BOGE AIR. THE AIR TO WORK.

BOGE
COMPRESSED AIR SYSTEMS

SCREW COMPRESSORS

OIL-FREE

Over 100,000 compressed air users expect more when it comes to their compressed air supply.

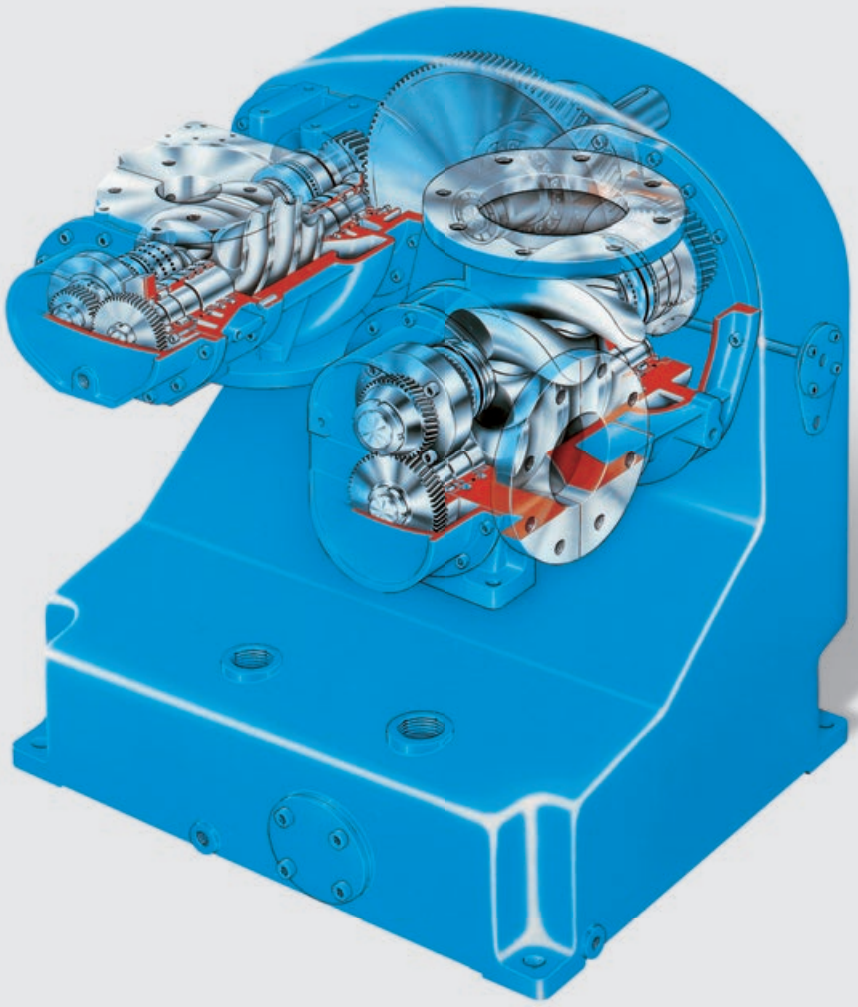
BOGE air provides them with the air to work.

BOGE oil-free screw compressors have long since proved their importance to compressed air users in critical applications such as pharmaceutical, food and semiconductor industries where absolutely oil-free compressed air is prerequisite.

With a BOGE oil-free screw there is no chance that oil can penetrate the compression process that means oil free air from the start. Oil-free air means less expensive downstream air treatment and moreover these compressors have been engineered for the safe and reliable generation of large quantities of oil-free air, energy efficiently, in base load or intermittent mode.

CONTENTS

Clean and efficient compressed air:
With BOGE screw compressors.



