

BOGE T series

The efficient turbo for oil-free compressed air

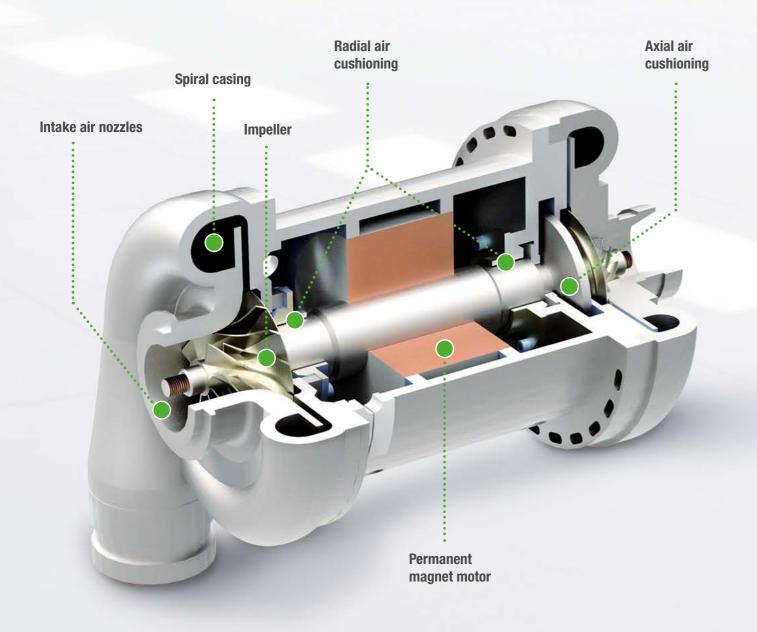






An intelligent concept in every respect

The new T series by BOGE recognises the signs of the times: Significantly fewer components and the complete absence of oil or lubricants guarantee low-wear operation and reduce maintenance and operating costs to the lowest level, while the motor compressor units ensure the highest degree of efficiency. The extremely small footprint and surprisingly low sound pressure level are further benefits of the superior drive concept. The result: oil-free compressed air generated in the smallest of spaces in a surprisingly cost-effective way.



Passionate about high speeds

Permanent magnet motors, as the ones implemented in the T series, offer several advantages simultaneously. Their design is very small and although they do not have any gears, they can achieve speeds of more than 100,000 revolutions and convince with very high performance in a minimum space. The high-quality titanium impellers at the ends of the drive shaft have an easy job generating the compressed air in conjunction with the diffuser and spiral casing.



Increasing efficiency with ease

With their sustainable and intelligent design principle, these models really fulfill the downsizing principle. In comparison to standard screw compressors they have shrunk to half the size and a third of the weight. This means they are easier to lift with smaller hoisting devices, are faster to install and provide significantly more maintenance space within a specified area. The compact design simplifies the replacement process significantly especially when replacing older machines.



Endless advantages thanks to air bearings

To achieve the highest speeds, an air-guided shaft does not require an electrical power supply or any other operating material than air.

An air bearing does not require expensive electronic controls, rechargeable batteries or condensers — it simply works all of the time even in the event of a power failure. Above all this type of bearing guarantees almost wear-free and correspondingly low-maintenance operation.



Effortless control

An intuitive and simple user interface makes it easy to operate the touch controls. Intelligent control algorithms supported by predictive grid controls guarantee reliable, sustainable and cost-effective operation, while the integrated 3 level frequency converters ensure that the volume flow can be continuously adjusted to the required compressed air.



