

**BOGE SRMV/SRHV series** 

Flexible Booster – unbeatable efficiency







## Already proven and unbeatably flexible!

Whether for laser cutting or blowing PET bottles or the higher compression of nitrogen – wherever high final pressures are required, booster technology from BOGE has proven itself for many years. What makes this high-efficiency piston compressor so unique now and in the future is its proverbial flexibility: irrespective of the maximum compression ratio, not only can any final pressure required between 16 and 40 bar be produced – the primary pressure can also be selected anywhere between 2 and 10.

# TECHNICAL DATA

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### **Tried and tested belt drive**

The belt drive not only enables the various voltages and frequencies to be achieved simply – in contrast with the direct drive, it acts as protection for the motor and power unit. Correct belt tension can be adjusted to ensure low losses (slippage).

### **Powerful IE3 motor**

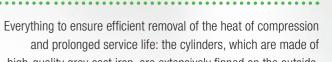
The piston compressors of the BOGE booster are fitted with IE3 motors as standard. The high-quality IE3 motors ensure a high degree of efficiency and absolutely "premium efficiency".

### **Electromagnetic ventilation**

To free up the compressor when restarting it, the counter-pressure in the compressed air system is ventilated electromagnetically and is therefore completely discharged. An automatic condensate separator can be added optionally between the magnetic valve and sound absorber, which collects the condensation that builds up without unnecessary loss of pressure.

### **Multifunctional soundproofed hood**

A soundproofed hood is also available as an option; this reduces the sound pressure level by up to 10 dB(A). The closed soundproofed hood concept including built-in control also optimises the dirt and dust concept of the system.



high-quality grey cast iron, are extensively finned on the outside, and the aluminium cylinder heads have cooling fins on the inside and outside.

### **Flow-optimised hood**

**Generous cylinder finning** 

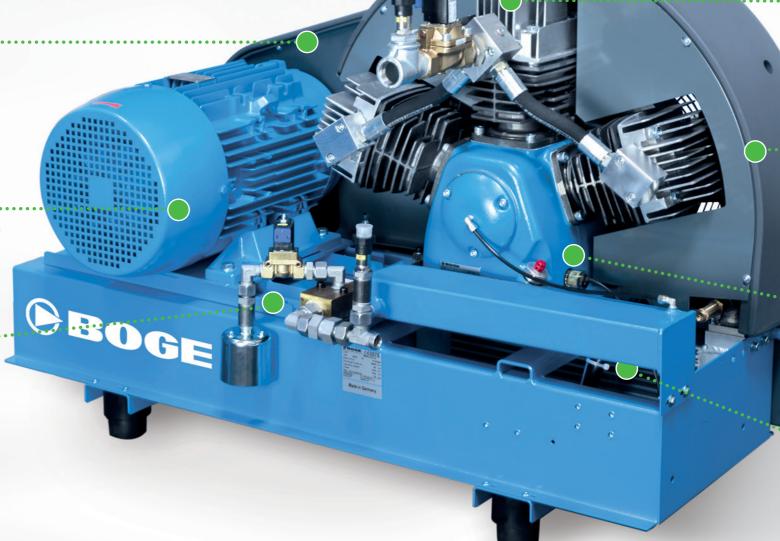
Thanks to the excellent cooling effect of the hood that directs the cooling air, these boosters are suitable for continuous operation. The 2-cylinder boosters operate with fin cooling and the 3-cylinder boosters with aluminium block coolers as aftercoolers resulting in a low discharge temperature, above intake air temperature (delta  $t: --> \Delta t$ ).

### **Integrated oil level monitoring**

The boosters are fitted with integrated oil level monitoring as standard, which continuously checks that the compressor is adequatly lubricated. The warning signal can be displayed on the control via a voltage-free contact, which increases operational safety.

