# 

Reliability drives growth. Sustainability secures the future. This edition dives into how we can boost performance while cutting waste and reducing our impact - because progress should work for people and the planet.

#### **ERIKS In Action**

A modern approach to customer service

ERIKS' Fulfilment Centre enhances speed, efficiency, and sustainability - allowing local teams to prioritise expert advice while customers enjoy faster, trackable deliveries and improved product availability, Page 12.

#### In Focus

#### To reduce your TCO, cut your $CO_2$

ERIKS helps cut CO<sub>2</sub> and costs through energy-efficient solutions, sustainable practices, and repair options—reducing your Total Cost of Ownership while supporting your business's environmental and social responsibility goals. Page 20.

#### Debate

#### Great British Energy: Green Revolution or Government Repetition?

Great British Energy promises a bold green shift, but can it avoid becoming another government initiative that falls short? The future of the UK's renewable energy depends on overcoming serious hurdles. Page 50.





# **Discover SKF Axios**

#### The first line of defense for your machinery

Do you want to make informed decisions and avoid problems before they arise? Count on the simple, wireless, and scalable end-to-end solution from SKF for anomaly detection.

#### Always on

Automated equipment monitoring trends your machine data, detects anomalies around the clock, and sends alerts when you need to take action.

#### Always with you

Whether on your phone, tablet, or PC, condition monitoring data and alerts are at your fingertips.

#### Always one step ahead

The more data collected, the smarter the machine learning becomes. SKF Axios constantly evolves to safeguard your equipment.





**SKF** 



In a world of constant economic and environmental evolution, the choices we make today matter more than ever. By championing Sustainability and Reliability in our work practices, we're not only driving efficiency and lasting performance - we're actively shaping a better future for our planet and the generations that follow.

We're kicking off this edition with ERIKS In Action, spotlighting the real-world impact of our OnSite solutions. Discover how we helped a leading pharmaceutical manufacturer streamline their stores management, strengthen their supplier network, and drive down overall costs.

We then turn our attention to the ERIKS Fulfilment Centre of Expertise, where innovation meets impact. It's all about faster service, smarter logistics, and greener practices empowering local teams to deliver expert support, while customers enjoy quicker, more reliable deliveries and improved stock availability.

I would then recommend to you our In Focus section where we discover how the ERIKS' SAM Reliability Platform delivers real-time monitoring, smart diagnostics. and expert support to help businesses proactively maintain critical equipment and achieve operational excellence.

Plus, with the UK leading in wind power generation, ERIKS is tackling the shortage of local servicing and spare parts by investing in UK-based Centres of Excellence for sustainable, efficient turbine maintenance and repair.

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Click to connect

Helping to not only reduce costs and carbon footprints through local support and component reuse but also boost regional economies and extend the life of wind assets

In our Making Industry Work Better you can hear how 3M's DBI-SALA® Fall Protection for Tools offers smart, simple solutions to keep tools tethered and teams protected. And with big changes coming to the world of waste management – businesses with 10+ employees must become waste savvy or risk some serious fines.

Finally, our Debate piece looks at the launch of Great British Energy. Could it mark a turning point in the UK's clean energy journey or become another well-meaning idea that falls short? The opportunity is huge - but so are the challenges.

We always enjoy our reader's feedback. So, if you would like to comment on the subjects covered, please join the discussion by emailing or tweeting us at @ERIKS\_UK.

Kuhard Lutter

**Richard Ludlam** Editor-in-Chief Email me at: knowhoweditor@eriks.co.uk

# IN THIS ISSUE

#### Latest News

- 06 UK Manufacturing still in decline as costs rise
- 06 Call for solar panels in factory car parks
- 06 ERIKS attends major exhibitions
- 06 Manufacturing workers lead on productivity
- 07 New survey reveals engineering salaries lagging behind
- 07 Make UK launches National Manufacturing Day
- 07 Coming to a town near you nuclear reactors



#### **Technology Update**

- 08 Gorman-Rupp keep it simple
- **08** Xylem connects all the bases
- 08 ERIKS Industrial Services Ltd Strikes Gold with Ecovadis Award!
- 09 ERIKS launches new lifetime extension service for onshore wind turbines at all-energy 2025
- 09 See what others miss with Blue Light Sensors from Telemecanique



#### **ERIKS in Action**

- 10 The savings aren't even the best part
- 12 A modern approach to customer service
- 14 How a day return to Greenford keeps tube trains on track
- Focusing on the driven 16 component
- 18 3 ways we've made web shopping easier than ever



#### In Focus

- 20 To reduce your TCO, cut your CO<sub>2</sub>
- 22 Why operational excellence depends on asset reliability and how to ensure both
- 26 Hybrid Ceramic Bearings give electric motors a boost
- 28 Why online monitoring has a new fan
- 30 Revealed: the secrets behind your data
- 32 The missing link... found
- 34 The winds of change are coming
- 36 Optimising boiler houses: a sustainable journey for industry
- 38 For improved pump performance, apply here
- 40 Reliability and sustainability: are you still in the dark?



#### **Making Industry Work Better**

- 42 Stop the drop!
- 44 Drive belt performance to get your teeth into
- 46 The overlooked factors in hand protection
- 48 How to wash your hands of flu prevention

#### Debate

50 Great British Energy: Green **Revolution or Government** Repetition?





KNO

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#### UK MANUFACTURING STILL IN DECLINE AS COSTS

The latest S&P Global UK Manufacturing Purchasing Managers' Index (PMI) figures show that UK manufacturing remains in contraction.

While the January PMI rose slightly to 48.3 from December's 11-month low of 47.0 the industry has now seen four consecutive months of decline, with falling output, falling employment, and less new orders. Rising input costs-driven by minimum wage changes and

higher National Insurance contributions—are placing additional strain on manufacturers.

Small businesses are struggling the most, while larger firms have shown some resilience. Experts warn that weak domestic and overseas demand, coupled with inflationary pressures, leaves little room for immediate recovery. However, the upcoming Industrial Strategy and expected interest rate cuts later in the year offer hope.

Some industry leaders suggest that embracing autom and Al-driven efficien could help manufactu remain competitive amid rising costs and global uncertainty.

# 

Renewable energy experts are pushing the UK government to mandate solar panel installations on commercial car parks, including manufacturing and engineering sites.

It is estimated that more than half a million car parking spaces across the UK could be transformed into solar canopies, potentially generating 1263 GWh of energy annually-enough to power 350,000 homes and considerably cutting the carbon footprint of businesses. Similar policies are already in place in France and Slovenia, and advocates argue that the UK should follow suit to improve energy security and reduce reliance on the national grid.

While the government's Clean Power 2030 plan acknowledges the potential for solar car parks, industry leaders believe a mandate would accelerate deployment and ensure the UK capitalises on this 'open goal' for solar power.

#### ERIKS ATTENDS MAJOR EXHIBITIONS

ERIKS is exhibiting at several major exhibitions in the next few months.

Firstly, the Water Equipment Show at Telford International Centre on May 15th where the company will have experts from its Flow Control Centre of Expertise on the stand to answer questions about water and wastewater applications.

Secondly, the company will be attending the National Manufacturing & Supply Chain Conference & Exhibition in Dublin for the first time on May 28th-29th. At this event ERIKS will be showcasing its entire offer from the next day delivery of factory fresh components to OnSite MRO stores management and reliability services. ERIKS' experts in hose technology, seals, pumps, motors and valves will be attending the event to discuss everything from new designs with OEMs to refurbishing obsolete equipment.



#### MANUFACTURING WORKERS LEAD ON PRODUCTIVITY

New analysis by FourJaw Manufacturing Analytics of Sheffield, reveals that UK manufacturing workers delivered \$280 billion in 2023 and achieved the highest productivity growth among major economies between 2018 and 2023.

Over this period, the value of per-worker manufacturing output rose by 15% or nearly \$14,000, surpassing Germany [\$106,000 per worker), South Korea (\$93,000), and Japan (\$76,000). In 2023, UK manufacturing employees contributed an average of \$109,000 per worker—second only to the US, where productivity stood at \$167.000.

Despite these improvements, the UK's manufacturing workforce remains one of the smallest in the industrialised world, shrinking from 2.7 million to 2.6 million workers in the five years in question. By contrast, Chinese manufacturers delivered a net output of \$4.7 trillion in 2023 - more than a quarter of the world's combined total of \$16.2 trillion.



With 214 million people reported to be working in the Chinese manufacturing sector in 2023, this gives the world's biggest manufacturing economy a per-worker productivity of \$22,000.

#### NEW SURVEY REVEALS **ENGINEERING SALARIES LAGGING BEHIND**

A new salary survey reveals that pay increases in the engineering and manufacturing sector are failing to keep pace with inflation and the cost of living.

The survey by recruitment firm Reed shows that while some roles, such as engineering directors and guality inspectors, have seen wage increases of 11% and 8.6% respectively, the sector's average salary growth of 3.3% lags behind the national average of 6%.

The survey does though, once again, show that engineering roles command higher-than-average salaries—£50,800 compared to the UK average of £38,900. Almost a quarter (22%) of those surveyed expressed unhappiness with their pay, with 60% citing stagnant wage growth relative to inflation

The survey also found that many workers are open to new opportunities, prompting calls for the sector to improve incentives, recognition, and flexible working arrangements to retain talent in an increasingly competitive global job market.



#### COMING TO A TOWN NEAR YOU - NUCLEAR REACTORS

Some positive news for engineering businesses as it has been announced that the UK government is fast-tracking nuclear power expansion by removing planning restrictions.

Prime Minister Keir Starmer's "Plan for Change" will slash red tape and streamline the approval processes for Small Modular Reactors (SMRs), allowing them to be built in more locations across England and Wales. Previously, nuclear development was limited to just eight sites in the UK, but this restriction is being lifted to encourage investment and reduce delays.

The move follows a period of stagnation in UK nuclear development, with only one plant— Hinkley Point C-currently under construction.

Advocates argue that SMRs are cheaper, safer, and faster to build than traditional nuclear plants, making them a crucial part of Britain's push for energy security and lower electricity costs.

Prime Minister Keir Starmer said, "This country hasn't built a nuclear power station in decades. we've been let down and left behind. Our energy security has been hostage to Putin for too long, with British prices skyrocketing at his whims. I'm putting an end to it - changing the



#### MAKE UK LAUNCHES NATIONAL MANUFACTURING DAY

#### Make UK has announced the return of National Manufacturing Day on 25th September 2025.

Now in its fourth year, the event will see hundreds of UK manufacturers open their doors to showcase job opportunities in the sector. Companies across industries including aerospace, automotive, pharmaceuticals, and renewables will offer hands-on workshops, allowing visitors to engage in activities such as virtual welding, circuit board design, and 3D printing.

Attendees can speak with current apprentices and industry professionals about career pathways and the initiative aims to inspire young people, career changers, and job seekers to consider roles in manufacturing. Make UK CEO Stephen Phipson has encouraged businesses to take part, emphasising that the event is crucial in promoting the industry's contributions to technology and global sustainability efforts. He said, "National Manufacturing Day is where the sector comes together to celebrate the innovations British companies make every day and showcase the careers on offer to people of all ages across the whole of the country.

"We hope this fourth National Manufacturing Day 2025 will encourage people who have never thought of manufacturing as their future to come along to see what it is really like first-hand. This is a highly paid sector which offers something for everyone."



rules to back the builders of this nation and saying no to the blockers who have strangled our chances of cheaper energy, growth and jobs for far too long."

#### **GORMAN-RUPP** KEEP IT SIMPLE

Pumps for hostile environments don't have to be complex, but do have to be tough. So Gorman-Rupp's new 6400 Series<sup>™</sup> pumps offer a robust, efficient alternative to self-priming options.