SOPHISTICATED TECHNOLOGY

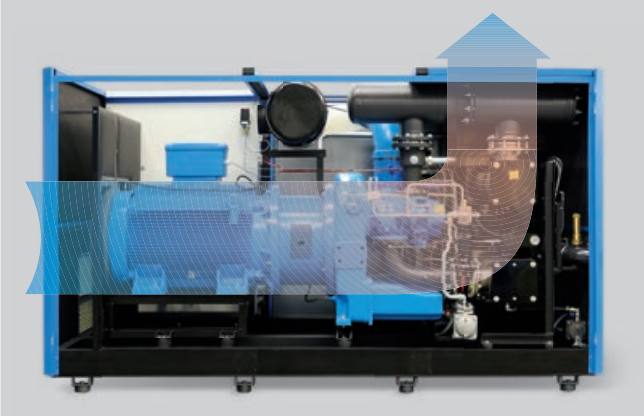
Using a two-stage airend ensures very low specific power consumption. There are direct drive or belt drive options with frequency control as an option on all machines.

The shafts are sealed by a combination of special sealing rings and a two-stage labyrinth vented to atmosphere. This system ensures optimum operational reliability. The precision rotors are finished with a durable coating that prevents corrosion.

The amply dimensioned airend roller bearings are of the highest quality and very durable giving the most reliable service life even in the most demanding operational conditions.
These special bearings eliminate the need for other more traditional means of axial thrust compensation.

Clean air from the start: BOGE oil-free screws operate at much higher speeds than oil-injected counterparts and the heat of compression is therefore dissipated differently. The special BOGE airend and the cooling concept are the centrepiece of the design. Both components have been designed to provide utmost safety and maximum efficiency – ideally suited for sensitive fields of application.

SOPHISTICATED CONCEPT



EFFICIENT COOLING AIR CIRCULATION

BOGE oil-free screw compressors are divided into three clearly defined sections. The component parts are intelligently positioned along the cooling air flow – for increased service life and prompt availability of compressed air. Control electronics, electrical components and motor are located in the coolest part of the machine.
Both airend stages are easily accessible. Because a separate cooling air fan is fitted as standard an optional cowl cooler can be mounted directly on the compressor. As the discharge air is cooled, no additional discharge ducting is required which means the compressor can be installed according to individual requirements

