistics and warehousing, rail transport and infrastructure, major ports and harbours, manufacturing and production facilities, and construction sites. Emergency services, the blue-light sector, defence and public safety organisations also benefit. These industries have traditionally relied on TETRA or conventional PMR radio networks. Whilst reliable, these require significant infrastructure investment.

Coverage areas remain limited. The IS380.1 provides these sectors with a cost-effective pathway to expand their communication capabilities. The device supports international frequency bands. This makes it suitable for global deployment. Local certifications are available according to specific business requirements.

<https://www.isafe-mobile.com/en/products/products-zone-1/21/is3801>

Familiar feel. Unlimited reach.

This new 4G radio makes the switch effortless.

Built for hazardous environments and certified for Zone 1/21, the IS380.1 runs on ISM-OS 16 and delivers Push-to-Talk over Cellular and Mission Critical PTT over existing 4G networks. It looks and handles like the radio your teams already know – but now your voice travels far beyond the site boundary.

No new workflows. No retraining.
Just wider, smarter communication.

4G Radio IS380.1

- › **Android-based 4G radio** – combines telephony and push-to-talk (PTT) in one handy device
- › **Familiar two-way radio design** – enables easy transition from classic radios to the IS380.1
- › **Replaceable battery** – enables continuous operation readiness
- › **Rotary switch for channel selection or volume control** – enables quick and safe handling
- › **System integrated i.safe MOBILE App World**– enables the use of certain applications for PTT & LWP



isafe-mobile.com

Fast Ex-P Compressor Motor For Zone 1 – Availability Meets Explosive Atmosphere Expertise

In just three weeks, MENZEL delivered a water-cooled, pressure-encapsulated (Ex-p) compressor motor to Austria's largest plastics manufacturer. This was possible because both the base motor and the required Ex-p system were available from stock, and we have the expertise to convert standard motors to Ex-p in-house, TÜV-certified.

Challenge: High safety requirements with minimal lead time

The customer urgently required a replacement for a compressor drive operating in a hazardous area (Zone 1). In addition to complying with the protection class II 3G Ex pzc IIB T3 Gc, fast availability was critical, as the compressor plays a key role in the production process.

The new motor had to fit exactly into the existing footprint, including foundation dimensions, flange positions, and connection geometries. All necessary modifications to the stock motor had to be completed within three weeks. MENZEL engineers were on-site even before order placement to review the installation situation and clarify all technical details.

Solution: Perfect combination of stock availability, engineering expertise, and Ex-p know-how

MENZEL successfully executed the project because both the suitable squirrel-cage motor from the MEBKSW series and the pressure-encapsulated Ex-p system were immediately available from stock – a decisive advantage over many other manufacturers.

The stock motor was extensively adapted to the application and installation site. The housing was equipped with purge flanges, allowing the motor to be flushed with a non-ignitable gas mixture before start-up, while overpressure during operation prevents the ingress of hazardous gases. The motor was certified II 3G Ex pzc IIB T3 Gc, and all testing according to applicable Ex standards was performed in our in-house certified test facility.

Additional modifications included:

- Conversion to cooling type IC 81W (water-cooled)
- Mechanical adjustment of frame size from 560 to 630
- Relocation of terminal boxes
- Preparation of the star-point terminal box for current transformers
- Adjustment of bearing flange connections
- Installation of vibration sensors

Thanks to close cooperation between engineering, manufacturing, and quality assurance, all mechanical and electrical work was completed within three weeks and delivered via special truck. MENZEL also offered technical supervision for commissioning.

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Customized special designs

- Custom designs for special applications and operating conditions
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menzel-motors.com



**AROUND THE CLOCK,
AGAINST THE CLOCK!**

Explosion Proof ATEX/IECEX Zone 1 / 21 iPhone 17

Introducing the ATEX iPhone 17 – Certified Communication for Hazardous Environments

Professionals working in hazardous areas no longer have to choose between safety and cutting-edge technology. The new ATEX iPhone 17 Zone 1 / 21 brings the latest Apple performance to industries where explosive atmospheres are part of daily operations.

Designed for use in ATEX Zone 1 (gas) and Zone 21 (dust) environments, the device is engineered and certified to operate safely in locations such as oil & gas facilities, chemical plants, offshore platforms, grain processing plants, and

pharmaceutical production sites. The ATEX modification ensures that the smartphone meets strict European explosion-safety requirements while preserving the full functionality users expect from the latest iPhone.

The ATEX iPhone 17 combines Apple's powerful hardware with specialized safety engineering. The device is housed in a robust protective enclosure designed to prevent ignition risks while maintaining usability in demanding industrial settings. All electrical components are carefully integrated and protected according to ATEX certification standards, ensuring safe operation in environments where flammable gases or combustible dust may be present.

Despite its ruggedized safety design, the smartphone retains the premium experience of the standard iPhone 17. Users benefit from a high-performance processor, advanced camera system, large high-resolution display, and seamless connectivity. This makes the device ideal for modern industrial workflows, including digital inspections, remote expert support, video documentation, asset management, and industrial communication apps.

The ATEX iPhone 17 is also designed for practical use in the field. The enclosure offers enhanced durability, improved grip for gloved operation, and reliable protection against dust and moisture, allowing workers to operate confidently in challenging environments. The device supports the latest enterprise mobility solutions, ensuring smooth integration into existing IT and security infrastructures.

By combining Apple innovation with certified explosion protection, the ATEX iPhone 17 provides a future-ready communication platform for hazardous industries. Workers gain access to powerful mobile technology without compromising on safety or compliance.

The result is a smartphone that enables smarter workflows, improved safety, and greater productivity in environments where reliability and certification are critical. ATEX iPhone 17 – The power of Apple technology, engineered for hazardous areas.

For more information please visit www.atexxo.com



Visit Filtermist at MACH for clean air you can count on

Filtermist Limited will be showcasing three brand-new products on stand 418 in Hall 19 at MACH from 20th-24th April – all designed to help UK manufacturers ensure the air in their production facilities is clean and safe to breathe.

Graeme Bell, Filtermist's Global Commercial Director, elaborates, "As part of the global Absolent Air Care Group, Filtermist has access to an ever-expanding product portfolio which is continually evolving. We are widely known for our UK manufactured oil mist filters and aftermarket services, but we also manufacture Dustcheck and Kerstar branded dust collectors, process filters and industrial vacuum cleaners, and we distribute and support industrial filtration products from our sister company Absolent AB.

"Everything we do focuses on clean workplace air – our customers in the UK and around the world count on us to ensure their people are protected from exposure to harmful airborne particles, and their bottom line is healthy.

"Our global product development team is constantly listening to customers to establish what will add the most value to their operations – reducing energy consumption, utilising smaller footprints and offering higher filtration performance at a lower cost are all key topics which our latest products help to tackle."

