ISSUE 55

KNOW + HOW

AGGRESSIVE ENVIRONMENTS

In harsh operating conditions, equipment is pushed harder, wears faster, and small faults can quickly lead to disruption. From dust and moisture to vibration, heat and chemical exposure, aggressive environments test every component in your system.

In this issue, we explore how manufacturers are tackling these challenges head-on, with engineered solutions, smarter maintenance strategies and real-world examples that show how reliability, safety and uptime can still be achieved when conditions are at their toughest.

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MORE PROGRESS

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WELCOME

This edition takes us from the highly topical issue of water supply infrastructure to energy-from-waste plants, busy shipping ports and aerospace manufacturing. Markedly different environments, but all with one thing in common: when critical equipment is pushed hard and problems stay hidden for too long, the margin for error disappears quickly.

That reality comes through clearly in ERIKS In Action, where the consequences of failure are immediate and the response must be fast. We look at how ERIKS supported a major water supply works when ageing pumps and motors began to threaten regional supply, requiring urgent intervention to stabilise the site and restore confidence in the system. We also follow a project inside a sealed radiation-curing chamber at an aviation cable plant, where key drive components had to be rebuilt in conditions so aggressive that few suppliers were prepared to take on the work.

Across the rest of the issue, attention turns to other operations where continuous running leaves little room for failure. We explore how SKF's Three-Barrier Solution is helping sites exposed to dust, moisture and heavy washdowns. We also look at the challenge of keeping container cranes in motion, where faults that escape routine testing can bring port operations to a halt. That same pressure to keep systems running is felt at a waste-to-energy facility, where rapid response repairs and carefully planned shutdown work are helping to maintain continuous power generation.

A different kind of risk is the focus of Making Industry Work Better, where hose management comes under the spotlight. Often treated as fit and forget items, hoses can become serious safety and compliance concerns when left unchecked.

For this issue's Debate, we step back to consider how industrial purchasing itself is changing. With Amazon increasingly positioning itself as an omni-purpose business procurement platform, we ask where online convenience fits into industrial supply, and whether convenience and speed can ever replace specialist support when it comes to keeping critical operations running.

As always, we welcome your feedback. If you would like to share your thoughts on any of the topics covered, please feel free to join the conversation via our social channels using the hashtag #ERIKSUK or get in touch directly. We hope you enjoy this edition of Know+How.

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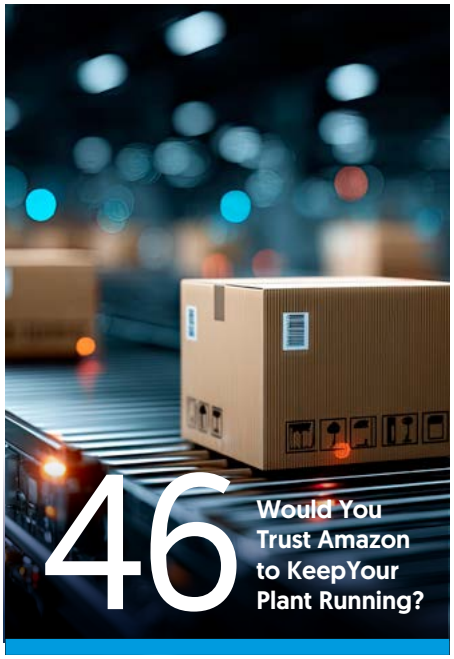


RUBIX COMPLETES ACQUISITION OF ERIKS UK & IRELAND

As announced in November 2025 the acquisition of ERIKS UK & Ireland has been completed bringing together two multi-specialist industrial distributors offering a broad range of products and services, while extending the Rubix offer in flow technology.

Commenting on the acquisition, Vince McGurk, CEO Rubix UK, Ireland and Iceland said: "I'm delighted to welcome my new colleagues to Rubix and look forward to working with them as we take an improved and expanded offer to our customers.

"This is a very positive move for the manufacturing sector across the UK and Ireland. In extending our market leading position, we are better placed than ever to help customers solve the problems, meet the challenges and take the opportunities in front of them."

As a result of the transaction, Rubix UK, Ireland & Iceland becomes the Group's second largest regional market with combined annual revenues in excess of €850 million.

MANUFACTURING OUTPUT **RISES FOR FIRST TIME IN A YEAR**, BUT DEMAND REMAINS WEAK

UK manufacturing output increased in October for the first time in 12 months, according to the latest S&P Global UK Manufacturing PMI, which rose to a 12-month high of 49.7, up from 46.2 in September.

The improvement was driven in part by the phased restart of production at Jaguar Land Rover, which helped lift intermediate goods output and ease supply chain disruptions linked to the recent cyber-attack. However, underlying demand remains subdued, with total new orders and export orders contracting for the thirteenth and forty-fifth consecutive months respectively.

Manufacturers reported ongoing weakness in overseas markets, alongside tariff uncertainty and cautious domestic investment. Employment fell for the twelfth month running, though at a slower pace, with firms citing cost pressures and skills shortages.

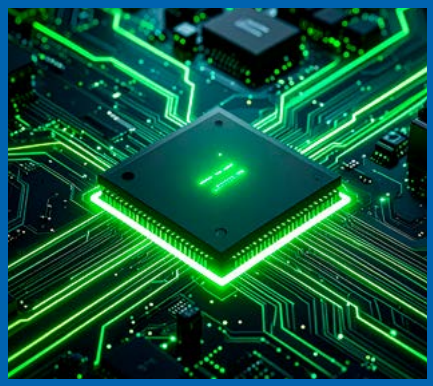
Input cost inflation eased to its weakest level this year, but supply chains remain stretched. Business optimism improved, though sentiment remains below long-run trends.

NVIDIA'S RECORD VALUATION RAISES QUESTIONS OVER PACE OF AI MARKET GROWTH

Nvidia has become the world's first company to surpass a $5tn market valuation, accelerating past other major technology firms amid surging demand for AI computing hardware.

The company's rapid expansion reflects widespread investment in large-scale data centres and AI model development, supported by partnerships with firms including OpenAI and Oracle. Nvidia's value now exceeds the GDP of every nation except the US and China, according to World Bank data. However, financial institutions including the Bank of England and the IMF have warned that valuations in the AI sector may be rising faster than underlying commercial returns.

The company also remains exposed to geopolitical uncertainty: China is its largest market for advanced chips and export rules continue to shift. Despite questions about sustainability, analysts suggest strong demand for AI infrastructure means investor confidence is likely to remain high in the near term.



OVERCONFIDENCE LEAVES SUPPLY CHAINS EXPOSED TO CYBER THREATS, REPORT FINDS

Manufacturers may be significantly overestimating the cyber resilience of their supply chains, according to new research from security firm NCC Group.

While 94% of surveyed organisations say they are confident in their ability to respond to a supplier-based cyberattack, one-third are not routinely assessing supplier risk or monitoring security controls.

Meanwhile, 92% trust that suppliers follow best practice without requiring evidence. The report warns that such confidence may be misplaced, particularly as recent high-profile attacks in retail, automotive and food sectors have shown how a single supplier failure can halt operations for days or even weeks.

UK respondents were among the most concerned globally, with 67% expressing uncertainty over their level of supplier oversight. New regulatory requirements – including the UK's Cyber Security Resilience Bill and the EU's NIS2 Directive – are expected to tighten compliance, but NCC Group says proactive collaboration and shared standards will be essential to improving resilience.

WEST MIDLANDS CONSORTIUM LAUNCHES £12.5 MILLION SME SUPPORT PROGRAMME

A new £12.5m programme has been launched to help manufacturing SMEs in the West Midlands diversify into high-growth markets and strengthen their supply chain resilience.

Led by C&W Business Solutions as part of the West Midlands Combined Authority's Investment Zone initiative, the Supply Smarter West Midlands Consortium brings together the Manufacturing Technology Centre, WMG at the University of Warwick, and regional universities.

The scheme will provide eligible businesses with capability audits, technical guidance, leadership training and access to R&D grants of up to £200,000. The programme focuses on six strategic growth areas: aerospace, electric vehicles and batteries, sustainable construction, med-tech and health-tech, smart energy systems and digital manufacturing.

The initiative comes as many traditional suppliers face uncertainty following production disruptions in the automotive sector. Organisers say the aim is to help SMEs secure new opportunities, build higher-value capabilities and support long-term manufacturing competitiveness.

SMOOTHER SANDING. FASTER FINISHES. MEET THE 3M™ CUBITRON™ 2

When it comes to paint preparation, the difference between a good finish and a flawless one often comes down to the sanding process.

That's why ERIKS is excited to bring you the latest innovations from 3M™ Cubitron™ 2 – a game-changing solution that makes random orbital sanding faster, cleaner, and more consistent, while keeping operators safer and more productive.

At the heart of this transformation is 3M's Precision Shaped Grain technology, engineered to cut through surfaces more efficiently while lasting significantly longer than conventional abrasives. Whether you're prepping for primer or refining a gel-coat before that final coat of paint, Cubitron™ 2 helps you skip steps, reduce rework, and save valuable time on the shop floor.

And now, with the introduction of the 3M Xtract™ Cubitron™ 2 range, you have access to grades from 60+ to 1000+ – covering every stage of the process with just one powerful product line.

These discs are built not only for performance, but for better health and safety too. Less vibration, less dust, and longer disc life mean fewer changeovers and a cleaner working environment.

MORE LIGHT. MORE CONTROL. MORE RESPONSIBILITY.

Ledlenser's fourth-generation P-Series handheld torches - re-engineered for professionals who demand performance without compromise.

For over 25 years, the P-Series has set the benchmark for portable lighting. Now fully redesigned, the latest range delivers more light, smarter control and a stronger focus on sustainability. Built for industrial maintenance, construction sites and outdoor operations, each torch is engineered to perform where reliability matters most.

Ledlenser's Advanced Focus System enables seamless switching between flood and spot beams, while the new Mode Select Ring – featured on models including the P7R, P18R and P21R – allows instant access to lighting modes and lock functions, even when wearing gloves.

USB-C charging, extended runtimes and rugged aluminium housings ensure dependable use in demanding conditions.

Sustainability is built in, with housings made from at least 75% recycled aluminium and fully recyclable packaging. Brighter, tougher and more responsible – the new P-Series is lighting engineered for the real world.

GREASING MADE **SIMPLE**

If you've ever battled with stubborn hand pumps or bulky pneumatic grease kits, you'll know that lubrication can be one of the messiest and most frustrating jobs in maintenance.

But not anymore. The new Lutz LubeDrive, now available through ERIKS, is a cordless drill-powered grease and oil pump that's set to take the hassle out of centralised lubrication refills.