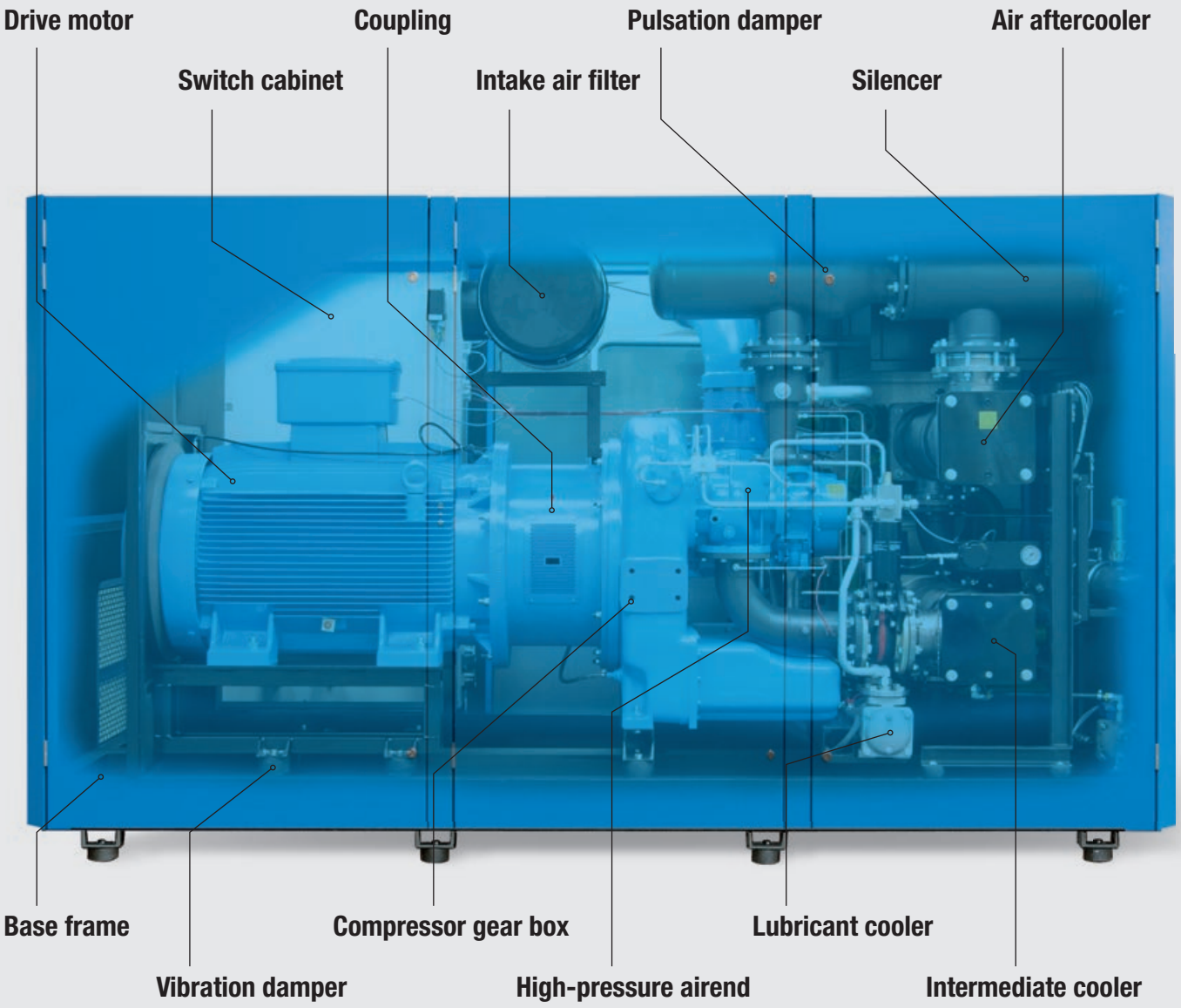
RELIABLE COOLING CONCEPT

BOGE oil-free screws are available air or water-cooled. A tube in shell principal is used for water cooling. Water flows through the pipes and the compressed air around them, which means that the “dirty” medium passes through the pipes – this facilitates easy maintenance and cleaning. The use of ribbed pipes on the compressed air side and plain pipes on the water-side ensure a high degree of efficiency. Flanged pipes also ensure the replacement of the cooling module without having to remove a single component whereas easily extractable pipe bundles make cleaning in mounted condition simpler than ever. The coolant can be treated to achieve the necessary water quality if required. Where no cooling water is available BOGE can supply a chilling system. Air cooling is possible in many applications which means that a cooling water supply and the associated costs can be totally eliminated.

The safe way to generate oil-free compressed air:

Design advantages of the SO series.

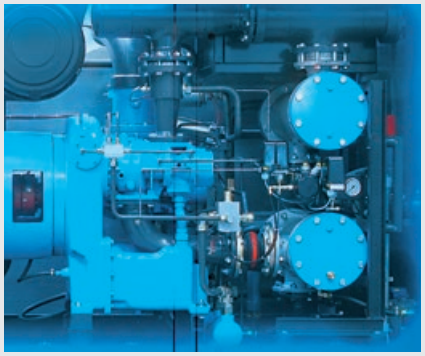
INTELLIGENT DESIGN



(Example shows water cooled system)

Precise engineering for clean results: **The SO series is characterised by its intelligent design, innovative functional principle and high quality workmanship. Its dependable quality and high efficiency ensure safe and cost effective generation of oil-free compressed air. Air or water-cooled, fixed or variable speed options are available to suit most every site condition.**

CONVINCING ADVANTAGES

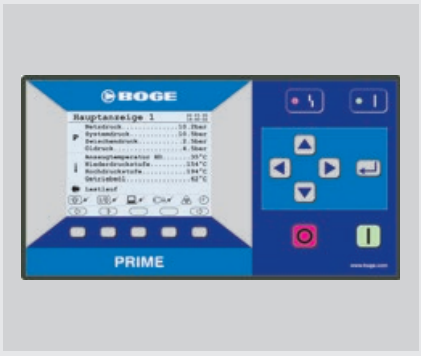


HIGH QUALITY AND MAINTENANCE FRIENDLY DESIGN

Ease of maintenance was one of the crucial design factors when developing the SO series. All component parts are easily accessible which facilitates prompt and hassle free maintenance. The use of high quality materials and the reduced number of wear parts make the BOGE oil-free screw compressors as efficient and reliable as any demanding customer would expect. The entire production process is subject to permanent quality assurance and is closely monitored by an experienced quality team – from receiving inspection of purchased parts to final inspection and testing.

