

## BOGE bluekat Converter



**Already proven and absolutely oil-free**

BOGE bluekat technology is always the right choice when it must be guaranteed that oil-free compressed air is really oil-free. This technology cannot be described as "virtually oil-free", and therefore it is ideal for highly sensitive applications such as those found in the food processing, beverage and pharmaceutical industries – or even in hospitals where breathing air quality is setting new standards and is class 0 certified as per ISO 8573-1. The BC series (BC = bluekat Converter) proves that this uncompromising high standard can be met at extremely competitive prices.

**Modern control**

The control ensures the optimum conditions for reliably producing oil-free compressed air to class 0 standard in accordance with ISO 8573-1, regardless of the ambient air. It controls the start-up and temperature control as well as safeguards the entire compressed air network against errors.

**Electric heater**

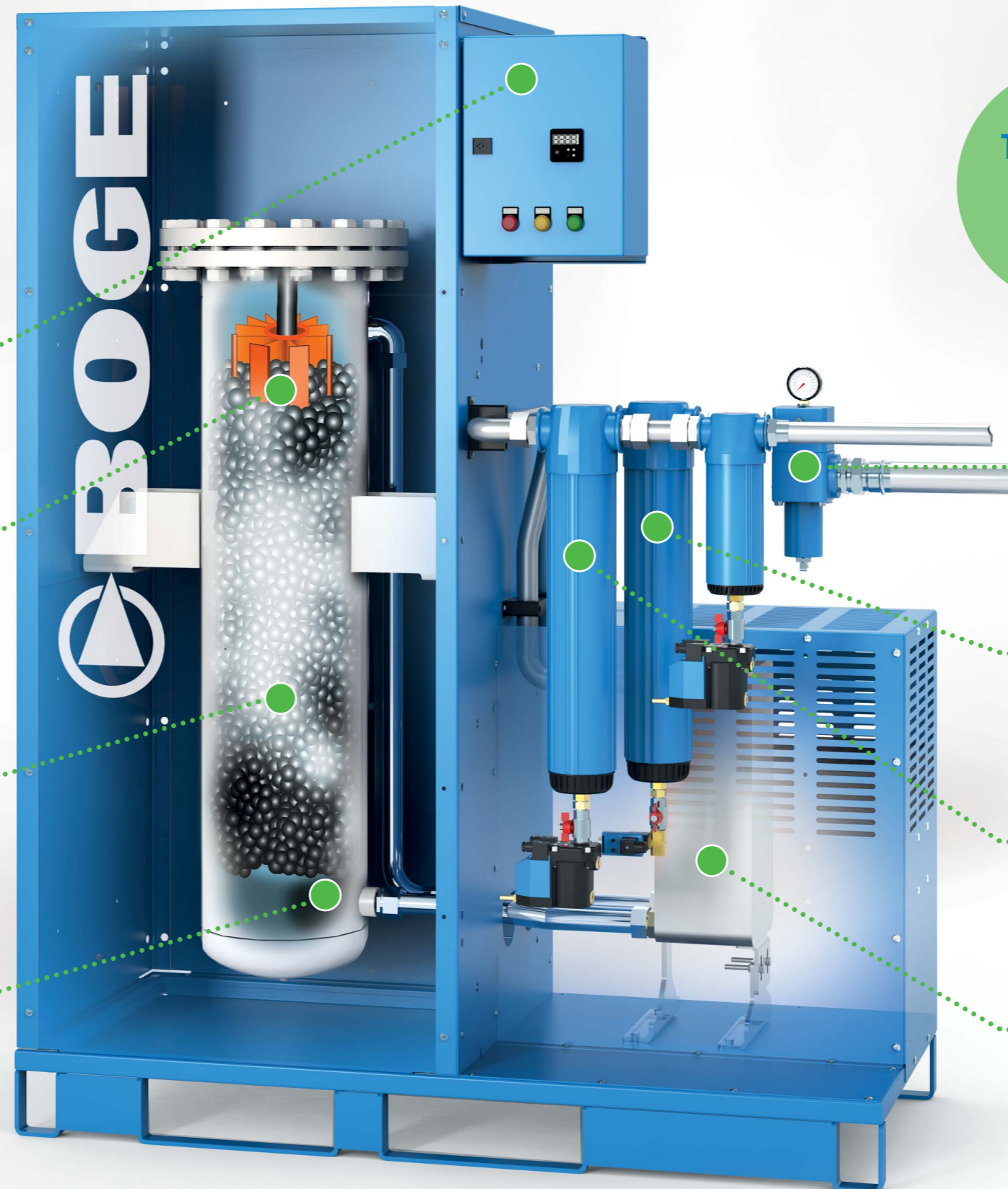
The electric heater is used to maintain a constant temperature in the converter bed. This ensures that the conversion process always takes place under optimal conditions. During the start-up process, the heater ensures continuous heating without temperature peaks.

