



Automation Services

Complete control from the Start



Out of the box, or

Acquiring and assembling components is one way to automate a process or part of a process. But an 'out of the box' solution will only ever be similar to earlier solutions. So why not consider a partner who thinks 'outside the box', like ERIKS.

We will get involved with your automation requirements at the earliest opportunity so we can understand your needs and address them with an open mind. The result is complete control over developing a bespoke solution, unconstrained by existing components or current thinking.

It's a solution that gives you complete control in meeting your automation needs: efficiently, cost-effectively and – if required, innovatively – from the moment you press the 'Start' button.





outside the box?



Steps to success

Though automation may always be the solution, the problem is always different. However, by following the simple steps below – which will be fine-tuned to suit your specific problem and individual circumstances – ERIKS can help you to achieve your goals.

- n **STEP 1** Consultation: reviewing high risk, performance-critical areas to identify and prioritise savings or improvement opportunities
- n **STEP 2** Recommendation: prioritising solutions into short- and medium-term for implementation, to create an agreed action plan
- n **STEP 3** Supply, installation and commissioning: our engineers can work with your team, if required, to get the solutions successfully implemented
- n **STEP 4** Reporting and training: to ensure the commitments made are delivered and to help you get the most out of the solution
- n **STEP 5** Ongoing support: provided as required by our technical specialists, from reliability review meetings to best practice advice



MILKING PRODUCTIVITY

Automation of the milking of dairy cows leads to higher milk yields.

When food is automatically dispensed to a feeding bowl within a milking robot, the cow goes to the bowl, at which time gates close to keep the cow in position. As the cow feeds, a camera, radar or laser system identifies the position of the teats for cleaning by water jet, and coupling to the milking machine. The cow is then automatically milked for a pre-determined length of time, based on previous yield, identified by a personalised transmitter attached to the cow. Once milked, the cow is uncoupled from the machinery and the gates re-open. If the cow attempts to re-enter the machine before she is due to be fed or milked again, the gates will refuse to open.

ERIKS has engineered and constructed all kinds of movement on automated milking machines, including supplying all electrical and mechanical, rotating and linear actuators.



30 years' experience

As part of a pan-European group with 30 years' experience in automation, ERIKS Automation Services, now in the UK, can call on extensive expertise and comprehensive resources.



ERIKS can work with any size business, but for smaller organisations with no expertise of automation or their own R&D department, our resources make us invaluable. With a whole range of automation components and systems available, we are able to develop effective solutions for even the most unusual or complex automation challenges, and across a broad spectrum of industries.

ERIKS can manage and facilitate the entire process to ensure you receive the ideal solution for your automation requirement:

- n Initial concept
- n Development
- n 3D modelling
- n Inhouse testing including pre-compliance EMC testing
- n Manufacture
- n Installation



Solving problems, supplying solutions

Most automation partners offer only a small part of the comprehensive service provided by ERIKS. This means that they are essentially suppliers of components rather than solutions. ERIKS take the opposite approach.

- n **We encourage customers** to come to us not just to source a part, but also with a problem to solve
- n **We take a broader view** and analyse the entire process
- n **We devise the most effective way** to meet your automation requirements and your specifications (equipment footprint and purchasing budget, for example)
- n **We operate a solution-neutral approach.** So if the most effective solution is a relatively simple standard, that is what we will recommend, design and install. We aim to meet your automation requirements, not our sales targets

GROWING BENEFITS

Automated climate control in horticultural greenhouses reduces energy use.

The HortiAir greenhouse air treatment system helps to control the climate, reduce energy use and reduce CO₂ emissions. The HortiAir unit uses two heat recovery units, which eliminates the need for roof vents by maintaining the correct humidity and temperature. The units also keep CO₂ locked within the greenhouse due to the fact the greenhouse is completely closed, and help cool it in hot sunlight. Coupled via a LAN to the process computer, each unit is sufficient to control conditions in one 35m² greenhouse, using 2 humidity/temperature sensors, 2 humidifiers, 9 open/close valves, 1 proportional valve and 3 control boards. A greenhouse automated with HortiAir requires a heat-power generator half the standard size.

ERIKS developed the electro-mechanical installation for HortiAir, together with the control system and software.



Project timeline

1

Idea generation
by customer

2

Input from
ERIKS
Automation
Services
application
engineer

3

Appointment
of ERIKS
project manager

4

Technical
proposal

5

Quotation
supplied.
Order received



Our product range

The products listed right are only a small selection of the extensive range available from ERIKS Automation Services, and used in the construction of our automation solutions.

- n Brushed and brushless DC motors
- n AC servo drives and motors
- n Servo tube actuators
- n Stepper motors
- n Inverters
- n Electric motors
- n Amplifiers
- n Ballscrews
- n Leadscrews
- n Linear actuators
- n Guidance systems
- n SCARA handling systems
- n Pneumatic drives
- n Linear motors



6

7

8

9

10

Execution of basic engineering

Execution of detailed engineering

Prototype supply and testing

Delivery of initial small series for field testing

Large scale series start-up and delivery



Our supplier partners

ERIKS work with a number of leading names in the automation industry, who supply quality components designed and manufactured to the highest standards.

These suppliers include:

- n Fenner
- n Dunkermotoren
- n Sanyo Denki
- n SKF
- n Bosch Rexroth
- n Festo

SITTING COMFORTABLY

Automated exercise equipment enhances patient rehabilitation.

Patients with back injuries are encouraged to exercise to reduce pain. But with traditional exercise machines this has the effect of strengthening only the strongest muscles whilst the least exercised muscles become weaker still. Working with an OEM, ERIKS automated an exercise seat to ensure that patients exercise effectively. The physiotherapist utilises the on-board computer to tailor the exercise regime to the patient's specific needs. The initial set-up takes around thirty minutes and the data is stored for use in future exercise sessions. The weights in a conventional exercise machine have been replaced with an AC servo system, this makes it possible to select from a wide variety of load patterns. The combined effect of these improvements is a reduction of pain and speedier rehabilitation.

ERIKS designed, developed and manufactured five linear actuators required for the equipment, the AC servo generator, the industrial PC, safety devices, the interface and the software.

Visit us at www.eriks.co.uk/automation to find out more information on our Automation Services.



The automatic choice

If you need a complete automation solution from design to development, manufacture and installation, you need the comprehensive service only ERIKS Automation can offer:

- n Experienced electrical, mechanical, pneumatic, hydraulic and electronic engineers
- n Capabilities in motion control, linear and rotary drives
- n Extensive in-house testing facilities
- n 3D modelling
- n ISO 9001:2008 certification
- n Knowledge of the European Machinery Directive, EMC Directive and all relevant safety and industry-related guidelines
- n Complementary products from timing belts to bearings and pneumatic and hydraulic components, supplied by ERIKS Group specialists
- n For medical and food applications, we have cleanroom facilities

**So it's automation thinking out of the box,
all in one package.**

Contact ERIKS Automation Services
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