Built with portability and ease-of-use in mind, the LubeDrive transforms any standard 18V cordless drill into a powerful, high-displacement lubrication pump. No hoses to uncoil. No compressors to drag around. Just fast, clean, and controllable grease delivery, wherever you need it.

Designed for technicians, maintenance engineers and field service teams, LubeDrive takes the friction out of routine lubrication.

It's ideal for workshops and mobile teams alike, delivering the reach and flexibility to grease machines in situ – helping reduce downtime and boost service speed.

With precision control over grease flow, you can avoid overfilling, reduce waste, and extend equipment life – all while cutting the time and effort needed to get the job done.

And because it runs off tools you already own, the LubeDrive keeps your equipment list lean and your total cost of ownership low.

OKS 400 MoS_2 HIGH-PERFORMANCE GREASE

Engineered to protect critical components under extreme loads and the toughest assembly conditions.

Designed for highly stressed lubrication points, OKS 400 outperforms conventional greases. Its unique dual lubrication effect, powered by molybdenum disulphide (MoS_2), forms a super-thin, ultra-stable sliding film on metal surfaces, drastically reducing friction and preventing direct metal-to-metal contact - even under extreme pressure.

Perfect for boundary and mixed friction conditions, OKS 400 ensures smooth, controlled assembly in demanding applications. From mounting wind turbine towers and nacelles to tightening multi-ton bolts and cones, it keeps processes reliable, even in challenging site conditions.

The result? Longer component life, reduced wear, and fewer unplanned downtimes. Extended relubrication intervals and lower maintenance requirements deliver both performance and cost efficiency. Proven, robust, and dependable in the field, OKS 400 is high-performance lubrication engineered for heavy-duty applications where failure is not an option.

ENGINEERED FOR EXTREMES: REBUILDING THE BEATING HEART OF AN AVIATION CABLE PLANT

Mahesh Patel
Engineering Manager, Rotating Equipment
ERIKS UK & Ireland

When a leading global connectivity manufacturer spotted cracks spreading across the aluminium capstan drums at the heart of its aviation cable production line, it was more than an ageing-equipment issue. These drums had spent over twenty years working inside a sealed radiation-curing chamber, an environment so aggressive that most suppliers declined even to quote for replacements.

> Materials science, precision fabrication, and systems integration.

Yet without them, production would eventually stop. The challenge demanded engineering capability that could stretch across materials science, precision fabrication, and systems integration. ERIKS stepped into that space.

Extreme Manufacturing, Zero Margin for Error

The Swindon plant produces high-specification data cables for the aerospace sector – components designed to perform flawlessly for the entire lifespan of an aircraft. As part of the curing process, cable is threaded through a sequence of large aluminium drums while exposed to radiation, allowing the protective coating to harden instantly.

Two decades in this sealed, corrosive, high-energy environment had taken their toll. Stress fractures began to form, threatening both the stability of production and the quality of the end product. Replacing the drums demanded far more than machining identical parts. Every surface, weld, and interface had to withstand continuous radiation exposure while holding the tight tolerances aerospace manufacturing relies upon.

A Brief Turns into a Bespoke Engineering Mission

ERIKS' involvement began modestly, with a request to assess gearbox overhaul requirements. But when the customer struggled to find a partner willing to take responsibility for the larger capstan replacement, the scope shifted dramatically.

Taking on the project required stepping beyond catalogue components and into a full engineering partnership. The first challenge was sourcing specialist aluminium fabricators capable of welding large assemblies without distortion – a notoriously difficult task given aluminium's reactivity to heat.

At the same time, ERIKS analysed how materials would behave under sustained radiation, reviewed ageing OEM drawings, and incorporated improvements based on failure patterns observed over the equipment's twenty-year service life.

Once fabricated, each drum then had to undergo dynamic balancing to extremely fine tolerances. Even minor imbalance at operating speed could induce vibration, accelerate wear, or alter cable geometry. Precision was non-negotiable.

> Improvements based on failure patterns observed

Rebuilding More Than the Drums

As confidence developed, the project evolved into a broader restoration of the entire drive system. Incremental repairs carried out over the years had kept production running, but drifted the equipment away from its original design intent. ERIKS' role became not just to replace failing components but to re-establish a coherent, fully optimised system.

The upgraded installation now includes three-way bevel gearboxes acting as speed increasers, high-performance chain couplings, torque limiters, stainless-steel shafts and locking elements – each selected for long-term durability inside a corrosive, sealed environment.

Where possible, improvements were embedded to increase service life and reduce future failure risk.

By returning the system to its true design envelope, while strengthening it with modern engineering insight, ERIKS ensured the production line would operate with renewed stability and extended capability.

> A showcase of multidisciplinary engineering.

Partnership Through Problem-Solving

What began as a single-component enquiry ultimately became a showcase of multidisciplinary engineering. ERIKS coordinated materials testing, supplier engagement, application engineering, and project oversight to deliver a complete solution for an unusually demanding environment.

The outcome is more than a set of newly fabricated drums. It is a fully restored and future-proofed production system, rebuilt with the precision required for aerospace-grade output. It is also a stronger technical partnership, built on the delivery of solutions where standard suppliers could not engage.

With installation due for completion later this year, the plant will return to full operational performance – engineered for extremes once again, and ready to support the next generation of aircraft.

PRIORITY ONE: THE REPAIRS THAT KEPT WATER FLOWING

Dean Lindsay
Area Sales Manager, Engineering Services
ERIKS

When a high-lift pump fails at a major Water Supply Works, the consequences aren't abstract—they are immediate, far-reaching, and felt in every household and industrial site the station serves.

> "ERIKS carried out an in-depth survey."

In the South of England, one such risk grew quietly for years, hidden behind ageing motors, moisture-laden galleries, and stretched maintenance teams. What it needed wasn't luck – it needed intervention. And not just any intervention, but Priority One repairs carried out at pace and with absolute technical certainty.

This is the story of how ERIKS helped keep drinking water flowing to safeguard supply to a major refinery, and restored stability to a system operating closer to the edge than anyone realised.

When Time Catches Up With Critical Assets

Back in 2022, ERIKS carried out an in-depth survey of the site's high-lift pumps – vast pieces of equipment responsible for pushing water across the region's supply network.

The findings were unambiguous. Several slip-ring motors were decades old, maintenance had largely been reactive, and the environmental conditions in the open-sided pump gallery meant moisture ingress was not just possible but inevitable. The report made one recommendation clear: treat these pumps as high priority.

But in an industry where maintenance teams are stretched thin and capital budgets are always under pressure, it is all too easy to focus on what seems manageable rather than what is essential. Lower-risk pumps were repaired first. And then the inevitable happened - the very pump flagged as critical failed.

Suddenly the consequences were no longer hypothetical. Five pumps feeding the region's drinking water, and five more supplying a refinery with volatile, fluctuating demand, were now operating without the safety margin that keeps a network resilient.

If multiple pumps failed at once, it wouldn't just be inconvenient – it could stop a refinery, disrupt household supply and seriously damage public trust.

Maintenance Strategy Stretched to Breaking Point

Years of reactive maintenance had taken their toll. Many of the pumps had run continuously for decades. The isolation valves – vital for safely removing pumps – hadn't been operated in so long that several had seized completely. One pump had even been out of action for more than twenty years due to an over-trimmed impeller that left it dramatically under-performing.

Any hope of phased refurbishment vanished. Every repair now carried P1 status, meaning work had to begin immediately. No waiting for quotes. No convenient scheduling windows. Remove, repair, reinstall – fast.

This is precisely the environment where ERIKS' engineering teams excel.

Rebuilding Reliance, Not Just Equipment

From the moment each asset arrived at the ERIKS Workshop, the process followed a singular objective: return the pump and motor to as close to original specification as possible – reliably, safely, and quickly.

Slip-ring motors were fully stripped, electrically tested, and mechanically restored. Rings were skimmed and brush gear renewed to ensure clean, stable current transfer.

Insulation resistance readings – low on several moisture-affected motors – were corrected through controlled drying and overhaul.

The pumps themselves underwent a similarly rigorous programme. After complete disassembly, casings were shot-blasted, restored, and coated with Belzona to combat erosion. Impellers were inspected for wear and balanced to tight tolerances, an essential step for reducing vibration and extending bearing life.

New mechanical seals, sleeves, and wear rings were fitted throughout. Once rebuilt, every unit was tested under load on ERIKS' dedicated pump test rig to verify flow, pressure and mechanical integrity before returning to site.

Despite the complexity, turnaround times were consistently met. No unplanned outages. No sudden supply gaps. Just a steadily strengthening system.

> “From crisis-driven firefighting to a position of renewed reliability.”

Restoring Confidence, Not Just Capacity

With all five drinking water supply pumps and two of the refinery units now fully overhauled – and more work planned – the site has shifted from crisis-driven firefighting to a position of renewed reliability.

The transformation wasn't simply about fixing what was broken. It was about rebuilding the margin of safety that entire communities and critical industries depend on.

Thirsty for more?

Scan or click the QR code to explore more water solutions and services from ERIKS.

NEW ABERDEEN GEARBOX CELL CUTS WIND TURBINE DOWNTIME

Peter Mitchell
Renewables Director
ERIKS

Downtime has long been one of the most stubborn challenges facing onshore wind operators. When yaw gearboxes fail, turbines can be left idle for months while replacement units are sourced - a delay that can translate into hundreds of thousands of pounds in lost generation revenue.

ERIKS has addressed this issue with the launch of a dedicated Yaw Gearbox Cell at its Centre of Excellence for Renewables in Aberdeen, designed to return turbines to service in hours rather than months.

Developed in collaboration with ERIKS' European Centre of Excellence in Pensnett and refined alongside leading UK wind operators, the new cell enables yaw gearboxes to be received, inspected and refurbished in as little as 16 hours. By contrast, lead times for new replacement units can stretch to nine months, leaving operators exposed to prolonged outages and significant revenue loss.

> "Downtime reduced from months to hours."

At the heart of the initiative is a well-documented failure mode affecting yaw gearboxes used on widely deployed 2.3 MW onshore turbines. Each turbine contains eight yaw gearboxes, responsible for aligning the nacelle with changing wind direction.

Failures in the fourth-stage carrier were found to be causing premature breakdowns under normal operating loads - a problem compounded by limited OEM spare-parts availability.

Rather than treating the issue as a straightforward repair challenge, ERIKS adopted a more forensic, engineering-led approach. Critical components were reverse-engineered using 3D scanning and full metallurgical analysis, allowing parts to be upgraded and recast to a higher material specification.

Improved bearings, advanced polymer seals and increased load-handling capacity have resulted in a design that not only restores performance, but improves on the original.

The Aberdeen facility has been purpose-built to support rapid turnaround and repeatable quality. Clean and dirty zones, specialist craneage, custom tooling and full test rigs allow refurbished units to be processed efficiently, while on-site stockholding of replacement components eliminates delays between inspection and rebuild.