FREQUENCY CONTROL (OPTIONAL FEATURE)

The SO series is available with frequency control as an option. It is designed to optimise demand fluctuations enabling a particularly energy efficient operation. The frequency converter is supplied either separately or integrated into the switch cabinet. Part load regulation is then achieved by dynamic speed change. Frequency controlled screw compressors are intended for use as stand-alone machines or ideally suited when covering peak loads in multiple compressor systems with high oil-free compressed air demands.



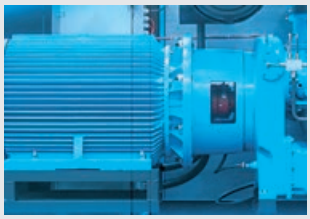
PRIME COMPRESSOR CONTROL

The PRIME control is the latest state-of-the-art energy efficient controller to come from BOGE. A large-scale back-lit LC display with clear text information shows error/maintenance messages, operating status and all operating parameters on three main menus. Volume flow and pressure characteristics are graphically displayed and freely scalable. The modular design means optional displays – e.g. pressure dew point – can be easily added. The PRIME is fitted with an integral real-time clock and a switch clock function making it possible to control external equipment. Communication is effected via RS 485 interfaces or potential-free contacts.

SO 61 to **SO 126** Oil-free screw compressors (air or water cooled)

Free air delivery: 5.25 – 13.01 m³/min, 185 – 459 cfm
Pressure range: 8 – 10 bar, 115 – 150 psig
Motor range: 45 – 90 kW, 60 – 125 HP

SO 126



MOTOR
These models are equipped with a three-phase asynchronous motor, ISO class F with additional motor reserves to meet the most challenging operating conditions. The motor is installed in the cool air intake section of the package and is thermistor protected to ensure a long service life.

WATER COOLING
Where large volumes of air are required water-cooling is a must. The intelligent BOGE cooling concept guarantees safe and economical cooling of the compressor with optimum maintenance friendliness.

EXHAUST AIR COOLING
As an option the SO series can be equipped with a cowl cooler eliminating the need for expensive exhaust air ducts.

PRIME CONTROL
The PRIME control is the latest state-of-the-art energy efficient controller to come from BOGE. A large-scale back-lit LC display with clear text information shows error/ maintenance messages, operating status and all operating parameters on three main menus.

Oil-free compressed air with efficiency guarantee: This range economically and reliably produces oil-free compressed air. Depending on site requirements they can be air or water cooled. 8 models with 16 variants synchronise the compressed air system to meet your demands.

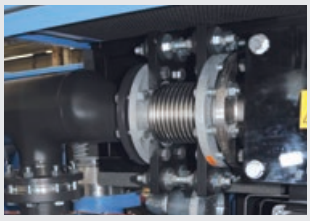
BOGE Model	Max. pressure		Effective free air delivery*		Motor power				Dimensions silenced W x D x H	Dimensions super-silenced W x D x H	Weight silenced	Weight super-silenced
					Main drive motor		Fan motor					
	bar	psig	m^3/min	cfm	kW	HP	kW	HP	mm	mm	kg	kg
SO 61 A	8	115	6.65	235	45	60	4.80	6.50	2957x1310x1886	3769x1310x2385	2654	2934
	10	150	5.25	185	45	60	4.80	6.50	2957x1310x1886	3769x1310x2385	2654	2934
SO 76 A	8	115	8.86	313	55	75	4.80	6.50	2957x1310x1886	3769x1310x2385	2804	3084
	10	150	7.70	272	55	75	4.80	6.50	2957x1310x1886	3769x1310x2385	2804	3084
SO 101 A	8	115	12.06	426	75	100	4.80	6.50	2957x1310x1886	3769x1310x2385	2934	3214
	10	150	10.46	369	75	100	4.80	6.50	2957x1310x1886	3769x1310x2385	2934	3214
SO 126 A	8	115	13.01	459	90	125	4.80	6.50	2957x1310x1959	3769x1310x2459	3046	3326
	10	150	13.01	459	90	125	4.80	6.50	2957x1310x1959	3769x1310x2459	3046	3326
SO 61 W	8	115	6.65	235	45	60	0.55	0.75	2906x1310x1890	3312x1310x1890	2171	2201
	10	150	5.25	185	45	60	0.55	0.75	2906x1310x1890	3312x1310x1890	2171	2201
SO 76 W	8	115	8.86	313	55	75	0.55	0.75	2906x1310x1890	3312x1310x1890	2341	2371
	10	150	7.70	272	55	75	0.55	0.75	2906x1310x1890	3312x1310x1890	2341	2371
SO 101 W	8	115	12.06	426	75	100	0.55	0.75	2906x1310x1890	3312x1310x1890	2511	2541
	10	150	10.46	369	75	100	0.55	0.75	2906x1310x1890	3312x1310x1890	2511	2541
SO 126 W	8	115	13.01	459	90	125	0.55	0.75	2906x1310x1890	3312x1310x1890	2561	2591
	10	150	13.01	459	90	125	0.55	0.75	2906x1310x1890	3312x1310x1890	2561	2591

