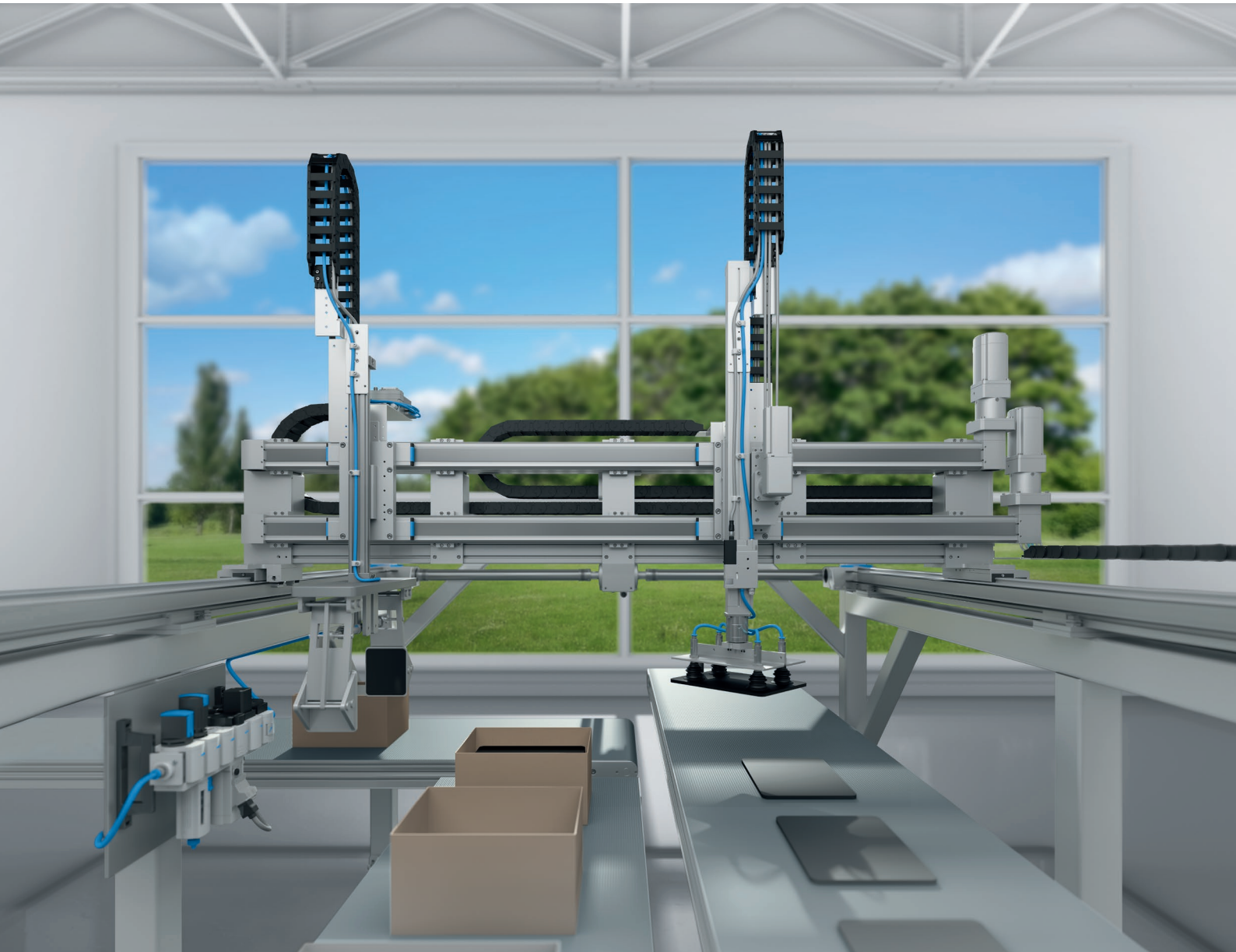


**Climate-friendly production and energy savings?
It couldn't be easier – with Festo!**

FESTO



Take a quantum leap in automation technology. By using suitable components from Festo in an intelligent way, you can reduce the energy consumption of your systems and thus specifically lower your production's carbon emissions.

