

BOGE SO-3 series

Oil-free with maximum efficiency



All in the name of maximum efficiency – from 110 to 160 kW water-cooled

Top ratings for free air delivery, efficiency and overall cost – the new SO-3 shows what is possible with the perfect interaction of innovative functions, smart design and high-quality processing.

Its technologically sophisticated yet low-maintenance design doesn't just make the environmentally friendly, reliable production of oil-free compressed air particularly sustainable but it also minimises costs from the start.



Perfectly positioned intake filter

Installing the intake filter at the coolest point with little differential pressure guarantees high free air delivery and low specific power. Pre-separation followed by fine-filtering of the intake air ensures particularly efficient cleaning of the intake air.

Efficient, powerful drive motor

IE 4 energy efficiency class motors are a guarantee for maximum effectiveness. Using an optional frequency converter, energy consumption can be further reduced.

Effective sound insulation

Take special sound insulation material, for example, that has the maximum sound absorption ratings in all relevant octave bands, and use it generously. The result is convincing – with significantly reduced sound levels.

Optimised cooling concept

The highly efficient cooling system relies on extra large coolers made of premium-quality stainless steel and a cooling principle that uses consistent water flow to reduce the risk of contamination. The low compressed air outlet and compression temperatures as well as effective condensate separation also help with energy efficiency.



Temperature-controlled cover fan

Smart engineering includes every aspect of the energy footprint – not least the fan. With the new BOGE SO-3, a temperature sensor will determine whether and when the cover fan is activated, e.g. in high ambient temperatures. Not only does this reduce the internal cover temperature but also energy consumption.

Re-developed airend

The new BOGE SO-3 airend features high-quality, generously sized bearings and requires 40% less speed than its predecessor. Low compressor temperatures and reduced wear increase service life, and flow-optimised rotors guarantee – with the lowest specific power – high free air delivery as well as “best-in-class” efficiency ratings!

Option: integrated heat recovery

The electric energy needed for the compression process is almost exclusively converted into heat. Unfortunately, this cannot be changed. However: using the highly efficient BOGE solution for heat recovery, up to 94% of this energy can be used in other ways – for the heating system, heat for industrial processes and much more. This saves energy and cash.