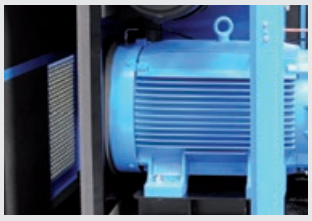
* Free air delivery for the complete package in accordance with ISO 1217, Appendix C, at 20°C ambient temperature and maximum pressure. Emitted sound level as per PN8NTC2.3 from 76 dB(A)
The technical data is designed for international use: maximum ambient temperature + 40°C, maximum cooling water temperature + 40°C.
Different demands on request. Dimensions and construction are subject to change.

SO 150-2 to **SO 480-2** – water cooled oil-free screw compressors

Free air delivery: 16.20 – 51.49 m³/min, 572 – 1818 cfm
Pressure range: 8 – 10 bar, 115 – 150 psig
Motor range: 110 – 355 kW, 150 – 480 HP

SO 220-2





EXTREMELY QUIET
The SO-2 machines are equipped with a combined sound and pulsation absorber. Because of its intelligent design and the use of powerful sound absorbing materials the entire range operates quieter than ever before.

HIGHEST EFFICIENCY
The cooling air flow of the SO-2 machines has been substantially optimised. The air intake from the coolest area and the minimisation of pressure losses additionally increase the free air delivery with a low specific power consumption.

SAFE AND SERVICE FRIENDLY
Particular importance was given to optimise accessibility of maintenance intensive components (e.g. cooler and oil cooler) during the design of the SO-2 machines. An additional separator was integrated to improve intermediate separation – for absolutely safe operation.

FLEXIBLY CONNECTING
The raised position of the compressed air outlet does not require any risers and allows for problem free connection of additional components: e.g. external aftercooler, cyclone separator, filters and dryers.

Oil-free compressed air at the highest level: The SO-2 generation of oil-free screw compressors sets new standards in the 110 and 355 kW performance class. High FADs, low specific power consumption, extremely quiet operation along with the service friendly design are the benchmarks of this series – for oil-free compressed air production at a superior level!