Providing trouble-free operation in applications from agriculture to construction, and from mines to wastewater treatment plants, the 6400 Series end suction centrifugal pumps comfortably handle clean liquids or liquids containing large solids. And they do it with minimal service interruptions and some of the lowest maintenance costs in the industry.

For current operators of Super T Series pumps from Gorman-Rupp, costs are kept even lower, thanks to interchangeability of the shaft, seal, wearplate and impeller (excluding vortex impeller) for most models. 6400 Series pumps also match the Super T series' footprint and shaft height. And the rotating assemblies can be removed without disturbing the pump volute or piping. So your spares inventory is reduced, and installation and maintenance are speeded-up.

Backed by a five-year warranty for peace of mind, the new 6400 Series is simply the sensible choice.



#### **XYLEM** CONNECTS ALL THE BASES

The new hydrovar® X variable speed pump brings together innovation, connectivity, simplicity, sustainability and user-friendliness, in one integrated motor and drive solution. The leading-edge combination of synchronous motor, frequency converter and pump provides the perfect balance of performance, savings, and fast return on investment – and all in a sustainable package. Delivering not only a smaller carbon footprint – thanks to best-in-class efficiency – the pump also has minimum environmental impact, as it is manufactured free from rare earth metals.

With application software built in, the hydrovar<sup>®</sup> X is the easiest drive to commission, program and operate. It enables virtually any configuration of pumps, together with multi-pump capability for up to 8 pumps as standard, with no single failure point.

The IE5 motor is equipped with advanced control, for increased efficiency and extended motor life.

Preset from the factory, the hydrovar<sup>®</sup> X has a user-friendly graphic colour display and an automated start-up menu, and can be controlled and managed remotely from the Xylem X app.



ERIKS INDUSTRIAL SERVICES LTD STRIKES GOLD WITH ECOVADIS AWARD!



We're proud to announce that ERIKS Industrial Services Ltd has achieved the Ecovadis Gold rating, placing us among the top 5% of organisations globally for sustainability.

Upgrading from Silver, this milestone underscores our relentless commitment to responsible business practices.

This prestigious recognition reflects the dedication of our UK and Ireland teams, who consistently uphold the highest standards in environmental, social, and ethical performance.

While we celebrate this achievement, we remain driven to lead by example, pushing boundaries and setting new benchmarks for sustainability.

A huge thank you to our incredible team and partners for making this possible. Together, we're driving real change.

#### ERIKS LAUNCHES NEW LIFETIME EXTENSION SERVICE FOR ONSHORE WIND TURBINES AT ALL-ENERGY 2025

ERIKS is launching its new lifetime extension service for onshore wind turbines on Stand D28 at the ALL-ENERGY event which takes place at the SEC, Glasgow on 14th and 15th May 2025 With 30% of the UK's onshore wind turbines now coming to the end of their intended lifecycle, ERIKS' innovative new service will not only help turbine owners get more from their existing assets but also help the UK meet its energy generation requirements.

Exhibiting alongside ERIKS, and its partners in delivering the new service, are Xi Engineering Consultants and 1Stop Wind. The partnership will operate as a seamless service, but each partner handles a distinct part of an individual project. In brief, 1StopWind provide the statutory health and safety inspections

#### SEE WHAT OTHERS MISS -WITH BLUE LIGHT SENSORS FROM TELEMECANIQUE

Telemecanique Sensors introduces its advanced Blue Light technology, available in compact XUM, XUK, and XUT formats - engineered for a new era of precision detection.

Blue Light's high intensity and short wavelength make it ideal for detecting lowreflectivity, dark, shiny, curved, or transparent objects - even in tight, challenging spaces. With superior performance over red-light sensors, it ensures unmatched process reliability. The XUT model excels in compact installations, with a tough, glass-fibrereinforced build and simple, intuitive setup. Configure via teach button or IO-Link with flexible modes including object, 2-point, dynamic, or exclusive window teaching. including drone inspects of blades and towers, ERIKS provide the technical expertise for all major component inspections and the digital twin modelling is conducted by Xi Engineering Consultants.

A major advantage of the lifetime extension service from ERIKS is that it considerably delays the decommissioning of turbines with all the logistical and environmental challenges that brings.

For more information, please email renewables@eriks.co.uk



With detection ranges from 80 mm to 1.2 m, visible light spot for alignment, and IP67/IP69K & ECOLAB certifications, these sensors are built to last and perform.

Smart, durable, and ready for Industry 4.0 - discover the power of Blue Light precision.



Anthony Troy **Customer Operations Manager** FRIKS

It's not unusual for a business to buy up to 70% of its spare or replacement machine parts from the original manufacturer or a single supplier. Which means it's not unusual for them to pay higher prices, to wait longer for parts, and to put their production at risk through supply chain interruptions. That's why a major pharmaceutical manufacturer invited ERIKS to look at reducing their parts inventory, improving their supplier network, and reducing costs. And the best part was the teamwork involved.

With an OnSite team in place, ERIKS already had a presence at the customer's facility in Ireland. But this team had no involvement with the customer's own stores or spares procurement. However, when the customer realised their OEM parts spending had reached an unacceptable level, ERIKS were invited to liaise with the customer's own engineering spares team, to find the most effective way to make savings.

With the customer team's in-depth knowledge of their procurement needs, and ERIKS' strong supply network, the scene was set for a parts conversion project that would deliver not only parts, but savings and efficiencies too.

The most effective way to make savings 🤧

#### What's in a name?

One way that original equipment manufacturers try to keep control of parts inventory is by providing only the most basic part descriptions and names. This makes it hard for customers to identify parts for sourcing from other suppliers.

So one of the first steps that ERIKS and the customer took together was to create a uniform parts description and part number process. With this information at their fingertips, anyone ordering parts could then be sure of identifying the correct part - and have the ability to shop around for the best price.

With maintenance and repairs keeping them quite busy enough, engineering teams don't have the time or resources for parts shopping. But with new descriptions and part numbers to hand, it's easier for anyone to source parts. So at the customer's request, ERIKS stepped up to provide support, by scouring their extensive bank of preferred suppliers for the right parts at the right price.

And if the ERIKS OnSite team felt there was an even better price out there, they could call on ERIKS Engineering in turn, or ultimately ERIKS Procurement, to get the best possible deal in the shortest possible time.

Uniform parts

#### Ordered to order

Parts ordering and stores management are still very much the customer's remit. But core parts are now more easily identifiable thanks

description and part number process 🤧



#### Easily find the best price from a preferred supplier **?**

to the name and number conversion process. So ERIKS can ensure they are readily available on the ordering system for whenever a new part is required.

This enables the customer's team to quickly and easily find the best price from a preferred supplier.

Meanwhile ERIKS OnSite team can hold highrisk and high-turnover items ready in stock, to shorten delivery times and help keep production rolling. With on-site space in short supply, ERIKS also hold extensive stocks at a local hub for fast delivery to the customer's site when required.

#### More parts for less

The parts conversion process has helped savings and efficiencies to continue to grow for the customer

With parts sourced at lower prices, and a reduced inventory, the customer's total cost of ownership is lower. With shorter and more efficient supply chains, sustainability and reliability are improved, and the risks of downtime and lost production are minimised. And of course, the parts conversion project has helped to achieve the customer's initial aim: to reduce capital expenditure and maintain it at a more acceptable level.

In the earliest days of working with the customer, ERIKS were supplying just 17 line items. However, from 2016 to the parts conversion being completed in 2024 the line item count increased to 524 offering an overall saving to the customer of €524,739.

So if anyone was ever in doubt about the power of partnership between the customer's teams and ERIKS, they've definitely been converted by now.

# A MODERN

**Pamela Bingham** Chief Executive Officer ERIKS



ERIKS has invested more than £20 million in its FCE, its Fulfilment Centre of Expertise near Birmingham and can now deliver to every single customer at the time they want. In this article we'll look at why we view this investment as essential in meeting our customers' increased expectations.

Unsurprisingly during the global pandemic, the number of in-person visits to branches plummeted. These numbers have never recovered and have permanently moved to contact by phone, email, or Skype/Teams. At the same time ERIKS was analysing its data in regard to what percentage of customer requests were serviced immediately from local stocks and how much product was being dispatched centrally.

Also, the business was looking at its environmental performance and aiming to reduce 'product miles' as well as inefficient practices such as unpacking and re-packing products for local distribution via ERIKS' own vans

#### An impossible guessing game

One of the strategies we highlight is that ERIKS has a broad product range and within each range there's a myriad of options. Plus, it serves an enormous number of industry sectors, and they all use different types of products

So, when deciding what to keep in a local service centre it's an impossible guessing game. The only point of reference available is 'What do I sell already?' and from its data ERIKS was able to see that this broke down into broadly two categories: a) The showstoppers and b) the stock replenishment items.

The showstoppers are generally kept by the customer and the stock replenishment items are non-urgent and available from the FCE for next day delivery.

#### **Centralised and flexible distribution**

In terms of meeting customers' needs, the advantages of a centralised distribution are well known. ERIKS' FCE has 50.000 items that can be dispatched within one hour and more than 250,000 products on next day delivery. This huge range provides excellent supply chain redundancy as like-for-like products can be dispatched quickly if the specified product isn't available.

Secondly, the turnover of products in a centralised facility is much faster, ensuring that stock is 'factory fresh'. Same-day delivery is possible with the basic standards being next day delivery before 9am, 10am or midday (as stipulated by the customer) with no fuss returns. The use of courier partners allows FRIKS to deliver to multiple businesses. within the same time window as opposed to their former local approach which meant deliveries were met sequentially by their own vans

Using courier partners means that customers can also 'Track and Trace' their goods. so they know exactly when to expect them. Centralised distribution is also more

environmentally friendly with less vehicles running more efficient routes and using recyclable packaging. This is an important point for many businesses as they align themselves with net zero regulations.

Due to COVID we all became far more familiar with the digital purchasing experience as exemplified by Amazon. This approach has many positives in terms of convenience, but the one major negative is the detachment from people that this brings. When it comes to purchasing spare parts people like to, when necessary, speak directly and immediately to an expert there's a fine balance between individual consultancy and automated logistics that needs to be struck.

ERIKS service centre teams are no longer concerned with basic logistics so now have more time to communicate with their customers, ensuring that the service they are receiving, be that basic spares delivery, getting advice about like-for-like parts with shorter lead times or having their own ringfenced area at the FCE, is working for them.

We feel that this modern approach to customer service is what's needed world class logistics coupled with regular communication and consultancy all tailored to the individual customer.

#### Put ERIKS in your pocket download the App today!

Scan it. Order it. Track it.

Get everything you need for fast, easy Digital Replenishment with the ERIKS App. No paperwork, no hassle - just instant access to thousands of engineering components and industrial consumables, right from your phone.

#### eriks.co.uk



#### Fast ordering. Smarter working. Total control.

The ERIKS App gives you the power to replenish stock, check product details, and track deliveries in real time anytime, anywhere. Download now for iOS or Android and make every job that little bit easier.

Why you'll love the ERIKS App:

- Instant scanning for faster, error-free ordering
- All your product info at your fingertips
- Track and trace your deliveries in real time
- Easy repeat ordering with saved order history
- Always connected stay logged in for instant access



#### Let's make industry work better

## HOW A DAY RETURN TO GREENFORD KEEPS TUBE TRAINS ON TRACK



Mike Golds Engineering Services Director

Around 4,000,000 passenger journeys are made every day on Transport for London's (TfL) tube trains. And every day, the traction motors that drive the trains must perform reliably and efficiently, to get every passenger safely to their destination. Which is why the motors' stator frames go to Greenford.