In total, ERIKS has invested £500,000 in the yaw gearbox cell, with more than £750,000 invested in the Aberdeen site over the past 12 months.

The service also delivers clear sustainability benefits. By replacing just 16 kg of material in a 250 kg gearbox, more than 90 per cent of the original unit is reused, diverting over 230 kg from landfill with each refurbishment. For operators under increasing pressure to demonstrate circular-economy practices, the approach offers a practical way to reduce waste without compromising reliability.

> "A complete production cell."

Each refurbished gearbox is supplied with a laser-etched QR code linked to ERIKS' Smart Asset Management (SAM) system, giving operators instant access to inspection reports, material certificates and full repair histories. The result is not only faster return to service, but improved traceability and asset governance across the turbine lifecycle.

> "Life extension, not replacement."

The yaw gearbox cell forms part of ERIKS' broader Lifetime Extension and Through-Life Management offering, supporting wind farm owners looking to safely extend turbine operating life through a combination of engineering insight, physical inspection and data-led maintenance strategies.

For a sector focused on resilience, sustainability and long-term performance, the Aberdeen yaw gearbox cell represents a shift away from long replacement cycles - and towards faster, smarter life-extension solutions built around the realities of operating wind assets in the field.

Take a look at how ERIKS are shaping a cleaner, greener future.

PLUG, PLAY, PERFORM:
A SMARTER WAY TO UPGRADE CLARIFIER DRIVES

Steve Parry
Application Engineering Manager, Rotating Equipment
ERIKS

In wastewater treatment, some of the most critical processes depend on systems that move at an almost glacial pace. Clarifier tanks, for example, rely on ultra-slow, continuous rotation – often just one revolution every 90 minutes – to keep flow steady while heavier solids settle out. When that motion stops, the whole process is at risk.

For one northern wastewater company, ageing clarifier drive systems were becoming a growing concern. Many had been in service for more than 30 years, built up from multiple components bolted together over time. What once worked reliably was now a patchwork of motors, torque limiters, belts, chains and multi-stage gearboxes – each one another potential failure point.

> "A process that cannot simply be paused."

Too many parts, too much risk

The problems were familiar. Water ingress caused bearing failures. Belts and chains stretched or snapped. Couplings drifted out of alignment. Gearboxes ran inefficiently, generating heat and wear. Every failure meant downtime, reactive maintenance and disruption to a process that cannot simply be paused.

Worse still, there was little standardisation across the site. Each clarifier had its own bespoke arrangement, with unique mountings and components.

Spare parts couldn't be shared, fault-finding took longer than it should, and maintenance teams were constantly firefighting rather than planning ahead.

The utility needed a better answer – one that reduced complexity, improved reliability and could be rolled out consistently across multiple tanks and sites.

Simplifying the drivetrain

Working closely with the customer, ERIKS set out to rethink the clarifier drive from first principles. The result was a fully integrated planetary gearmotor system designed specifically for slow-speed, high-torque applications.

Planetary gearboxes are compact by nature, spreading load across multiple contact points to reduce wear and improve efficiency. In this case, the gearbox and motor were directly coupled into a single unit, removing the need for belts, chains, torque limiters or secondary gear stages altogether.

Despite being compact – roughly the size of a kettle – the unit delivers the smooth, controlled torque needed to rotate large clarifier arms reliably, hour after hour.

Control, protection and flexibility built in

To add another layer of resilience, each gearmotor was paired with a Variable Speed Drive (VSD). This allows for controlled acceleration and deceleration, protecting the mechanical system from shock loads while providing torque limiting in the event of blockages or abnormal conditions.

> The unit delivers the smooth, controlled torque.

The VSD also gives operators the flexibility to fine-tune rotation speed as process conditions change – a valuable advantage when dealing with variable flows and loads. It's a small addition that delivers big gains in control, protection and future-proofing.

A scalable, 'plug-and-play' approach

One of the standout features of the solution is its scalability. ERIKS designed a universal mounting and adaptor plate that allows the same standardised drive system to be fitted across different clarifier designs and tank sizes.

For smaller tanks with lower torque requirements, fewer units can be used. Larger tanks can be scaled up accordingly. The principle remains the same, wherever it's installed.

This standardisation brings real operational benefits. Spare parts are simplified. Maintenance teams become familiar with one system instead of many. Response times improve, and inventory costs come down.

> ERIKS delivered more than a component upgrade.

Minimal disruption, maximum confidence

Installation was designed to be as straightforward as the system itself. In most cases, the new drive can be installed within a day, either by ERIKS engineers or the customer's own teams.

That means minimal downtime and no prolonged shutdowns.

For the wastewater treatment site in in the North of England the impact was immediate. Uptime improved, maintenance demands dropped, and the clarifier drives were transformed from a persistent risk into a dependable asset.

By replacing complexity with clarity, ERIKS delivered more than a component upgrade. The result is a scalable, off-the-shelf solution that improves reliability today, simplifies maintenance tomorrow, and gives water companies confidence that one of their most critical processes will keep turning – slowly, smoothly, and exactly as it should.

Beyond clarifier drives

See how ERIKS supports the water industry with engineered solutions and service

ENGINEERING A SMARTER MILKING SOLUTION

Graeme Davidson
Director of Rotating Equipment and Services
ERIKS

It started, as these things often do, with a straightforward ask. During a routine visit to a leading manufacturer of robotic milking systems, our engineers were asked to supply a DC motor as a like-for-like replacement for an existing air motor. Same footprint, same output, minimal fuss.

But anyone who's spent time around automated machinery knows the danger of "minimal fuss". So before we quoted a part number, we did what we do best: we asked questions. What's the motor driving? How critical is the process? What happens if performance drifts? And, crucially in this case, what does "good enough" look like when you're dealing with animal welfare and food hygiene?

> "Protecting hygiene, welfare and uptime."

Precision - the difference between clean and contaminated

The air-driven motor wasn't powering a conveyor or a fan. It sat at the heart of a rotary cleaning system mounted on the robot's arm - two contra-rotating shafts driving brushes that clean and disinfect teats before milking. Do that well and you reduce contamination risk. Do it inconsistently and you invite problems you won't see until much later.

Once a cow steps into position, gates close gently behind her. Automation takes over with impressive precision: an ear tag identifies the animal, and a laser scanner or camera locates udder and teats, guiding the rotating brushes for targeted cleaning and disinfection. Only then do the couplers align and attach, extracting milk while monitoring quality in real time. If anything looks wrong, that milk is rejected before it reaches the tank.

> "Calmer cows, cleaner outcomes."

From air to electric - with control built in

In practice, the air motor was doing its best in a demanding environment: repeated cycles, washdowns, tight tolerances, and the need for consistent torque and speed. Working alongside the customer's design team, we helped develop an electrically driven upgrade that delivered stable, repeatable brush performance - and the control to fine-tune it.

The result wasn't just a new drive. It was a more predictable cleaning phase, smoother operation, and a platform the customer could build on.

A quieter upgrade with a bigger impact

By the end of the project, the conversation had moved well beyond "like-for-like". The upgraded system now delivers consistent, high-quality results: improved hygiene standards, enhanced animal welfare, and a clear uplift in throughput. And because the system uses animal ID data to prevent milking too soon, it supports herd health while helping optimise yield.

That's the power of getting involved early. When you look beyond the component and focus on the bigger picture, you don't just supply a part - you help engineer a process that performs, day after day.

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A CRITICAL UPGRADE FOR BIRMINGHAM'S WASTE-TO-ENERGY HEARTBEAT

Jason Lockett
Senior Project Manager, Industrial Electronics
ERIKS

Every day, an energy-from-waste facility on the edge of Birmingham turns 350,000 tonnes of residual waste into 25MW of electricity – powering around 25,000 homes. At the heart of that process are the high-speed, water-cooled atomisers with their precision-engineered titanium discs, spraying a lime and carbonate slurry to neutralise harmful flue-gas emissions.

> "Atomisers stop, the plant stops."

Among those emissions are trace dioxins, linked to serious health risks. That makes the atomisers not just vital equipment but the protective barrier that keeps the site safe, compliant and running. If one goes down, the entire plant must stop, costing up to £150,000 per day.

So when the original drive system approached obsolescence, the operator turned once again to ERIKS – two decades after we first designed it – to future-proof a facility where reliability isn't optional.

A Relationship Built on Trust- and Time

ERIKS' relationship with the Tyseley facility spans more than 20 years, during which the original atomiser system ran with unwavering reliability. Regular on-site support built a deep, trusted partnership with the operator's engineering team – who knew help was always close at hand.

> "Decades of trust safeguard a city."

So when obsolescence started creeping in, they didn't turn to just any supplier. They returned to the team who knew the plant inside out. Led by Project Manager Jason Lockett, ERIKS set out not simply to replace ageing hardware, but to engineer an upgrade that eliminated risk, strengthened safety, and restored long-term confidence in the atomisers.

When Old Becomes Risky

Despite their long and reliable service, the original atomiser drives had reached the point where maintenance was becoming a delicate balancing act. Replacement parts were increasingly impossible to source. Mechanical chokes were running hotter than they should. Interlocks – vital for operator safety – no longer offered the certainty required of a modern system. And redundancy across the setup was limited.

Any one of these issues could have triggered a shutdown. Together, they represented a growing operational and financial risk that demanded a robust, engineered response.

Engineering a Modern, Resilient Solution

Working in collaboration with the manufacturer of the atomiser units, ERIKS developed a complete modernisation package engineered for reliability, safety, and longevity.

The upgrade included newly designed high-speed motor chokes, Yaskawa A1000 inverters, advanced PLC and HMI integration via Siemens hardware, and PILZ safety

interlocks to bring the whole system up to the latest standards.

A duty/standby configuration was introduced so that if one drive encounters a fault, its partner automatically takes over. That alone offered an enormous uplift in resilience, dramatically reducing the risk of full-plant downtime.

Equally important was the optimisation of choke design. The improved configuration eased electrical and mechanical stress on the motors, extending bearing life, lowering maintenance requirements, and delivering measurable energy savings thanks to reduced current draw - from 96A down to around 75A.

> “Redesigned chokes reduce running costs.”

Upgrade Under Pressure

The plant’s annual summer outage lasts just a month, so every hour counts. ERIKS took on the challenge with a full turnkey delivery: installation, certification, testing, commissioning, and all supporting documentation. Pre-commissioning and auto-tuning were carried out ahead of schedule, giving the control room a seamless restart.

Despite the pressure, the team delivered the entire upgrade in just ten working days, returning the plant to service modernised, stable, and fully compliant.

