

BOGE SO series

Oil-free and safe







Innovative down to the last detail. Available from 45 to 355 kW

Precise engineering for clean results: The SO series impresses with its intelligent design, high-quality workmanship and innovative functional principle.

Its technologically mature and maintenance-friendly design makes the production of oil-free compressed air safe, reliable and economical. Based on site condition's, you have the option of fixed or variable speed drive and air or water cooling.

TECHNICAL DATA

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Optimally placed intake filter

The principle of pre-separation and subsequent fine separation of the intake air ensures optimal cleaning of the intake air and minimum wear at the airend in all SO models. The intake filter – mounted at the coolest point – guarantees high delivery rates and low specific power.

Powerful drive motor

In the interest of maximum efficiency, only highly efficient motors are used — optionally with an automatic, demand-controlled relubrication device. To further reduce energy consumption, all drives can be equipped with frequency converters.

Effective sound insulation

How to achieve an effective reduction of the sound level? Through the consistent use of special sound insulation material with a higher degree of sound adsorption in the relevant octave bands.

Tried and tested airend

Developed in Germany, the BOGE airend impresses with high-quality, generously dimensioned bearings, the smallest possible tolerances and effective sealing between the oil system and compression chamber. Everything for absolutely oil-free compressed air and high delivery rates with the lowest specific power.

Optional heat recovery

The amazing thing about the BOGE heat recovery solution: 94% of the supplied energy can be used for the heating system, as service water or as heat for industrial processes. This not only saves energy but also cash and applies to all water-cooled compressors.

Consistent vibration decoupling

The vibration decoupling and the low-stress design of the compressor and cooling sections as well as other components not only results in a further reduction of pulsation vibrations and the sound level: it also guarantees less wear and a longer service life of the components.

Low-maintenance cooling concept

In the interest of a long service life, the coolers have been oversized and are constructed from high quality materials. To ensure that the hot compressed air is cooled to a constant low temperature, the cooling system has been designed to ensure constant water velocity through the pipe work, resulting in less contamination and thus improved efficiency.

Maximum condensate separation

Only effective condensate separation with intelligent flow guidance creates the prerequisite for optimum cooling. This guarantees high energy efficiency with minimal pressure losses.

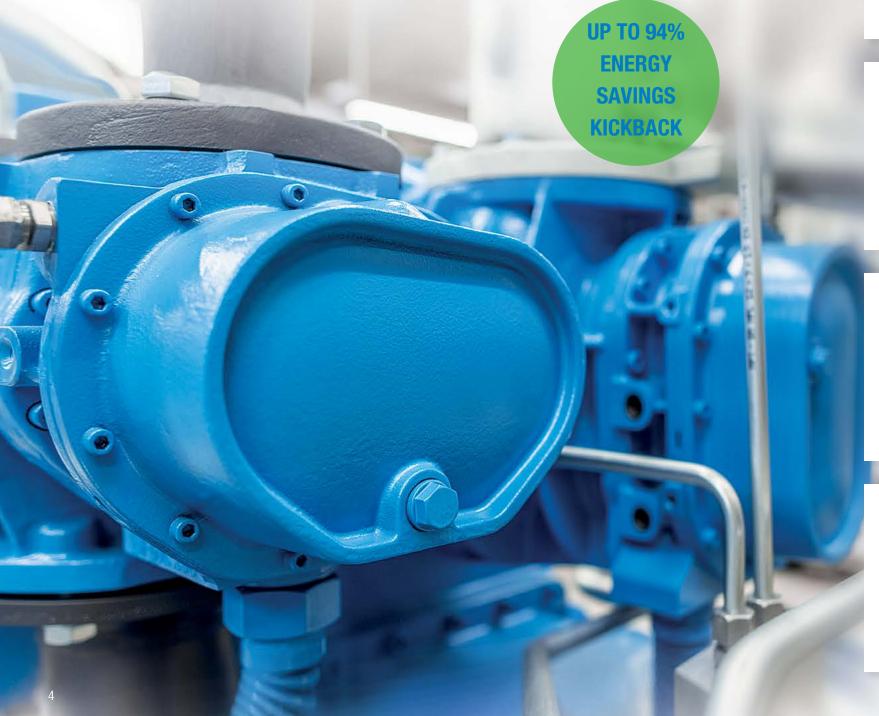


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Compressed air of the highest quality – savings included

It is to the credit of our developers and the commitment to consistently high-quality materials that our sophisticated compressor technology is known for its long service life. This is supported by the frequency control and the comprehensive measures for vibration decoupling. The fact that despite all this the SO series allows for an extremely cost-effective generation of oil-free compressed air only proves our approach.



Oil-free and safe

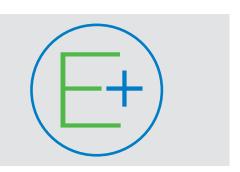
From the innovative compressor technology, which operates with the smallest possible tolerances, to the effective sealing between the oil system and the compression chamber to produce absolutely oil-free compressed air wherever the highest compressed air quality is required, there are no compromises with the SO series.