ERIKS Engineering Services workshop at Greenford is as important to TfL as any station on the Underground – because it's a workshop dedicated solely to them. Built in line with ERIKS aspirations and the needs of TfL, it's not only helping to keep the trains running. It's also helping TfL to achieve its CSR targets and realise the social values the Government sets for its Local Government bodies.

#### **Changing trains**

ERIKS Engineering Services have operated a workshop in Greenford for many years. But in 2022, the decision was taken to change the workshop to serving TfL alone. This provided the opportunity to increase the throughput of motor stators for rewinding – and to move to a new building which could be kitted-out for more efficient customer service and more sustainable operations.

But it wasn't simply a case of finding any suitable building almost anywhere. TfL had very specific requirements for ERIKS to meet. These made finding a building much harder or much easier, depending on your point of view.

Harder, because ERIKS wanted the new workshop to be in the same area, to help cut down on transportation cost and provide a greener service, which limited availability. Easier, because this narrowed the search.

#### The 50 metre Tube journey

The right building for ERIKS and TfL turned out to be right under their noses – around 50 metres from the existing workshop. Even so, it took until October 2023 to find it. And it wasn't until six months later that access was granted so work on the interior could begin.

However, around five months after that, the new building was ready to move into – and the move was made with no disruption to service delivery for the customer.

Now the workshop has doubled the units that the old one had for the rewinding process, plus a new Vacuum Pressurised Impregnation tank which increased our batch capacity and reduced our gas usage by 50%.

This was important to both TfL and ERIKS, as making the new building greener than the old was a key part of the relocation brief.

As well as utilising solar power for heating and lighting, the building incorporates



an improved production process which eliminates wastewater discharge to sewerage. Instead, a closed system cleans the stators and the dirty water is replaced every two weeks and treated to enable reuse. In another step towards a circular economy, all scrap copper resulting from the rewinds is recycled.

In addition, simply by locating the workshop in Greenford, carbon emissions are substantially reduced. Rather than being transported hundreds of miles to competitors' sites, the motors are maintained locally with minimum transportation required.

#### **Transport for London, for Londoners**

TfL's commitment to serving London and Londoners doesn't end with providing the Tubes and buses.

They want to offer social value. They want to offer skilled jobs for local people and wages that are at least equal to the London minimum wage. And they want to help local young people to learn and train, so that their workforce remains rooted in the community long into the future.



So they didn't just have demands about the building. They also knew exactly what they wanted ERIKS to provide for the people who work in it. And ERIKS with its strong focus on ESG and delivering measurable social impact, was proud to meet TfL's clear expectations and align with their values.

The Greenford location draws from a pool of local London employees, offering pay well above the London minimum wage. And through engagement with the South Thames Colleges Group, Rosedale College and UTC Heathrow, we provide students of Engineering and other relevant subjects opportunities for T-Level placements at the workshop.

Notably, these placements are paid—which is not mandatory, but a reflection of how much ERIKS value the skills and contributions of the next generation.

This alignment between TfL's vision and our ESG-driven approach ensures that together, we're making a positive, lasting social impact.



#### **Dedication pays dividends**

While the new Greenford workshop has reduced the carbon emissions of motor maintenance for TfL, it has also increased production. So TfL can expect a continuing, consistent and quicker supply of quality rewinds to keep the trains running.









Whether it's a workshop dedicated to a single customer, a local workshop with specialist skills for local industries, or an on site solution with ERIKS experts always on hand, ERIKS can help to optimise your maintenance, repair and operational performance, just like they did for TfL.

You could say it's just the ticket.

# OMPONENI



Simon Whitehouse **Business Unit Manager** ERIKS

With electric motors creeping upwards in terms of efficiency the savings to be made by moving between IE classifications is relatively small. However, by focusing on the driven component as opposed to the driving component – such as pumps – there are still big improvements to be had.

#### Testing pumps in-situ is vital **9**

With the current focus on sustainability, much of ERIKS' advice is about returning to first principles when performance testing a pump. To create the data necessary to assess the pump curve\* it is necessary to understand flow rates, pressures and the power consumption measured at the motor or from the control panel.

In recent years ERIKS has invested in technology that can test the performance of pumps in a non-intrusive way. Ultrasonic flow meters that clip to the outside of a pipe, pressure transducers that measure the suction and discharge pressure and power measuring equipment.

Testing pumps in-situ is vital as if you test a pump in the factory, it's efficient to the curve but not necessarily the application. When a pump is tested in-situ, if its performance is poor then there are many actions that can be taken to rectify the problem.

The ability to change a pumping system is important because, across all industries, if the infrastructure has changed, either by expanding or decreasing, then the pumps need to be reviewed for optimisation and while there's examples of where VSDs can be used in many cases the solution might be more extreme.

#### Obsolescence is an issue that **ERIKS** deals with regularly **99**

#### The battle with obsolescence

Obsolescence is an issue that ERIKS deals with regularly. It is linked to both changes in a process or a network and where businesses are running older, legacy equipment where access to spares is challenging.

ERIKS can work with customers to combat obsolescence with solutions ranging from condition monitoring to the scanning of an impeller for re-manufacture to extend the life of the pump.

ERIKS has the knowledge to re-engineer and re-scope OEM equipment and, with branches across the UK, businesses can get their work done locally to fit their time scales.

When customers want their pumps overhauled, they have the choice of using ERIKS or the OEM, but they are increasingly turning to ERIKS due to its experience, its logistical expertise and its ability to provide an independent opinion.



#### Independent, expert advice **9**

As well as the ability to re-engineer pumps ERIKS can also apply coatings that in many cases bring pumps 'back from the brink'. The coatings can improve the efficiency of the unit or enable the pumps to handle abrasive material or chemicals. Plus. some of ERIKS' workshops, such as its Norwich and Leeds sites, can wet test pumps.

#### **Clean and dirty**

The ability to handle both 'clean' and 'dirty' pumps is also something that sets ERIKS apart. Water companies operate both 'clean' and 'dirty' pumps and if a pump works in a clean environment, it cannot be exposed to an environment in which a 'dirty' pump is being worked upon.

#### Independence is key

As a member of the BPMA (British Pump Manufacturing Association) ERIKS is recognised as a pump specialist. As with all its engineering services, its independence and ability to offer the customer a solution that suits them is crucial.

With the current focus of businesses on energy efficiency and sustainability pumps



represents an opportunity to make great strides, and ERIKS can offer independent, expert advice to help them make big improvements.

\* Shows the relationship between the flow rate, head, efficiency, and power consumption of a pump. The curve provides a visual representation of the pump's ability to move fluid and the energy required to do so and is thus useful in determining the most efficient operating point of a pump.

# 3 WAYS WE'VE MADE WEB SHOPPING EASIER THAN EVER



Dan Walker E-Commerce Application Supervisor

Online ordering from the ERIKS Webshop has always been a quick, easy, and efficient way to purchase your technical products and parts.

Now three major improvements make it an even better way to shop:

1 Track and Trace from order to delivery

2 Search and find more easily

3 Manage your account more effectively



#### 1. Keep track of your order, with Track and Trace from order to delivery

Knowing when your order is going to arrive is essential for planning scheduled maintenance or assessing the duration or impact of downtime – planned or unplanned. Some elements of Track and Trace have been available in the past, but only from the time of dispatch, and only if dispatched from or via the ERIKS Fulfilment Centre of Expertise. The new capability provides Track and Trace information even before the product is shipped, from the moment of acknowledgement of sale. It covers back orders and items being dispatched directly from suppliers. And instead of keeping only buyers in the loop, now the engineer who placed the order will also be able to follow delivery progress.

This extra transparency, and visibility further along the supply chain, ensures complete insight into every purchase from the ERIKS Webshop – from point of sale to point of delivery. So ERIKS customers know more, know it sooner, and can use that knowledge to improve the efficiency of servicing, maintenance and repair.

#### 2. Find products faster with new, improved Search function

With over 200,000 products available in the ERIKS Webshop, finding the one you need can be a challenge. But the new and improved Search capabilities now make searching and finding quicker, easier and more intuitive than ever before.

If you don't have the complete Part Number to hand, that's no longer a problem. Start typing in as much of the number as you have, and the Search tool will give you suggestions even as you're typing. And if typing isn't your strong point, the new tool will still cope. If you accidentally leave out a space, or forget to put a '/' where there should be one, for example, the search tool will realise you're all thumbs and make allowances in its search.

#### Quicker, easier and more intuitive than ever ??

If you don't have the ERIKS part number, that's not a problem either. You can search using your own part number, or using a keyword, and the tool will still offer you suggestions from the Webshop stock.

If you're not exactly sure what specific product you want, you can make a start by searching by category. So, for example, if you want a pair of gloves but don't know which ones, you can click on the Gloves category and a page of sub-categories [Chemical



#### Manage your account effectively, efficiently and easily ??

Resistant, Cut Resistant, Disposable etc.] will be displayed, to help you narrow down your search step-by-step. There are helpful filters and terminology icons to support your navigation to quickly find the product you need.

If you want to buy a particular brand, simply click on the brand name and the Search tool will show you every product in the Webshop from that brand.

Lastly, the wait for a price on a configured product has been eliminated. When you enter your specific configuration (for hose, that would be end fitting, diameter and length), the price will be displayed immediately, ready for you to place your order.



#### 3. Stay in control by managing your account more effectively

With so many essential products and parts available to buy through the ERIKS Webshop, you need to be able to manage your account effectively, efficiently and easily. And that's exactly what the enhanced Webshop functions enable you to do.

From submitting online Requests for Quotes (RFQs) to ordering directly from your quotes online, from tracking orders to traceability of products, you can have an overview of your whole purchasing relationship with ERIKS, fully visible through the Webshop. Customers can implement spending controls, with signoff requirements for purchases to elimate maverick spending and maintain control and compliance.

And the ERIKS Webshop is not just about products and parts purchasing. It's also your portal to tracking progress of engineering repairs, refurbishments and workshop production, including customised or configured products. In fact, the Webshop can tell you everything you need to know, to help you keep your assets functioning efficiently, your processes running smoothly, and your business operating productively.

The changes outlined above are not the only recent improvements to the ERIKS Webshop. Look out for more in the next issue of Know+How.

# REDUCE



ERIKS

Adam Wright Head of Sustainability & Operations Excellence

We all understand the need to reduce CO<sub>2</sub> emissions. But while there's plenty of talk about the challenges for industry, there's not so much information about the financial benefits - especially in terms of Total Cost of Ownership [TCO]. However, what's good for the planet can also be good for your bottom line.

Carbon intensity 10% or more reduction in carbon intensity YOY for the last 3 years. (tCO2e per £m).

Waste 23% reduction in waste produced, of which 71% is recycled, 27% goes to energy from waste and only 3% to landfill. Hazardous waste has reduced by 69% YOY.

#### **Science Based Target Initiative**

Scope 1 & 2 emissions: 58.8% reduction by 2034 Electrification of vehicle fleet Minimise and phase out gas usage where possible Reduce, reuse or recycle to eradicate landfill

Formal adoption of science-based targets and carbon reduction plan

Scope 3 emissions: 35% reduction by 2034

Education and awareness of energy efficient upgrade



100% recycled packaging materials used across all our sites.

 Total cost of ownership model Offer repair (recycle) option alongside replace



ERIKS is committed to its sustainability program and is working hard with its diverse supply chain to develop its Ecovadis rating. We also hold ISO 14001 environmental certification in relevant sites.

#### Carbon reduction through greater energy efficiency ??

The shortest route to carbon reduction is through greater energy efficiency. And the quickest way to optimise energy efficiency in your operations is to talk to someone with energy-saving know-how, solutions and products. Plus a commitment to putting their sustainability know-how where their mouth is, in their own business.