A System Reborn

The benefits of the new system were immediate. Zero-speed interlocks and improved emergency stops elevated operator safety. Redundancy and modern controls boosted uptime. Maintenance needs fell sharply. Energy efficiency improved significantly thanks to lower current draw.

> “Upgrade that transformed control.”

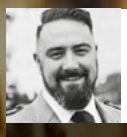
And with improved telemetry and advanced diagnostics available at the control room, the operator now enjoys full visibility of atomiser performance – supporting faster decisions, early intervention, and smarter maintenance planning.

For the operator, ERIKS brings more than engineering skill. Decades of site knowledge and a long-standing, problem-solving partnership have kept the atomisers, and the wider facility, running at peak performance.

Today, the upgraded drives underpin the safe and efficient running of Birmingham’s waste-to-energy plant – showing how long-term collaboration and technical expertise can help power homes and protect the environment, day after day.

BUILT FOR BRUTAL CONDITIONS. ENGINEERED FOR UPTIME.

WHY THE **SKF THREE-BARRIER SOLUTION** IS YOUR BEST DEFENCE IN THE FIGHT AGAINST FAILURE



Kenney Harris
Business Development Manager
SKF

When you're working in an industry where the air bites, the ground shakes, and water and dust seep into every crevice, your bearings need more than luck. They need armour. And not just any – they need the kind that doesn't blink at washdowns, doesn't flinch under vibration, and doesn't quit just because things get tough.

> It's time to fightback against failures.

This is where SKF's Three-Barrier Solution comes in. A triple-threat approach to bearing protection, it's not only keeping operations moving in cement mills, quarries, paper plants and asphalt operations – it's changing the game entirely.

The reality? Brutal.

Let's not sugar-coat it – the environments we're talking about here don't play nice. Dust storms from conveyors. Slurry spray from screens. High-pressure hose-downs, vibration like a jackhammer, and loads that would make a lesser bearing weep.

And it's not just inconvenient. A single bearing failure can bring production to a halt for days. In high-output industries, that downtime quickly runs into the tens of thousands – sometimes more. Add remote locations, tight shutdown windows and rising safety pressures, and the need for something tougher, smarter, and more self-sufficient becomes painfully clear.

A complete system, not a sticking plaster

Enter SKF's Three-Barrier Solution – a fully integrated defence system purpose-built to keep the nasties out and the lube where it belongs. Rather than relying on a single fix (which, let's face it, rarely cuts it), SKF combines three engineered barriers, each working in harmony with the others.

The first line of defence is the SKF Plummer Block Housing, fitted with a Taconite Seal – a heavy-duty labyrinth seal system designed to withstand water, dust, and slurry, even under intense washdowns.

It's grease-purgeable too, so you're not just sealing things in – you're actively flushing out the bad stuff.

Next, you've got the grease-filled housing cavity, acting as a buffer zone that traps contaminants before they ever get near the bearing. And not just any grease – SKF uses a biodegradable option (LGGB 2) that's kinder to both equipment and the environment.

Finally, the Sealed SKF Explorer Spherical Roller Bearing at the heart of it all is factory-filled, sealed for life, and made from upgraded steel with heat treatment that doubles its service life.

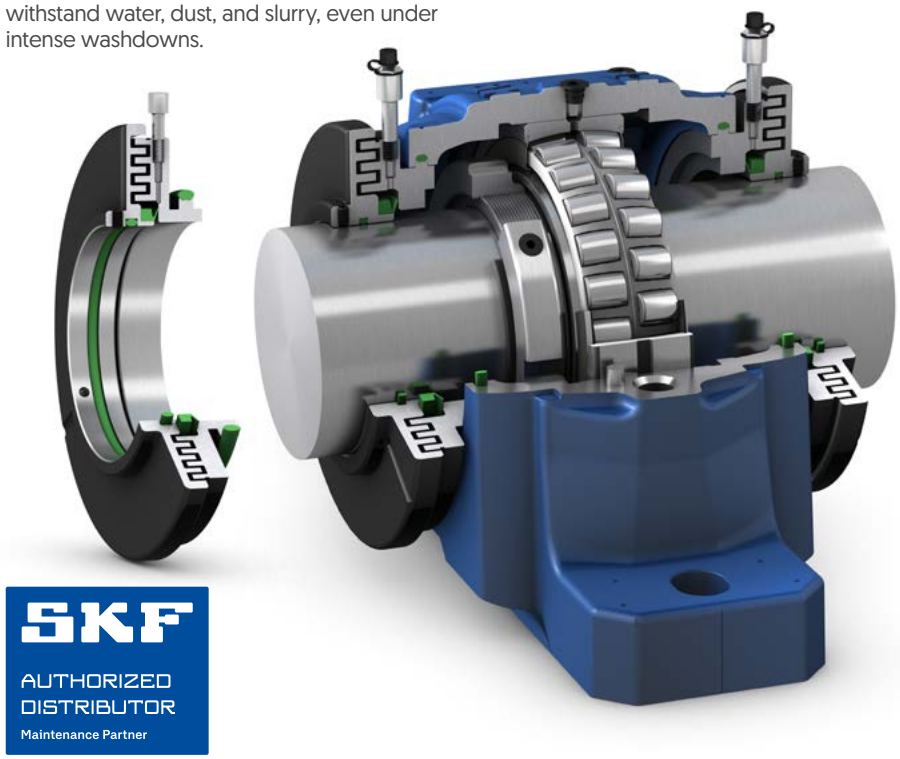
> Three layers. One mission: protect, perform, and last longer.

Proof in the performance

It's one thing to talk tough. It's another to walk it. And the numbers don't lie.

In one quarry application, switching to the SKF Three-Barrier system increased bearing life from two years to over four – a simple change that saved tens of thousands in downtime and repairs. In other cases, the mean time between failures tripled, conveyor uptime hit 92%, and grease usage dropped by a staggering 90%.

Maintenance intervals that were once weekly are now measured in half-years. And with fewer manual interventions, there's less exposure, lower risk, and a happier workforce.



> From weekly breakdowns to biannual check-ups.

Not all solutions are created equal

Plenty of suppliers promise protection. But most stop short of solving the whole problem. A sealed bearing here, a decent housing there – but few offer a fully engineered system where every element is designed to complement the next.

That's what sets SKF apart. Their Taconite Seal isn't just rugged – it's purgeable, multi-staged and field-tested in the worst possible conditions. Their Explorer bearings aren't shelf fillers – they're application-specific workhorses with proven pedigree.

And when you add in the environmental benefits – such as lower grease use and safer maintenance – the advantages stack up quickly.

With ERIKS' on-the-ground know-how and SKF's engineering muscle, you're never flying solo. From system design and installation to remote monitoring, predictive maintenance, and component remanufacture – it's not just a product, it's a partnership, in fact, the first of its kind in the UK & Ireland.

Stop firefighting, start future-proofing

In hostile environments, failure is a fact of life – unless you build for more. SKF's Three-Barrier Solution doesn't just prevent bearing failure. It rewrites the playbook on uptime, safety, and sustainability.

So whether you're running a quarry, a cement mill or anything in between – maybe it's time to stop patching problems and start building protection in from the start.

Because when it's built to withstand, engineered to protect, and proven to save – why settle for anything less?

SKF
AUTHORIZED DISTRIBUTOR
Maintenance Partner

WASTE NOT, WANT NOT

HOW ERIKS BECAME A CRITICAL PARTNER IN TURNING WASTE INTO POWER

Dean Lindsay
Area Sales Manager, Engineering Services
ERIKS

Every year, more than 60,000 tonnes of household waste are transformed into clean, renewable energy at a leading recycling facility in the South East. The site plays a vital role in supporting regional sustainability goals, generating enough electricity to power thousands of homes through an advanced energy-from-waste process that leaves minimal waste for landfill.

Behind this operation is a tightly coordinated team responsible for keeping systems running safely, efficiently, and continuously. With only two planned shutdowns each year, every minute of downtime counts.

Once waste begins to arrive, the process cannot be stopped – the plant must continue to operate without interruption. When key equipment begins to show signs of strain, the impact can be felt across the entire site.

> “The results were immediate.”

Early warning signs

Last year, small but significant changes began to emerge in the plant’s performance data. Rising vibration levels on a critical Induced Draft (ID) fan, drops in efficiency across the Under Fire Air (UFA) system, and a growing maintenance backlog started to raise concern.

Adding to the challenge, some of the affected components had long overseas lead times, while others required bespoke engineering solutions. If any of these systems failed, the consequences would be immediate and severe – risking process disruption and costly downtime.

The site needed a partner who could move quickly, identify root causes, and deliver sustainable solutions that would restore performance while protecting ongoing operations.

Rapid response and results

ERIKS was called in to assess the situation and immediately began a programme of investigation and repair. Through on-site diagnostics, the root cause of the ID fan vibration issue was identified, and emergency repairs were coordinated with support from the ERIKS workshop network.

> “Once waste begins to arrive, the process cannot be stopped...”

A critical bearing block replacement was completed within hours, and the fan was returned to full operation before the weekend – avoiding costly delays and ensuring the plant remained on schedule.

This initial response set the tone for what would become a much broader collaboration. In preparation for the next planned shutdown, ERIKS worked alongside the site’s engineering and operations teams to scope, submit, and deliver a full maintenance programme. Eleven separate work packages were completed within the limited outage window – ranging from fan refurbishments and gearbox checks to air system repairs – all planned, executed, and closed out with comprehensive reporting.

From urgent repair to long-term reliability

The results were immediate. Reliability improved, unplanned downtime was avoided, and a strong foundation for trust was established. Having entered the site as a new supplier, ERIKS quickly demonstrated both responsiveness and technical depth.

Beyond emergency support, ERIKS delivered detailed reports and recommendations designed to strengthen the site’s preventative maintenance regime. Insights into lubrication practices, alignment accuracy, and condition monitoring helped the customer adopt a more predictive, data-driven approach to asset management.

That successful engagement laid the groundwork for an ongoing relationship. When the next shutdown arrived, ERIKS was again called upon to provide

> “Reliability improved, unplanned downtime was avoided...”

deeper diagnostics and more complex refurbishments, applying lessons learned from the first phase to improve efficiency and reliability further. Planning is already underway for future outages – with ERIKS now firmly integrated into the maintenance and reliability strategy.

Rapid response, and expert support

What began as an urgent repair has developed into a strategic partnership. Through rapid response times, expert engineering support, and collaborative planning, ERIKS has become an integral part of the site’s ongoing performance strategy.

The partnership continues to evolve, with both teams focused on optimising uptime, reducing maintenance risk, and improving overall system resilience. By combining on-site expertise with the technical capabilities of ERIKS’ nationwide workshop network, the facility can maintain the high level of reliability demanded by a 24/7 operation.