Amazingly economical

Both the type of intake and the intelligent routing of the cooling air as well as the effective cooling by heat exchangers ensure a high delivery rate with the lowest specific power.

The air-cooled versions use an intercooling system developed by BOGE. All this ensures extremely economical, cost-saving compressed air generation.



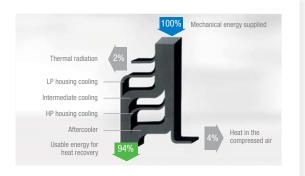
Technologically sophisticated

Achieving a long machine life requires high-quality materials, the smallest tolerances and the most precise machining. An important role is also played by the frequency control, which allows a machine-friendly, smooth operation — almost without starting and stopping — as well as the sophisticated measures for vibration and voltage decoupling.



Heat recovery for every size

All water-cooled compressors in the SO series can be used for heat recovery if desired. This means: Savings in primary energy use, connected loads, investment and operating costs and much more. Up to 94% less use of supplied energy for your heating system, for pre-heating, as hot water or as service water for industrial processes.





Optimal control

In order to successfully minimize energy consumption and wear, the SO series relies on the BOGE PRIME efficiency control system specially developed for oil-free screw compressors. It provides an overview of all functions at a glance: A large, backlit LC display with plain text display clearly shows all operating parameters; optional displays can also be easily added. Availability is maximized, all limit values are reliably monitored and the connection to provis 3 is ensured.



More efficiency through frequency control

All machines in the SO series are available in a frequency-controlled version; the frequency converter is housed in the switch cabinet to save space. This allows energy savings to be achieved in several ways: Idle times are minimized, the operating pressure is lowered, start-up currents are eliminated and it is possible to react more quickly to changes in demand. In addition, the "smooth" operation reduces wear on the compressor and thus extends its service life.



More efficiency through temperature optimization

Thanks to effective intercooling by a frequency-controlled exhaust fan, the intermediate temperature of the air-cooled compressors of the SO series is optimized. In this way, the inlet temperature to the HP airend remains constant and energy consumption is minimized – the associated increase in efficiency is impressive.



No more limits: airtelligence provis 3

This intelligent, higher-level interconnected control system can handle an unlimited number of compressors, compressed air networks and accessory components. Their high-performance control algorithms monitor and control the entire compressed air station — predictively and consumption-dependent.

The control is operated intuitively with touch commands via the 15.6" display.



The future soon: BOGE connect

BOGE connect is your ticket to Industry 4.0: All plant data and machine details are continuously sent to the BOGE connect portal. The data can be accessed graphically from any smart device. The decisive advantage: BOGE connect independently detects inefficient systems and helps to identify optimization potential and simplifies service.





Customized solutions

A question of preparation

The heat-regenerating DAV-2 adsorption dryers ensure that the compressed air used is free of contamination and moisture even at high volume flows. On the one hand, thermal insulation reduces heat loss and thus energy consumption. On the other hand, the dew point control enables a longer drying phase by switching between the two containers as required. The energy demand decreases. The result is dry and clean compressed air with pressure dew points down to -70° C.



Versatile and for every need

BOGE oil-free screw compressors can compress not only air, but also gases such as nitrogen. Customer requirements, such as the use of alternative components or different colour scheme, can also be met. BOGE manufacturing can individually adapt the compressor to the conditions and customer specifications, even internationally (e.g. with regard to supply voltage or special certificates).



Universal use of heat recovery

With the innovative heat recovery concept developed by BOGE, you can recover the maximum amount of energy. For example, the special stainless steel heat exchangers can provide up to 90°C hot water to optimize your heating or process. BOGE can offer support in how to achieve maximum return on investment through local energy funding schemes for you.



Container solutions with all the trappings

You have no space in your building? No problem! We also plan, manufacture and install container and base frame systems or special customized constructions — including compressors, processing, control technology, piping, cabling and ductwork. Plug & Play capability ensures maximum flexibility.



When it comes to the safe and economical production of absolutely oil-free compressed air, the screw compressors of the SO series impress with their "efficiency guarantee". Depending on the application, cooling is by water or air, and the large model selection in all power classes from 45 to 355 kW — in combination with highly spezialised system components — allows the compressed air system to be specifically matched to your needs.



BOGE

The BOGE service for any application



Simple maintenance

A core principle of BOGE screw compressors is their ease of maintenance in everyday operation. All maintenance-relevant components are easily accessible. In addition to this, we have reduced the number of wearing parts once again.



Always on call: our engineers

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



Tailor-made: our maintenance agreements

Regular maintenance considerably prolongs the service life of your system. To this end, we offer tailormade service packages – from system inspection and maintenance agreements to a full service agreement, whereby we carry out all work to your compressed air system without exception. We are happy to advise you on your options.



Consistently customer-orientated

Not only do we offer you your own compressed air service but also specialist seminars at the BOGE compressed air academy, where experts provide you with market-specific specialist content according to the motto "From practice for practice" or instruct you in systematic troubleshooting.















Customers in more than 120 countries worldwide trust in 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.



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