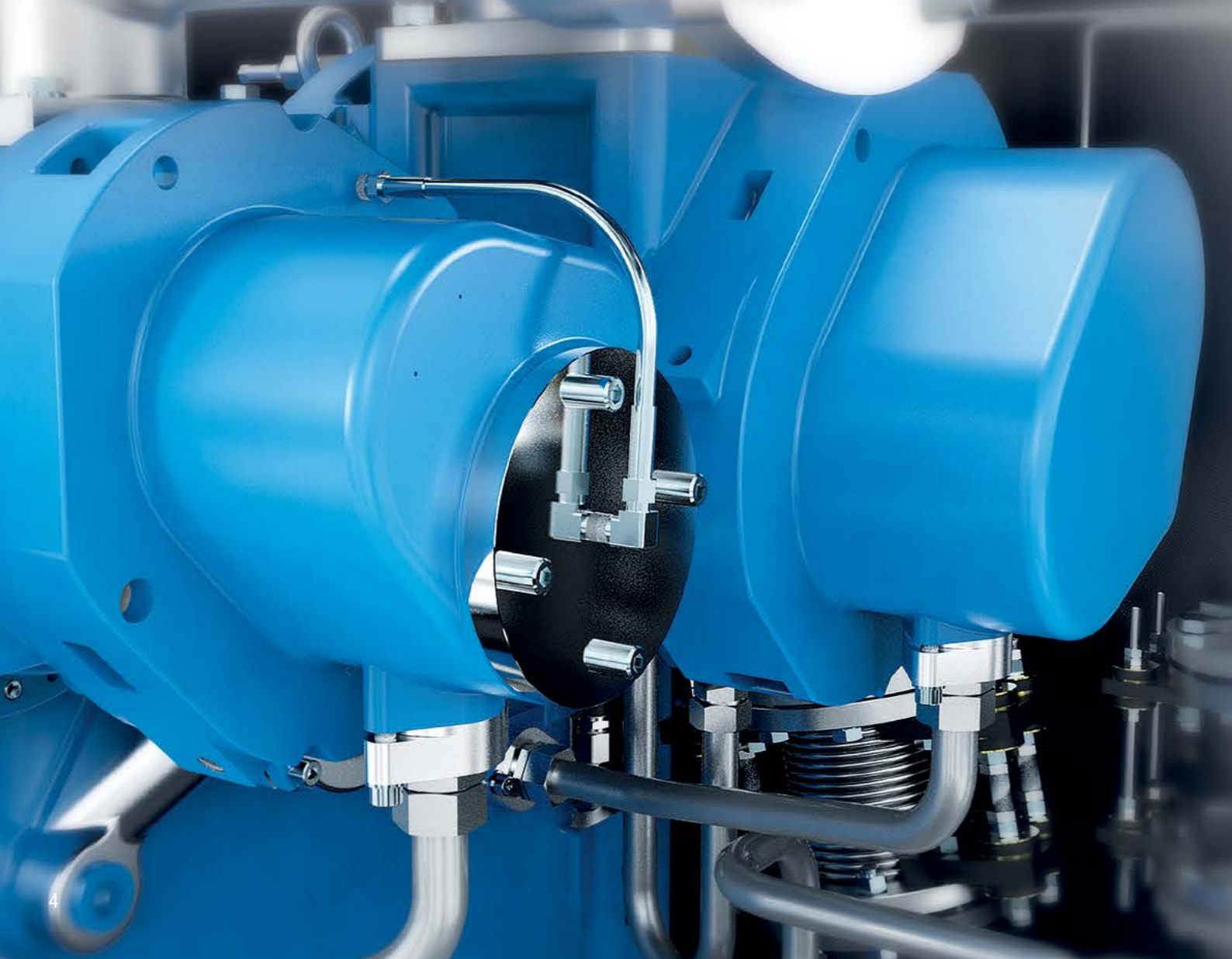
Consistent vibration decoupling

Measures to consistently isolate many components from vibrations and voltage have several effects: pulsing vibrations are noticeably reduced, there is less wear and the components' service life is extended. The incredibly quiet operation will be the first thing you notice.

Premium quality – an economic decision

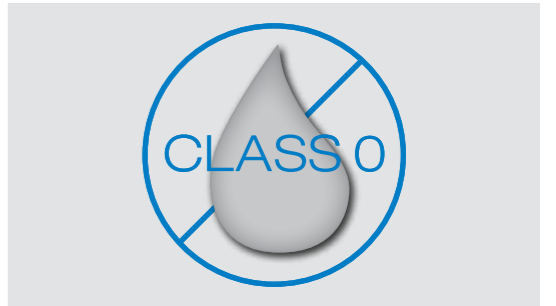
There are many reasons why BOGE compressor technology is known as particularly durable. As much as this is down to our engineers who continuously optimise processes and integrate innovations, it is also thanks to our consistent use of high-quality materials. Our new SO-3 also benefits from this. It additionally features measures for isolation from vibrations which is gentle on resources, proving that uncompromising quality can be very economical.

**UP TO 94%
ENERGY COST
KICKBACK**



Guaranteed oil-free

Whether in pharmaceuticals, food or drink, in engineering or in an industrial paint shop – wherever high-quality, completely oil-free compressed air is needed in larger quantities, the new SO-3 will be a huge asset: with innovative compressor technology using the finest tolerances and perfect sealing between the oil system and the compression chamber.



Technologically sophisticated

In addition to the re-developed airend, it is also thanks to the optimised intake and effective cooling that the SO-3 reaches top marks for free air delivery, taking the title “Best in Class” with its specific power consumption. The IE4 motor, with its high level of efficiency, is also responsible for this.



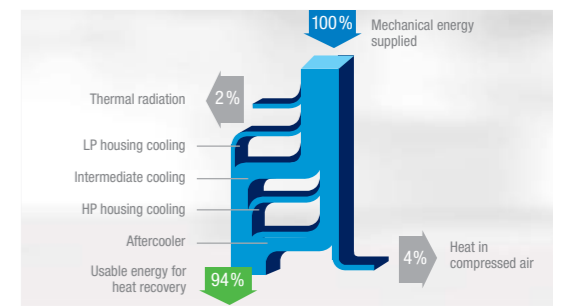
Low operating costs

For TCO (Total Cost of Ownership), in addition to the procurement costs, it is primarily the energy and maintenance costs that make a major contribution. The new SO-3 airend is really convincing in this respect: The speed reduced by 40 % lowers energy consumption, wear and maintenance costs as well as extending service life. With its best-in-class specifics, the SO-3 ensures an exceptional TCO value.



Sustainable, thanks to heat recovery

Thanks to optionally integrated heat recovery, up to 94% of the energy required for the compression process can be used for other things – for the heating system, for pre-heating, for hot water or as service water for industrial processes with temperatures up to 90 °C. Whether for primary energy, power input, investment or operating costs – heat recovery means saving sustainably.