**Versatile catalytic converter**

The integrated catalytic converter performs several functions: it breaks down long-chain hydrocarbons into water and carbon dioxide, converts silicone into silicate (siloxane content  $\leq 0.3 \mu\text{g}/\text{Nm}^3$  according to NIOSH 1501), eliminates carbon monoxide to a level  $< 0.1\%$  and also reduces germs, bacteria and viruses.

**Temperature monitoring**

All models of the BC series are monitored by temperature sensors: this applies to the heating temperature in the internal heater as well as to the outlet temperature from the converter bed. When deviations from the target value are detected, the control automatically readjusts or switches off the catalytic converter and the shut-off valve closes if the temperature is exceeded.



**Pressure-maintaining shut-off valve**

The pressure-maintaining shut-off valve is designed for multitasking and has a non-return, minimum pressure and shut-off function. In the event of a fault, the valve closes, thus ensuring that no oil can get into the compressed air network.

**Effective particle filter**

Even before the compressed air flows into the compressed air network, all particles are effectively filtered out. The pressure-maintaining shut-off valve is additionally protected against contamination to ensure a long service life.

**VS module**

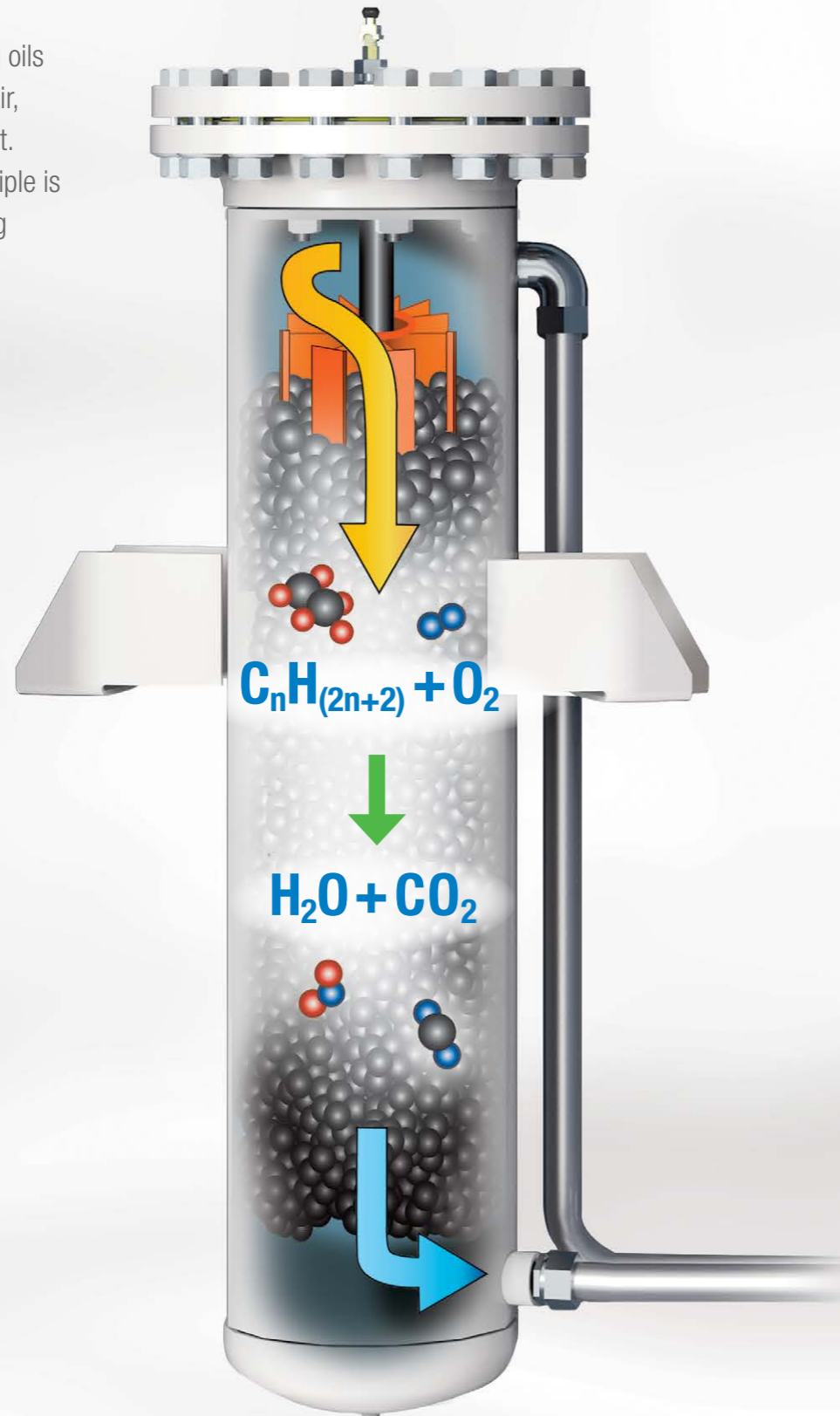
With the VS module included as standard, a variable volume flow between 20% and 100% can be treated. This further increases the flexibility of the bluekat converter, making it easier to cope with variable volume flows.