F Save – energy saving for Filtermist oil mist filters

The first new product, F Save, has been developed to reduce energy consumption on Filtermist's centrifugal oil mist filters. Filtermist MD, René Joppi elaborates; "Our research and our customers' feedback showed that some machines are only operational for around 30% of the working day. If the Filtermist unit is kept running the whole time the machine is switched on, whether it's needed or not, this means energy is being used unnecessarily. Not only does this waste valuable resources and contribute to the customer's carbon footprint, it also costs money!

"We've developed a smart system that involves attaching a sensor to the machine's coolant pump which sends a signal to the F Save 'Hub'. The Hub then switches the Filtermist unit off if the pump isn't running. Our data shows that with this new smart system customers can reduce their energy usage by up to 70%! In these cases, payback can be achieved in as little as just over three months.

"F Save does not require any electrical interfacing with the machine tool which makes it extremely simple to set up. It also prevents machine operators from accidentally overriding the mist extraction, meaning people are always protected from exposure to harmful airborne oil mist particles."

AW oil mist filters

Filtermist will also be introducing a brand-new oil mist filter developed in conjunction with Absolent AB. The new 'AW' units have been specifically designed to effectively capture large volumes of submicron particles generated in applications that use neat oil.

"The AW series combines over 80 years of oil mist filtration expertise from Absolent and Filtermist, packaged in a compact, lightweight, energy efficient, plug and play unit which is designed to be machine-mounted," comments Graeme. "This is a very interesting addition to the Group's product offering, and we are excited to be showing it to a UK audience for the first time on our MACH stand."

AD dust and fume extraction units

The third new product on show will be an AD dust and fume extraction unit from Absolent AB. Initially launched last year, the AD range is being extended to offer ATEX rated options for use in potentially explosive atmospheres which must comply with DSEAR requirements.

The AD range maximises 'True Downflow' technology to provide dust extraction units which are compact, easy to maintain, and deliver optimised filtration density. Designed using input from hundreds of real customer use cases, the AD range provides a truly modular, fully 'customer centric' product line that is now available to UK manufacturers that undertake abrasive metal processes including welding, laser

cutting, grinding and many more.

True Downflow combines vertical filter elements with a top to bottom air flow. This unique combination optimises the effect of gravity and ensures that the dust coming out of the filter elements during pulse jet cleaning is forced down to the disposal solution in the hopper.

Another unique aspect of the new range is the 'CleanChange™' filter change clamping mechanism. The filter elements are linked together and, as the operator pulls the first element out, the next one is pulled to the front. No tool is needed, and engineers do not have to enter the dust filled unit to replace blinded filter cartridges.

This latest addition marks a pivotal moment in the Absolent Air Care Group's product portfolio, as Graeme explains, "Dust extraction markets offer huge growth potential for our global businesses. AD units can be used on a huge range of fume and dust extraction applications and we're very excited to be showing one in the UK for the first time."

Visit www.filtermist.co.uk to find out more about all of the products and services Filtermist offers to UK customers.

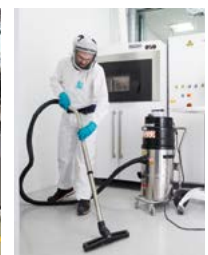
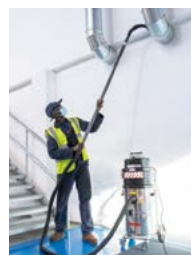


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- ★ Oil, coolant and swarf vacuums that recover liquids, separate swarf, and discharge at speed to minimise downtime and reduce fluid costs.

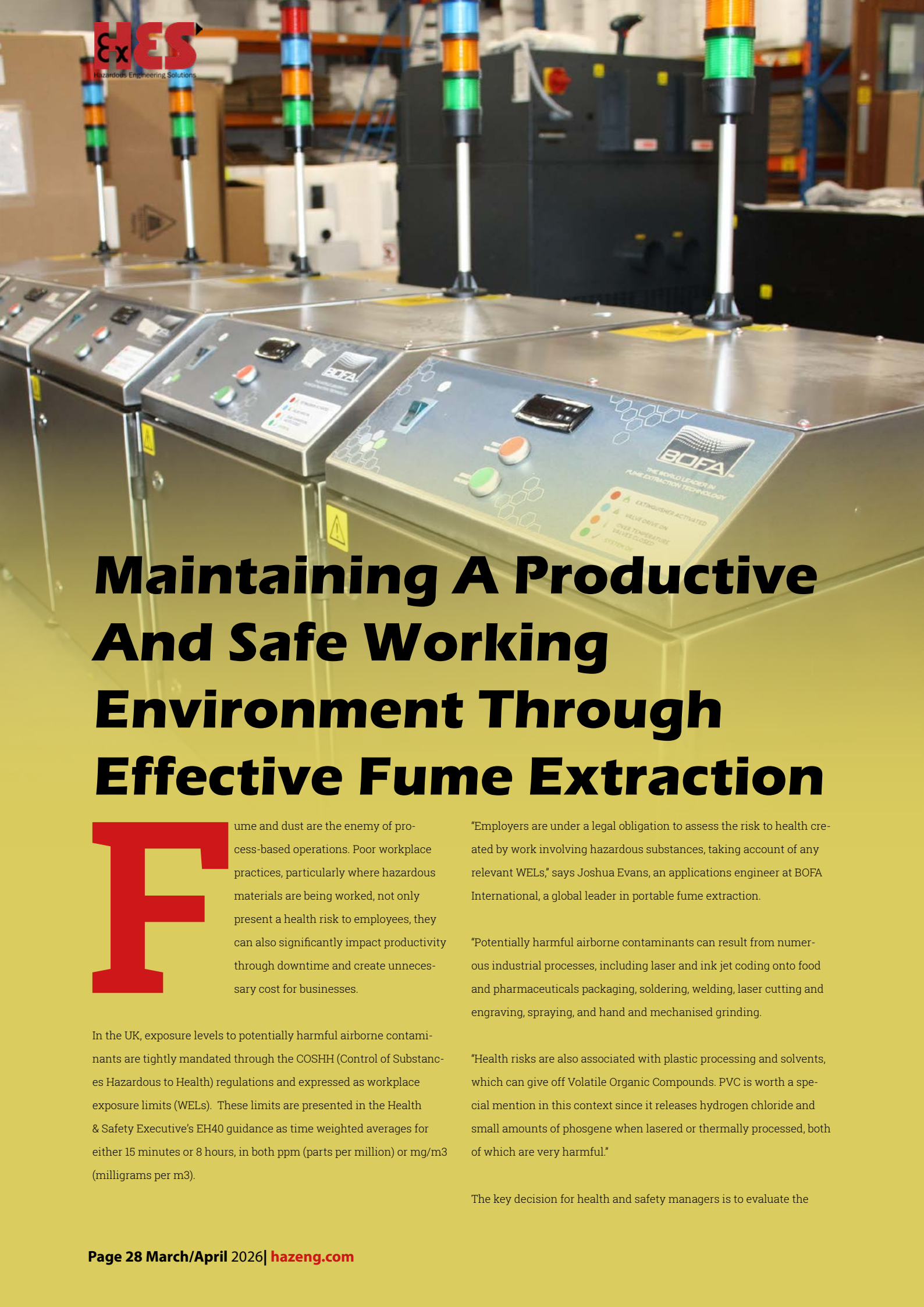
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Maintaining A Productive And Safe Working Environment Through Effective Fume Extraction