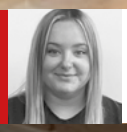
Powering progress

In just a few months, ERIKS has transitioned from a new supplier to a trusted reliability partner, helping this major waste-to-energy facility remain efficient, compliant, and ready to meet the demands of the communities it serves.

Through collaboration, technical excellence, and a shared commitment to sustainable progress, ERIKS continues to support one of the region’s most important energy recovery sites – transforming waste into opportunity and keeping the lights on for thousands of homes every day.

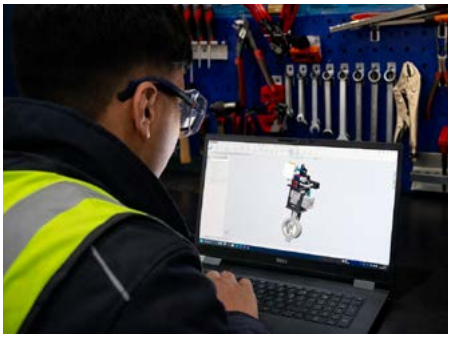
CUSTOM TEST RIG SAFEGUARDS CRITICAL ENERGY INFRASTRUCTURE

Victor Harris
Senior Projects Manager, Industrial Electronic
ERIKS A RUBIX Company



Edyta Skowronek
Valve Repair Technician
ERIKS A RUBIX Company

When a major energy operator discovered that the safety valves in its gas turbines were becoming obsolete, it faced a significant technical and operational dilemma.



> “Developing a bespoke testing solution.”

These valves act as the final protective barrier within turbine systems, responding in milliseconds to release pressure and prevent potentially dangerous equipment failures. As the valves aged, refurbishment remained the preferred route, but without any means of testing them under true working conditions, there was no reliable way to confirm that performance and safety standards were still being met.

This challenge led the operator to ERIKS' Flow Control Technology Centre in Leicester, where a team of engineers began developing a bespoke testing solution that could restore confidence in these critical components.

A Complex Certification Problem

Because each valve is certified as part of the wider turbine system, replacing them with new units would have required extensive and costly recertification. Refurbishment was therefore essential. Yet the absence of a suitable functional test meant operators were dependent on visual checks alone, leaving uncertainty around how valves would behave once reinstated into high-pressure, high-speed turbine environments.

The potential consequences of an underperforming valve were severe. A single failure could lead to catastrophic machine damage, extended downtime, or broader safety risks. It was clear that a specialised test solution was not simply beneficial – it was necessary.

Engineering a Purpose-Built Solution

ERIKS engineers, working in close collaboration with hydraulic specialists, designed and built a test rig capable of accurately reproducing the extreme conditions found inside a turbine.

The rig was engineered to validate every aspect of valve performance, from the speed and timing of opening and closing, to fail-safe functionality during simulated power loss, and the ability to release pressure and maintain leak-tightness under sustained load.

Although the internal operation of the rig required advanced engineering and custom software, it was intentionally designed to be intuitive for trained users. Creating a system that delivered high accuracy without unnecessary complexity was a key part of ensuring long-term reliability and repeatable results.

> Long-term reliability and repeatable results.

Development was an iterative process. Early tests revealed that original valve specifications and real-world characteristics were not perfectly aligned, prompting the team to source reference valves and capture fresh data. Even defining the precise point at which a valve should be considered "open" required careful analysis, as the valve's soft, exponential opening pattern created ambiguity. The team adapted the software and measurement parameters to ensure that the test process reflected this real behaviour accurately.

A Collaborative Approach That Continues to Grow

The completed test rig is now permanently located at the Leicester facility, where ERIKS specialists carry out the full refurbishment cycle. Each valve is first assessed, then completely stripped down so every component can be inspected. Seals are replaced where appropriate, and any parts showing significant wear are renewed. Once rebuilt, the valve is returned to the test rig for verification under conditions that accurately replicate operational demands.

The strength of this system and the expertise behind it soon encouraged the operator to extend the scope of work. Additional documentation, quality requirements and expanded refurbishment responsibilities were added once the reliability of the rig had been demonstrated.

A Hub for High-Integrity Valve Work

The Flow Control Technology Centre in Leicester has steadily grown into a national hub for advanced valve refurbishment and testing. Alongside this project, the team supports highly specialised applications across defence, transport, and industrial sectors, including rigorous testing programmes for electric motors used throughout London's transport network.

The turbine valve project, which initially began as a technical challenge centred around obsolescence, has opened the door to a long-term partnership focused on keeping critical energy assets operating safely and efficiently.

Several valves are already progressing through the refurbishment and test cycle, with more scheduled as part of an ongoing programme.

> A dependable and repeatable process.

Securing the Future of Legacy Assets

As energy systems age, operators increasingly face the task of maintaining safety and performance without access to original components. This bespoke test rig demonstrates how tailored engineering solutions can extend the life of vital assets while avoiding costly system-wide recertification.

By combining reverse engineering, precision testing, and a deep understanding of valve behaviour, the Leicester team has created a dependable and repeatable process that ensures every refurbished valve returns to service with proven performance.

For industries under pressure to balance safety, reliability, and obsolescence, it shows how innovative engineering can deliver assurance where off-the-shelf solutions no longer exist.

INTEGRATED VALVE AND ACTUATOR SOLUTIONS: A RECIPE FOR EFFICIENCY

Ian Elliot
Product Manager
ERIKS UK & Ireland

With energy prices still uncomfortably high, food and beverage manufacturers are under increasing pressure to find efficiencies across their operations. From energy use to hygiene compliance, there's a growing demand for solutions that are smarter, simpler, and more cost-effective – and integrated valve and actuator systems are stepping up as a powerful way to deliver all three.

The Challenge of Glove Dispensing

In recent years, energy has gone from a minor line in the budget to a major overhead. Before the pandemic, it typically made up around 2% of a food manufacturer's cost base. Now? It's closer to 15%. That's a sharp rise – and one that shows no sign of falling back.

At the same time, manufacturers are being squeezed from every angle. Retailers and consumers want cheaper prices, while raw material and labour costs continue to climb. So, the hunt is on for any operational gains that can free up capacity and protect profit margins – without compromising product quality or safety.

One of the most overlooked opportunities lies in the use of compressed air. It's vital to most automation and processing tasks on the line, but also one of the most energy-intensive – especially when conventional motion control systems are used.

> "Smart pneumatics, real savings."

A smarter approach to motion control

Traditional pneumatic setups typically involve a mix of separate actuators, valves, switches, and tubing. Each of these components adds complexity and introduces energy losses, particularly in the form of 'dead' air volume – the unused compressed air that sits in the system between cycles.

Integrated valve and actuator solutions, such as IMI Norgren's IVAC, offer a simple but effective alternative. By combining key components into a single unit, these systems eliminate unnecessary tubing and streamline control at the point of use.

The result is a significant reduction in air consumption – in some cases, by up to 50%, depending on the application. With less air required to perform the same motion, the energy savings add up fast, making a noticeable impact on the bottom line.

> "50% air savings possible."

Hygiene compliance built-in

Of course, in food and beverage production, energy efficiency is only part of the story. Any component specified also needs to meet strict hygiene standards, particularly in washdown areas or zones that come into contact with the product.

Integrated systems offer clear advantages here, too. With fewer external parts and minimal crevices, units such as IVAC are easier to clean and maintain. Their IP67 rating ensures they can withstand regular washdowns without performance degradation or ingress.

The all-in-one construction also removes the risk of dirt or food particles becoming trapped in tubing or around fittings, supporting more effective cleaning cycles and helping manufacturers meet regulatory requirements more easily.

> "Simpler systems, faster fixes."

Reduced downtime and maintenance

Simplifying the system also pays dividends when it comes to reliability and maintenance. Fewer components mean fewer points of failure – and a clearer path to fault-finding when issues arise.

Integrated actuator and valve solutions are quicker to install, easier to troubleshoot, and simpler to replace. With all the functionality contained in a single unit, maintenance teams can work faster and more efficiently, keeping downtime to a minimum and production on track.

For OEMs and machine builders, the benefits continue: specifying one integrated component instead of several reduces part numbers, speeds up assembly, and makes system design more straightforward.

> "Clean design, cleaner results."

Proven and practical way to cut costs

Food and beverage manufacturing continues to face increasing pressure – from energy and compliance demands to cost and efficiency expectations. But the answer doesn't always have to be complex or expensive.

Integrated valve and actuator solutions offer a proven, practical way to reduce compressed air use, streamline maintenance, and maintain the highest hygiene standards, all while cutting operational costs.

Whether you're looking to retrofit existing machinery or optimise the design of new equipment, now is the time to take a closer look at your motion control setup. Integrated solutions, such as IVAC from IMI Norgren, might just be the simplest step you can take toward a more efficient, future-ready plant.

RESCUING A SEAL, SAVING A SCHEDULE

Dave Clarke
UK Export Manager
ERIKS

When a long-standing oil and gas customer reported a sudden increase in sealing component failures, it triggered alarm bells across the ERIKS International team. These weren't everyday parts.

They were one-metre-wide PTFE anti-extrusion rings – critical back-ups that protect primary O-rings inside subsea wellhead assemblies. In an environment where pressure is relentless and tolerances unforgiving, even a small dimensional deviation can threaten production. That's exactly what was happening.

> "Old drawings, new risks."

A Critical Failure at Depth

For seven years, these PTFE rings performed exactly as intended. Then, within twelve months, failures began to stack up. Inspection revealed gaps between the ring ends that drifted outside tolerance - enough to compromise the primary seal and risk elastomer extrusion when exposed to extreme subsea pressure differentials.

Eight rings had already been scrapped. Replacement costs exceeded £1,400 per unit, but the bigger issue was the time it took. Any delay to offshore installation carried a staggering operational impact, estimated at £1 million per day of lost production.

The situation was complicated by a supply chain built around a single OEM. Communication was slow, lead times stretched to 12 weeks, and crucially, the supplier refused to work to the customer's updated drawings – continuing instead with a legacy template. ERIKS found itself responsible for components it could neither influence nor control. Confidence in the entire sealing system was fading fast.

A Turning Point in the Specification

The breakthrough came when the customer revised their technical specification, retaining material requirements but removing the mandatory OEM clause. With that barrier lifted, ERIKS could finally explore alternative routes, while remaining fully compliant.

A cross-functional team from ERIKS International and ERIKS Sealing & Polymer reviewed the customer's updated drawing in detail. The tolerances were tight, the geometry precise, and the certification requirements extensive. But now there was room to act.

ERIKS approached a trusted UK machining partner with proven expertise in large-format PTFE components. Crucially, they agreed to manufacture exactly to the drawing. Lead times also dropped dramatically, from 12 weeks to just five.

> "Precision and control restored."