# Well thought out placement of the aftercooler

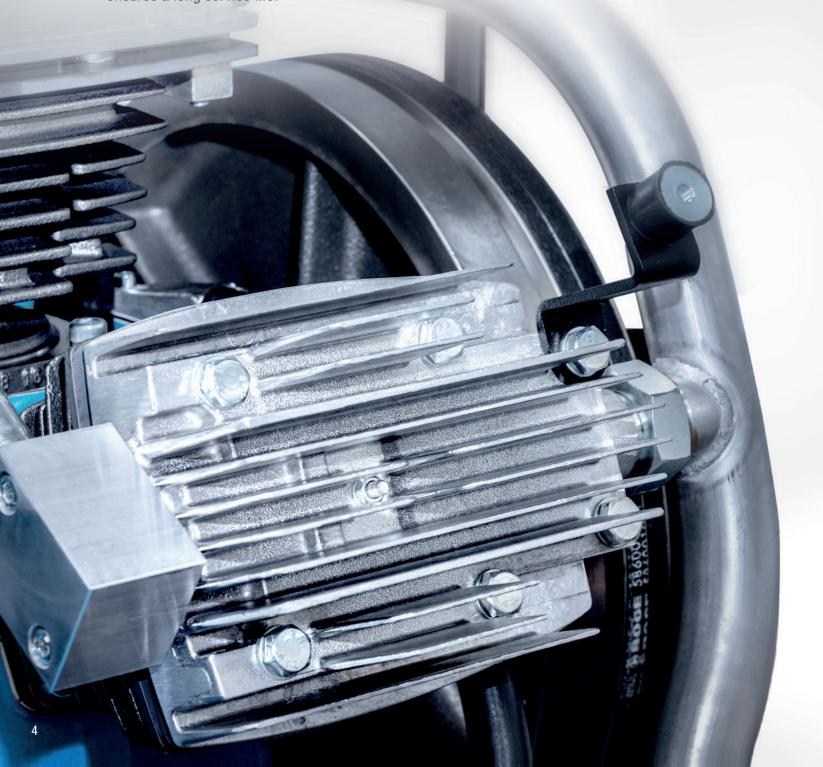
The intelligent position of the aftercooler in the air stream of the flywheel ensures that the cooling air is guided straight across the cooler and cylinder. This targeted directing of air guarantees particularly low compressed air temperatures.





## An endurance runner with high performance potential

The technological advantages of the single-stage compressed booster from BOGE are evident: alongside the low energy requirement in comparison with multi-stage systems, there is exceptional flexibility in the selection of primary pressure and final pressure. These long-lasting systems are not only impressive due to their excellent efficiency — the use of high-quality components also ensures a long service life.



### **Extremely durable even in continuous operation**

These compressors are truly hard-wearing and they know no limitations in their duty cycle. The reasons for this are to do with the design: the low average piston speed of 3 m/s (by comparison: depending on the speed, diesel motors run at around 7–15 m/s) reduces the heat retention of the components and thereby lessens stresses and wear. Everything designed to enable low-maintenance, cost-saving operation and longer service life.



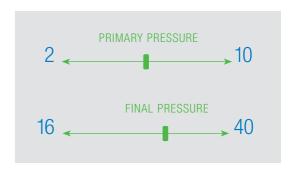
### **Excellent efficiency thanks to high level specifications**

A plethora of individual measures ensures the exemplary efficiency of these models. The minimisation of the clearance in the cylinder plays a central part, whereby the volumetric efficiency can be increased considerably. However, the largest gain in efficiency comes from the principle of increasing the pressure from an existing network: unnecessary higher compression is avoided, and the energy intake from the combination of screw compressor / booster remains considerably lower than with atmospheric 2-stage or 3-stage compression by piston compressors.



# **Maximum flexibility for primary pressure and final pressure**

The oil-lubricated boosters of the SRHV series from BOGE are absolutely unparalleled when it comes to the individual adjustment of final pressure — perfectly matched to your demand. Additionally these models can also be easily combined with screw compressors from other manufacturers (as primary compressors for 5 to 10 bar). The final pressures can be altered at any time as required for adaptations to suit production requirements.



### **Quality down to the finest detail**

All components are developed and installed by BOGE in Bielefeld; for it is only when you have full control over production that high performance can be combined with a long life cycle. Only high-quality materials are used, and the modern production processes ensure minimum tolerances — the precondition for efficient, low-wear operation.





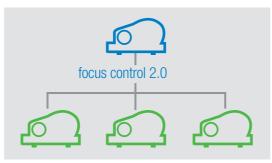
# The advantages of intelligent control

For all models of the SRMV/SRHV series, BOGE offers a modular control of the latest generation – the focus control 2.0. You thereby have everything under control simply – with the emphasis on "simply", for this higher-level control for multi-compressor stations makes the generation of compressed air via touch screen considerably more efficient and reliable.