2

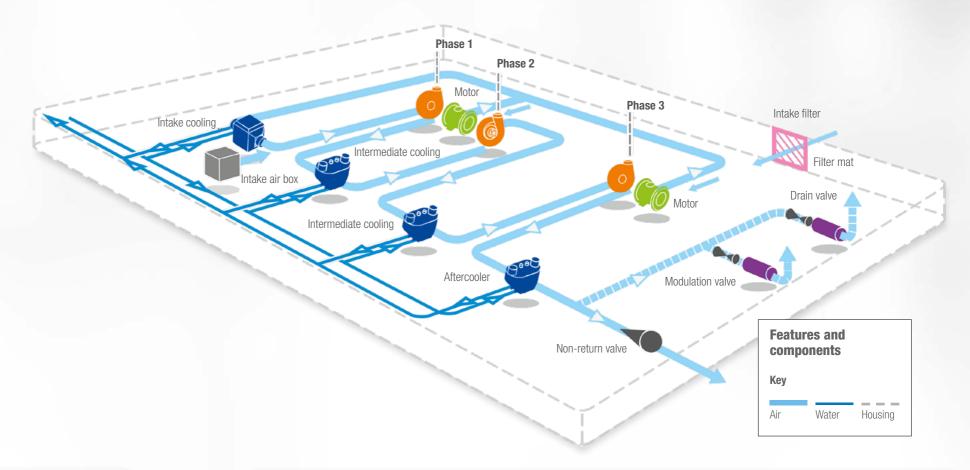


More energy using fewer raw materials

The groundbreaking drive concept of the T series highlights that the highest level of efficiency and distinct sustainability are not mutually exclusive: Significantly fewer components – this primarily stands for particularly reliable, wear-free and low-maintenance production of oil-free compressed air. And if idling does occur, these compressors have the best energy consumption in their class.

Main advantages at a glance:

- Superior drive concept
- Maximum efficiency
- No oil or lubricants
- Extremely small footprint
- Low maintenance and operating costs
- Powerful heat recovery
- Long service life
- Significantly lower sound pressure level



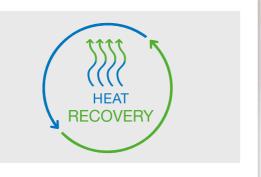
More efficient than any other

The small T series offers the best energy efficiency values. This is most evident when it comes to the specific power consumption as these models have clear advantages in comparison to previous screw compressors. This is not surprising considering the measures implemented to reduce the size of the design. The only movable components are air-guided thus guaranteeing maximum aerodynamic efficiency, so that additional consumers such as fan motors, etc. are not required.



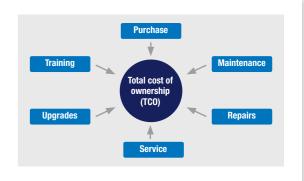
Heat recovery at any time

High-performance heat recovery does not require any additional space as all of the models fulfill the conditions for this option as standard. Potential savings of up to 80% can thus be achieved. The used service water reaches temperatures of up to 90°C. In addition to the significant cost savings, environmental factors such as the reduced emission of pollutants and thermal loads must also be taken into account.



Progress that is astonishingly cost-effective

From the straightforward purchasing price through to the minimal energy requirements, low-wear operation and correspondingly longer service intervals — the T series offers all of these technical requirements while also meeting ambitious savings targets.



Even the CO₂ footprint is low

The $\mathrm{CO_2}$ emissions clearly highlight the superiority of the "small" drive concept, as the energy efficiency of the system sustainably reduces the burden on the environment. The minimal energy and resource requirements enable these models to stand out for their exemplary $\mathrm{CO_2}$ footprint. It is also quite fitting that the noise level of the T series is setting completely new standards.



4



Oil-free thanks to experience – sustainable on principle

Class 0 oil-free compressed air

This classification is achieved easily by the new BOGE turbo compressors. As the innovative, air-guided motor shaft operates without any lubrication, these are completely oil-free compressed air systems.



Full service

The design does not require any oil filters or replacement filters and everything else for your compressed air system is covered by the BOGE Full Service Contract — right from commissioning through to maintenance. All of the spare and maintenance parts are already included, while BOGE connect always provides an overview of the relevant performance data.



Expected BOGE quality

Compressed air systems must function reliably. This is why BOGE always relies on the best materials, high-quality processing and intelligent engineering made in Germany. The T series was developed and produced by us in accordance with the highest quality standards based on customer requirements. All of the components are optimally coordinated with one another.



Of course this applies to every component

The motor parts made of high-quality stainless steel as well as the high-quality, particularly strong impellers and rotors made of titanium are key features of all of the T series models and are the prerequisite for achieving the lowest tolerances. Combining premium quality with intelligent, innovative solutions has proven to be effective.



Anyone wishing to achieve savings targets that were hardly conceivable to date, must find a way to use fewer components. This conserves valuable resources, reduces maintenance costs and has a direct impact on the purchase price. The reliability particularly benefits from this as anything that is not installed cannot wear out. The simple formula is to reduce the number of components and increase reliability. BOGE Premium Full Service helps to ensure long-term planning security so that you can concentrate fully on your core business.

Reduced number of components – increased reliability		
Number of components	BOGE T series	Oil-free screw compressor
Gears	0	3
Bearings	6	19
Seals	3	17
Fan motor	0	1
Lubrication system	0	1
Oil pump	0	1



6





Best

Of German

ngineering

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.

