

# ERIKS Technical Services

To increase your profitability, start here



MARKET • PRODUCT • APPLICATION • CUSTOMISATION • LOGISTICS • INFRASTRUCTURE

know-how makes the difference

# ERIKS

# Reliability. Productivity. Profitability.

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*A knowledgeable partner, prepared to take the time to understand your issues and goals, then to provide an effective, long-term solution.*

We are more than a breakdown or emergency service. If you want to increase profitability, shareholder value and reduce the cost of goods sold, you have to eliminate repeat plant failures. As a knowledgeable partner, ERIKS is prepared to invest the time and resource to fully understand your issues and goals, helping you to manage your production and associated assets more effectively.

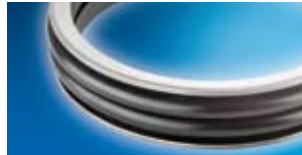
This means addressing the root causes of excessive costs, not just the symptoms. It means identifying and analysing problems, then providing solutions – not

a sticking plaster. Our philosophy is to eliminate the cause, rather than devising measures to control it. It's an approach which demands attention to detail, high levels of skill, and the very best technical resources.

The result is not a quick fix or a repeat failure – but a long-lasting solution or upgrade. One which increases productivity, improves reliability, maximises your profitability and reduces your total cost of ownership.

Whatever your aspirations and ambitions for your business, there's one critically important factor: as a minimum, your machines have to perform as they were designed to perform. They have to start when required and run as long as you need them to. For this to happen they need tender loving care and ERIKS Technical Services is here to make sure that happens.

## Core Competences at a glance



**Seals** *see page 14*



**Gaskets** *see page 14*



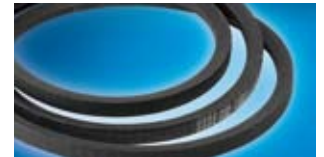
**Valves** *see page 15*



**Bearings** *see page 15*



**Gears and Drives**  
*see page 11*



**Power Transmission**  
*see page 16*



**Fluid Power** *see page 16*



**Industrial Hose** *see page 17*



**Tools and Maintenance Products** *see page 17*



**Electro, Electronic and Mechanical Repair**  
*see page 10*



**Predictive Maintenance**  
*see page 9*



**Logistics**

# Steps to success

**Achievement of your productivity and profitability goals is a process unique to you: and one which ERIKS fine-tunes for your success.**

The first step is **consultation**: reviewing existing high risk, performance-critical areas to identify and prioritise savings or improvement opportunities.

Next we make **recommendations**, highlighting ERIKS solutions and prioritising them into short and medium term categories for implementation. This becomes a working, agreed action plan, incorporating work schedules, milestones and completion dates.

To implement the ERIKS solutions our multi-disciplined engineers will, if required, work with your own teams on **supply, installation and commissioning**.

Finally, we offer a variety of **on-going support** as necessary through our technical specialists, ranging from reliability review meetings to best practice advice designed to ensure the continued smooth running of your assets.





<b>Strategic</b>	Productivity and reliability. Long-term planning and implementation to meet key objectives
<b>Project/Consultancy</b>	Cost control, legislation, integration, resource utilisation, environmental responsibility, capital projects
<b>Management</b>	Maintenance, planning and scheduling, reliability improvement
<b>Engineering</b>	Condition Monitoring and analysis, energy reduction and cost down projects. Application reviews, failure modes, OEM part conversion, reverse/re-engineering
<b>Logistics</b>	Part supply, stock management and critical parts analysis
<b>Best Practice</b>	Energy management, surveys (site, stores, stocks, product) standardisation, process mapping
<b>Training</b>	Product training, selection, installation, maintenance. Root cause failure analysis, stores management

# Increasing productivity, process-wide.



*A pump in need of repair at a Suffolk Leisure Park presented an opportunity for preventative coating. ERIKS Technical Services advised on the most appropriate coatings to reduce bead wear, prevent flash rusting and enhance efficiency. The result was the reclamation of potentially scrap equipment, and improvement of its performance.*

## Valves see page 13

Supply and support of one of the widest valve ranges, including gate, butterfly, globe, check and marine valves.

## Fans and Pumps see page 13

Supply, maintenance and repair, including site removal and refit, full reverse engineering, mechanical seal conversions. Seal and bearing overhaul and replacement, restoration of impeller clearances, application of performance enhancing coatings, dynamic balancing of rotating elements, full final inspection testing.