Easy upgrades to start saving now

Ways to make automation more efficient



MSE6-C2M with pressure reduction and soft start for restarting

up to
20%

Energy efficiency modules from the MSE6 series

Avoid unnecessary compressed air consumption. In some work cycles, the energy supply can be temporarily stopped – right up to zero energy consumption and zero leakage. That is why the intelligent energy efficiency modules of the MSE6 series constantly monitor

the compressed air consumption and block the compressed air during non-production times after a certain amount of time. The MSE6-C2M and MSE6-D2M also maintain the system pressure at a minimum standby pressure level.

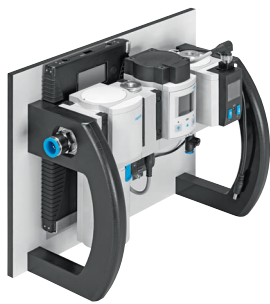
→ www.festo.com/mse6



MSE6-E2M with complete pressure shut-off



MSE6-D2M as an extension for a second string on the MSE6-C2M or a CPX terminal



up to
20%

Air-flow analyser SFGA

The mobile measuring device SFGA lets you measure the actual flow and pressure values at any time and anywhere and compare them against historical data. Based on the flow measurement you can quickly and easily identify deviations from the ideal state caused e.g. by leaks or

unexpected pressure fluctuations and pressure losses. This means you have a reliable basis for implementing the right energy-saving measures.

→ www.festo.com/sfga



up to
20%

Flow sensor SFAM

You can install the flow sensor SFAM as a stand-alone device or in combination with an MS series service unit so you get a transparent impression of the compressed

air consumption straight away. Because a changing flow value is often a sign that there is a potential for savings.

→ www.festo.com/sfam



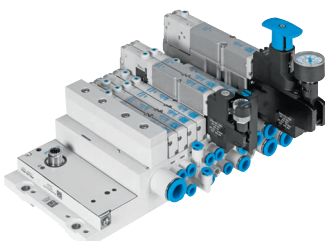
up to
80%

Pulse valve VSVA

Thanks to the built-in pulse feature, the valve automatically lowers energy consumption when using blast air. This enables you to save a significant amount

of compressed air during pauses. Another benefit is that the blast pulse is stronger than with a continuous air flow.

→ www.festo.com/vsva-pulsevalve



up to
22%

Vertical pressure regulator plate VMPA1 or VABF

With the pressure regulator plate (vertical stacking) the working pressure for individual cylinders can be regulated directly on the valve terminal. You can check whether the maximum pressure level is actually

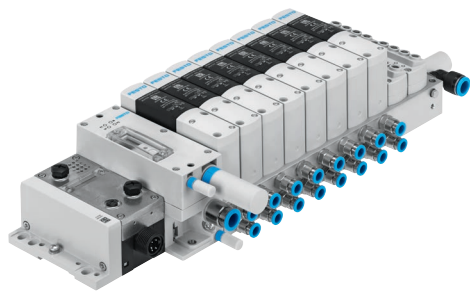
necessary for each automation task or whether you can reduce the pressure for a particular movement and thus save energy.

→ www.festo.com/vmpa1

→ www.festo.com/vabf

Always state-of-the-art technology

Use energy-efficient alternatives



up to
70%



Digitised pneumatics with Motion Terminal VTEM

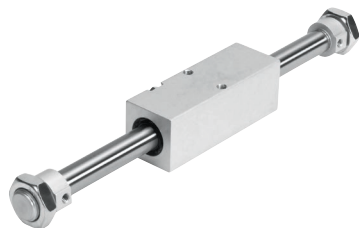
The Motion Terminal uses an integrated technological approach to enable the energy-efficient operation of pneumatic automation technology. It does this using piezo valves with up to 90% less energy consumption in the valve pilot stage and in-house developed Motion Apps.