Measuring What Matters

One persistent challenge remained: inconsistent measurement of the gap. PTFE is highly sensitive to temperature, and when components are over a metre in diameter, even minor deviations can skew results. With the customer's trust on the line, ERIKS needed a way to eliminate doubt.

At the Barnsley gasket facility, ERIKS engineered a bespoke inspection solution: five precision discs, each machined to the exact same reference diameter and finish. These were distributed to all parties, including the manufacturer, ERIKS' inspection teams, and customer representatives as far away as China.

Every inspection would now be taken from the same reference point, under the same conditions. No ambiguity. No misalignment. No hidden variables.

Assurance Delivered

The first production batch of five rings underwent dual-stage inspection. A third-party inspector approved by the customer verified every critical dimension at the supplier's site.

ERIKS carried out a second inspection at Warrington's Sealing & Polymer Quality Control Centre, producing full reports and material certification.

To strengthen confidence, ERIKS supplied the first batch free of charge; payment was only required if all parts passed. They did, without a single dimensional non-conformance.

The rings shipped to China, installed without issue, and have since performed flawlessly in subsea operation. The customer has continued ordering through the new supply chain, and consistency across larger volumes has remained exceptionally strong.

> "Zero non-conformances. Zero installation issues."

Engineering, Collaboration, and Control

This wasn't just a sourcing exercise. It was a full technical recovery: understanding the problem, regaining control of the supply chain, redesigning the inspection process, and restoring trust in a critical sealing component that sits at the heart of subsea wellhead reliability.

By combining engineering insight with agile decision-making, ERIKS helped the customer avoid immediate scrap costs, eliminate further downtime risk, and sidestep the far greater consequence of a halted installation schedule.

In the world of subsea operations, success often hinges on precision measured in millimetres – but the impact can be counted in millions. Here, engineering know-how made all the difference.

FEET AS THE FOUNDATION: SAFETY FOOTWEAR THAT WORKS AS HARD AS YOU DO

Dean Walker
Key Account Manager
FOOTSURE

Long shifts on hard surfaces take their toll. Back pain, joint strain and long-term injuries often start at the feet, where poorly fitting footwear fails to support arches, distribute pressure, or absorb impact. In heavy-duty environments, comfortable, well-fitting shoes can be just as important as PPE.

> Reduce fatigue, improve stability and help workers stay comfortable.

Support where it matters

According to HSE, slips, trips and falls are the most common cause of non-fatal injuries. Safety footwear helps protect employees from accidents in the workplace, while proper support can also ease pressure on muscles and joints, reducing fatigue and discomfort over long shifts.

By contrast, ill-fitting footwear can force muscles and tendons to overcompensate, causing sore, aching feet and strain that can travel up to the legs and back. Over time, this can affect posture, balance and overall wellbeing.

Modern designs, such as those from ERIKS' supplier Footsure, now include arch-supporting footbeds, shock-absorbing midsoles and energy-dispersing heels. These features reduce fatigue, improve stability and help workers stay comfortable during long shifts.

> Stretchable panels, tailored sizing and cushioned insoles.

Fit for every foot

Footwear that fits correctly must also account for differences in male and female foot shapes. Female feet typically have higher arches, shallower insteps and a more curved outer edge, while male feet are flatter and broader. Designing boots and shoes on a true female last ensures a better fit, reducing hotspots, blisters and fatigue.

Even traditionally difficult styles, such as wellingtons, are being redesigned to match female foot anatomy. Stretchable panels, tailored sizing and cushioned insoles provide a secure, comfortable fit while still meeting safety standards for waterproofing, slip resistance and toe protection.

Lightweight, durable, modern

Weight has long been a challenge in safety footwear. Many manufacturers now use lightweight materials such as carbon fibre, composites and modern thermoplastics to reduce fatigue without compromising protection. Some boots and trainers incorporate athletic-inspired design, offering breathability, flexibility and modern aesthetics alongside composite or steel toe caps and slip-resistant soles.

Lightweight, well-designed footwear not only improves comfort but also contributes to productivity, particularly during long shifts or in physically demanding roles. Features such as removable cushioned insoles, breathable linings and shock-absorbing heels help workers stay on their feet longer with less strain.

> Ergonomically designed boots and shoes.

Legislation and standards

Regulatory changes continue to shape safety footwear design. The EU's General Product Safety Regulation (2023/988) introduced stricter labelling, risk assessments, technical documentation and digital product passports.

In the UK, EN ISO 20345:2022 expanded classifications and protection categories, with a transition period running to 2027. Older products on the market can remain certified until expiry, but manufacture of non-compliant items must stop.

These changes ensure footwear provides the protection required in demanding environments while meeting modern safety expectations.

How fit improves performance

In heavy-duty workplaces, footwear delivers safety while supporting performance, comfort and endurance. Ergonomically designed boots and shoes that consider foot shape, arch support and impact absorption make a real difference to health and productivity.

Lighter, well-fitted footwear reduces fatigue, supports posture and stability, and helps workers stay comfortable throughout long shifts.

Footsure, one of the UK's leading safety footwear distributors, works with suppliers and manufacturers to make these advances widely available, helping employers provide well-fitting, compliant footwear for all their staff.

IN SAFE HANDS:

HYBRID TECHNOLOGY REDEFINING CHEMICAL PROTECTION

Stacey Ramsden
Associate Specialist, Inside Sales
Ansell

Designed for modern industrial risks, AlphaTec™ 53-002/003 gloves simplify glove selection while providing unmatched resistance to chemicals and secondary hazards. It's multi-hazard safety made practical, a single solution that puts protection, compliance, and worker comfort within reach.

The hidden risks in everyday tasks

Cleaning and maintenance might sound straightforward, but anyone who has worked in an industrial environment knows it is far from risk-free. Behind routine jobs such as equipment cleaning, spill response, or surface disinfection lies exposure to aggressive chemicals, high temperatures, and abrasive surfaces.

Without the right protective gloves, those everyday tasks can quickly become dangerous, leading to injuries, downtime, or even long-term health risks.

For safety managers and procurement leads, the challenge is even more complicated. Different hazards often require different gloves, meaning multiple glove types on site. This increases the chance of improper selection, non-compliance with protocols, or misuse across tasks. Workers may also struggle with gloves that are too thick, uncomfortable, or cumbersome, choosing not to wear them properly when dexterity is needed.

This is the gap Ansell set out to address with the AlphaTec™ 53-002 and 53-003: gloves that deliver broad-spectrum chemical protection without compromising comfort or usability.

> "Revolutionary hybrid technology."

A breakthrough in glove design

At the heart of both models lies a revolutionary hybrid technology, combining a thermoplastic layered coating with a proprietary synthetic co-polymer. This multi-layer system creates a highly effective barrier against a broad range of aggressive chemicals, ensuring reliable protection across demanding applications.

Both gloves are certified to EN ISO 374 Type A, with permeation times exceeding 30 minutes against 17 out of 18 test chemicals. Remarkably, in 16 cases they reach the maximum Class 6 threshold of over 480 minutes, placing them in the top tier of chemical protection. For many users, this performance matches or exceeds the protection of thicker butyl or butyl/Viton gloves, but in a form that is lighter and easier to wear.

In addition to chemical resistance, the AlphaTec 53-002/003 are also anti-static (EN 1149-3) and tested against mechanical hazards (EN 388). For workplaces where risks overlap, the AlphaTec 53-003 adds an extra layer of protection with contact heat resistance up to 100°C (EN 407).

Two gloves, one solution

While the protective shell is the same, the two models are tailored to different user needs:

AlphaTec 53-002: An unsupported design that prioritises flexibility and dexterity. Featuring a raised diamond grip, it's suited to precision tasks or short-duration jobs where gloves may need to be changed frequently.

AlphaTec 53-003: Built on the same chemical shell but lined with a 15-gauge nylon liner. This improves comfort, sweat management, and durability for longer wear. With the added benefit of heat protection, it is ideal for tougher, multi-hazard tasks.

For safety managers, having two options

built from the same technology simplifies selection and reduces the risk of the wrong glove being used for the wrong job.

> “MICROCHEM™ Chemical Barrier Technology.”

Where they work best

The AlphaTec 53-002/003 gloves are designed to perform across a wide range of industries and tasks, including:

- **Equipment maintenance** – handling lubricants, oils, and cleaning agents.
- **Chemical cleaning and transfer** – protection against solvents and disinfectants.
- **Spill response** – a reliable solution when multiple substances may be present.
- **Disinfection and sanitation** – common in pharmaceuticals, food production, and heavy industry.

In these environments, where hazards are unpredictable and varied, the ability to rely on a single glove family makes a real difference to safety and compliance.

Designed with the worker in mind

Safety is only effective if PPE is worn correctly and consistently. That’s why ergonomics and usability were key design drivers.

- **Secure grip:** A lozenge-style surface pattern ensures tools and equipment can be handled with confidence.
- **Extended cuff length:** At 35 cm (14 inches), both gloves offer forearm coverage to reduce splash risk.
- **Comfort choices:** Users can choose between the lighter, unsupported 53-002 or the lined 53-003, depending on task intensity.
- **Skin-safe:** Both are free from latex and silicone, reducing the risk of allergic reactions.

By making gloves more comfortable and practical, AlphaTec 53-002/003 encourage correct, consistent use, which is where real-world protection begins.

A closer look at the science

The gloves’ performance is powered by MICROCHEM™ Chemical Barrier Technology, a multi-layer barrier system engineered to resist both permeation and degradation. Each layer works together to provide consistent protection against a wide range of aggressive acids, solvents, and chemical mixtures, maintaining strength and flexibility even in demanding environments.

This technology ensures that wearers are protected not only from direct contact hazards but also from the long-term effects of chemical exposure, helping extend both glove life and worker confidence on the job.

Proven in practice:

In a recent implementation, Syngenta, a leading manufacturer of pesticides and agricultural chemicals, identified issues with its existing PVC gloves, which provided limited chemical resistance and poor dexterity during production tasks. After trialling the AlphaTec™ 53-002, operators reported noticeably higher chemical and mechanical protection, as well as greater dexterity.

The gloves have since been rolled out across two of Syngenta’s five manufacturing sites, with further expansion planned – all supported through ERIKS. The switch has helped enhance both worker protection and operational efficiency.

> “A comprehensive solution.”

Smarter safety, simpler choices

For employers, the benefits of AlphaTec 53-002/003 extend well beyond protection. By reducing the number of glove types needed on site, they simplify procurement, improve compliance, and lower the risk of misuse. The result is safer, more efficient operations and fewer injuries or delays caused by glove-related issues.