## Starters and Contactors see page 10

Monitoring, repair and upgrade solutions, and full site maintenance.

## Drives see page 11

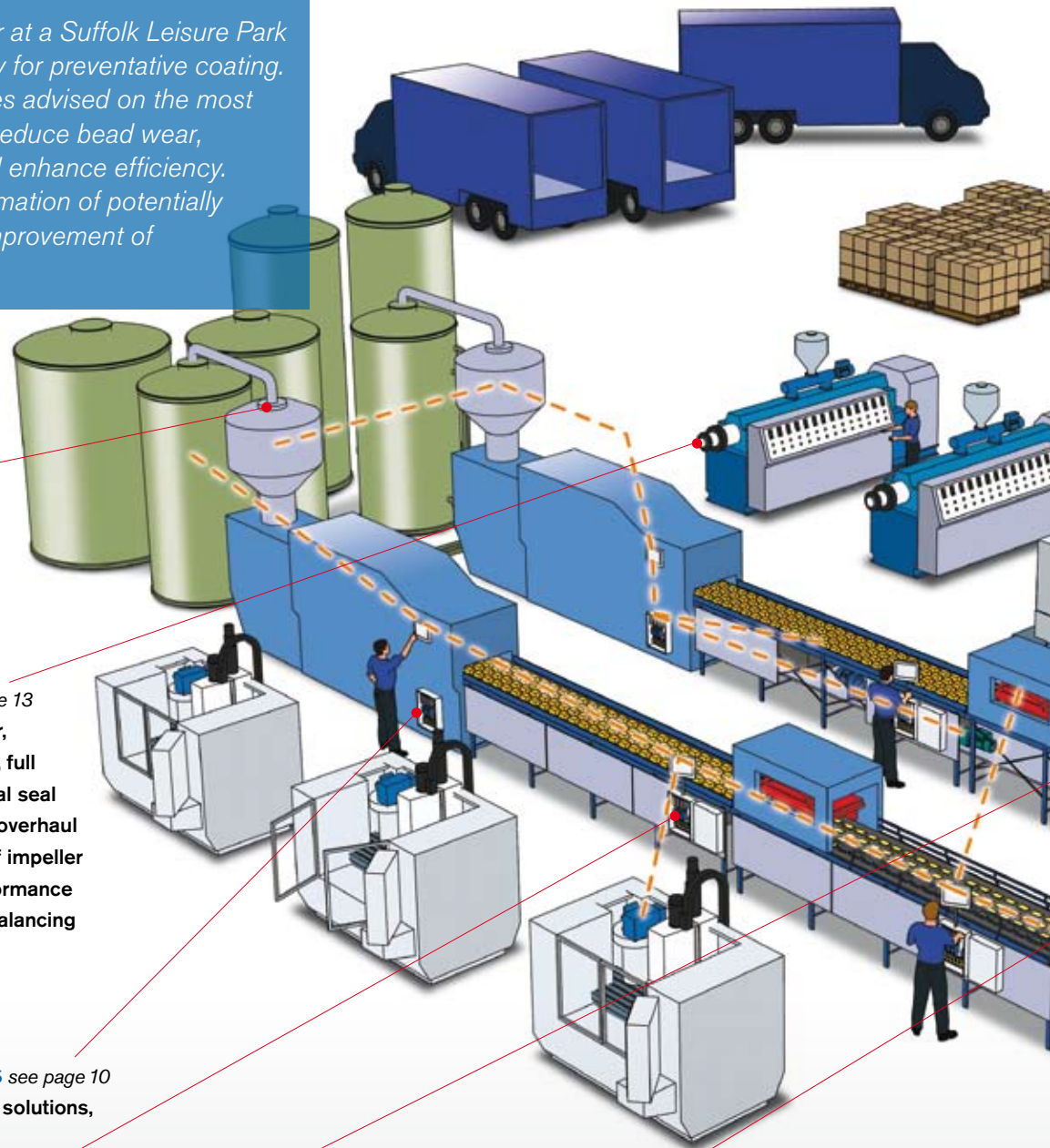
All aspects of drive selection and commissioning, from low-cost fractional drives to large drive systems with energy-saving features and network integration. General energy-saving surveys and Condition Monitoring.

## Gearboxes see page 11

Dedicated repair and test facilities for gearboxes of any type and size. Craneage up to 55 tonnes enables a complete care and maintenance service.