### **Higher-level system management**

The focus control 2.0 takes over the entire monitoring of primary and final pressures and controls up to four connected compressors in base load change as required: Whether the most powerful booster is always switched on first or the oldest booster is always switched on last, or whether they are all used to capacity equally so that maintenance can be carried out at the same time – modular control provides this degree of freedom. Redundancy is thus also ensured very simply.



With BOGE airstatus you have full control over the status of up to 32 pieces of equipment. Wherever you are, it lets you analyse, regulate and evaluate your compressed air station. A single airstatus controller is sufficient for this. You log in to your BOGE airstatus web portal using your personal access data. All system data are available to you in real time via the LAN connection. You can evaluate, analyse and optimise - you have all data to hand at a glance.



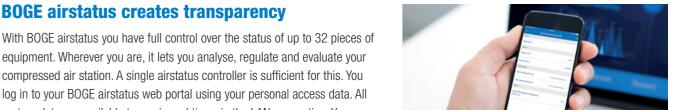
### **Everything is simply under control**

Even if it is supplied in a separate control cabinet for wall mounting – the focus control 2.0 is the control centre for these models. It continuously monitors primary and final pressure, delivery volume and pressure level. Its warning and fault management means the machine is switched off when maximum pressure is reached or if it falls below the primary pressure, and all locally saved events can be read and analysed at any time.



### Our "purity law" for nitrogen

Besides the higher compression of compressed air, all boosters in this range also enable the compression of nitrogen (N2). Controlled by focus control 2.0, the optional rinse function assumes the purging of the nitrogen buffer vessel before filling – a precondition to ensure the ongoing purity of the produced gas.





## The perfect peripheral equipment for high pressures

### **High pressure requires premium filters**

In the high pressure range in particular, the use of highly specialised micro-filters and activated carbon filters is indispensable. All high-pressure filters from BOGE have a high-quality aluminium casing with threaded connector according to ISO 228-1:2000, and the extremely effective element fleeces ensure a high dirt absorption capacity with a low consistent differential pressure.



### **Generators that make you more flexible**

Produce nitrogen based entirely on your individual requirements. With the BOGE nitrogen generator, rigid supply contracts are a thing of the past. Performance, delivery volume (from 2.2 to 478 Nm³/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.



### **Highly recommended for aftercooling**

The effective removal of water reduces maintenance costs and improves system operation as well as product quality. To achieve low pressure dew points, the use of a highly efficient water-cooled high pressure aftercooler is recommended. This removes water vapour and ensures the maximum cooling of compressed air and gases.



### A compressed air dryer with a savings effect

Minimal pressure losses and constant pressure dew points in every phase of operation — a powerful high-pressure cold compressed air dryer from BOGE saves energy and considerably increases efficiency. There is no doubt about it. It can be continuously adapted to the actual operating conditions and is suitable for flow rates from 0.42 to 63 m³/min. and a maximum pressure up to 50 bar. Only a minimal amount of environmentally friendly ozone-neutral coolant is required.



The comprehensive range of BOGE peripheral devices for the optimum processing of compressed air reflects our many years of experience with compressed air systems. In addition to a full range of coolers, dryers and filters, there are also generators for special tasks.



# **BOGE**

# **Everything to assist you**



### It all works like clockwork

If you use only BOGE original spare parts, you will benefit from the manufacturer's technological advantages for years. You can remain confident that your BOGE compressor will continue to demonstrate all its positive characteristics and perform to the full even after repair or maintenance. You will find details of our service packages at boge.com.



### **Innovative coolants for every purpose**

For smooth operation under all conditions, BOGE offers various special coolants, among other things, which noticeably reduce operating costs thanks to long intervals between oil changes. In addition to Syprem P, a fully synthetic temperature and oxidation-resistant coolant, which improves the heat extraction of the compressor as well as minimising friction and wear, "FoodLub H1P" is also available — a special food/grade coolant that is certified for the pharmaceutical and food industries.



### **All-round service for your security**

Do you want to be able to concentrate fully on your core business? The simplest way is to outsource the regular inspection and maintenance of your compressed air system. Benefit from competent, low-cost servicing by our certified technicians. We offer a selection of servicing offers based on your requirements — up to complete compressed air management.



# The quickest way to greater improvements in 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.







Best

Of German

ngineering

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.