Sustainability is another key advantage. The AlphaTec 53-002/003 gloves are designed to balance durability with comfort, helping reduce waste from premature disposal and frequent replacement. Their durable construction, combined with greater wearer acceptance, supports longer use cycles and fewer discarded gloves; a meaningful step towards safer, more responsible PPE use across industries.

Multi-hazard safety made practical

In today’s industrial workplaces, where chemical, mechanical, and thermal risks often overlap, no safety manager can afford to compromise on protection. With AlphaTec 53-002 and 53-003, Ansell delivers a comprehensive solution that makes chemical safety both reliable and practical.

For workers, it means comfort and confidence. For managers, it means simpler choices and stronger compliance. And for businesses, it means fewer risks, fewer injuries, and safer, smarter operations overall.

KEEPING CONTAINER CRANES IN MOTION

Trevor Hilton
Area Sales Manager
ERIKS

When a container ship docks, the clock starts ticking. Every lift, every move, every minute depends on the reliability of the ship-to-shore cranes towering over the quayside.

At one major UK terminal, that reliability was suddenly at risk when two of the site's heavy-duty DC drive motors – the muscle behind the crane hoists – showed early signs of failure. With limited spares and vessels waiting, downtime simply wasn't an option.

So when the engineering team needed rapid, expert intervention, they picked up the phone to their local ERIKS Workshop. The response was immediate.

> "Hidden faults identified"

A Hidden Problem

The first motor – a 400 kW DC unit responsible for the hoist mechanism – had already been pulled from service. Insulation tests on site revealed a fault to earth, and the team knew that if one motor was in trouble, others could follow. These cranes operate continuously, handling thousands of container movements every week, so even minor faults can snowball into major disruption.

A second motor, initially removed as a precaution, appeared healthy after passing standard insulation and surge testing. However, once in ERIKS' workshop, more advanced bar-to-bar diagnostics told a different story. The analysis revealed a short circuit between windings – the kind of hidden defect that would never show up in routine tests but would almost certainly have caused a future failure at the worst possible moment.

To make matters even more pressing, the site only operates with three motors of this specification. With two already out of action and the third awaiting planned maintenance, the risk was clear: falling below minimum operating capacity would compromise crane functionality within days, bringing both commercial and operational consequences.

With vessel schedules running to tight windows and penalties looming in the background, the priority was simple: get those motors back into service, and fast.

Rebuilding Reliability, One Winding at a Time

The solution required precision, coordination and speed. ERIKS mobilised teams across Leeds, Swansea, Cardiff and Bristol, allowing several major repair tasks to run in parallel. This multi-site collaboration ensured that no single process became a bottleneck – a crucial factor when turnaround time was critical.

> "In-house commutator manufacturing."

Both motors were completely stripped down and cleaned. Their armatures were rewound to the original bar-wound configuration but upgraded with modern insulation materials to achieve Class F performance, offering greater heat resistance and longer service life. One motor required an entirely new commutator due to severe wear – manufactured in-house at ERIKS' specialised commutator facility in Bristol, one of the few workshops in the UK with the capability to produce components to such exacting standards.

Alongside the electrical restoration, the motors received full mechanical overhauls. Bearings and seals were replaced, brush gear was refurbished, housings were reworked, and structural steelwork was renewed. Even the force ventilation units – vital for cooling and motor efficiency – were stripped back and rebuilt with new bearings, seals and filters, before being cleaned and repainted.

Testing wasn't just thorough, it was transparent. Surge tests, bar-to-bar analysis, electrical integrity checks, and detailed video reports were provided to support customer sign-off, ensuring every component met or exceeded OEM standards. With clear evidence of what had failed and how it had been corrected, the customer could return the motors to service with full confidence.

> "Rewound, re-engineered and returned fast."

The Race Against the Clock

Despite the scale and complexity of the work, ERIKS returned both motors well ahead of expectation. The first unit arrived back on site more than two months ahead of schedule, immediately restoring essential spare capacity and giving the terminal breathing room at a critical moment.

Once reinstalled by the customer's engineering team, both motors returned to full service without issue. With upgraded materials, renewed mechanical components, and a level of electrical scrutiny far beyond standard testing, the customer now benefits from greater long-term reliability than before the initial failure.

> "Intervention prevented operational risk."

Protecting Every Hour of Uptime

At a busy container terminal, a single crane's downtime can cascade into missed windows, delayed vessels, and contractual penalties. By identifying faults that were invisible to standard testing and by turning around complex motor rewinds faster than anticipated, ERIKS helped safeguard operations at one of the UK's most critical logistics hubs.

The result wasn't just two refurbished motors – it was restored resilience, renewed confidence, and the continuity of a supply chain that cannot afford to stand still.

HOSE MANAGEMENT:

THE HIDDEN RISK THAT COULD CLOSE YOUR PRODUCTION LINE

Tyler Dunkley
Application Engineer
ERIKS

When the ERIKS team first arrived at a major pharmaceutical site to conduct a routine hose survey, the client estimated they had around 300-400 hoses to inspect.

Fast forward to today, and the actual number has grown to over 1500 – and counting. This dramatic discovery highlights a critical blind spot in industrial operations: hose management.

"Manufacturers tend to treat hoses as a commodity – fitting and forgetting them," explains Tyler Dunkley, Application Engineer at ERIKS.

"But like any other component, they wear over time and degrade in ways that aren't always visible to the naked eye. We've found hoses that have been installed for over 10 years, way past their lifespan. Some even dated back to 1998, hidden away and forgotten in areas that receive minimal inspection or maintenance attention."

What condition are your hoses really in?

The statistics are sobering. On average, over 80% of hoses fail their initial survey. Around 30% are rubber or EPDM compounds – perishable materials that expire within 5-7 years from their cure date, not purchase date.

> "On average, over 80% of hoses fail their initial survey."

This means new items sitting in storage can fail inspection simply through aging, even without use. More than 20% of failures are due to leakage, creating immediate health, safety, and environmental hazards.

What does hose failure actually cost?

While companies focus investment on major capital equipment – motors, pumps, and processing machinery – they often overlook the hoses that connect and operate these systems. Yet the consequences of hose failure can be catastrophic, affecting not just individual sites but entire supply chains and customer relationships.

In pharmaceutical environments, where cleanliness is paramount, a compromised hose can contaminate entire batches, forcing costly scrapping. These facilities also use aggressive cleaning processes involving caustic chemicals and high-temperature steam, both capable of causing life-changing injuries if released. Production line downtime can cost hundreds of thousands of pounds per hour.

The pressure itself presents a deadly risk. Anything over 7 bar (and most industrial hoses operate at 10 bar plus, with some reaching 1,000 bar) can cause pressure fluid injection injuries. "Even water at that pressure can kill you," Tyler warns. "It feels like a pinprick, but you have hours to save yourself."

What are the legal risks of hose failure?

When the Health and Safety Executive discovers poorly maintained hoses, they have extensive powers. They can impose immediate line closures, quarantine equipment, and in serious cases, arrest responsible individuals. With a 96-97% prosecution rate, consequences include unlimited fines, imprisonment, and mandatory intervention fees of £183 per hour, invoiced every two months for up to a year.

> ERIKS' Hose Management System provides end-to-end control.

"If there's a reportable incident – a RIDDOR – due to hose failure, the HSE may conduct a full investigation," says Guy Boomer, Director of ERIKS Hose Technology. "The company and individuals involved face prosecution, unlimited fines, potential imprisonment, reputational damage, and environmental penalties. One of our customers' sites in Singapore was fined €2 million for a hose-related incident" Which operates under similar governance to its UK operations.

How do you demonstrate compliance to regulators?

ERIKS' Hose Management System provides end-to-end control. Following the initial survey, which identifies failed hoses and compliance gaps, the team provides daily inspection reports, comprehensive post-survey analysis, and quotations for replacements with recommendations for improvements.

Every replacement hose is pressure tested, certified with full material traceability, and tagged with a unique identifier uploaded to ERIKS' SAM (Smart Asset Management) platform. This creates a comprehensive digital record that demonstrates compliance to regulators and provides an auditable trail that stands up to the most rigorous inspections.

"Even if a hose fails between inspections, the HSE will see you've made all reasonable efforts to control risks," explains Guy. "Having that system in place provides peace of mind – you're doing the right thing and derisking your organisation."

How do you change a 'fit and forget' culture?

Tyler has led this particular pharmaceutical client through significant challenges. "It takes time to involve the right people. Once you raise enough issues and they've failed internal audits, they start taking it seriously. The client had multiple audit failures – their own internal reviews, plus supplier audits. That's when urgency kicks in."

> The service goes beyond inspection.

The service goes beyond inspection. ERIKS helps clients adapt their processes, standardise specifications, train staff on inspection techniques, and streamline ordering – teams simply quote tag numbers rather than complex specifications or simply scans a barcode or QR code.

"We're helping them embrace a more conscious health and safety culture," Guy concludes. "Nine times out of ten, downtime is caused by overlooked items like hoses. We're changing that mindset."

HOW COATINGS ARE REDEFINING PUMP PROTECTION

Bob Orme
Senior Technology Expert
LOCTITE

The elements have inspired awe since the beginning of mankind – but also frustration. Often, the effect of earth, water, air and fire conspire against our best efforts to improve our lives. For engineers, this can mean an ongoing battle to protect infrastructure in aggressive environments.

The corrosive effect of elemental damage is caused by chemistry. Fortunately, chemistry is also the answer, thanks to the application of tailored coatings that can fight the battle effectively for a very long time.

Consider the use of a high-lift water pump, operating consistently outdoors to move water from its source to supply drinking water to thousands of people. Every week, every month, every year, the pump is under attack from any debris shaken up by the turbulence it creates – but also from the water itself, nature's most corrosive element.

The impact of repairing a pump is significant, both in terms of cost and inconvenience, in manpower and downtime. Remarkably, though, the application of a coating can keep the pump free from these dangers and protect from long-term wear. We've found that, by applying a coating of LOCTITE PC 7255 during routine maintenance, a pump will likely fail mechanically before the coating fades.

Developed to withstand water

To protect pumps and associated pipelines in aggressive environments, we recommend LOCTITE PC 7255. This is a low-friction, sprayable, easy-to-use, ceramic-filled epoxy that offers protection against turbulence, chemical attack, abrasion and corrosion.

Crucially, it is WRAS-compliant, meaning it can be used for applications involving drinking water. This is obviously a key consideration for the water industry, who benefit from long-term assurance that the pump is delivering water with no metal leaching or other contamination.

> "Protection against turbulence, chemical attack, abrasion and corrosion."

The high-gloss, low-friction coating can be spray-applied for fast and easy application to complex geometries. Better still, it can restore or increase pump efficiency – because the pump's metal surface is rough and uneven, the coating can add a layer of smoothness that helps the motor run more efficiently for years to come.