That's exactly what the ERIKS Roadmap to Sustainability is all about.

It not only sets targets and demonstrates achievements on the way to reducing the environmental and social impact of ERIKS' operations and products. It also 'builds-in' all these things to ERIKS products, solutions and services. So you can prove your business's sustainability and reduce the TCO of your assets, simply by choosing ERIKS.

#### Make strides with our footprint

Sustainability isn't achieved by one business alone, because every business's actions can help the next.

For example, ERIKS have formally adopted science-based targets and a carbon reduction plan. This includes offering a repair option for customers' assets as an alternative to replacement. This in turn helps customers to reduce waste and – if the repair also improves energy-efficiency - helps to shrink the customer's carbon footprint and energy costs

As a signatory to the UN Global Compact, ERIKS have also agreed to work towards the UN's sustainable development goals. These goals include urgent action on climate change and its impacts, healthy lives and well-being, gender equality, and sustainable economic growth.

#### Reduce the TCO of vour

We have chosen to use ecovadis to benchmark our sustainability journey and have already achieved a Gold rating.

Again, by working with ERIKS, businesses can help towards fulfilling their own Social Values, knowing that a key supplier shares and lives those values in everything they do.

#### All figured out

The ERIKS Roadmap to Sustainability covers a wide range of topics. By improving and achieving performance in these, ERIKS helps customers in their own efforts to be more sustainable

Already, 100% of ERIKS' energy use in the UK is from 'green renewable' sources. ERIKS have also reduced by 23% the amount of waste they produce. Of remaining waste, 71% is recycled and 27% goes to energy-fromwaste, leaving only 3% to go to landfill.

#### Help customers in their own sustainable ??

ERIKS are working with their own suppliers to minimise the impact that the production and shipping of parts can have on the environment. As these parts are then sold to ERIKS' customers, the benefits filter through to help with customers' own sustainability taraets.



to minimise our supply chain impact (impact of production and shipping f the parts we sell to y the customer).



#### **Sustainable Development Goals**

ERIKS is formally aligned to the UN Global Compact and has action plans for 4 SDG's.



and Well-being Ensure healthy lives and promote well-being for all at all ages.

Good Health



Gender Equality. Achieve gender equality and empower all women and girls.



#### Decent Work and **Economic Growth**

Promote sustained inclusive and sustainable economic growth, full and productiv employment and decent work for all.

#### Climate Action.

Take urgent action to combat climate change and its impacts.

As a result of these and other related actions and initiatives, ERIKS have reduced their carbon intensity (tonnes of carbon dioxide equivalent per £m) by 10% year-on-year for the last three years.

So by working with ERIKS, you can be sure you are helping to reduce the overall carbon footprint of the industrial sector. You can be confident that the products and solutions you choose will have a minimum negative impact on the sustainability of the sector and of your own business.

And as you make product choices that help to increase your business's energy efficiency, reduce its carbon footprint and improve its sustainability, you can be sure that alongside reducing your business's impact on the environment, you will also be reducing the Total Cost of Ownership of your assets.

#### Sustainability steams ahead

William Grant's Girvan Distillery uses huge amounts of steam in the production of over 100 million litres of alcohol per year. The better the steam quality, the better the heat transfer, and problems such as excessive condensate and steam hammer are reduced.

Suffering poor steam quality and frequent failures of boiler feed water valves, W. Grant worked with ERIKS and Grundfos to find a cost-saving, energy-saving solution.

A fixed-speed CR pump was replaced with a Grundfos iSOLUTIONS CRIE pump, with integrated variable speed drive. This gave greater control of the boiler. with reduced complexity and increased efficiency

After six months, the valve was showing no sign of failure, and both steam quality and boiler energy-efficiency were improved. Energy savings on one pump alone were around 40%: equivalent to approximately £5,000 a year.

assets, simply by choosing ERIKS **99** 

# efforts to be more

# WHY OPERATIONAL EXCELLENCE DEPENDS ON ASSET RELIABILITY AND HOW TO ENSURE BOTH

ERIKS

#### **David Manning-Ohren** zontal vs Vertical Technical Manager

It doesn't matter which industry sector you operate in, or what processes make up your production operations. Whatever you manufacture or produce, you will have critical assets within your facility which represent a disproportionate risk to your productivity should they break down.



If these assets are unreliable, they will increase maintenance costs, create operational bottlenecks, reduce efficiency and potentially even compromise safety. (A catastrophic failure of rotating equipment, for example, can turn rotating components into lethal missiles.) On the plus side, simply by ensuring that these critical assets reliably continue to perform efficiently, you can minimise downtime, reduce costs, increase safety and maximise productivity.

But who do you rely on to optimise asset reliability – and how do they do it?

#### **Knowledge is power**

The more you know and understand about vour critical assets, the more effectively you can ensure that they continue to operate at their most efficient and productive, with minimum downtime and maximum uptime.



And if you are able to access this information in real time, then your ability to minimise unforeseen breakdowns, to lower the costs of maintenance and energy, and to reduce operational expenditure, will be significantly improved.

It may not be possible to eliminate every breakdown. But it will be possible to avoid catastrophic failures and the major impacts they have on efficiency, productivity and profitability.

Safety will be improved not only through a reduced likelihood of dangerous equipment failure, but also through the application of planned, proactive maintenance. (Statistics show that unplanned maintenance resulting from breakdowns is more likely to lead to injuries.)

Velocity RMS Axial vs Horizontal

You will be able to eradicate undiagnosed or misdiagnosed reliability issues. And with realtime and historic data at your fingertips, you will even be able to make better informed operational plans for the future.

So how do you go about accessing, collating and interpreting the crucial data from your critical assets?

#### Sensors make sense

From bearings to fans, gearboxes to pumps, and inverters to valves, changes in vibration, temperature, fluids and performance are key indicators of potential issues with assets.

Velocity RMS Axiel vs Venical

By carefully positioning sensors where they can collect this data, and monitoring the results to identify changes and anomalies, it is possible to obtain very accurate early warnings of issues which could lead to breakdowns. This then enables early intervention through maintenance, to rectify the problem and prevent it from developing further.

Manufacturers such as SKF and Schaeffler offer basic sensing and monitoring solutions of the shelf. The sensors provide entry-level data gathering suitable for simple systems, and for assets where access is difficult. The proprietary solutions generally include a limited range of sensors to choose from, and a software app for anomaly detection based on data collected every one to four

#### Obtain early warning of issues **?**

hours. SKF's' out-of-the-box Axios monitoring product is a great example of these selfinstalled monitoring solutions.

One of the main requirements to ensure useful results from the sensors is to identify the best combination of sensors and location. This needs to be where they can gather the most relevant and informative data. As such, it demands knowledge of how and why vibrations, temperatures or fluids can change their values - and where those changes can be most readily and most accurately detected











Then, once the relevant data has been collected, its value depends on the ability of the asset's operator to analyse it correctly, and to act in a timely and appropriate manner to pre-empt breakdown or catastrophic failure.

Alternatively, a fully integrated product relieves the asset operator of the burden of correct installation, data collation and interpretation, and – depending on the chosen level of support – even of taking action

The ERIKS Smart Asset Management (SAM) Reliability Platform, for example, supports these two levels of service offering powered by analysis which delivers insights, to interpretation which informs - and triggers actionable solutions. It's down to you whether you install the sensors yourself or rely on ERIKS expertise, let me explain.

Interpretation which informs and triggers – actionable solutions ??

#### **Empowering optimised performance**

More than 100 market-leading companies across a wide variety of industry sectors already benefit from early warnings via the ERIKS SAM Reliability Platform.

In industries ranging from food and beverage to steel, from packaging to pharmaceuticals, and from healthcare and construction to chemicals, this real-time cloud-based monitoring platform is helping to support engineering teams in mean time between

#### A complete, integrated reliability package **?**

failure, minimising downtime and maximising productivity.

In addition to algorithmic data analysis, the Reliability Platform offers live status monitoring. Condition scores from 1 to 10, with green/amber/red colour coding, make it easy to understand asset health at a glance. Smart maintenance alerts enable proactive maintenance. Smart algorithms will even provide diagnosis of potential causes, and propose actionable solutions.

And a digital central repository of the history of the asset and its certification helps to streamline documentation.

#### **Reliability at every level**

Two levels of protection are available with the Reliability Platform:

Advanced Service Level Protection collects real-time data from a sensor network. This data is then analysed by the ERIKS dashboard, to provide deep insights into machine health. The data is presented in a user-friendly, informative way, to enable users to take timely actions and implement early preventative measures.

With a minimum of 20 sensors, supplied by ERIKS and installed by the customer, the Advanced Service Level collects data from as frequently as 5 or 10 minutes, can be accessed 24/7 and informs you of any issues.

#### Professional Service Level Protection provides real-time monitoring driven by a network of sensors designed and

installed by ERIKS, providing predictive maintenance alerts and actionable insights.

The unique cloud-based asset management platform is monitored by a dedicated support team of expert technicians, who swiftly identifying issues to implement fixes turning amber warnings into green lights for your production.

Packages start with a minimum of 20 sensors that are installed and commissioned by ERIKS engineers, to collect data as frequently as every two minutes.

#### **Reliably evolving**

As industry's needs change, so should condition monitoring. That's why ERIKS SAM Reliability Platform is continually evolving and improvina.





It's not just a network of sensors. It's not only a data gathering application. It's even more than a remote condition monitoring system.

ERIKS SAM Reliability Platform is a complete, integrated, reliability package. It provides you with deep and invaluable insights into your equipment. It is supported by experts in reliability, who can act on those insights to ensure your assets operate at their optimum efficiency, with lower maintenance costs, minimum downtime and maximum productivity.

It is the key to reliably unlocking operational excellence through informed, intelligent maintenance of your most critical equipment.

To discover how the ERIKS SAM Reliability Platform helped one customer monitor the unmonitorable, turn to page 28: 'Why online monitoring has a new fan'.

# HYBRID CERANIC BEARINGS



Kenney Harris **Business Development Manager** SKF

Electric motor manufacturers and end-users are constantly searching for improvements in motor efficiency and performance. Hybrid ceramic bearings from SKF provide new possibilities.

#### A number of advantages **?**

Hybrid ceramic bearings integrate steel rings with rolling elements made from silicon nitride (engineered ceramic). Compared to this technology, traditional steel bearings are cost-effective but have higher friction and lower efficiency. Alternatively, full ceramic bearings are ideal for extreme conditions, offer superior corrosion resistance and hightemperature capabilities, but are more brittle and expensive.

#### The hybrid advantage

If you have considered the alternatives and think hybrid ceramic bearings would be suitable for your electric motor, you will find a number of advantages.

Firstly, SKF hybrid ceramic bearings are fully interchangeable with the standard all steel bearings which means no special changes are required to your motor to fit them.

Secondly, the electrical insulation properties of silicon nitride rolling elements prevent electrical erosion commonly seen with VFDs, enhancing machine longevity and reliability. This results in fewer failures and a more consistent performance of vital equipment.

Thirdly, thanks to silicon nitride's low density reducing weight and inertial forces combined with the lower friction coefficient, SKF Hybrid ceramic bearings unlock both the speed potential, running up to 25 percent faster than standard steel counterparts, along with reduced heat generation resulting lower operating temperatures.

SKF Hybrid ceramic bearings can cut down friction by a substantial 50 percent through optimizing machine design.



Finally, the superior performance even with harsh lubrication conditions, can extend bearing service life and maintenance intervals. SKF Hybrid ceramic bearings' design facilitates smoother operation, extending grease life by up to eight times with certain high-performing lubricants. This improvement can lead to fewer maintenance interruptions (either to relubricate or to change greased-for-life bearings) and reduced lubricant expenditure.