Fume and dust are the enemy of process-based operations. Poor workplace practices, particularly where hazardous materials are being worked, not only present a health risk to employees, they can also significantly impact productivity through downtime and create unnecessary cost for businesses.

In the UK, exposure levels to potentially harmful airborne contaminants are tightly mandated through the COSHH (Control of Substances Hazardous to Health) regulations and expressed as workplace exposure limits (WELs). These limits are presented in the Health & Safety Executive's EH40 guidance as time weighted averages for either 15 minutes or 8 hours, in both ppm (parts per million) or mg/m³ (milligrams per m³).

"Employers are under a legal obligation to assess the risk to health created by work involving hazardous substances, taking account of any relevant WELs," says Joshua Evans, an applications engineer at BOFA International, a global leader in portable fume extraction.

"Potentially harmful airborne contaminants can result from numerous industrial processes, including laser and ink jet coding onto food and pharmaceuticals packaging, soldering, welding, laser cutting and engraving, spraying, and hand and mechanised grinding.

"Health risks are also associated with plastic processing and solvents, which can give off Volatile Organic Compounds. PVC is worth a special mention in this context since it releases hydrogen chloride and small amounts of phosgene when lasered or thermally processed, both of which are very harmful."

The key decision for health and safety managers is to evaluate the

most effective means of capturing these potentially harmful emissions and filtering them appropriately, both to ensure operator safety and to contribute to a more efficient production environment.

Typically, these options include captor hoods, which use a capture velocity across the source of the emissions; receptor hoods, which use the movement of particles / vapour towards the device to capture them; partial enclosures, which extract contaminants typically for hand grinding and finishing; and full enclosures matched to the needs of automated processes such as laser coding or PCB manufacture.

"There are also challenges that go beyond capture," says Joshua Evans. "For example, extraction systems linked to thermal processes need to mitigate any potential fire risks. This is particularly important where a combustible dust has the potential to be drawn into the filtration system."

Under these circumstances, managers should specify a system benefiting from fire-resistant materials for casings and filters and thermal cut-out protection. In the case of BOFA, the company has developed sophisticated Spark Arrestor and FireBOX technology to mitigate the risk of burning particulate entering the fume and dust extraction system.

Filtration technology is also advancing, for example through BOFA's patented DeepPleat Duo pre-filtration, which uses reverse airflow to reduce the velocity of contaminant as it enters the filter chamber. This means that larger particulates fall into the steel drop-out chamber, while smaller particles are drawn into the filtration media. The very smallest particulate passes into the main High Efficiency Particulate Air (HEPA) filter, while vapours and gases are removed via a layer of activated carbon. Once this process is completed, clean air is returned into the workplace.

The other key determinant for optimal productivity is extraction system control. BOFA's Intelligent Operating (iQ) system provides independent filter status monitoring to determine filter replacement in the most timely manner, thereby reducing the risk of downtime.

Concludes Joshua Evans: "In short, better information means better extraction performance and the avoidance of unnecessary downtime - and a safe breathing environment for operatives."

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Why CHEMUK has become the heartbeat of the UK chemical supply chain

CHEMUK returns to the NEC, Birmingham, on 20 May and 21 May as the UK's largest event dedicated to the full chemical supply chain. With the sector undergoing rapid transformation driven by innovation, evolving regulation and the pressure to deliver more resilient, sustainable operations, it is vital for manufacturers, suppliers, formulators and logistics leaders to use this rare opportunity to access every part of the industry ecosystem under one roof.

Described by Tim Doggett, CEO of the Chemical Business Association (CBA), as the "go-to event of its kind in the UK, and arguably even in Europe, for the complete chemical supply chain", CHEMUK brings delegates from across the UK and further afield for two days centred on creativity, collaboration and innovation. What really makes the event special is its community. It has a unique ability to bring together the whole chemical supply chain, combining a strong exhibition with a high-quality conference programme and keeping people at the heart of the experience.

Across its expanding show zones, CHEMUK presents over 600 specialist exhibitors representing raw materials, ingredients, intermediates, specialty chemicals, process technologies, engineering solutions, packaging, handling, distribution, waste management and regulatory compliance. This breadth is what sets the event apart: it is not just a marketplace for products, but a cross-section of the UK's chemical value chain. Whether you are sourcing critical inputs, improving production efficiency, reviewing safety solutions or exploring the latest in green chemistry, the event provides direct access to the partners and technologies shaping the sector's future.

For operations, supply chain and compliance professionals, CHEMUK offers clear and immediate value. The Chemicals Management and Process & Chemical Engineering zones provide practical insights into improving safety, reducing operational risk and meeting tightening regulatory requirements. Exhibitors demonstrate advancements in hazard mitigation, labelling, transport, storage, automation, data management, emissions monitoring and waste-to-resource processes. Upstream and downstream players benefit equally. Raw material suppliers connect with formulators and brand owners through the Chemicals Supply Show and the Formulated Product Manufacture Show, enabling efficient sourcing, faster product development and stronger supplier-customer integration. For R&D teams and analytical

specialists, the Chemicals Laboratory Show brings together the latest laboratory technologies, instrumentation, testing services and analytical solutions.

Alongside the exhibition, the CHEMUK 2026 conference programme brings together expert speakers from across industry, government, academia and the wider chemicals ecosystem to address the most pressing strategic and technical issues facing the sector. Spanning multiple theatres across the two days, sessions will cover themes such as regulatory change, chemicals management, decarbonisation, digitalisation, circularity and innovation in formulated products. Case studies, panel discussions and technical talks will help attendees benchmark strategies, learn from peers and take away practical ideas they can apply in their own organisations.

CHEMUK 2026 will take place in Hall 5 at the NEC and is free to attend for industry professionals. Running from 09:30–17:00 on 20 May and 09:30–16:00 on 21 May, the format is designed to maximise networking while allowing delegates to combine supplier meetings with conference sessions and feature areas.