Increased efficiency can be controlled

State-of-the-art, interlocking controls for multi-compressor stations are the most effective way of optimising energy consumption. Thanks to BOGE's PRIME efficiency control specifically developed for oil-free screw compressors, the new SO-3 provides all the requirements for connection to provis 3 and BOGE connect. All functions and operating parameters are clearly presented on the backlit LC display in plain text. Availability is maximised automatically and all limit values are reliably monitored.



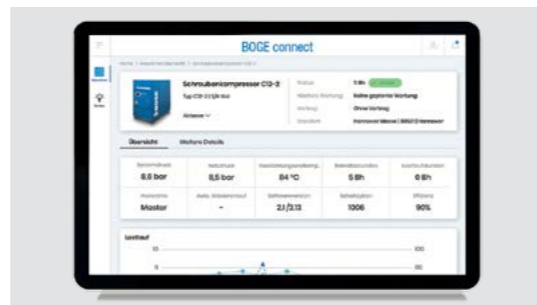
Frequency control – an option that pays off

Like all machines in the SO series, the SO-3 is also available in a frequency-controlled version. In addition to numerous options for saving energy, this also contributes to an extended service life because "gentle" operation minimises compressor wear. The actual strength of frequency control, however, is efficiency optimisation: Idle times are minimised, operating pressure is lowered, start-up currents are eliminated and it is possible to react more quickly to changes in demand.



BOGE connect – ready for Industry 4.0

Smart compressed air management in the age of Industry 4.0 – that is what BOGE connect has been designed for. All plant data and machine details are continuously recorded, monitored and sent to the BOGE connect portal. The data can be accessed graphically from any smart device. But most important of all: This innovative "smart service" tool allows remote monitoring of a compressed air station and helps to identify optimisation potential.



The multi-talent: airtelligence provis 3

The latest version of our smart, interlocking control will set benchmarks for the co-ordinated operation of your compressed air system because it is compatible with an unlimited number of compressors, compressed air networks and accessory components. Its high-performance control algorithms monitor and control the entire compressed air station – predictively and consumption-dependent. The control is operated intuitively with touch and gesture commands on the 15.6" display. As a complete solution ready for connection, this control supports OPC-UA platform-independent architecture and enables an energy audit with performance tests, statement of costs and reporting (in accordance with DIN EN ISO 50001-2011), thus optimising the efficiency of your entire compressed air system – even when older compressors need to be integrated.



BOGE Customised Solutions

A clean solution for dry compressed air

With high volumetric flow rates, the compressed air being used must be free from contamination and moisture. For this, BOGE has developed its heat-regenerating DAV-2 adsorption dryer. Its thermal insulation reduces heat loss and energy consumption. Thanks to dew point control, switching the receivers can be adjusted so energy consumption adapts to the actual dryer load. This provides dry and clean compressed air with pressure dew points of down to $-70\text{ }^{\circ}\text{C}$ – with low energy requirements.



Exceptional expertise in gas production

We have recently brought reinforcements on board for the production of gases, such as highly purified and ultra-pure nitrogen: Since August 2023, INMATEC Gase Technologie, one of the leading manufacturers of nitrogen and oxygen generators, has been part of the BOGE family. The expanded product portfolio means that we will be able to cater to more diverse and industry-specific requests in the future. Read more about INMATEC products, expertise and system solutions at www.inmatec.de.



Turbo compressor as the perfect team player

Thanks to their design, BOGE turbo compressors (e.g. BOGE T 220) are the perfect addition to the new BOGE SO-3 series models: They are particularly low maintenance they require little energy and – when used as a basic load machine in connection with the SO-3 – guarantee perfect performance specifics and a high level of reserves.