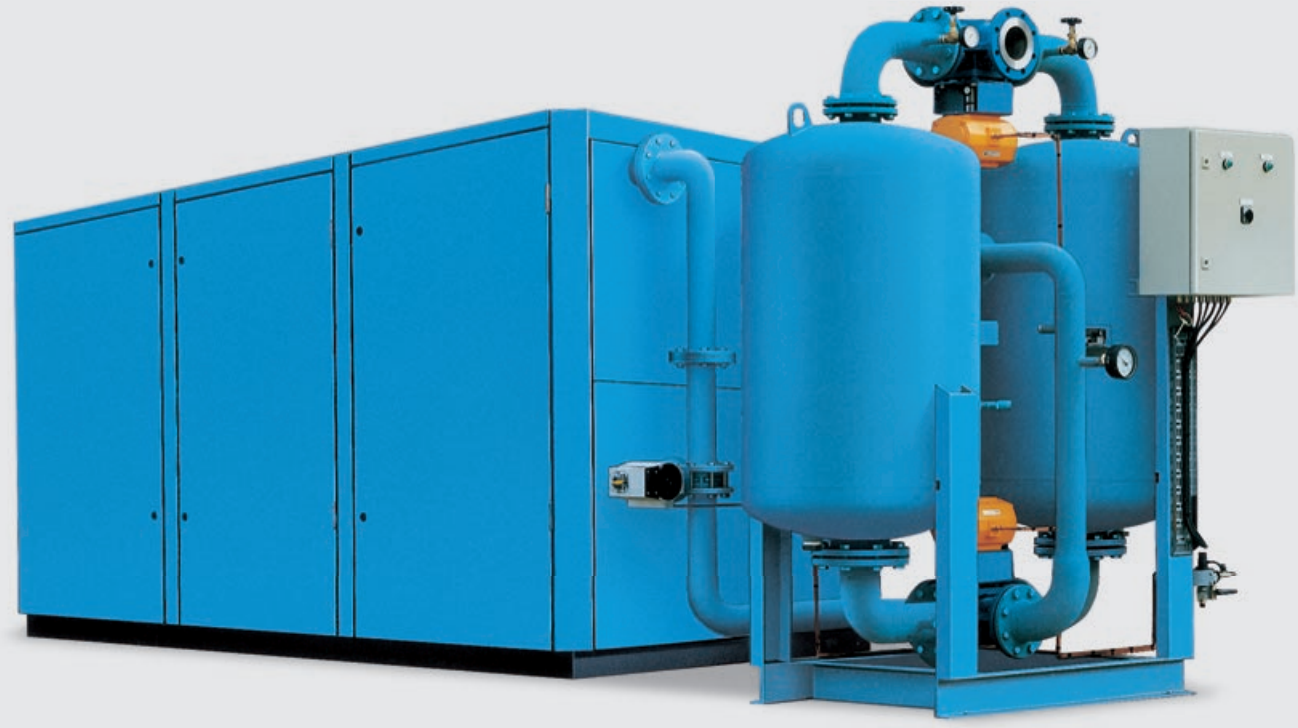
BOGE Model	Max. pressure		Effective free air delivery*		Motor power				Dimensions silenced W x D x H	Dimensions super-silenced W x D x H	Weight silenced	Weight super-silenced
					Main drive motor		Fan motor					
	bar	psig	m³/min	cfm	kW	HP	kW	HP	mm	mm	kg	kg
SO 150-2 W	8	115	18.57	656	110	150	0.75	1.00	–	3230x1520x1820	–	3300
	10	150	16.20	572	110	150	0.75	1.00	–	3230x1520x1820	–	3300
SO 180-2 W	8	115	21.60	763	132	180	0.75	1.00	–	3230x1520x1820	–	3350
	10	150	19.60	692	132	180	0.75	1.00	–	3230x1520x1820	–	3350
SO 220-2 W	8	115	26.30	929	160	220	0.75	1.00	–	3230x1520x1820	–	3400
	10	150	23.20	819	160	220	0.75	1.00	–	3230x1520x1820	–	3400
SO 269-2 W	10	150	26.18	925	200	270	0.75	1.00	–	3230x1520x1820	–	3600
SO 270-2 W	8	115	34.90	1232	200	270	1.10	1.50	–	3782x1800x2268	–	5600
	10	150	28.40	1002	200	270	1.10	1.50	–	3782x1800x2268	–	5600
SO 340-2 W	8	115	42.36	1496	250	340	1.10	1.50	–	3782x1800x2268	–	5800
	10	150	35.92	1268	250	340	1.10	1.50	–	3782x1800x2268	–	5800
SO 430-2 W	8	115	47.22	1668	315	430	1.10	1.50	–	3782x1800x2268	–	6000
	10	150	46.89	1656	315	430	1.10	1.50	–	3782x1800x2268	–	6000
SO 431-2 W	8	115	51.49	1818	315	430	1.10	1.50	–	3782x1800x2268	–	6000
SO 480-2 W	10	150	51.42	1816	355	480	1.10	1.50	–	3782x1800x2268	–	6600

* Free air delivery for the complete package in accordance with ISO 1217, Appendix C, at 20ºC ambient temperature and maximum pressure. Emitted sound level as per PN8NTC2.3 from 76 dB(A)
The technical data is designed for international use: maximum ambient temperature + 40ºC, maximum cooling water temperature + 40ºC.
Different demands on request. Dimensions and construction are subject to change.