In a sector where efficiency, safety and innovation are inseparable, CHEMUK has become a cornerstone event and a catalyst for collaboration. For leaders across the full supply chain, it is where the industry unites to solve today's challenges and shape tomorrow's opportunities.



Pepperl+Fuchs Ident-Ex® 02: Advanced Scanning for Hazardous Areas

As numerous industrial sectors undergo digitalization, there is a growing trend toward automation, traceability, and paperless processes and workflows. Scanners are an important component of ERP, MES, and MMS systems and increasingly rely on 2D image processing such as QR codes, DataMatrix, or optical character recognition (OCR). This is where Pepperl+Fuchs comes in with the new Ident-Ex® 02 wireless reader and scanner, which is certified for use in Zone 1/21, Zone 2/22, and Class I, II.

Comprehensive scanner solution with innovative form factor To meet a wide range of scanning requirements, the Ident-Ex® 02 is available in four different variants: Pocket, Grip, Grip+, and Smart Grip. The basis for all configurations is the Pocket version, a small, handy pocket-sized scanner – the lightest and smallest wireless barcode scanner for Zone 1/21 on the market. The Grip and Grip+ versions complement the compact Pocket scanner with an ergonomic pistol grip with magnetic and optional in-zone charging function.

With a matching cradle, the Grip variant can be combined and upgraded with the Smart-Ex® 03 and Smart-Ex® 203 smartphones to form a Smart Grip – for seamless and direct feedback during data collection and transmission to the smartphone display as part of the scanner. Since Bluetooth Classic and 5.4 LE are supported, this also applies to any other device that aligns with these standards. This interoperability makes the Ident-Ex® 02 a highly flexible and powerful scanner. The 1430 mAh lithium-ion battery of the scanning unit offers sufficient capacity for a full shift and does not require an external power source. This, combined with its weight advantage, makes the Ident-Ex® 02 more flexible and easier to use.

All configurations can be easily charged via USB-C, the HMI variant Grip+ can even be charged within Zone 1/21 via the S3/S4 interface of the VisuNet GXP or within Zone 2/22 via the VisuNet FLX system. For added convenience, the Grip, Grip+, and Smart Grip variants can be charged using a magnetic charging cable. This saves additional costs, as no additional charging dock is required.

The Ident-Ex® 02 enables scans at distances of up to 10 meters (flex range version) or up to 25 meters (long range version) and supports all common 1D and 2D symbologies such as EAN-13, UPC-A, ISBN, Industrial 25, QR code, DataMatrix, and Maxicode.

Easily customizable

Developed and manufactured in Germany, the Ident-Ex® 02 offers customers the flexibility to respond to their needs and device portfolio. The grips and cradles can be exchanged or customized as desired without the need for additional service. Accessories available for the Ident-Ex® 02 Grip and Smart Grip include a leather holster, a universal docking station, and a magnetic charging cable.

With its ergonomic design and high accuracy, the Ident-Ex® 02 is ideal for intensive scanning tasks. In addition, the Ident-Ex® 02 has an integrated hardware aimer and can also read damaged or poorly printed barcodes. It also delivers excellent results in low-light conditions. This makes it suitable for even the most demanding scanning tasks.

Comprehensive solutions for a wide range of application scenarios Pepperl+Fuchs offers a comprehensive portfolio of solutions to meet a wide range of Auto-ID application scenarios in the industrial sector. From simple scanning tasks that can be implemented with its own eBARCODE-ML app as a software solution, to a Scanner SnapOn module that can be attached to the Smart-Ex® 203, to the most demanding requirements in hazardous areas with the new Ident-Ex® 02: Pepperl+Fuchs solutions cover every conceivable scenario and can be customized to fit any application.



Rethinking Device Lifecycles in Hazardous Areas

In hazardous areas, mobile devices are subject to strict certification requirements. This directly affects how equipment is selected and replaced. In practice, there are two common approaches. The first is fully certified Ex tablets. These are intrinsically safe devices where the certification is built into the hardware itself. The second approach uses standard consumer tablets combined with a dedicated explosion-proof enclosure. Despite their differences, both approaches share the same limitation. The device and the explosion protection are effectively locked together.

When the hardware becomes outdated, underpowered, or unsupported, the entire solution must be replaced. For Ex tablets, this is because the certification is tied to that specific device. You cannot upgrade internal components without invalidating certification. For consumer tablets with Ex housings, the enclosure is designed for one specific model. Once that tablet is ready for an upgrade, the enclosure can no longer be reused. In both cases, a hardware refresh results in full replacement, including components that are still mechanically sound.

A More Sustainable Approach A more sustainable model separates the device from the explosion protection. Instead of treating them as a single unit, they become modular components. In this setup, the enclosure remains a long-term asset, while the tablet inside can be upgraded independently. This allows companies to follow standard IT lifecycles without replacing the certified housing each time. It also removes a common bottleneck. With traditional Ex devices, users often have to wait for new certified models to access updated technology. A modular approach allows immediate use of newer consumer hardware, without being dependent on certification cycles. The result is a system that is both more flexible and more aligned with modern expectations around sustainability and cost control.

A Universal Modular Solution The UniCase by Armadex is built around this modular principle. Instead of being tied to a single device, the enclosure is designed to work with multiple tablet models through an interchangeable inlay system. The outer housing remains unchanged, while the inlays are tailored to a specific device. Buttons, touchscreen, cameras, and microphones can be used as intended, without compromising usability. When upgrading to a new tablet, only the inlay and the device are replaced. The enclosure itself is reused. This approach decouples the lifecycle of the ATEX tablet enclosure from that of the device, while maintaining full operational functionality in the field.

Looking Ahead As industries place more emphasis on sustainability and efficiency, the way equipment is designed and managed becomes increasingly important.

A modular system allows companies to reduce waste by reusing durable components. It also avoids repeated investment in certified housings, which is the most expensive part of the solution. At the

same time, it ensures access to the latest technology. Devices can be upgraded when needed, without waiting for new certified variants or replacing the entire setup. In hazardous environments, where reliability and compliance are essential, this approach provides a more balanced model. It supports long-term use of costly certified equipment while enabling continuous technological improvement.

<https://armadex.com/unicase/>



Device-specific inlay design



Each UniCase uses four device-specific corner inlays, precisely engineered to match the tablet's geometry.

This configuration ensures stable positioning, vibration resistance, and full protection without compromising usability.

Physical buttons remain fully operable, exactly as intended by the manufacturer.



The Misuse Of Flameless Venting

How to be Aware of Factors That Reduce Flameless Venting Efficiency

When an ignition source meets a combustible dust cloud within an enclosed space, such as in a dust collector, silo or bucket elevator, a devastating explosion may occur.