## Motors see page 12

Refurbishment, maintenance and repair of rotating machinery, from fractional horsepower motors to 13.6kV motors, and including ac/dc motors, alternators and generator sets. High quality rewinds carried out and tested.



**Actuators and Hydraulic Cylinders** *see page 16*  
Bespoke solutions manufactured in ISO 9001-approved facilities.

**Electronic Systems** *see page 10*  
Solutions for complex factory operations, from motion control and PLCs to specially developed test rigs and robotics, advanced HMI technology and software.

**Power Services** *see page 10*  
Power-in and power-out solutions and services, from transformers and substations to cables, generators and temporary supplies.

**Condition Monitoring** *see page 9*  
Vibration analysis, alignment and balancing, oil analysis, thermography, ultrasonics and partial discharge (HV).

**Troubleshooting** *see page 8*  
Comprehensive reactive fault-finding, diagnostic and repair capabilities, supported by unsurpassed system know-how.

*Replacing mechanical damper controls with electronic drives in exhaust fans at a UK aggregates company's coating plants, reduced absorbed motor power by 40%, whilst maintaining an effective airflow. The pay-off period was as little as 18 months.*



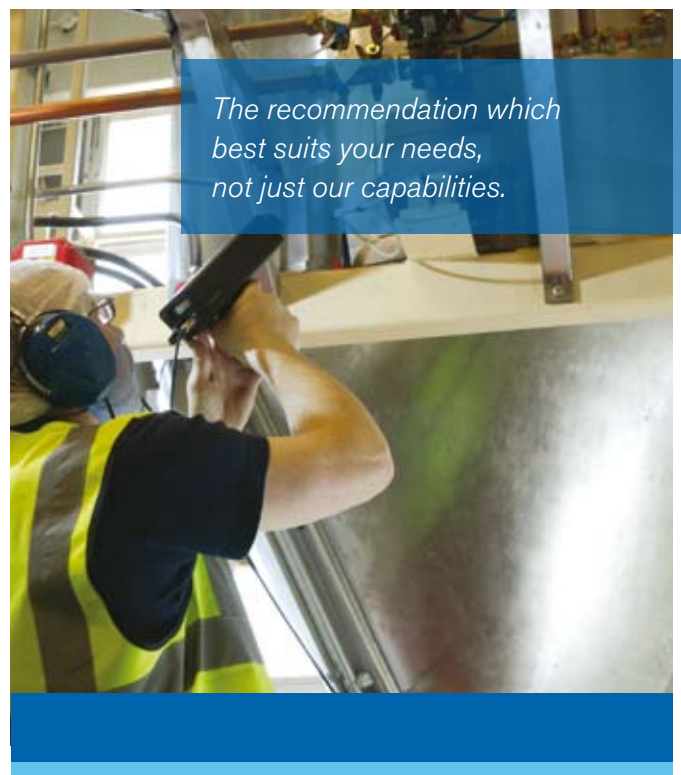
# Repair or replace? React or predict?

**ERIKS Technical Services gives you the kind of choices others don't give. So instead of being offered a 'take it or leave it solution', we offer you solutions you can pick and choose.**

Because we have both high quality electromechanical repair facilities and a huge range of replacement parts in stock, where applicable, we offer you the option of a replacement part or a repair. Taking into account the speed of repair, total cost of ownership and replacement cost, we can make the recommendation which best meets your needs, not just our capabilities.

Every repeat failure represents a potential performance improvement opportunity. For critical plant applications with high risk consequences, early detection of component degradation is essential.

Our Predictive Maintenance Services identify potential issues, so that you can repair or replace parts at your convenience before they fail. We can also identify the root cause of failure and make recommendations or modifications so they are eliminated.



*The recommendation which best suits your needs, not just our capabilities.*





# CONDITION MONITORING



## Facilities and resources

- In-house nationwide network of ISO 18436 certified Condition Monitoring personnel
- Latest high resolution thermographic equipment
- Market leading vibration analysis data collectors and software
- In-house oil analysis facilities
- Ultrasound (airborne) detectors with calculation facility
- Self-designed partial discharge analysers
- Regowski coils manufactured in-house meeting ATEX requirements
- Motor current signature analysis available nationally
- Laser alignment

## Capabilities

- Experts in electromechanical machines/ rotating equipment
- Accurate analysis of machine data in a form you can understand
- Multidisciplined Condition Monitoring personnel