SKF Hybrid ceramic bearings contribute to more than just higher performance levels. Their longer service life and reduced maintenance requirements lead to reduced energy use and fewer resources, making a significant contribution to meeting sustainability goals.

#### Maintaining performance

To ensure the life and performance of hybrid ceramic bearings, as for all bearings, correct maintenance is essential.

Hybrid ceramic bearings perform best when used with lubricants specifically designed for them. And it's important to follow the manufacturer's guidelines to avoid overlubrication, which can cause overheating leading to premature bearing failure.

SKF offers the LHGQ 2 electric motor bearing grease as the ideal lubricant for SKF hybrid ceramic bearings. Selecting the correct grease can extend the interval between regreasing, reducing maintenance and downtime costs.

#### Value v. cost

Although the initial cost of hybrid ceramic bearings is higher, the long-term savings in energy, maintenance, and replacements make them a cost-effective choice. In fact, using hybrid ceramic bearings in electric motors can significantly reduce the Total Cost of Ownership (TCO).

#### Smoother, quieter motor operation **9**

They improve efficiency and energy savings by reducing friction and wear, leading to lower operational costs.

They have a longer lifespan and require less maintenance, which reduces downtime and replacement costs. They can operate at higher speeds with less vibration, which enhances motor performance and reliability. And they generate less heat – helping to lower cooling requirements and associated costs



#### Why choose SKF Hybrid Ceramic **Bearings?**

There are traditional bearings. There are hybrid ceramic bearings. And then there are SKF hybrid ceramic bearings, which will:

- Protect against electrical erosion from variable frequency drives, and so enhance durability
- Increase maximum operating speeds by up to 25% over steel bearings
- **Reduce friction** by up to 50%, thanks to the tribological characteristics of silicon nitride
- **Extend service life** and reduce maintenance costs, by withstanding contaminants and poor lubrication conditions
- **Maximise sustainability** and enhance operational efficiency, thanks to their longer service life and reduced maintenance requirement

Industry is facing rapid transformation as advances in electrification, automation, and renewable energy – and the search for sustainability - place greater demands than ever before on mechanical components.

As a critical element in many applications, bearings face new stresses and performance expectations. By optimizing electric motor performance and reliability, SKF hybrid ceramic bearings are not just problem solvers but performance enablers, turning challenge into opportunity.

#### Which bearing is best for your motor?

To select the best bearing for your electric motor, you should:

- 1. Assess your application's specific requirements, including load conditions, speed, and environment.
- 2. Assess the failure history of the current bearing selection.
- 3. Evaluate the cost-effectiveness of hybrid ceramic bearings based on performance and maintenance needs.
- 4. Talk to ERIKS and SKF for real bearing know-how

#### IN FOCUS

# WHY ONLINE MONITORING HAS A NEW FAN



Duncan Webb Reliability Systems Manager ERIKS

Keeping a close eye on your assets is essential to optimum efficiency, costeffective maintenance, and avoidance of catastrophic failure. But what if the asset is 30m up in the air? Then you don't need a ladder, you need a platform: the ERIKS Smart Asset Monitoring platform.

A customer had been relying on portable monitors for intermittent monitoring of a fan motor, which is vertically mounted 30m up a chimney. The motor powers an extractor fan, which removes polluting fibreglass fragments from waste gases before they are dispersed via a chimney. If the motor fails and the fan stops working, the pollutants have the potential to contaminate a nearby beauty spot and major waterway.

The motor non-drive end bearing had already failed three times in the previous 18 months, due to undetected deterioration. And there was always the risk of an issue arising in-between monitoring visits.

ERIKS Smart Asset Monitoring platform (SAM) made maintaining the asset a much more down-to-earth task.

#### **Completely baffled**

The main indicator of a problem with the fan and motor was excessive noise. This had reached such a level that the customer was considering baffling the fan with an acoustic cabinet. Clearly this was treating the symptom rather than the cause.

#### The risk of an issue arising **?**

ERIKS had a better solution. By using wirefree sensors connected to the ERIKS SAM platform, the customer could continually monitor the motor without requiring access.

When the customer agreed to a trial installation, the sensors were expertly positioned by ERIKS' engineers to collect a one-second burst of data every two minutes, across three different axes. Using the platform to analyse the data not only provided early warning of potential failure, but also revealed the source of the problem.

#### **Accelerated solution**

Analysis of the data collected by the sensor showed that while the motor's acceleration was increasing significantly over time, the fan's velocity was not. This suggested an issue with the bearings, which on-site technicians diagnosed as inner and outer race faults.

#### Early warning of potential failure **?**

The repair would involve removing the motor, which required a crane to be hired-in. Replacing the motor immediately would reduce the crane hire costs, but the customer lacked a spare.

Having identified insulated bearings as a potential solution to the recurring failures. ERIKS approached the motor manufacturer for a suitably insulated replacement motor. However there was no suitable motor available from stock, and the manufacturer quoted a hugely extended delivery lead time for making the changes required.

#### Improve, investigate, innovate

ERIKS' response was to supply the motor direct, with all the necessary changes: insulating the bearings, adding shorting rings and future-proofing by making it 'inverter ready.' Even with the extra work, it was still delivered faster than the original manufacturer could offer.



This allowed the failing motor to be lifted out and replaced with the updated version, which shortened the crane hire period and reduced the cost. The failing motor and bearings were then forensically examined back at the ERIKS workshop.

The inspection showed that bearing failure was imminent. Evidence of electrical fluting also proved that simply swapping-out the old motor with a like-for-like replacement would have left the root cause unresolved. However, with the data from the SAM platform highlighting the potential issue, the modifications made to the replacement motor were effective at eliminating the problem.



#### Using the SAM platform for analysis ??

With new bearings installed, and the same modifications made as on the replacement, the updated asset was returned to the customer as a spare.

#### Fail to plan, plan to fail

Research has shown that unplanned maintenance – often performed under time pressure - is a six times greater safety risk





than planned maintenance. And obviously, the unplanned downtime also negatively affects productivity.

By installing sensors for ongoing monitoring, and using the SAM platform for analysis, the customer has greatly reduced the risk of failure. In addition, diagnosing the cause of the excessive noise saved the £45,000 cost of an acoustic cabinet. As a further enhancement, solar-powered sensors have now been installed, to reduce energy costs and shrink the customer's carbon footprint.

Which all proves that the ERIKS SAM platform is something you can build on, for more sustainable production.





**David Hammersley** Projects & OEM Manager ERIKS

Jonny Herbert HVAC-Datacentre Business Development Manager ERIKS

Next time you save a document to the cloud, make an internet search or browse a website, think about this. Deep inside one of dozens of top secret buildings somewhere in the UK or Europe, a server will spring into action to handle the data involved. But behind the servers and beyond the electronics, there's a whole other infrastructure that relies on just as much secrecy, efficiency and reliability. Which is why it relies on ERIKS Flow Control.



A crucial role 💔

As more and more of the world's business - from online shopping to banking to communication - is conducted online, data is a hot topic. What many people don't realise is that it's also, literally, a hot environment. Servers where data is handled and stored generate enormous amounts of heat, but need to be kept cool to operate effectively.

So no matter how sophisticated the electronics and how 'virtual' the world they create, behind it all sits the very real metal and mechanics of effective datacentre cooling. And that's where the know-how of ERIKS Flow Control plays a crucial role.

Maximum uptime and lifetime reliability **99** 

#### Data won't wait

The key to the digital world is speed and efficiency. Which demands high-performing, dependable, energy-efficient products and technology. The HVAC infrastructure provided by ERIKS Flow Control is no exception. It may operate behind the scenes, but it's equally mission-critical.

ERIKS' infrastructure solutions for datacentres include:

- air conditioning
- chilling units
- cooling towers
- economiser systems
- liquid cooling systems
- computer room air conditioning

computer room air handling control units and more.

Supplied by ERIKS to a wide range of major players in the sector, maximum uptime and lifetime reliability are built-in to all the specialised econ® brand products for datacentres.

#### Consolidated, compatible package **?**

Reliability is assured by certification of isolation and control valves to Safety Integrity Level (SIL) 3, according to IEC 61508. The high-performance automated valves provide bidirectional zero leakage, high rangeability, and exceptional control accuracy. In addition, the products are engineered using carefully selected construction materials – from ductile iron to titanium, and stainless steel to RPTFE. By matching these to the application and environment, pipework corrosion risk is minimised and lifelong performance virtually guaranteed.

#### When special is standard

The exceptional demands of datacentre HVAC systems require exceptionally designed and engineered products. That's why the econ<sup>®</sup> brand from ERIKS offers many 'special' features as standard.

to allow for lagging of roof-mounted valves. Also standard is the IP68 rating for our gearbox, providing greater protection against water ingress when positioned outside. Most competitors offer only the lower IP65 rating.

We also offer certain types of butterfly and ball valves, an electric valve actuator and a Y filter, none of which are available elsewhere.

- For example, extended spindles are standard,

But it's not only our products that are special. Our service is too.

As part of the ERIKS Group, we can provide a consolidated, compatible package of products of our own manufacture. We can also go beyond the HVAC system, to offer a wider range of products and services for the datacentre civils build – from within the datacentre environment, to the district energy distribution network, and within commercial buildings.

The only thing we can't do, because of the confidentiality of the datacentre industry, is tell you exactly what we have supplied and who we've supplied it to. But it's no secret that out of 37 completed datacentre projects over the last four years, there has been only one product failure. And that proved to be the result of accidental damage to a single valve, resulting from incorrect installation by a subcontractor.

To find out more about our solutions for datacentre applications, visit **ERIKS Flow** Control. In complete confidence, of course.

#### The data explosion

- If you were to start today to download all the data from the internet, it would take you around 181 million years.<sup>1</sup>
- Internet users spent approximately 2.8 million years online in 2018 alone.<sup>1</sup>
- Between 2010 and 2020, the volume of data generated, harvested, copied, and consumed worldwide grew by almost 5000%.<sup>2</sup>
- Every internet user in the world created roughly 1.7 megabytes of data per second in 2020.<sup>3</sup>
- 1. Unicorn-insights.com 2. Forbes.com 3. Ibm.com

#### IN FOCUS

# THE MISSING LINK. FOUND



Phil Waastaff Commercial Manager ERIKS

Frame? Check. Engine? Check. Fuel system? Check. Battery? Check. Hose? Erm...

You may have all the other components in place, but without the industrial hose to carry the fluids and gases, a generator or other asset simply won't work. Yet hose is almost always the last thing to be considered, specified and supplied.

A large manufacturer has recently developed a new-style mobile generator. Designed to be transported around the world, the generator will provide more sustainable power for major sporting events which move from venue to venue. However, despite the many months of design and development work, the required industrial hose was ordered with a delivery deadline of just three davs.

Fortunately, ERIKS Industrial Hose facility has the experience, expertise and capability to design and manufacture to the highest standards, even on the shortest deadlines.

#### Hoses with a twist

When customers provide original drawings. ERIKS' engineers don't rush straight into



production. Experience proves that a few small design twists and tweaks can often help to cut manufacturing costs, or make the hose easier to fit or maintain. So time spent in the short-term can mean time or money saved in the long run.

Customers' design and engineering teams will often collaborate with ERIKS' own engineers, to discuss the feasibility of a particular idea before it moves beyond the initial development stage. With ERIKS' input, the customer can be sure that not only will the finished design be fit for purpose, but also that it will be capable of cost-effective manufacture.