Explosion vents are often installed on these vessels to open and safely relieve pressure and flames. When these applications are located indoors, "free venting" isn't possible and flameless venting devices may often be used instead. These devices include a flame arrester constructed of several layers of wire mesh to absorb the heat and keep flames from escaping.

How effectively a vent relieves pressure is referred to as its "venting efficiency," which helps system designers determine the proper size and quantity of vents that are required to safely protect the process. However, with flameless venting, a number of particles may clog the filter, which greatly reduces its venting efficiency.

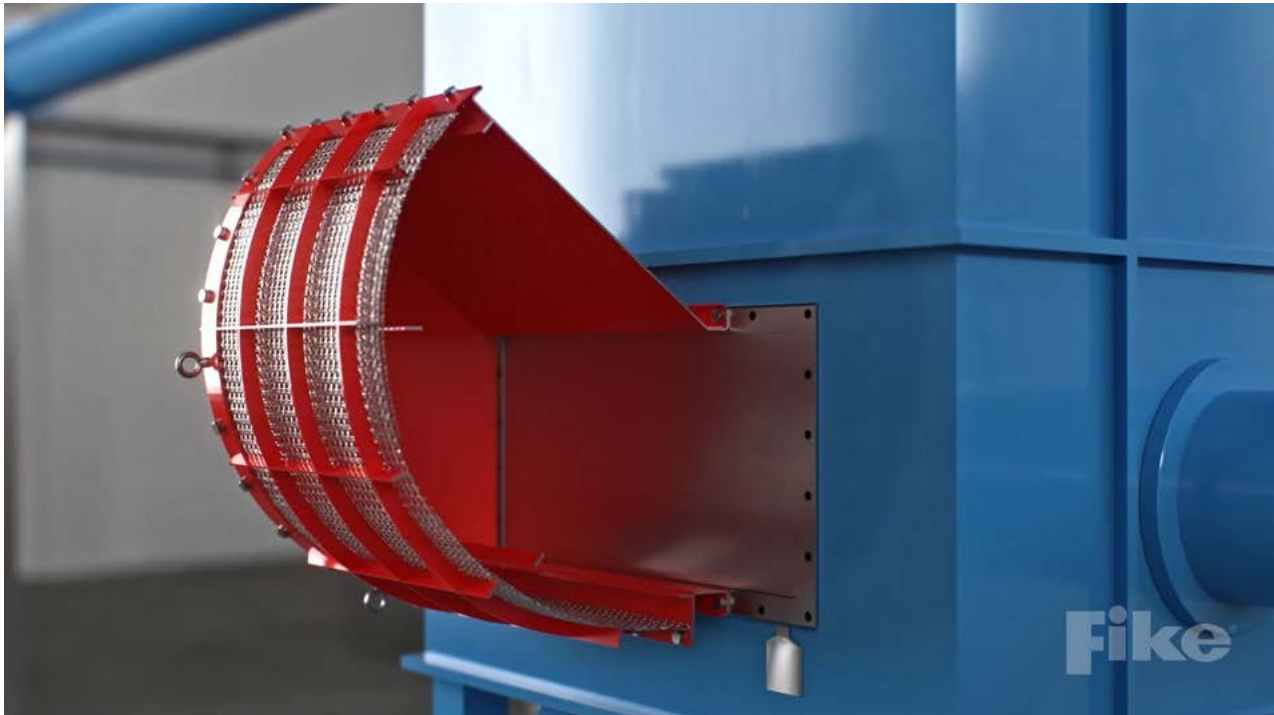
This is why product clogging and several other variables must be included in the design of a flameless venting system. If this efficiency rating isn't properly calculated for an application in which flameless vents are installed, they may not safely relieve the deflagration when called upon.

Essential Elements of Flameless Vent System Design

The performance of every flameless vent filter depends heavily on the unique characteristics of the burning dust cloud. Therefore, when designing a flameless venting system, an explosion protection provider should know the following about the application and its handled dust:

1. **PARTICLE SIZE:** Various particle sizes may clog the filter slower or faster.
2. **PARTICLE MORPHOLOGY:** Affects the rate of clogging as well as the size of aggregates that get blocked on the surface of the filter. For example, fibrous dusts may clog the filter in a different way versus melting dusts (such as sugar) or granular dusts.
3. **DUST CONCENTRATION:** 250g/m³ in a certain volume will challenge





a filter differently in comparison to 2000g/m³. In the second case, the filter may clog faster and it can even fail due to the increase in pressure.

4. VESSEL GEOMETRY & IGNITION: In a long vessel, where ignition may occur at the bottom and the flameless venting system is installed at the top, flame will push the maximum amount of dust from the entire volume through the filter.

5. VESSEL VOLUME: Each flameless venting size has a maximum process equipment volume where dust is dispersed and can be successfully quenched. Above that limit, flame quenching is not guaranteed due to the high thermal load.

Why is Efficiency Reduced in Flameless Venting Devices?

Flameless venting performance cannot be described by one efficiency number but rather must be disclosed through a complex model that considers all of the factors of the process and its handled dust

For example, there is a possibility that a flameless venting device of a certain size performs very well under 500g/m³ of cornstarch, showing an efficiency of 70 percent, but clogs very quickly under 500g/m³ of wood flour, showing an efficiency of just 40 percent or lower.

If multiple factors are ignored and severe clogging occurs, there is a chance of the device failing and the vessel rupturing.

Why It Matters

Purchasers of flameless venting systems must understand that

within these devices is a hidden, complex problem of fluid mechanics, including fluid- particle flow, the transferring heat and the releasing of pressure, all within milliseconds.

The application of such a device to mitigate an explosion requires more information than traditional venting.

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UK First: Element Achieves Nationally Recognized Testing Laboratory (NRTL) Status to Deliver Direct Access to the U.S. Market

Through its Skelmersdale lab, Element's new NRTL designation removes the need for multi-site testing and U.S. hand-offs, accelerating time-to-market for manufacturers targeting the U.S.

London, UK, March 12: Element, one of the world's leading providers of laboratory-based testing, inspection and certification services, today announced a major milestone in its global certification capability. Its Skelmersdale, UK, laboratory has been officially recognised by the United States government as a Nationally Recognized Testing Laboratory (NRTL) for Hazardous Locations. This recognition, a first for the UK, authorises Element Skelmersdale to conduct testing and issue NRTL certification for manufacturers seeking access to the U.S. market.

Representing a significant step forward for Element and its customers worldwide, this latest achievement strengthens the company's ability to support manufacturers of equipment used in explosive and hazardous environments with faster, more streamlined access to critical U.S. certifications.