- You choose the right pressure and speed for every stage of your application – even within a stroke – using the app “Selectable pressure level”. This enables you to make significant compressed air savings, e.g. with a return stroke with reduced pressure.
- The app “ECO drive” optimises the pressure in the drive during the movement

to the minimum necessary and switches off the air supply completely in the end position. As a result, savings of up to 70% are possible with the Motion Apps “Selectable pressure level” and “ECO drive”.

- The app “Leakage diagnostics” with its separate diagnostic cycles and defined threshold values enables reliable leakage monitoring for pneumatic systems connected to the Festo Motion Terminal, thus ensuring that leaks are detected early.

→ www.festo.com/vtem



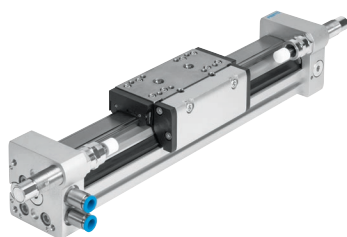
up to
15%

Rodless linear drive DGO

The drive is designed in such a way that it features magnetic power transmission without a mechanical connection. There is a hermetic seal between the cylinder

chamber and the external rotor. This prevents leakage losses.

→ www.festo.com/dgo



up to
10%

Pneumatic linear drive DGC

The patented sealing band in the rodless drive's sealing system really comes into its own with long strokes. Virtually leakage

free, the drive systematically reduces compressed air consumption.

→ www.festo.com/dgc



up to
60%

Vacuum generator OVEM

Reliably holding objects using vacuum does not necessarily require a constant vacuum pressure. In particular with smooth surfaces, you can avoid continuous air consumption with an air-saving circuit. The intelligent vacuum generator

OVEM monitors the vacuum pressure, generates vacuum only when it is needed and thus significantly reduces energy consumption.

→ www.festo.com/ovem

up to
20%



The percentage values for energy saving potential are based on calculations carried out at Festo for a sample application. We will be happy to explain the details to you and also to calculate your specific cost benefits.

The saving does not come from using the product itself, but rather by supporting status detection and monitoring with respect to leakage.

A critical look at important system details

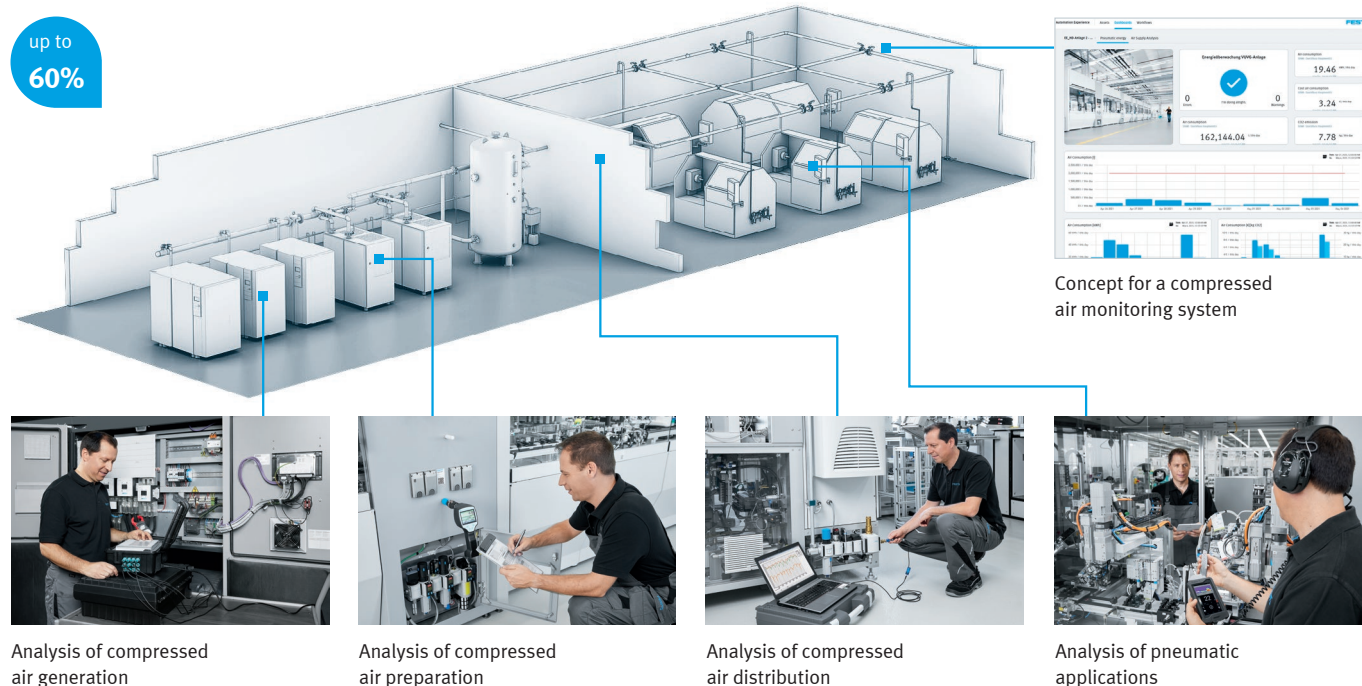
Services for checking overall compressed air efficiency