- Flexible local staff to fit with your schedules
- Machine protection by:
  - Periodic portable monitoring
  - Linking to PLC/SCADA or internet
  - Stand-alone protection
  - Permanent data collection
  - Alerts by email, text and OV contacts
- National, regional and local CM management structure

## Brands/partners

Using the latest technology we ensure the most cost-effective solution for you:

- SKF
- Pruftechnik
- Holroyd
- Hansford Sensors
- IFM
- Flir Systems
- AI Control
- BINDT
- T-Mac
- CMP

# ELECTRONICS



**ERIKS Technical Services has more than 85 years' experience in the maintenance, repair and refurbishment of electrical and electronic equipment and systems. From electronic and HV control systems to full on-site asset management, ERIKS Technical Services offers exceptional know-how and a passion for technology.**

*The true cost of machine failure is not simply the cost of repair. We also aim to minimise downtime, reduce costs and improve your production quality and efficiency.*

## Facilities and resources

- Specialist regional repair centres
- Qualified engineers
- Advanced testing and diagnostics
- In-house machining

## Capabilities

- On-site support
- Full component overhaul
- Repair and service of:
  - AC and DC drives
  - Inverters
  - Soft starts
  - Digital and analogue PLC/CNC systems
- Repair and replacement of control systems
- Upgrade and retrofit of obsolete drive systems
- Repair and manufacture of encoders and resolvers

## Some of the major brands we repair

- Allen-Bradley
- Bosch
- Danfoss
- Indramat
- Omron
- Yaskawa
- S2S Electronics
- Siemens
- Sprint Electric
- Fenner
- ABB
- Emotron
- Fenner
- WEG

# GEARBOXES

Whether your gearbox requires replacement or repair – scheduled or emergency – ERIKS Technical Services has the resources, capabilities and decades of experience to help you. As a leader in the field, our specialist gearbox knowledge is complemented by extensive system know-how, enabling us to diagnose and repair problems more cost-effectively.



*All units are stripped and inspected free of charge before any work is undertaken, and a new-for-old philosophy applies on uneconomical repairs.*



## Facilities and resources

- Main fully equipped 35,000 sq.ft dedicated gearbox repair and test centre
- Smaller Regional repair centres for a faster response
- Large scale overhead craneage and test facilities
- Large machine shop to manufacture difficult to come by parts
- Exceptionally highly skilled engineers and technicians



## Capabilities


- Comprehensive maintenance and support service
- Assessment, rebuilding and testing
- Gearbox audits and asset management programmes
- Build to order from stock in kit form
- Obsolete and non-standard spares manufacture
- 24/7 service
- Next-day delivery as standard. Same-day on request
- ATEX certification
- ISO 9001:2001 compliance
- Condition Monitoring:
  - Vibration analysis
  - Thermographic surveys
  - Lubrication analysis
- Comprehensive 2-year warranty available

## Some of the major brands we repair

- |               |                       |
|---------------|-----------------------|
| ■ David Brown | ■ Renold              |
| ■ Fenner      | ■ Rossi Motoridottori |
| ■ Flender     | ■ SEW Eurodrive       |
|               | ■ Sumitomo            |

# MOTORS

An electric motor typically accounts for as much as 65% of a site's electrical energy usage. So ensuring your motors are running at their most energy-efficient can make all the difference to your profitability. ERIKS Technical Services' multidisciplinary expertise and experience in refurbishment, maintenance and repair makes it easier for you to make your motors more efficient, more reliable and more productive.

 Motor failures often occur unnecessarily. By identifying the root cause (drive-end bearing failure or coupling misalignment, for example), we can help you avoid problems earlier, with less disruption and less expense.

## Facilities and resources

- Fully equipped workshops with latest technology
- In-house machining
- Full on-site service
- Comprehensive test equipment
- Time served engineers and technicians
- 24/7/365 availability



## Capabilities

- High quality rewinds:
  - Removal
  - Recording
  - Replacement
  - Testing
- Repair of all rotating equipment including ac/dc motors, alternators and motor generator sets
- Motor audits and management programmes
- Full traceability and identification
- Detailed failure reports
- Unbiased repair/replace advice
- Rebuilds to as-new specification, using genuine manufacturer parts
- Full static and run tests

## Some of the major brands we repair

- Fenner
- Brook Crompton
- WEG
- GE Motors
- Teco Westinghouse
- ABB

# PUMPS



From new pumps to repairs, an overhaul to a complete system redesign, ERIKS Technical Services has an unparalleled capability and expertise, together with an unmatched UK geographical coverage. So wherever you are, whatever your requirement, and whatever your pump application – water abstraction, food and beverage, wastewater treatment or more specialist still – you can rely on ERIKS to provide the most effective solution for maximum productivity and enhanced profitability.