With this designation, Element Skelmersdale becomes the first and only UK based NRTL authorised to issue U.S. certification for hazardous locations directly from within the UK. It is also the first and only UK based NRTL able to carry out evaluation, testing, and certification for hazardous locations in a single location, removing the multi site process that is typically required across the industry. As a result, manufacturers benefit from a dramatically simplified certification pathway and accelerated routes to market for hazardous location products.

Element's new NRTL status delivers clear and tangible benefits for customers. The laboratory now has full control of the certification process, enabling Element to issue NRTL certification independently without reliance on third party certification bodies in the United States. Certification can be issued directly from the UK, significantly reducing turnaround times by eliminating the need to transfer reports overseas for final approval. Greater efficiency and reduced dependency on external laboratories also support improved cost management for manufacturers.

Commenting on the achievement, Fabian Schober, SVP of Element's Connected Technology & Mobility (CT&M) business unit, said: "Achievements like this underline our long term commitment to investing in capabilities that deliver real value for our customers. This recognition reflects the dedication, expertise, and collaboration of teams across our business and within our Skelmersdale laboratory. I want to sincerely thank everyone who contributed."

Further details on the designation are available via the official announcement in the U.S. Federal Register [here](#).

About Element Materials Technology

Element is one of the world's leading providers of laboratory based testing services, supporting more than 50,000 customers operating in some of the world's most technical and highly regulated industries, where failure in use of products, materials, and technologies is not an option. Headquartered in London, UK, Element's 8,500+ scientists, engineers, and technologists work across a global network of more than 270 laboratories. The company supports customers from early R&D, through complex regulatory approvals, and into production, ensuring products are safe, sustainable, and achieve market access.

For more information about Element, please visit our website or connect with us on LinkedIn, X, Instagram, and YouTube.

About Element's Connected Technologies & Mobility Business Unit
Element Connected Technologies & Mobility, a business unit of Element Materials Technology, provides testing, inspection, and certification services for connected devices and mobility solutions. With over 40 specialized laboratories around the world, and designation as an officially recognized Bluetooth Qualification Test Facility (BQTF) in the US, we help manufacturers launch products that meet global standards for connectivity, safety, and performance. Our 1,000+ experts support a wide range of technologies, including consumer electronics, IoT, autonomous vehicles, and medical devices. By combining deep domain knowledge with Element's global capabilities, we accelerate time-to-market and ensure compliance across increasingly complex regulatory landscapes.

For more information, visit: element.com/connected-technologies.

From Diesel Engines to ATEX Innovation: An Interview with Steve Moorey F.E.P., PVL Ltd

In the world of industrial engineering, few careers span as many decades, continents, and technological revolutions as that of Steve Moorey, Owner and Managing Director of PVL Ltd. From his early days as a petrol pump attendant in West Sussex to troubleshooting heavy machinery across Africa, and later founding one of the UK's leading suppliers of pressure and control instrumentation, Steve's journey is as rich as it is instructive.

Today, through PVL Ltd, Steve is helping industries navigate one of their most critical challenges, safe and reliable operation in hazardous environments, through a comprehensive range of ATEX-certified pressure solutions.

We sat down with Steve to explore both his remarkable life story and the engineering thinking behind PVL's ATEX pressure product range.

Steve begins by reflecting on his early career. He explains that he started at the very bottom, and in his view, that is where the most valuable lessons are learned. After leaving school, he took a job as a petrol pump attendant and mechanic at a rural garage in Westhampnett. The work was entirely hands-on, and it quickly grounded him in the realities of mechanical systems. Shortly afterwards, he was apprenticed as a diesel and truck mechanic with J H Sparshatt and Sons. Alongside this, he attended Chichester College on day release and studied at Bognor Regis Technical College in the evenings. This combination of practical work and formal education helped build a strong technical foundation.

He recalls that engineering at the time was entirely tangible. Systems were mechanical, visible, and understandable in a very direct way. Fault finding required observation, logic, and experience. According to Steve, understanding how things fail is

just as important as knowing how they work.

His career soon took him far beyond the UK. In 1967, he moved to Zambia, an experience he describes as transformational. Working initially as a Kenworth truck mechanic, he found himself operating in challenging conditions where reliability was critical and resources were often limited. Over time, he became known as a specialist troubleshooter, called upon to diagnose and resolve complex mechanical issues.

During his time in Africa, he worked on an extraordinary range of equipment, including heavy earthmoving machinery, cranes, draglines, and diesel engines from leading manufacturers. One of his standout achievements was becoming the first engineer to strip and overhaul a Cummins engine in Central Africa. This kind of work demanded not only technical skill but also adaptability and determination.