**Heat exchanger**

The heat exchanger uses the high compressed air temperature from the converter tank to preheat the incoming compressed air to a high level. This effectively saves energy – in fact, the energy consumption of the BC series is a low  $0.01\text{-}0.005 \text{ kWh}/\text{Nm}^3$ .

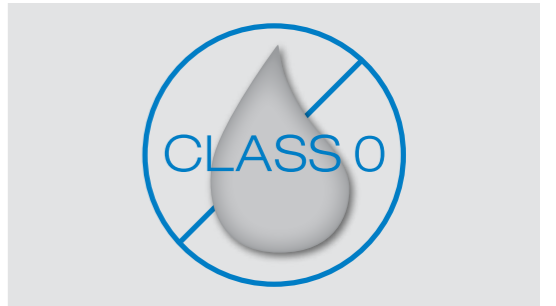
**Oil-free compressed air of the highest quality**

When it comes to effectively removing oils and hydrocarbons from compressed air, there is no safer system on the market. Or equally as interesting: the BC principle is the most economical way of producing totally oil-free compressed air.



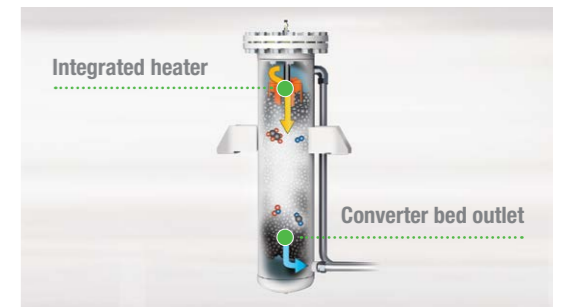
**Absolutely oil-free – guaranteed**

A permanent class 0 compressed air quality according to ISO 8573-1 – no other technology can guarantee such a low residual oil content. This remarkable effect has been certified by TÜV. The bluekat converter delivers oil-free class 0 compressed air at 20-100% of the volume flow.



**Innovative converter principle**

The bluekat converter actively converts oils and hydrocarbons into carbon dioxide and water – without any filter or activated carbon adsorber. And not just under ideal conditions: the catalytic converter works independently of the temperature and moisture of the compressed air to be treated.



**Highest safety**

In order to exclude any potential transfer of oil, the bluekat converter has two positions for temperature recording, which monitor both the integrated heater and the converter bed at the outlet. If one of the temperatures deviates, the control readjusts automatically. If temperatures fall below or exceed limit temperatures, the shut-off valve closes and the catalytic converter switches off.



**Pure compressed air quality**

The bluekat converter delivers oil-free class 0 compressed air at 20-100% of the volume flow. The removal of the oil is just one effect of the BC technology. It also converts silicone into silicate (siloxane content  $\leq 0.3 \mu\text{g}/\text{Nm}^3$  according to NIOSH 1501), reduces the CO content to  $< 0.1\%$  and decimates germs, bacteria and viruses.



**One hundred percent safety with savings effect**

BOGE bluekat converters raise the bar several notches higher with oil-free compressed air: they work perfectly with other conditioners and generators to further improve the quality of the compressed air and do not impose any conditions on the ambient air.