*ERIKS Technical Services know-how extends far beyond the pump, covering related disciplines from sealing technology to drives, to provide a comprehensive solution.*

## Facilities and resources

- Over 20 workshops UK-wide
- 70 Local service centres
- 24/7/365 service
- In-house design and fabrication
- Pump centre membership

## Capabilities

- New pumps
- Spare parts
- Reverse engineering
- Maintenance, overhaul, uprating, repair
- Condition-based monitoring and site services
- Comprehensive pump reports incorporating:
  - Digital images
  - Test results
  - Lead times (repair and replacement)

- Site maintenance and shutdowns
- Turnkey projects
- Fault diagnostics
- Inventory management and rationalisation
- Pump energy audits

## Some of the major brands we repair

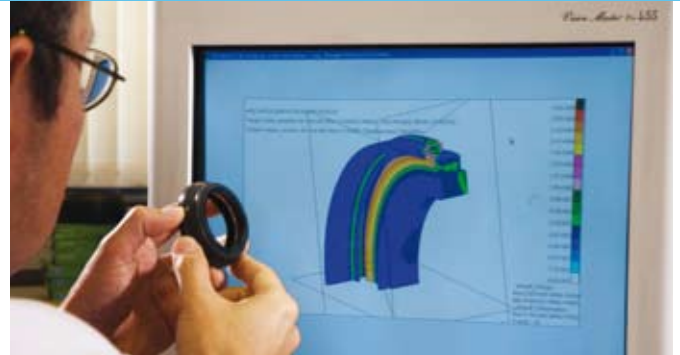
- ARO
- Busch
- Grundfos
- ITT Lowara
- KSB
- Mono
- Elmo Rietschle
- SPP
- Tapflo
- Tuthill
- Ingersoll Rand

## SEALING

Seals safeguard critical parts of your process – preventing leakage or contamination – but are often overlooked until they fail. ERIKS is Europe's largest supplier of O-rings and a worldwide force in seals, partly due to our Materials Technology Centre. This develops advanced compounds for our design and development team to craft into engineered sealing solutions.

### Facilities and resources

- Materials Technology Centre
- Computer-based design and FEA
- Test and development facility
- Qualified design and test engineers
- Manufacturing
- Site support
- Sealjet machine – produces specials in minutes
- FDA, 3A, USP Class VI, EC1935, WRAS/Wrc, NSF and DVGW approvals
- 24/7 service



### Capabilities

- Rapid prototyping
- Development of specialist compounds and materials
- Obsolete and non-standard manufacture
- Application re-engineering
- Replacement part supply
- OEM equivalents and alternatives
- Mechanical seal refurbishment
- Failure mode analysis

## GASKET, PACKING AND INSULATION

A market leader in the design and specification of gasket, packing and insulation products, we can supply production volumes and low volume specials to order. Our specialists can help you re-engineer existing applications or develop new.



### Facilities and resources

- CAD/automated cutting machines
- CNC water jet, knife cutting and routing machines
- CAD linked direct to production
- On-site support and advice
- 24/7 service
- Comprehensive base materials stocks

### Capabilities

- Rapid prototyping and production
- Independent technical support
- Any size or shape
- Application re-engineering
- Kan Ban, kitting and assembly/installation packs
- High pressure and temperature solutions

# VALVES

Supplying standard valves from stock, and sourcing or customising items for special projects, are our core services. Technical teams help specify your requirements, from a single stock item to a specially built or modified system.

## Facilities and resources

- Large stock of valves and spares for fast UK delivery
- Actuation, modifications, repairs, painting and special finishes

## Capabilities

- Technical advice
- Dedicated major contracts project team
- Application engineering advice
- Testing services in-house or on-site including PMI, pressure, temperature, hot oil, hardness, and non-destructive examination



# BEARINGS

ERIKS in-depth capabilities meet all your bearing requirements: from a straightforward replacement with a full manufacturer's warranty, or an in-house UK-manufactured special part from Revolve, to on-site condition monitoring and maintenance.