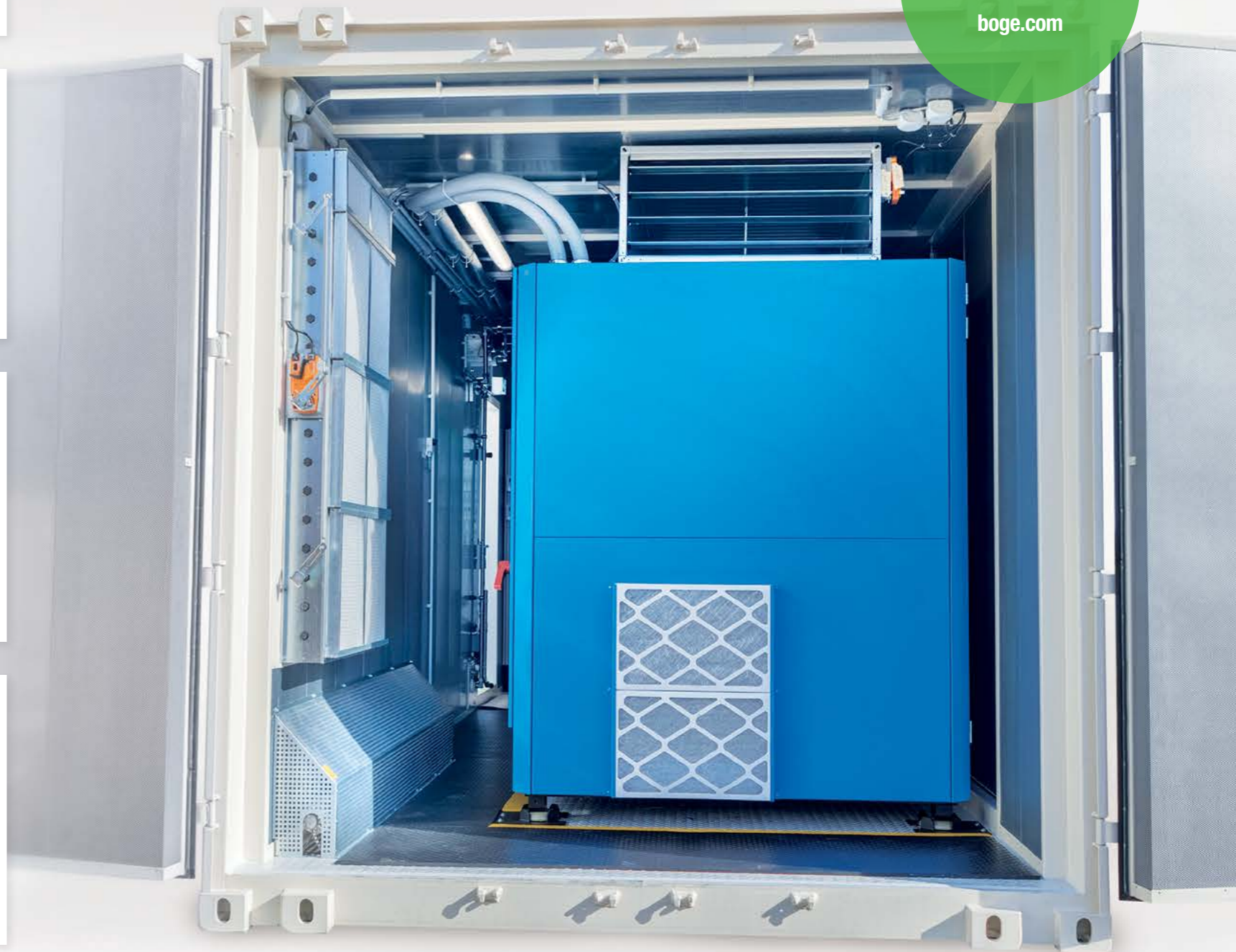


Maximum adaptability using plug & play

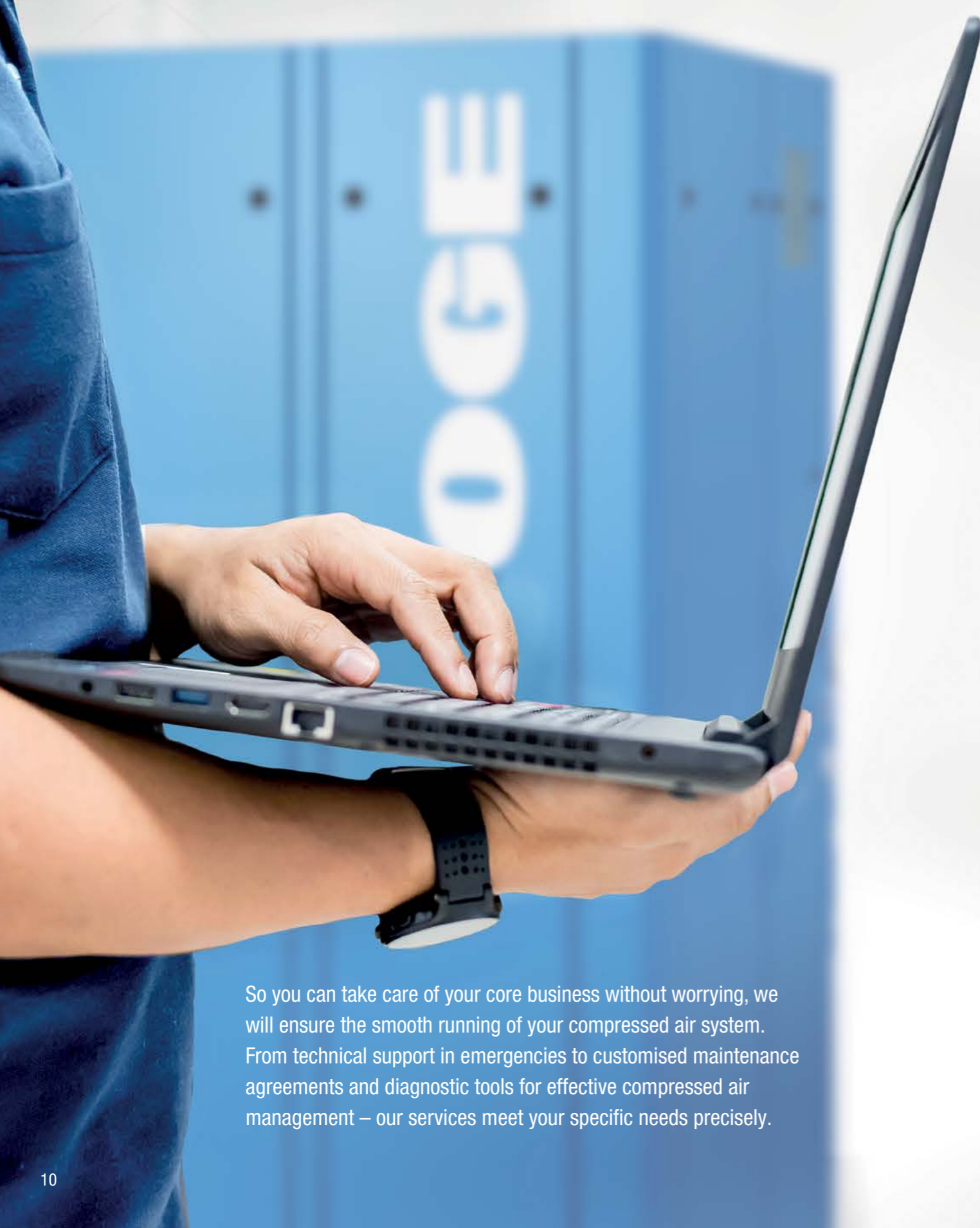
Particularly when the available space is not sufficient, we are happy to provide you with a customised solution in the form of entire compressor stations, containers and basic frame systems as well as tailor-made special designs – including compressors, processing, control technology, piping, wiring and ductwork. From planning and manufacturing to on-site installation.



Based on decades of experience as compressed air pioneers, our clients know that no matter how special your request is, BOGE will be able to meet it with a customised solution. A whole department specialises in “Customised Solutions” which – by using highly specialised system components – allow the targeted adaptation of a compressed air system of any size to your individual needs.



Always at your side



So you can take care of your core business without worrying, we will ensure the smooth running of your compressed air system. From technical support in emergencies to customised maintenance agreements and diagnostic tools for effective compressed air management – our services meet your specific needs precisely.

Extremely maintenance friendly

When it comes to service-friendliness in everyday operations, the new BOGE SO-3 is perfectly equipped. All maintenance-relevant components are easily accessible and can therefore be serviced quickly and without complications. Needs-based maintenance agreements ensure transparent costs you can plan for.



Technical support around the clock

Whether commissioning, maintenance, repair or inspection – our certified BOGE service engineers around the world are your professional port of call for all technical matters.

And if an unforeseen incident was to happen, you can rely on our technical support that is available around the clock – 24 hours per day, 7 days a week, 365 days per year.



Customised maintenance agreements

Regular maintenance is key when trying to extend the service life of your plant. Our needs-based service packages include system inspection and maintenance agreements as well as full service agreements where we carry out all work to your compressed air system without exception. What is right for you? Let's find out together.



Our expertise enables your success

In addition to our compressed air service, BOGE also runs its own Compressed Air Academy where experienced coaches teach you market-specific specialist content in specialist seminars or instruct you in systematic troubleshooting. All according to the motto "From practice for practice".





Best
Of
German
Engineering

Customers in more than 120 countries worldwide trust the BOGE brand. Already in its fourth generation, this family-run company directs all its experience into developing innovative solutions and exceptionally efficient products for the compressed air industry.