Compressor



BOGE bluekat Converter



DS dryer



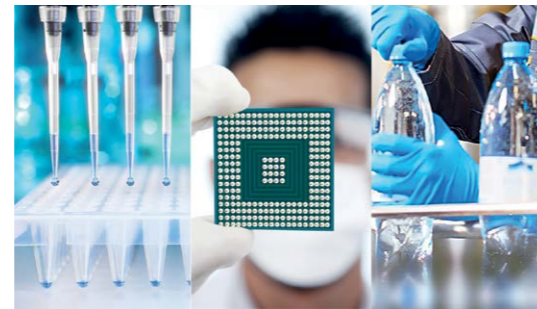
Filter F.M



Compressed air receiver

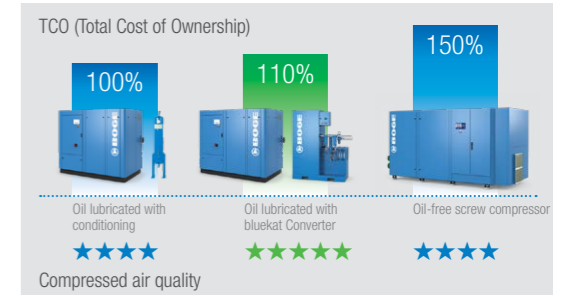
**Universally applicable regardless of environment**

A BOGE bluekat converter operates completely independent of ambient and suction conditions and can therefore be used universally in all industries – for moist or dry, oil-lubricated or oil-free generated compressed air.



**The cost comparison speaks for itself**

Whenever oil-free compressed air of the highest available quality is required, a BOGE bluekat converter is the most economical and cost-effective solution. When comparing costs over a period of five years, the TCO value, i.e. the consideration of all investment, operating and service costs, is unmatched in this purity class.



**Can be used for full or partial system oil-free air**

A major advantage of the BOGE BC series is its flexibility; a bluekat converter can be used for the entire compressed air network, with fixed or variable demands, or installed separately as a partial device for a specific part of the compressed air network where oil free air is required.



**Saves energy and maintenance costs**

Energy costs are surprisingly low when compared to the quality of compressed air produced. The same applies to maintenance costs: because a bluekat converter does not have any rotating parts, only a minimal amount of maintenance work is required.



## Compressed air for every quality requirement

### BOGE S-4 – Master of all disciplines

With the S-4 series BOGE has achieved a significant breakthrough in all major categories – in terms of energy consumption, noise emissions and ease of maintenance. All models have a premium compression stage developed in-house, which is designed for the highest degree of efficiency and virtually maintenance-free operation.



### Dryers for every environment

BOGE offers a whole range of the most diverse compressed air dryers to try to cater to every requirement. For example, our external refrigerant dryers from the DS-2 family are suitable for a greater compressed air demand or challenging environmental conditions, whereas the refrigeration or heat-regenerating adsorption dryers are designed for particularly dry air and pressure dew points from -40°C to -70°C.



### Generators that make you more flexible

Produce nitrogen based entirely on your requirements. With the BOGE nitrogen generator, rigid supply contracts are a thing of the past. Performance, delivery volume (from 2.2 to 478 Nm<sup>3</sup>/h) and degree of purity (from 3% to 0.001%) can be adjusted individually, and thanks to the modular kit, this system can be extended and retrofitted at any time.



### Filters for every purity class

The innovative design of BOGE's highly efficient filters guarantees compressed air of the required purity class. High-performance filter materials and the flow-optimised design ensure minimal pressure losses and maximum efficiency. Particles, oil and water aerosols are reliably filtered out. Our activated carbon adsorbers provide even longer service life in oil vapour adsorption.



As the quality and purity requirements of compressed air vary considerably depending on the area of application, BOGE offers a comprehensive range of premium processing products. These system components reliably meet the quality demands of every industrial sector – with optimum efficiency values.

**COMPRESSED  
AIR PROCESSING**  
boge.com



**Less is more**



From technical support in emergencies and tailored maintenance agreements to diagnostics tools for effective compressed air management – our service packages are customised to your specific requirements. To allow you to focus on what you do best.

**Low maintenance costs**

The BC series from BOGE also sets standards for maintenance cycles: as a result, only a small amount of testing and inspection work is carried out each year. The control is tested after 5 years and some electrical components are replaced.



**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. In addition, our Technical Support is available round the clock – 7 days a week.



**Tailormade: 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.



**Training with results: advance your efficiency**

Quality of service is a high priority at BOGE. At the BOGE Academy, not only do we train our own staff – we always welcome the service employees of our partners, dealers and customers, as well as planners and engineers with an interest too. The programme ranges from compressed air seminars to sales and service training, along with specialist seminars on effective strategies for increasing efficiency in compressed air production.





**B**est  
**O**f  
**G**erman  
**E**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.