There are many ways to dry compressed air. The most reliable and efficient ones come from us!

FOUR OPTIONS, COUNTLESS ADVANTAGES

BOGE offers four systems for drying oil-free compressed air. After thorough analysis of your compressed air requirements and quality targets our experts will be able to recommend the optimal solution to meet your needs whilst achieving the ideal cost-benefit ratio.



OPTIMISE THE ENERGY FROM THE COMPRESSED AIR DRYER

All BOGE SO series compressors can be supplied with a Heat Of Compression (HOC) adsorption dryer to reach pressure dew points up to -40°C.The heat recovered, via the intercoolers, provides all the necessary regeneration in a loss free cycle minimising the requirement of auxiliary power.

Tell us your requirements, we provide the know-how: The selection of a dryer depends on the required point of use compressed air quality. BOGE experts will ensure the most effective and most efficient dryer solution customised to meet your needs.

REFRIGERANT COMPRESSED AIR DRYER

The pressure dew point of the refrigerant compressed air dryer is +3°C (DIN ISO 7183). Providing that the system temperature never falls below +3ºC and air quality meets the production requirement, then a refrigerant dryer is the ideal choice for compressed air treatment.

HEATLESS ADSORPTION DRYER

Heatless adsorption dryers for pressure dew points to – 70ºC are necessary when a higher compressed air quality is required. For the regeneration process heatless adsorption dryers require purge air which must be included when sizing the compressor.

