

FESTO

# There are savings in the air

WHERE'S ONE OF THE BEST PLACES TO SPOT COMPRESSED AIR LEAKAGE? NOT NECESSARILY ON THE MACHINE OR THE AIRLINE BUT, SURPRISINGLY, ON THE BOTTOM OF A BALANCE SHEET. BECAUSE CONTRARY TO THE 'AS FREE AS AIR' CLICHÉ, COMPRESSED AIR IS ACTUALLY A SIGNIFICANT COST FOR BUSINESSES, AND COMPRESSED AIR LEAKAGE IS A MAJOR FACTOR IN UNNECESSARILY LARGE ENERGY BILLS.



In fact, in ERIKS' experience, many businesses are running a quarter of their compressors simply to provide enough air to serve the leaks in the system. And according to a study of compressed air systems in the EU by the Fraunhofer ISI institute, cost savings of around 42% of the compressed air bill can be made simply through optimal leakage management. When this is combined with the efficiency and productivity benefits which go hand-in-hand with a less leaky system – which creates greater process reliability, higher machine availability and lower operating costs overall – you can expect to see savings of up to 60%.

Of course, by its very nature compressed air is invisible, and therefore leaks and other inefficiencies are very hard to identify. That's why it pays to call in experts such as Festo – especially when the potential cost savings usually far exceed the cost of the service, and the payback period is typically extremely short.

Festo Energy Saving Services from ERIKS offer a customised range of services, to determine and optimally exploit potential savings in compressed air, based on extensive expertise and experience in the area of energy savings. Following a four-step process of analysis, planning, implementation and sustainment, Festo Energy Saving Services assess your current situation, propose and devise energy- and cost-saving measures, then implement and secure them for the long term.

A detailed and expert analysis of your compressed air supply not only identifies consumption but also the quality of the compressed air and – of course – the leakage. This creates a consumption profile of compressed air requirements from basic load to peak load, including any fluctuations, through consumption monitoring over several days, and by comparing energy consumption with supplied compressed air volume. With this data established it's then possible to consider measures to take for improvement, and to identify potential savings.

Once the situation has been analysed, the service moves into the planning stage, where the data is evaluated, the required leak repair measures are identified and documented, and detailed, customised action plans developed. At the same time, a condition monitoring system is developed to help detect wear and changes in pressure and flow rates at an early stage, so remedial steps can be taken before downtime occurs. Or, if downtime does occur, to ensure the cause can be identified more quickly and more effective action taken.

Developing a condition monitoring system can include identifying the parameters to be monitored, selecting suitable sensors, and the actual design and construction of the system. But where ERIKS and Festo go further still is with the development of an optimisation concept, which goes beyond simple leakage rectification to realise further potential savings, through a strategic redesign of your compressed air system for the future. Detailed analysis of your existing compressors, a comparison of alternatives and the selection of the best solution will

help you to stabilise your processes, reduce your energy use, and reduce your costs.

**Optimisation also looks at the way your compressed air is applied as well as the way it is supplied. This may lead to updating technology, increasing machine efficiency, and achieving shorter cycle times, simplified installation and maintenance, and higher productivity, production quality and plant availability.**

Implementation is, of course, a crucial element of Festo Energy Saving Services from ERIKS. Many businesses lack the human resources and expertise to implement an action plan quickly and efficiently – and with every day of inefficient compressed air use is another day of unnecessary cost, any delay wastes money. However Festo can provide the expertise and the bodies on the ground to eliminate leaks quickly and professionally through repair or replacement, to bring your compressed air supply and

consumption up to the latest standards, and to professionally install your condition monitoring system. So you can start to save straightaway, without placing any extra burden on your maintenance staff. Finally, with your new and improved systems in place, you need to secure the optimised operating conditions for the long term.

New leaks and wear can never be completely eliminated, so regular maintenance is an essential element of continuing to achieve the initial energy- and cost-savings and productivity gains. Festo not only offer preventive and corrective maintenance service packages, but also training. More than 42,000 attend more than 2,900 Festo training events, each year, where they have been helped to develop their own know-how, as well as gaining the skills to develop their own high-efficiency, value-added systems.

With Festo training, your employees can benefit from Festo's experience to improve their knowledge of pneumatics and ensure optimised, energy-efficient operation of your systems for the future, with results where you can see them: on the bottom line.