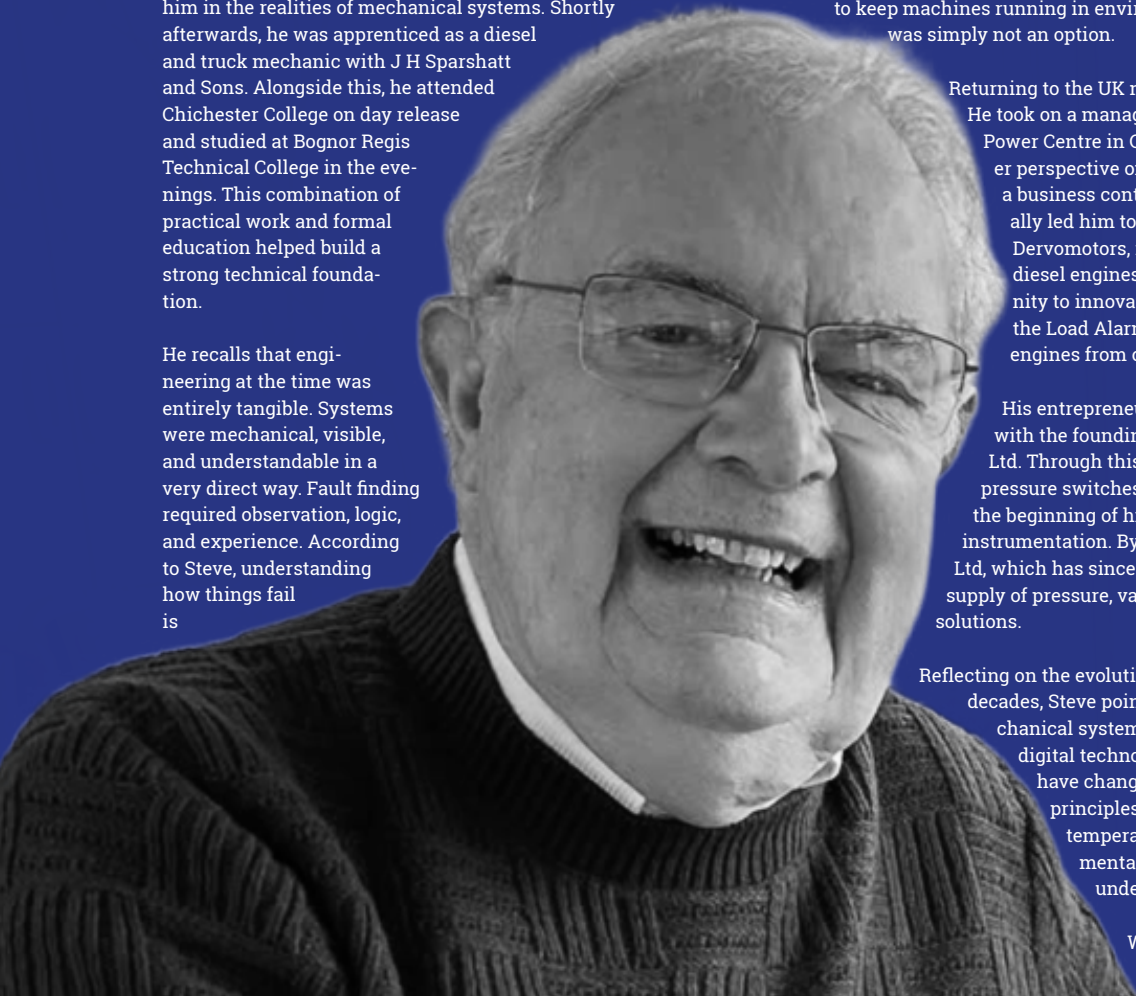
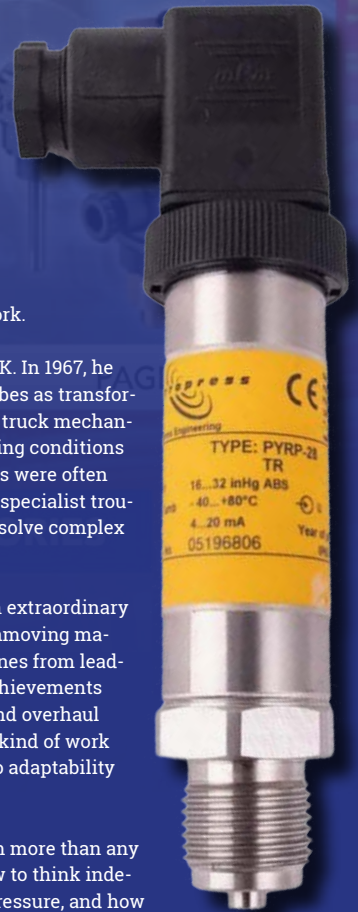
Steve explains that these years taught him more than any formal training ever could. He learned how to think independently, how to solve problems under pressure, and how to keep machines running in environments where failure was simply not an option.

Returning to the UK marked a transition in his career. He took on a managerial role at the Perkins Engines Power Centre in Crawley, which gave him a broader perspective on how engineering fits within a business context. This experience eventually led him to establish his own company, Dervomotors, in 1980. The business focused on diesel engines and also gave him the opportunity to innovate. It was here that he developed the Load Alarm, a device designed to protect engines from overload conditions.

His entrepreneurial journey continued in 1983 with the founding of Applications Engineering Ltd. Through this company, he introduced SUCO pressure switches to the UK market, marking the beginning of his involvement in pressure instrumentation. By 1993, he had established PVL Ltd, which has since become a respected name in the supply of pressure, vacuum, and level measurement solutions.

Reflecting on the evolution of engineering over the decades, Steve points to the shift from purely mechanical systems to increasingly electronic and digital technologies. While tools and systems have changed, he believes the underlying principles remain constant. Pressure, temperature, and flow are still the fundamental variables that engineers must understand and control.

What has changed significantly, however, is the emphasis on



safety, particularly in hazardous environments. This is where ATEX certification becomes essential. Steve explains that ATEX applies to industries where explosive atmospheres may be present, such as oil and gas, chemical processing, pharmaceuticals, and emerging sectors like hydrogen energy. In these environments, even a small spark can have catastrophic consequences, so every component must be designed to eliminate risk.

This is the context in which PVL's ATEX pressure range has been developed. The range is designed to provide accurate and reliable measurement while meeting strict safety standards required for operation in potentially explosive atmospheres. Steve emphasises that these products are not simply about compliance but about ensuring real-world reliability in critical applications.

The ATEX pressure range offered by PVL includes pressure switches, pressure transmitters, and vacuum sensing devices, all engineered to perform in demanding industrial conditions. These products are designed to operate in zones where explosive gases or dust may be present, providing both safety assurance and operational performance.

According to Steve, what distinguishes PVL's solutions is their engineering quality and durability. These are components that must perform consistently over long periods, often in harsh environments where vibration, temperature variation, and mechanical stress are common. Accuracy is essential, but so is robustness.

He explains that PVL works with established and proven technologies, often in collaboration with leading manufacturers, to ensure that each product meets the highest standards. The company also places strong emphasis on technical support, helping customers select the most appropriate solution for their specific application.

In practical terms, these ATEX pressure solutions are used across a wide range of industries. In oil and gas, they monitor pressure within pipelines and processing systems to ensure safe operation. In chemical plants, they help maintain control over reactions and storage processes. In hydrogen applications, they play a critical role in managing pressure within systems that are still evolving technologically. In pharmaceutical and food production environments, they contribute to maintaining controlled and safe operating conditions.

Looking to the future, Steve sees significant opportunities in the development of hydrogen as an energy source. He notes that while hydrogen offers enormous potential, it also introduces new challenges, particularly in terms of safety and pressure management. ATEX-certified equipment will be essential in supporting the growth of this sector.

At the same time, he acknowledges the broader trend towards electrification. In a personal reflection that highlights just how far technology has come, he mentions that he now rides a Zero FXE electric motorcycle. It is a far cry from the diesel engines that defined the early part of his career, yet it represents the same spirit of engineering progress.

Despite these changes, Steve remains convinced that the fundamentals of good engineering have not altered. Safety, reliability, and a deep understanding of how systems operate are as important today as they were when he first started.

When asked what advice he would offer to the next generation of engineers, his response is clear. He believes in the value of hands-on experience and encourages young engineers to understand systems in a practical sense, not just theoretically. Curiosity and a willingness to learn are essential, as is the ability to approach problems logically and persistently.

Beyond his professional achievements, Steve's life has been rich with memorable experiences. He recalls racing a sixteen foot jet boat powered by a Ford Thunderbird V8, an experience that combined his passion for engineering with a sense of adventure. Another moment that stands out for him is giving his slide rule to a young schoolboy in Zambia, a gesture that symbolised passing knowledge and opportunity to the next generation.