## Facilities and resources

- Revolve manufacturing: design, application, production and technical support
- Bearing Core Competence Centre: optimum unbiased solutions
- Regional condition monitoring engineering teams
- SKF's only Certified Maintenance partner – accredited quality of technical ability



## Capabilities

- Fitting
- Alignment
- Specialist U.S. product sourcing
- Large bearing refurbishment
- Bearing condition monitoring
- Manufacture of specials, obsolete and OEM replacement (ball, cylindrical and taper roller up to 1½m)
- Lubrication surveys and recommendations
- Fully outsourced lubrication contracts
- Application re-engineering
- Bearing failure mode reporting
- Replacement part supply

# POWER TRANSMISSION

The coupling, belt, chain drive or gear unit is the vital link between prime mover and driven machine: setting the speed, smoothing-out shock loads and keeping things moving. This link demands careful selection, application and maintenance. Energy cost savings from installing a high efficiency motor can be lost, or the production line halted, due to the wrong transmission. ERIKS technical staff can help.



*To maximise cost savings on drives, utilise the full product offering of inverters, eff1 motors and energy-efficient belt drives.*

## Facilities and resources

- Application engineers
- Drive alignment and other maintenance tools
- Machine shop
- Large stocks
- Belt cutting equipment
- Training

## Capabilities

- Application engineering
- Custom drive designs
- Problem solving
- Energy saving advice
- Installation and maintenance training

# FLUID POWER



## Facilities and resources

- System and power pack design team
- 30,000 sq ft production facility
- Volume hose production and kitting
- On-site engineering teams
- Regional hose production
- Oil and air analysis
- Training
- 24/7 service

## Capabilities

- Pump, valve and cylinder refurbishment
- Air leakage survey
- Oil quality analysis
- Power pack design and production
- Mobile system building
- Filtration system review

ERIKS' engineers can advise and implement solutions to upgrade and enhance your hydraulics, pneumatics and filtration systems. Our teams are available to work on-site or in our production facility, to answer any challenge from energy efficiency to system reliability.



# INDUSTRIAL HOSE

No two industrial hose applications are the same – in application, end fittings or assembly. ERIKS technical team helps you select the right components, then builds and tests the assembly to ensure maximum service life and safety.

## Facilities and resources

- Large stocks and wide range of hoses and fittings
- Hygienic hose assembly
- Metallic hose production
- Rubber, PTFE and Silicon hose manufacturing
- Bellows
- Expansion joints
- Technical specialists
- On-site support
- System specification



*ERIKS Hose Technology has a 30 year track record of providing cost savings for major customers in a variety of industries*



## Capabilities

- Application engineering advice
- 140bar test rigs
- Rapid hose assembly
- Hoses built to order
- Hose management
- Problem solving teams
- System design
- ISO9001
- Certified welders

# TOOLS AND MAINTENANCE SERVICES

ERIKS can help standardise and consolidate your maintenance supplies, and simplify the process – saving time for your engineers and procurement teams. We will help select the product, improve its availability, and reduce time spent negotiating, sourcing and approving with multiple suppliers – freeing you to concentrate on your core tasks.



## Facilities and resources

- Large stocks of leading products
- Efficient core logistics system
- Technical specialists
- On-site support
- Stock management tools

## Capabilities

- Selection and approvals support
- Supply chain management
- Consolidated invoicing
- Vendor managed inventory
- On-line purchasing and stock management
- Purchase authority control

# Reliability, productivity, and profitability start now.



**Hitting the 'Start' button and knowing your machines will operate is far more effective than hitting the panic button when they don't. Reliability and confidence in your machines' productivity is what comes from working with ERIKS Technical Services.**

Our complete in-house engineering know-how and passion for technology enable us to address the root cause of most types of electromechanical failure, to ensure that it never happens again. And our pragmatic approach means we can suggest and then provide the best solution for your needs: whether that's repair or replacement.

## **What next?**

Working with ERIKS Technical Services is a 'soft start' not a kick-start. It's never an instant decision and rarely the decision of one person alone.

Experience shows that the best next step is a meeting between you, ERIKS Technical Services and may include your colleagues representing Health & Safety, maintenance, production, continuous improvement, and environmental services, to establish the scope and nature of our involvement and our mutual cooperation.

In advance of this meeting, we recommend you allow us to undertake a Needs Analysis Survey, to identify and prioritise opportunities.





*To arrange a meeting or commission a Needs Analysis Survey, please speak to your ERIKS representative*



Contact ERIKS Technical Services  
Tel 0845 006 6000  
[www.eriks.co.uk](http://www.eriks.co.uk)

**ERIKS**