In this particular case, despite the exceptionally short timescale, ERIKS' engineers went back to the customer's CAD design team to point out a problem with their



initial design. The proposed location of the hose meant there wasn't room to manoeuvre a welding torch into position for fitment. But a couple of small tweaks solved the problem on the drawing board and meant no further issues on the factory floor.

ERIKS is a long-standing partner of this original equipment manufacturer – and their sole supplier of welded hose assemblies. The close working relationship makes this kind of co-operation possible, to the ultimate benefit of the customer.



#### 3.2.1. Go!

Once the design was finalised, the Welding and Assembly Team Leader for Industrial Hose set to work. Bringing his know-how and experience to bear, his aim is always to devise the most efficient production method for the assembly.

The solution for the new-style generator comes in three parts. The first part involves two solid welded tubes, each half a metre long, with flanges welded to the end. The



second part is a support plate, and the third is a seal designed to fit around the plate. The breadth of knowledge within ERIKS meant that the Industrial Hose team could call on the ERIKS Sealing & Polymer team, to find a sealing solution that was not only practical and effective, but also affordable.

The production run is now under way, with two generators having been successfully manufactured and tested, and a total of 140 to be manufactured over 12 months.

#### The end to a means

The expertise of the ERIKS Industrial Hose team means that whatever needs welding to the end of a hose, they can do it. And in many cases, they already do.



The nuclear industry, oil refineries and the pharmaceutical sector all rely on hose manufactured and supplied by ERIKS. But they don't rely on ERIKS' reputation alone.

In these areas and others, where hose is required to transport dangerous or critical materials, or as part of potentially dangerous processes, extensive and strict testing and certification of hose components, fittings and welds is mandatory.

ERIKS not only provide full traceability right back to the raw materials, but also offer non-destructive Dye Pen Testing to test the penetration of the weld, which is a crucial safety issue.

Hose is probably never going to be the first thing you think of when developing new equipment or machinery. But with a capability that extends from hoses to solid tubes and welded assemblies, and from design to supply, ERIKS Industrial Hose should be the first people you think of.

IN FOCUS

# FRS OF CHANGE COMING



Peter Mitchell Renewables Director ERIKS

The UK is the best location for wind power in Europe<sup>1</sup> In 2024, wind generated nearly 83 terawatt-hours (TWh) of electricity across England, Wales and Scotland, up from nearly 79TWh in 2023<sup>2</sup>. But despite the growth in this sustainable source of power, wind generation owneroperators have found a shortage of UK-based servicing capability and spares supplies.



Sending repairs to Europe is a poor fit for the sustainable ethos of wind power. And the added challenges and costs resulting from Brexit do little to make it more financially viable. That's why ERIKS are investing substantially in creating a local, sustainable, service and repair resource, to support wind power generation and UK energy security.

#### A breath of fresh air

Wind power is no longer a new industry. But it is still a developing one. There's still room for innovation, engineering advances, and new approaches to maintenance and repair. So as well as investing in physical resources to support the sector, ERIKS are always open to talk to customers about specific problems and applications.

Engineering experience in sectors such as traditional power generation, oil and gas provides ERIKS with enormous transferable expertise. And the ERIKS' partnership approach to working with customers means there are always experts ready to listen, to discuss options, and to find solutions whether customised or standardised - that are cost-effective, efficient and reliable.

At the same time, the financial injection into ERIKS' physical facilities throughout the UK means that new solutions can be engineered, and servicing and repairs carried out, with shorter lead times and greater sustainability.

#### A Centre of Excellence for Renewables ??

#### **Closer to excellence**

HRIK

While much wind power engineering expertise is based inconveniently in Europe, ERIKS offer an alternative closer to home.

An investment of hundreds of thousands of pounds has been made in the ERIKS Engineering and Distribution Service Centre in Aberdeen, to create a Centre of Excellence for Renewables. Creating a dedicated Yaw gearbox repair cell and all aspects of generator inspections, overhauls, repairs along with full rewinding services, the facility is also supporting the local economy by establishing a growing local workforce of skilled staff.

ERIKS' location at Dudley in the West Midlands is the Centre of Excellence for Gearboxes, which of course are an essential component of wind turbines. ERIKS have been building, supplying and repairing gearboxes for over fifty years, so not only have experience but also well-established UK supply chains.

### service and repair

As the first-ever accredited SKF Maintenance Partner for the UK and Ireland, ERIKS can also help to optimise your SKF assets, reduce their Total Cost of Ownership, and maximise their productivity.

Lastly, our ERIKS Chesterfield Workshop provides specialist engineering services for High Voltage motors, transformers and generators. In-house services include coil manufacture and main generator repairs.

#### For the benefit of the customer and the environment ??

#### Turbines go round again

As many wind turbines have or are now reaching the end of their design life, important decisions have to be made about their future. As strong supporters of sustainability and circularity, ERIKS bring their repair and upgrade expertise to bear, for the benefit of the customer and the environment.

By reusing as many components as possible, ERIKS aim to reduce costs as well as reducing waste to landfill. Recent assessments have shown that ERIKS often re-use up to 87% of original components during overhauls. This also has the added benefit of improving mean time to repair and general lead time.

Using ERIKS' UK-based facilities also creates a win-win situation for customers. Firstly, it provides economic and sustainability benefits. Shorter transportation distances to workshops mean a reduced carbon footprint. Shorter supply chains mean not only lower carbon emissions for transportation, but also fewer unforeseen delays, less risk of supply chain disruption, and reduced costs.

Secondly, but equally importantly, working with ERIKS in the UK offers benefits which go beyond the financial and environmental.

ERIKS' investment in UK-based facilities in Aberdeen, Chesterfield and Dudley has provided a financial and employment boost to the local areas. By using these same local resources, customers can demonstrate their own commitment to social responsibility and values.

Like the wind itself, wind power is here to stay and so are ERIKS' Renewable Industry maintenance and repair services. Why not contact ERIKS to shoot the breeze?

- 1. UK Renewable Energy Roadmap Department of Energy and Climate Change, 2011
- 2. National Energy System Operator (Neso)

# **BLE JOURNEY**



**Paul Pugh** Channel Manager spirax sarco

Sustainability isn't a destination—it's a journey, and today we're focusing on optimising the boiler house as part of that ongoing commitment. Energy efficiency is crucial for sustainability and cost reduction. Let's explore how small changes can make a significant impact on the environment and your bottom line.

#### The Challenge of Sustainability

We've all seen the alarming headlines about climate change. We're no stranger to these concerns, with rising pressure to reduce carbon footprints and energy consumption. Global targets, like those set by the Paris Agreement, call for limiting temperature rises to 1.5 degrees Celsius, reducing emissions annually, and supporting sustainable development worldwide.

But with such massive challenges ahead, it's easy to feel overwhelmed. The question remains: What can your organisation do? The answer lies in small, actionable steps that lead to significant results over time.

#### The Six Rs of Sustainability: **A Boiler House Focus**

A great place to start is by revisiting the Six Rs of Sustainability. These principles are becoming increasingly well-known, particularly in education and research. They serve as a foundation for small changes that can lead to big impacts. Let's see how each of the six Rs can be applied directly to optimising boiler houses in food production.

Firstly, it's essential to start with the baseline - gathering granular data and load profiling is a non-negotiable first step, which can be achieved through the correct metering technology.





#### 1. Reduce

Reducing fuel consumption is a straightforward way to cut CO<sub>2</sub> emissions. But how can you reduce fuel without compromising production needs?

- Audit Energy Use: Monitor your current fuel consumption and identify areas where efficiency improvements can be made.
- Implement Efficient Control Systems: Automated controls can manage fuel use more precisely than manual operations, ensuring that fuel is used only when necessary



Manage fuel use more precisely ??

#### 2. Reuse

Think about reusing resources that are already in your system. For instance, flash steam generated during processes can often be recovered and used elsewhere.

Recover and Reuse Steam: Integrating flash steam into other stages of production reduces the need to generate new steam, thus lowering fuel demands.

#### 3. Recycle

In boiler systems, recycling is all about condensate. Reusing condensate means returning warm water to the boiler, reducing the energy needed to heat it back up.

Recycle Condensate: Not only does this save on fuel, but it also reduces the consumption of chemicals needed to treat fresh water. The result? A win-win for both sustainability and costs.

#### 4. Refuse

Don't be afraid to challenge traditional practices. Refuse to accept outdated methods if better alternatives are available.

Evaluate Current Procedures: Many boiler houses still rely on manual processes for safety checks, even if automatic systems are in place. Trusting and understanding the technology you have can save time, money, and resources.

#### 5. Rethink

Reconsider how your boiler house operates. Has your business evolved? Are you still relying on old systems that might not align with your current efficiency goals?

- Reassess Load Demands: Regularly update your understanding of what your boiler needs to produce and when, ensuring that your operations are as efficient as possible.
- Measure Your Impact: Start tracking your energy use, emissions, and savings to identify trends and report progress.

#### A win-win for both sustainability and costs ??

#### 6. Repair

Basic maintenance is often overlooked, but it's an essential part of an optimised boiler house. Regularly check for leaks, insulation wear, and system inefficiencies.

**Regular Maintenance Checks:** A small leak in a steam pipe might not seem critical, but over time it can waste thousands of pounds in fuel and chemicals. Simple repairs can lead to massive savings.

#### From Small Steps to Big Impacts: Why Optimisation Matters

Even modest changes can significantly lower fuel use and emissions. Consider these statistics.

- by 6°C through improved condensate return, reduces fresh water consumption lowers chemical requirements and saves 1% on fuel.



Imm of Scale can increase fuel costs by 10%.

Imm of Soot can add 2.5% to your fuel bills.

Increasing the temperature of a feed tank

Fixing a 5mm hole in a steam line at 7 bar pressure could save £20,000 per year in wasted fuel.

By addressing these small inefficiencies, t's possible to achieve up to 25% savings in boiler house costs. That's a substantial reduction, both financially and environmentally.

#### **Begin Your Journey with Optimisation**

Optimising your boiler house is a critical first step towards broader sustainability goals like net zero. It's about identifying easy wins that make a real difference. As you continue down this path, you'll find new opportunities to innovate and refine your processes.

Optimising your boiler house isn't just about technology; it's about making the right decisions to benefit your business and the planet. Together, we can make a lasting impact.

Contact us to discuss your needs, arrange a consultation, or find out more about how we can support your goals.

# FOR IMPROVED PUMPPERFORMANCE, APPLY HERE



Bob Orme Senior Technology Expert LOCTITE

Your centrifugal pumps consume up to 60% of your plant's electric motor energy. And 85% of a pump's lifetime cost is energy. So if there's a way to improve pump efficiency quickly and easily, by as much as 25% a year, you need to know about it. The Loctite Applicator Programme is the answer.



ROI in just two to twelve months **9** 

There's a whole range of Loctite Protective Coatings to reduce friction, erosion and corrosion in pumps, and to increase efficiency and cut energy use. And now there's a whole network of highly-trained Henkel Certified Applicators, to help you find the right Loctite product for your specific application.

#### Beware the wear

Even water can cause wear in a pump. More aggressive media cause even more wear. Then, once the pump's internal surfaces have been roughened, fluids will pass through more slowly, and require more work from the motor to pump them. So while production becomes slower, the motor uses even more energy.

These losses in efficiency can occur anywhere from the impeller to the casing disc and the piping system. And as abrasion continues, over time it can lead to corrosion, erosion and degradation.

Of course there are ways to restore at least some of the pump's efficiency. You can trim the impeller. Overhaul the installation. Replace the motor. Or as a last resort you can replace the pump itself. However these options are costly, and the return on investment (ROI) is slow.

Alternatively, you can consult a Henkel Certified Applicator, find the most appropriate Loctite Protective Coating for your application, and expect to see an ROI in just two to twelve months.