ERIKS and LOCTITE: A Formidable Bond

ERIKS is a key partner in the Henkel Certified applicator programme with 10 specialist service centres around the UK offering national coverage for LOCTITE coatings. We have worked with ERIKS for many years and to date have trained more than 50 ERIKS personnel in best practice.

We also provide consultancy services, ranging from analysing the project to evaluate the amount of coating needed, to estimating potential pump efficiency savings.

For the water pump, the process involves cleaning the surfaces before applying two layers of LOCTITE PC 7255. This is done with a spray gun, a quicker and more efficient method of application, especially for the interior pipework.

> "Offering national coverage for LOCTITE coatings."

A happy partner

Sean Milnes, Engineering Manager, at ERIKS, Chesterfield can attest to the value that LOCTITE delivers for customers working in aggressive environments.

"We've seen first-hand the relentless challenges posed by elemental forces like water. That's why LOCTITE PC 7255 is such a godsend as a long-term solution to protect against damage.

"What's remarkable is how easy it is to apply – sprayable, low-friction, and WRAS-compliant, making it ideal for drinking water applications. In many cases, the pump itself will fail mechanically before the coating shows signs of wear. That's the kind of performance our customers rely on.

"ERIKS is proud to be a Henkel Certified Applicator, and we look forward to continuing this important partnership."

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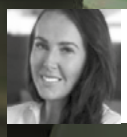
BEYOND THE BOND

COBOTS IN MANUFACTURING: **SMART COLLABORATION** FOR THE MODERN FACTORY



Hayley Reeves
Key Account Manager

Automation has long been synonymous with efficiency and productivity. But as manufacturing evolves, the focus is shifting from replacing human workers to enhancing their capabilities. Cobots, or collaborative robots, are at the heart of this change. They are designed to work alongside people, enhancing human capability on the factory floor.

They excel at repetitive or hazardous tasks, bringing precision, flexibility and safety to a range of industries, including manufacturing, logistics and healthcare. By handling assembly, material handling and quality inspection, cobots free up skilled staff to focus on complex or high-value work, while reducing fatigue, injury risk and errors.

They also allow operators to concentrate on problem-solving, quality control and innovation, ensuring human expertise remains central to production.

> “Cobots are built to work side-by-side with human operators.”

What are cobots?

Unlike traditional industrial robots, which operate in isolated zones for safety reasons, cobots are built to work side-by-side with human operators. Equipped with advanced sensors, AI-driven controls and intuitive programming interfaces, they can detect human presence, avoid collisions and adapt to changing conditions.

This makes them ideal for tasks that require both skill and adaptability. Cobots can be quickly reprogrammed for different duties, making them particularly valuable for small and medium-sized enterprises (SMEs) where production needs can change frequently.

Applications across the factory floor

Cobots are being deployed across a wide range of industries, including automotive, electronics, food and beverage. Typical applications include:

- **Assembly:** Screwing, welding and inserting components in confined spaces.
- **Material handling:** Lifting, stacking and transporting heavy or hazardous items, reducing fatigue and injury risk.
- **Quality control:** Performing precise inspections and testing to ensure consistent product standards.

Cobot + Cobot Controller + EcoStruxure Cobot Expert software

- **Packaging and palletising:** Sorting, boxing and sealing goods efficiently in consumer and food industries.
- **Machine tending:** Operating CNC machines, injection moulding stations and other equipment, freeing skilled workers for complex tasks.

> “Cobots offer more than simple task automation.”

Benefits beyond automation

Cobots offer more than simple task automation. Their advantages include:

- **Enhanced safety:** Built-in collision detection and torque monitoring minimise workplace injuries.
- **Efficiency and reliability:** Cobots operate continuously, reducing downtime and speeding production.
- **Flexibility:** Easily redeployed for different tasks, supporting agile manufacturing.
- **Cost-effectiveness:** Relatively low acquisition cost with a quick return on investment, often within a year.
- **Space optimisation:** Compact design and no need for safety cages free up valuable floor space.

> “A flexible, reliable and future-proof solution.”

Spotlight: BPX and robotics

ERIKS’ supplier BPX is a specialist distributor of control and automation components, solutions and software. To meet the growing demand for automation, BPX has established a dedicated Robotics Business Unit.

The team consults with manufacturers to deliver tailored cobot solutions, guiding customers from initial concept through to deployment and ongoing support.

By providing expertise, demos and proof-of-concepts, BPX helps manufacturers overcome labour shortages, quality inconsistencies and operational inefficiencies.

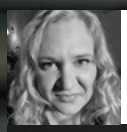
Flexible, reliable and future-proof solution

Beyond their tasks, cobots add real strategic value to the factory floor. In a sector challenged by labour shortages and production pressures, they offer a flexible, reliable and future-proof solution. Compact, cost-effective and easy to integrate, cobots allow manufacturers to optimise space, reduce costs and improve safety.

The global cobot market is projected to grow from $1.4 billion in 2022 to $27.4 billion by 2032, reflecting the increasing role of collaborative automation in modern manufacturing. As factories seek smarter ways to boost productivity and protect their workforce, cobots are set to become an essential part of the industrial landscape.

Scan or click to find out more about BPX and robotics

HELP YOUR PRODUCTIVITY GO WITH THE FLOW



Anna Wisniowska
Value Delivery Specialist
ERIKS

There are arteries running through most manufacturing and production sites. They're part of a network that helps products, parts and components flow through the factory like blood through a body. But if something goes wrong, the effects on productivity can be similar to a heart attack in a human: from extremely painful to completely catastrophic. So how can you keep your operations as smooth and reliable as a heartbeat?

> "Reduce damage caused to conveyed items."

Conveyor systems wind their way around industrial sites like arteries and veins around a body. And if they break down, it can cause just as many problems as a blocked blood vessel. So if you can reduce the risks, why wouldn't you?

And if the solution is as simple as a quick click, what's stopping you?

Held back by chains

The conventional chain conveyor can be a problem for productivity, product damage, maintenance and downtime.

For one customer in the construction industry, the wooden skid boards carried by their conveyor system were frequently damaged by the sharp edges of the conveyor's U-type steel attachments.

This meant increased waste and extra costs for replacement skid boards. It also meant that pieces of wood often fell into the conveyor machinery – including the bearings and other rotating equipment. The results were breakdowns, lost production, increased downtime and higher maintenance costs.

In fact, their chains were shackling their productivity. So they asked ERIKS for the key.

> "Fit existing conveyors, without interference."

Chain reaction

The challenge was to provide a solution to the skid board damage and associated problems, but without causing more disruption in the process. One site visit by ERIKS led to another, but this time together with an engineer from Renold.

Renold is the manufacturer of the revolutionary modular Renold Klik-Top™ Chain. Made from polymer blocks, it's specifically designed to reduce the damage caused to conveyed items by conventional chains, and to reduce maintenance.

Also, as the name suggests, it's as quick as a click to install.

When everything just clicks

When the customer heard the proposed solution, everything fell into place.

Damage to the skid boards would be prevented. Wood splinters affecting the rotating equipment would be eliminated. And breakdowns and downtime would be minimised.

The Klik-Top fixes onto the chain with one click, and can be removed just as easily – so replacement only takes a moment. There are no sharp edges in contact with the conveyed goods, and when the chain passes over the sprocket the clip's rounded edges prevent any damage. In addition, as the Klik-Top fits over

the pins, it protects the chain's bearing areas from dirt and other contamination.

But the customer wanted to be sure that the new solution would fit the existing conveyors, without interference from rivets and other components. So an initial order of twenty was placed for a three-month trial.

> “Reduces maintenance and replacement costs.”

Carry on conveying

After the simple installation, the Klik-Top Chain was put through its paces in normal operations. The good news was that it met all the customer's demands for seamless integration and smooth running. The even better news was that it did even more.

Breakdowns caused by ingress of wood splinters into the bearings were eliminated.

Because the chain components are better protected, they last longer – which increases the reliability of the whole conveyor system. That in turn reduces downtime, optimises productivity, and reduces maintenance and replacement costs.

The fact that Klik-Top Chain needs no lubrication for four years after installation offers further savings, on lubricants and labour.

And – of particular interest to this customer – the elimination of damage to the wooden skid boards means less waste, fewer replacements, less use of raw materials, less tree-felling, and a reduction in CO_2 emissions. This combination of factors is a significant contribution to the customer's focus on World Class Manufacturer Scope 2 and Scope 3 environmental targets.

Not surprisingly, at the end of the successful trial the customer installed Renold Klik-Top Chain across their entire conveyor system. The payback period was around two months, and the estimated projected cost saving is over £100,000. So production flows, and the savings flood in.

WOULD YOU TRUST AMAZON TO KEEP YOUR PLANT RUNNING?

Amazon has changed our lives; there's no doubt about that. From a place to order books and CDs it has evolved to cover an amazing cross-section of products we might want in a hurry from Lemsip to wrapping paper or from fabric softener to light bulbs (and that's just checking my order history for one month). It's a brilliant tool.

> "Amazon Business is an online procurement solution."

As well as being an excuse to get up from a Zoom or Teams call ("Sorry I have an Amazon delivery" is accepted worldwide as an excuse to leave an online meeting) the platform has spilled over into our working lives too.

Amazon Business is an online procurement solution offering businesses access to millions of products, plus features like quantity discounts and multi-user accounts, and tools for managing spending and purchases. It extends the familiar Amazon shopping experience to business customers.

But with the extension into the business world does the platform over-reach itself? I read in an industry journal recently an article from Amazon that said, "As industrial firms seek new sources of savings, a growing area of focus for those in procurement is likely to be non-core spend categories. In the industrial space, this may involve maintenance, repair and operations (MRO) items or personal protective equipment (PPE)".

Really? I find it hard to believe that any manufacturer's procurement team is going to buy its bearings, lubricants or electric motors via Amazon without any discussion or interaction with an expert. I found myself having an amusing daydream about our local delivery driver gamely trying to deliver a large pump – all stacked in the van with hair extensions, nail varnish and other parcels!

And while a little investigation of the Amazon Business website does uncover that their definition of MRO is definitely on the small side (Hi-Viz vests, electric drills etc.) I would still be concerned if any industrial business was buying its PPE from Amazon and they certainly do suggest that.

> "Consolidated spend and budget controls."

While the procurement arguments that Amazon makes are all valid – consolidated spend and budget controls – the same is also true of consolidating MRO spend through a vendor that knows about the space and can add value both technically and commercially. There's also one incredible advantage to working with a specialist MRO distributor, such as ERIKS. You get to talk to a human being, if you wish to do so. One that knows your account, knows your industry and can provide the insight you need should you have a problem.

So, while Amazon continues to deliver a great service to us at home and for some things in our business it's not a model that can be replicated across absolutely everything as they would have you believe.

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