Today, Steve Moorey's journey reflects the broader evolution of engineering itself. From the era of mechanical systems and slide rules to the modern world of digital instrumentation and ATEX-certified safety solutions, his career has spanned some of the most significant changes in the industry.

Through PVL Ltd, he continues to apply decades of experience to contemporary challenges, helping industries operate safely and efficiently in some of the most demanding environments. As new technologies emerge and industries evolve, the need for reliable and robust pressure instrumentation remains constant.

Steve's story serves as a reminder that while technology may advance, the principles of engineering endure. It is this combination of experience, innovation, and practical understanding that continues to drive progress in the field today.

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Driving Trust in Industrial Maintenance: An Interview with Seth Ratner, CEO of East Hills Instruments

In today's industrial maintenance landscape, where digital dashboards, remote diagnostics, and automated workflows increasingly dominate operations, the human element can sometimes feel secondary. Yet for Seth Ratner, that human connection is not just relevant, it is essential. As CEO of East Hills Instruments, Ratner has taken a bold and unconventional approach to reconnecting with the engineers and technicians who rely on his company's equipment every day.

Rather than relying solely on digital outreach, Seth has quite literally taken his business on the road. In this interview, he explains how a 14-day RV tour across Texas evolved into a powerful blend of relationship building, real-world insight, and digital storytelling that is resonating strongly with industrial maintenance professionals.

Seth begins by reflecting on what sparked the idea. He explains that while digital communication has its place, something was missing. Engineers working in refineries, processing plants, and industrial facilities are operating in environments that cannot be fully understood through emails or video calls. He felt that to truly serve them, he needed to see their challenges first-hand.

"I wanted to get out there and experience the environments our customers work in," Ratner says. "You can't replicate the conditions of a refinery or a plant floor through a screen. You need to stand there, feel the heat, see the constraints, and understand the pressures they're under."

This thinking led to what has become a defining initiative for the company. Ratner set out on a 14-day journey across Texas in a fully equipped RV, visiting facilities, meeting engineers face-to-face, and documenting the experience along the way. What might initially sound like a throwback to traditional sales methods quickly revealed itself as something far more innovative.

The journey became the foundation of a YouTube series titled On Site and Off Grid. What started as a creative way to share a unique sales audience has since evolved into a growing online phenomenon. The series offers an unfiltered look into the daily realities of industrial operations, highlighting the people and processes that keep critical infrastructure running.

He notes that the response has exceeded expectations. Viewers are not limited to industry insiders. The show has attracted a broader audience curious about the unseen world of industrial maintenance. For engineers, however, the appeal runs deeper.

"There's a sense of recognition," he explains. "The people in these roles don't often get visibility. They're doing critical work in challenging environments, and this series shines a light on that."

For maintenance engineers, this visibility matters. Their work is often reactive, high-pressure, and conducted behind the scenes. By showcasing these environments, the series not only validates their role but also provides a platform for shared understanding across the industry.

What makes this approach particularly compelling is how it bridges two traditionally separate domains. On one side is boots-on-the-ground engagement, the kind that builds trust through direct



interaction. On the other is digital storytelling, which amplifies those interactions to a wider audience.

Seth believes this combination is where the real value lies. He points out that while many companies focus heavily on metrics such as impressions and clicks, those numbers do not always translate into meaningful relationships. By contrast, his approach creates a more authentic connection.

"We're not just reaching people, we're connecting with them," he says. "When someone watches the show and then reaches out, the conversation starts at a completely different level. There's already trust there."

This shift is particularly relevant for engineers responsible for maintenance and reliability. Decision-making in these roles is rarely based on marketing alone. It is grounded in performance, reliability, and trust in the supplier. By demonstrating a genuine understanding of real-world conditions, East Hills Instruments is positioning itself as a partner rather than just a vendor.

Of course, credibility in this space must be supported by robust technology. Seth is quick to emphasize that while the storytelling element is important, it is only effective because it is backed by high-performance equipment designed for demanding environments.

He highlights the company's Magnum Pro Calibration Pumps, which have developed a strong reputation for durability. Designed to operate in harsh conditions, these pumps are built to withstand the realities of industrial use where precision and reliability are non-negotiable. Alongside this, the Winchester Engineering auto-ranging digital gauge incorporates patented technology that delivers both accuracy and ease of use.

For maintenance engineers, these attributes are critical. Calibration equipment must perform consistently under pressure, often in environments where downtime is costly and safety is paramount. Ratner explains that seeing these tools in action during the road tour reinforced their value.

"When you bring the equipment directly into the field and use it alongside the customer, it tells you everything you need to know," he says. "You see how it performs, how it holds up, and how it fits into their workflow."

This hands-on validation is something that cannot be replicated in a controlled demonstration setting. It provides immediate feedback and allows for a deeper understanding of how products can be refined to better meet the needs of engineers on the ground.

The success of the initiative has also revealed an important insight about the evolving nature of industrial marketing. Rather than choosing between traditional relationship-building and digital engagement, the most effective strategies may lie in combining the two.

He believes that the future of industrial communication will depend on this balance. Engineers are increasingly connected through digital platforms, yet the complexity of their work still demands a personal touch. By integrating both approaches, companies can create a more holistic and effective engagement model.

"There's still immense value in showing up," he says. "Shaking hands, having real conversations, and under-

standing the environment. But when you combine that with digital storytelling, you extend that value far beyond a single interaction."

For maintenance professionals, this approach offers tangible benefits. It leads to better-informed suppliers, more relevant solutions, and stronger partnerships. It also fosters a sense of community within an industry that often operates in isolation.

As the conversation draws to a close, Seth reflects on the broader message behind the initiative. Beyond the RV, the road trips, and the growing online audience, the core principle remains simple.

"At the end of the day, business is still about people," he says. "Technology is important, but it's the relationships that drive everything forward."

For engineers responsible for maintaining the systems that underpin modern industry, this message resonates strongly. In a world increasingly shaped by automation and digitalisation, the human element remains a critical factor in achieving reliability, efficiency, and long-term success.

Through a combination of real-world engagement and authentic storytelling, East Hills Instruments is demonstrating that innovation in industrial maintenance is not just about new technologies. It is also about rediscovering the value of connection, understanding, and trust.

And in doing so, Seth Ratner is not just driving across Texas. He is helping to redefine how the industry connects, communicates, and evolves.





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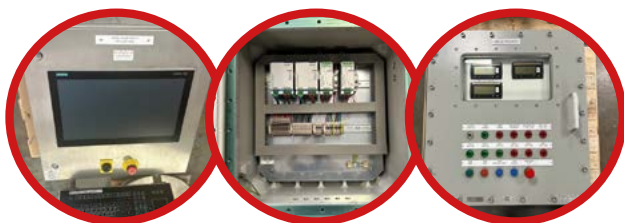




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