#### The solution is in the surface

The rougher the surfaces within the pump, the greater the hydraulic energy loss, the

### **Efficiency**

larger the loss of efficiency, and the greater the increase in energy use.

Loctite Protective Coatings provide the answer to all these problems, by creating a smooth and frictionless surface wherever transported fluids come into contact. The coatings have a low surface energy and high contact angle, to minimise friction losses and maximise abrasion resistance.

The latest formulations use a hybrid technology of epoxy and silicone, which provides better protection than regular reinforced epoxy products, and so optimises the efficiency increases.

But there's no need to wait until a pump starts to underperform before you see the benefits of a Protective Coating.

#### Better than new

Why settle for a pump that's as good as new, when you can have one that's better?

By calling on the expertise of a Henkel Certified Applicator, you can enhance the efficiency and reliability of even a brandnew pump, through the application of the appropriate Loctite Protective Coating.

Case studies carried out in the water, refinery, chemical and steel industries have shown that the efficiency of a new pump can be increased by 3-7%, simply through the use of a Loctite coating. For a pump which has already been in operation for some time, efficiency increases range from 6-25%, depending on the pump's condition.

Even worn pump components which would previously have needed replacing can be restored through the use of the appropriate

#### increases range from 6-25% **9**



coating. So you can save energy, reduce costs, and improve the sustainability of your operations.

#### The lows and the highs

One example of the new generation of Loctite Protective Coatings is Loctite PC 7337.

An epoxy/silicone hybrid, this coating has an impressively low surface energy of just 23mN/m and a high surface contact angle of 105°. This combination provides a surface that's hydrophobic, glossy, smooth and low friction.



All of which helps to minimise energy loss caused by friction in the pump system, which in turn increases motor efficiency, lowers motor energy use, and shrinks the motor's carbon footprint.

The proof isn't just in the product performance. It's also available through the Loctite pump efficiency calculator. A Henkel Certified Applicator can use this to show you the efficiency benefits and CO<sub>2</sub> reductions achievable through the use of the appropriate protective coating.

To enhance the efficiency of your new pumps, restore or repair your older pumps, and get expert advice on Loctite Protective Coatings, pump your usual ERIKS contact for information about the Loctite Applicator Programme.

# RELIABILITY AND SUSTAINABILITY: ARE YOU STILL IN THE



Tom Morgan Product Manager ERIKS

Where reliability is not an option, it's tempting to consider sustainability as less important. But in today's industrial environment, it's essential for responsible businesses to have both. Ledlenser proves that can be possible, with portable lighting solutions that keep people productive and safe, while helping to save the environment.



RECHARGEABLE

For industries that operate around the clock, reliability isn't just a perk but a necessity. That's why Ledlenser products are engineered to perform in the toughest conditions. From extremes of temperature to water resistance, every Ledlenser torch and headlamp undergoes rigorous testing to ensure it meets the high standards required by industrial clients.

However, the company's commitment to sustainability is never compromised. In fact, it's evident in every aspect of its design and manufacturing processes.

Where possible the company employs eco-friendly materials, implements energyefficient production methods, and prioritises longevity in its product lifecycle. By reducing waste and extending the usable life of their products, Ledlenser ensures fewer resources are consumed over time - in line with global efforts to minimize industry's carbon footprint.

#### Meets the high standards required by industrial clients ??

#### Leading the rechargeable charge

One standout initiative is Ledlenser's use of rechargeable technology.

Many Ledlenser torches and headlights are equipped with high-capacity lithium-ion batteries, which drastically reduce reliance on disposable batteries. This not only cuts down on hazardous waste but also saves users money in the long run.

To help reduce the frequency of recharging or replacing batteries, innovative Adaptive Light Technology offers automatic dimming and focusing, resulting in less energy consumption.

Alongside rechargeable batteries, the company has introduced replaceable parts and modular designs. So even after years of service, the products can be maintained or upgraded rather than discarded.

#### Making light work

There's more to successful illumination for safer working than simply shining a bright light.



## Successful

The rechargeable H7R WORK headlamp, for example, offers up to 1000 lumens, but also incorporates Ledlenser's Advanced Focus System (AFS). This allows users to seamlessly transition from a broad floodlight to a sharply focused beam, depending on the task in hand and the operating environment.

The headlamp - which is extremely intuitive to operate - provides a high CRI value (90), which ensures natural colour rendering for accuracy in colour-critical applications. Also protected against dust, water and impact, the H7R WORK is an ideal working companion. Yet sustainability is still incorporated in the design. The ability to customize brightness levels enables workers to conserve power during less demanding tasks, and ramp up intensity when precision is needed.

So energy consumption is minimised, without compromising operational safety.

#### **Bright ideas enhance safety**

If a light fails in a high-risk environment. and a worker is left unexpectedly in the dark, it's clearly a safety issue. So Ledlenser integrates intelligent features to enhance user protection.

For example, Ledlenser lights come with low battery warnings, to keep workers aware of the condition of the battery so they can act accordingly. Lights also incorporate temperature controls to prevent overheating, meaning unexpected failure is less likely.

In addition, the ergonomic designs of Ledlenser products improve user comfort and reduce fatigue – which is especially important during prolonged use. Lights like the EXC7R, designed for ATEX Zone 0/21

#### illumination for safer working **99**

environments, offer hands-free operation. They're also built with intrinsically safe materials to prevent sparks in explosive atmospheres.

#### Sustainability goes further

As part of its drive for sustainability, Ledlenser looks beyond the products and actively works to minimize environmental impact throughout the supply chain. Optimizing logistics and employing green packaging solutions are just two examples of ways the company reduces carbon emissions associated with transportation and waste.

#### Enhance customers' environmental credentials ??

And what makes Ledlenser products more sustainable can enhance their customers' environmental credentials too.

By investing in Ledlenser's innovative lighting solutions, businesses gain access to cuttingedge technology that ensures reliability, while supporting sustainability initiatives. With the help of Ledlenser - whether to reduce energy consumption, extend product lifecycles or cut waste production businesses can optimise their sustainability without compromising productivity or employee safety.

Clearly there's far more to choosing portable lighting products than just looking for the brightest beam. But when you realise that Ledlenser solutions balance the sustainability you want with the reliability, performance and durability you need, then you have truly seen the light.



Paul Skade Product Manager ERIKS

Most of us are well aware of the risks of falls that come with working at height. But an even greater risk is the danger of dropped tools and objects. And under The Work at Height Regulations 2005, employers have a duty to stop the drop.

#### 🕻 Four ways to minimise or eliminate the risk **99**

An object dropped from height can have consequences – whether that's a minor head injury, or a brain or spinal cord injury with loss of use of limbs as a result. And of course those consequences could include trauma for individuals and their families, and penalties, prosecutions and fines for the employer.

Many employers ingrain safety in their culture where they can. ERIKS, for example, has a Zero Accidents philosophy, intended to ensure everyone gets home safely from work every night.

But even if there's no human damage, there can be financial costs if a tool drops into machinery, or somewhere where it can't be retrieved. And there's the basic nuisance factor of wasted time and lost productivity, when descending to ground level to retrieve a tool, then returning to the work at height.

So when something as small as a dropped bolt or a metal tape measure can cost time and money, or have enough impact to cause damage or death, what can be done to minimise the risk?



#### 4 steps to safer working at height

Depending on the situation, there are four ways to minimise or eliminate the risk of accident or injury from dropped tools and objects

The first, and best, is to engineer-out the hazard altogether - but that's not always possible.

The second is containment, which means using kick boards and handrails on scaffolding, platforms and walkways, together with closed mesh, plywood or other solid barriers. In areas

outside walkways, safety mesh or barrier netting can prevent items dropping further.

The third and most important step is prevention.

This includes using solutions that actually prevent tools from falling, as well as educating the workforce in safe practices for handling tools and materials at height. For example, workers throwing items between each other instead of passing them safely from hand to hand should be strictly prohibited and breaches treated as a disciplinary issue.

That's why 3M Fall Protection not only provides fall safety solutions for people and fall protection equipment for tools, but also offers resources to raise awareness of drop prevention.

#### Getting the drop on danger

The 3M<sup>™</sup> DBI-SALA<sup>®</sup> Fall Protection for Tools range is designed to meet the challenges of real-world working: from heat and cold to moisture, corrosion and abrasion. Tested in an ISO 17025 accredited lab, in the field, and in 3M's ISO 90001 certified manufacturing facilities, the range offers the highest quality and reliability.

#### Solutions that actually prevent tools from falling **99**

For tools with no attachment points (such as a hole in the handle), Quick-Wrap Tape used with D-rings or Tool Cinch Attachments from 3M creates instant tethering points. Equipment weighing up to 36.3kg can be tethered with the use of the V-ring attachment point, with two stabilisation wings.

The range also extends to coil and bungee tethers, tool lanyards and tool holsters featuring high visibility reflectors, and 3M's Quick Mag Technology that helps speed up the workflow with a magnetic tool staging system

3M Small Parts Pouches in various colours feature an innovative self-closure system, that ensures small objects such as screws, nails and washers are trapped inside but easily retrievable. And if there is too much for a worker to carry to the work position at height, then a 3M Safe Bucket with integrated



connection points can be used to lift the equipment up.

#### **Protect and survive**

Finally, after prevention, comes step four: protection.

For people working on the ground beneath overhead work, personal protective equipment (PPE) such as hard hats offers a final way of reducing the impact of a dropped object.

But the best option is always to eliminate the danger at source, with 3M<sup>™</sup> DBI-SALA®</sup> Fall Protection for Tools. Combined with Safety Training by 3M, this helps to ensure tools stay safe at height, and risk never gets off the around.

#### **HEALTH & SAFETY**

43



#### danger at source **99**





# DRIVE BE

Mark Prior Product Manager **ERIKS** 

All drive belts transfer power. Some transfer more power than others. Thanks to its advanced materials, unique construction and enhanced tooth profile, the Fenner® Quattro PLUS CRE wedge belt transmits 26% more power than its predecessor. But that's not its only plus point.

#### Power, PLUS...

As well as transmitting more power to your application, the Fenner® Quattro PLUS CRE does it with greater efficiency: 98% compared with 96% efficiency for a standard belt. So - especially in applications operating 24/7 – it helps to reduce the Total Cost of Ownership (TCO). It also operates happily in temperatures as low as -40°C and as high as +130°C.

And the greatest advantage of all is that, because it extends belt life by as much as 15%, it does all this for longer

So what makes this belt such a significant advance in power transmission technology?

> Belt life extended by as much as 15% 🤧

#### **Construction, PLUS...**

6

The tension member of the Fenner® Quattro PLUS CRE belt has a unique construction, which improves the accuracy and stability of the belt length.

The contact section is manufactured from EPDM synthetic rubber, to improve the power transmission. The abrasion-resistant compound used in the belt's manufacture enhances durability and lengthens service life. And the enhanced tooth profile not only improves the flexibility of the belt, but also reduces its bending resistance - which in turn increases its efficiency and service life.

However, all this added engineering technology doesn't add up to a heavier belt. In fact the Fenner® Quattro PLUS CRE is lighter than other Quattro options - making it a heavy-duty performer but not a heavyweight belt.



This lighter weight also helps to reduce vibration, which leads to smoother running and fewer associated stresses on the transmission system.

#### Maintenance-free, PLUS

The design and construction of the Quattro PLUS CRE gives it a lower pre-tensioning force, and greatly extends the length of time before retensioning is required. Once fitted to the manufacturer's specification, it can be tensioned, run-in, retensioned, and then left to run maintenance-free in most applications.