Compressed air energy efficiency audit

Would you like to expand your capacities, but the pressure in your system is already dropping all the time and affecting production? Or the pneumatic components simply won't start up after not having been used for several days? If you are looking for ways to use compressed air more efficiently and to reduce your carbon emissions, our TÜV-certified compressed air energy efficiency audit to ISO 11011 is a good place to start.

Our experts analyse the entire compressed air system, from the compressor room to the pneumatic application. They identify inefficient use of compressed air, locate leaks and recommend optimisations. The final report with all the measurement results can be used for energy management in accordance with ISO 50001. And if you wish, Festo can also support you with implementing specific improvement measures.

→ www.festo.com/energysaving

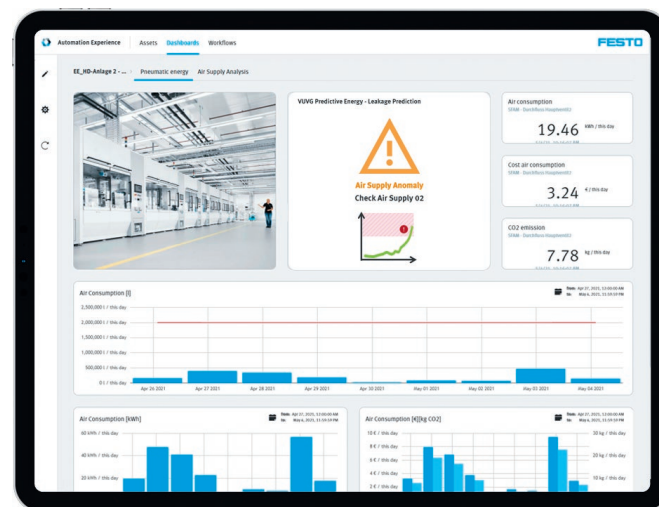


Predictive energy management – another way of saving energy

To keep your energy consumption in production as low as possible, you should permanently monitor all the relevant parameters and data. By using artificial intelligence, it is possible to predictively calculate how the system's status will change. Together with your experts, we will create a suitable solution for your machines or entire production plants. Once it has been validated in a pilot project, we can, if required, scale it up for all your production.

The basis for this is the software Festo Automation Experience (Festo AX), which makes your systems more intelligent. At the same time, you also benefit from predictive maintenance and predictive quality. We show you how!

→ www.festo.com/ax



Why wait? Get started now! Get in touch with us to find out how you can cut your compressed air costs by up to 60% and boost your productivity at the same time.