By lowering the pre-tensioning force required, the Quattro PLUS CRE also helps to extend bearing life, which further reduces maintenance downtime and costs. And because the belt is conditionally oil resistant, it can shrug off the effects of oil introduced during its operation.

#### **Precision, PLUS**

Fenner® PB\* (Precision Build) technology ensures accuracy and consistency in the manufacture of the Quattro PLUS CRE belt. So even when you choose belts from different batches, you can be sure that the length, strength, weight and performance will be the same across every belt you fit.

Which means you can rely on your power transfer not just hour after hour and day after day, but belt after belt too.

And if you fit the Quattro PLUS CRE in a complete Fenner® drive train package incorporating Fenner Taper Lock<sup>®</sup> Pulleys and Fenner® Taper Lock® Bushes – you can expect optimum performance, reliability and belt life.



#### Accuracy and consistency in manufacture **\***

#### **Applications**, PLUS

The operating temperature range, bending resistance and unique construction of the Fenner® Quattro PLUS CRE make it ideal for a wide range of applications.

It is especially recommended for:

- Fans, compressors and pumps
- Printing machines
- Textile machinery
- Packing machines
- Elevators
- HVAC and blowers

Conforming to a wide range of international standards – including BS 3790, ISO 4184 and DIN 7753 - you can also be assured that it's tried, tested, and approved.

So why settle for standard drive belt performance, when you can have Fenner® Quattro PLUS CRE performance?

#### **Case Study: A cure for** secondary cure

# THE OVERLOOKED FACTORS IN HAND PROTECTION



Paul Skade Product Manager ERIKS

In the manufacturing sector, every facility adheres to and recognises strict safety protocols and standard operating procedures to minimise hazards, with PPE practices central to protecting employees. Yet, it's essential to periodically reassess PPE, especially hand protection, to address overlooked factors that contribute to a safer, more productive workplace.





According to the most recent data from the Health and Safety Executive [HSE] for 2022-2023, there were 561,000 non-fatal injuries reported, covering all types of workplace injuries.

Within this figure, 60,645 injuries were reported by employers under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR), highlighting more severe cases.

Common causes included slips, trips, and falls, along with handling or carrying injuries, which often affect the hands and wrists (HSE Nonfatal injuries at work in Great Britain).

Secondary hazards are often neglected **?** 

With the rapid evolution of manufacturing technology and regulatory requirements, industries face an ever changing landscape. This evolution includes heightened standards for both general safety and industry specific needs. However, secondary hazards are often neglected after addressing the primary risk, and mitigating these risks can play critical roles in injury prevention.

#### Hand Protection: Addressing Complex Hazards

Hands are a primary tool in manufacturing but remain highly vulnerable to injury. In the UK, hand and wrist injuries remain a significant concern in the workplace. hazards ?? Despite advancements in hand protection, each workplace presents unique hand related hazards that require solutions tailored to the specific environment and use. Choosing gloves based only on primary features, such as cut resistance, often compromises essential qualities like dexterity and grip, which can lead to secondary injuries.

In manufacturing environments, inadequate dexterity can contribute to dropped tools and missteps, increasing the risk of additional injuries.

#### Each workplace presents unique hand related hazards

#### commitment to sustainability without compromising safety standards **?**

#### Importance of Dexterity and Grip

In settings where hand protection is vital, the need for a secure grip is often overlooked. Ambient conditions, tool surfaces, and the presence of moisture or grease can drastically impact grip, especially in high-risk areas. Enhanced dexterity and grip allow workers to maintain control, reducing incidents and/or over grip fatigue.

Shockingly, a significant proportion of hand injuries occur when workers are not wearing gloves. We believe the common reasons workers do not wear hand protection, includes gloves being too thick, uncomfortable, or not suited for environmental conditions. The challenge is selecting gloves that not only protects against hazards but protects without sacrificing comfort and usability.

To address the need for sustainable, highperformance hand protection, Polyco Healthline introduces the enhanced **Polyflex Ultra**. Built to withstand challenging environments, this glove offers superior grip in wet and oily conditions and achieves a Level 4 abrasion resistance under EN 388:2016 + A1 2018. Its durable foamed nitrile coating ensures a secure grip and long lasting wear, making it ideal for a variety of manufacturing tasks

#### Environmental Responsibility Meets Performance

Polyflex Ultra aligns with Polyco Healthline's #phAMBITION, incorporating a liner made from 91% recycled nylon, which makes up 48% of the glove's total weight. This innovation reduces reliance on virgin materials, reflecting Polyco Healthline's commitment to sustainability without compromising safety standards or product performance.

As industries advance, protecting the workforce requires attention to details beyond primary safety standards. Polyflex Ultra embodies this approach by addressing crucial aspects like grip, durability, and environmental responsibility, reinforcing safety and efficiency.

Health and Safety statistics: 2022 to 2023 annual release - GOV.UK

Statistics - Non-fatal injuries at work in Great Britain

# HOW TO WASH YOUR HANDS OF PREVENTION



Helena Kelly UK Customer Marketing Manager

The bad news is that the flu season is not over yet. So you still have a responsibility to your staff and your business to help to keep flu under control. The good news is that proper hand hygiene can make a huge difference to the spread of not just flu, but of 1 in 5 respiratory infections. So give your hands a good wash, then read on.

20% of the population are infected with seasonal flu every year.<sup>1</sup> That can make flu a significant factor in staff absences, which can have a major impact on productivity. So flu is not something to be sniffed at. But surprisingly, sniffles, coughs and sneezes are not the only way flu and other germs may spread – because 80% of all infections are transmitted by hands.

#### Flu can have a major impact on productivity **9**

When you realise that we all have between two million and ten million bacteria from our fingertips to our elbows, and that those germs can stay alive there for up to three hours, it's no wonder that hands are a major source of transmission.

Fortunately, even though you can't see the germs, you can get rid of them – because the solution is in your hands.

#### Targeted hand hygiene is so important **?**

#### Making a clean break

The causes of infection with flu or many other illnesses are best described as a chain. The hands of infected people carry germs, which are then left behind on every surface they touch. When those surfaces are door handles, stair rails or similar places that many others will also touch, it doesn't take long for the germs to find a new person to cling to and infect.

So the key to reducing the risk of infection is to break the chain.

To do that, it's important to realise that it's not the surface that's spreading the infection, but the hands. Even if a surface is disinfected, it will be populated with new germs as soon as the next infected person touches it.

That's why targeted hand hygiene is so

#### important.

As experts in industrial hand hygiene solutions, SC Johnson Professional recommend a handful of ways to reduce infection and help your business fly through the flu season with minimum disruption to productivity.

#### Pointing the finger

The first thing to be aware of is where the risk of transmitting infection from hands is at its highest. SC Johnson Professional have identified these eight key moments:

- 1. Entry and exit from a facility or venue
- 2. Using the washroom
- 3. Before and after touching common surfaces
- 4. Before preparing food
- 5. Before eating food, especially with fingers
- 6. Before and after moving from a workstation
- 7. After coughing, sneezing or nose blowing

#### Reduce the transmission risk 🤧

hygiene health hazard or a sparkling example, why not ask your usual ERIKS contact to arrange a free site audit from SC Johnson Professional? You've got nothing to lose except ten million bacteria.

8. After handling or disposing of refuse

If you can place your hand hygiene products to target these key moments, then people are more likely to take notice, wash their hands whenever it's essential, and so reduce the transmission risk.

#### Don't get irritated

Sometimes more frequent handwashing can lead to dry, chapped or irritated skin. That can put people off washing their hands properly, so infection starts to spread again

SC Johnson Professional recommend using a fragrance-free moisturising and restoring cream alongside soap can help to keep skin - and therefore people - healthy. It's not part of a beauty routine. It's a weapon in the battle against bugs.

To find out if your workplace is a hand



1. Blanchet Zumofen MH, Frimpter J, Hansen SA, Impact of Influenza and Influenza-Like Illness on Work Productivity Outcomes: A Systematic Literature Review. Pharmacoeconomics. 2023 Ma

#### **BEST PRACTICE**

#### Now wash your hands please

- Using a good handwashing technique, ensuring soap is spread all over and all around hands, fingers and thumbs
- Washing for at least 15 seconds before
- Turning off the tap with your elbow if
- Drying hands thoroughly
- Washing frequently with soap, and
- before and after eating



#### **GREAT BRITISH ENERGY:** GREEN REVOLUTION OR GOVERNMENT REPETITION?

The new Government's creation of Great British Energy (GBE) promises a bold leap toward the UK's clean energy future. Touted as a green revolution, the publicly owned entity is designed to champion renewable energy technologies while reducing reliance on fossil fuels. But for all its laudable ambition, GBE risks becoming another well-intentioned but underpowered initiative unless it navigates some serious challenges.

#### **A Bold Vision**

GBE aims to decarbonise the UK's electricity production by 2030, backed by £8.3 billion from the National Wealth Fund. This funding will target emerging technologies such as floating offshore wind, hydrogen, and tidal power, alongside more mature renewables like solar and wind. The potential benefits are immense: increased energy security, significant job creation, and a transition to a zero-carbon grid.

Aberdeen's selection as GBE's headquarters is symbolic, marking a shift from fossil fuels to renewables. However, symbolism alone won't deliver results. GBE's ambitions require strategic investment, robust infrastructure, and skilled labour—all of which are currently in short supply.

#### The Financial Tightrope

For all its fanfare, £8.3 billion over five years is modest compared to the colossal sums private players like National Grid and SSE are investing in the same timeframe. Critics argue that Labour's restrictions on borrowing will handicap GBE's ability to scale projects effectively. Without the financial freedom to leverage public funds, GBE risks being a minor public player in a field dominated by private giants. Moreover, the £125 million earmarked to establish GBE in this year's budget pales in comparison to the monumental infrastructure costs required to meet decarbonisation targets. For instance, the cost of a single high-voltage subsea cable alone is reported to exceed £3 billion—close to half of GBE's five-year budget.

#### **Managing Expectations**

Labour's campaign rhetoric of cutting household bills through GBE has already been met with scepticism. Recent reports have urged the government to temper expectations, noting that while GBE might lower costs in the long term, immediate reductions are unlikely.

Energy prices remain tethered to natural gas markets, and the infrastructure required to integrate more renewables into the grid will initially increase costs.

The government would do well to shift the narrative. Rather than overselling cost savings, it should emphasise GBE's potential to create skilled jobs, boost energy security, and foster domestic supply chains. This broader framing could help build lasting public support, even in the face of delayed financial returns.

#### Where GBE Can Shine

Despite the challenges, GBE has a unique opportunity to make a difference. By focusing on de-risking investments in emerging technologies, it can unlock private sector funding for riskier projects like tidal power and hydrogen. Additionally, GBE's support for smaller-scale projects—such as community solar and onshore wind farms—could fill gaps in the market that larger players often overlook.

Collaboration will also be key. By partnering with private investors, local authorities, and cooperatives, GBE can leverage expertise and funding to accelerate the clean energy transition. Such partnerships are essential to overcoming planning and regulatory hurdles, which remain significant barriers to renewable energy deployment.

#### A Green Revolution?

GBE represents a rare opportunity for the UK to reclaim control of its energy future. However, its success will depend on realistic goal setting, financial agility, and effective collaboration with the private sector. The Government must also tackle systemic obstacles like grid delays and planning bottlenecks, that could stymie even the most well-funded initiatives.

If executed effectively, GBE could catalyse a green revolution, creating a cleaner, more secure energy system for generations to come. But without the right strategy and support, it risks becoming a government initiative that overpromises and underdelivers. For manufacturers and industrial players, the stakes couldn't be higher. Whether GBE fulfils its potential will shape not just the UK's energy landscape, but its economic future.

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