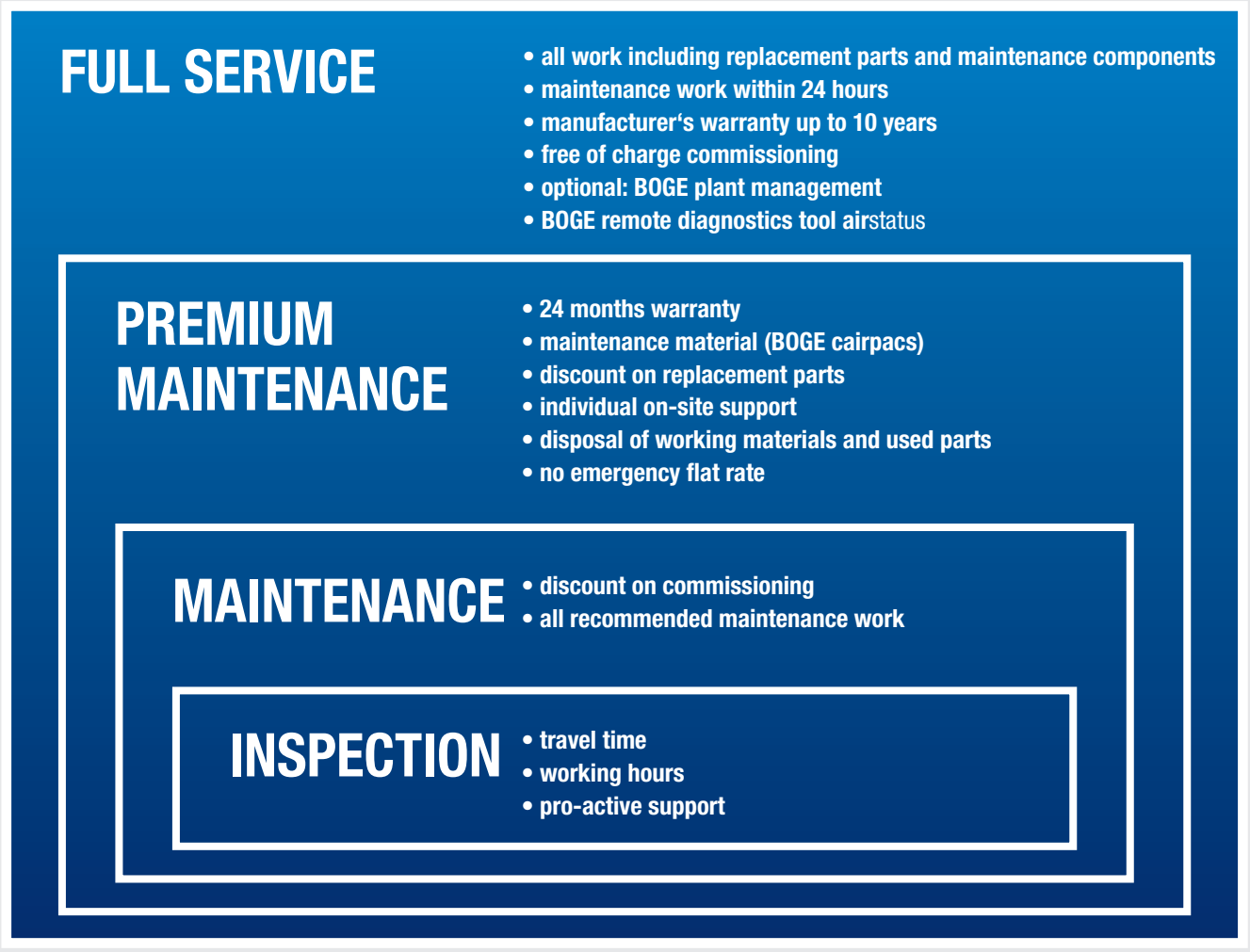
HEAT-REGENERATED ADSORPTION DRYERS

Heat regenerated adsorption dryers with pressure dew points up to -70°C are more economical at higher flow capacities than the heatless type.
Regeneration heat is supplied using ambient air heated by an external electrical heater and drawn in as vacuum regeneration.

READY FOR ACTION WORLDWIDE:
BOGE Service Support – Worldwide

PEACE OF MIND NOW COMES IN FOUR PACKAGES!

From inspection to the premium maintenance package – the choice is yours! There is a BOGE maintenance package to meet the level of service cover you require. Once you have selected your maintenance package you can simply sit back and enjoy the peace of mind that comes with maintenance from BOGE.



The Contract term on all packages is 24 months. In addition, BOGE bestcair warranty is also available.
For more information and terms and conditions please contact your BOGE service consultant.

Service your added value! Maximised reliability and economic efficiency are not the only technical advantages that BOGE has to offer. Our comprehensive service support program will ensure your BOGE compressed air system remains in tip top condition. Wherever you need us, whatever we can do for you: BOGE Service Support is always readily available close by – competent, to the highest standards, and always one step ahead.

BOGE BESTCAIR

BOGE **best**cair enables you to extend your factory warranty up to 5 years: 2 years factory warranty with 3 years additional **best**cair warranty – the choice is yours. Furthermore, **best**cair ensures manufacturer's recommended maintenance schedule of new and existing equipment at the specified service intervals.
For more information email bestcair@boge.com

BOGE GENUINE PARTS

Only original BOGE spare parts have the manufacturer's technological edge. You can be confident when opting for BOGE original spare parts in the service of your BOGE compressed air system will ensure that the integrity of the compressor is maintained, efficiency is retained and your peace of mind is sustained.

ALWAYS NEARBY

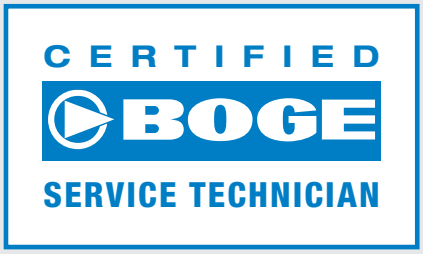
BOGE has a network of dedicated service technicians and certified partners at its disposal to help you worldwide with your installation, upgrading, commissioning or approval, maintenance, repair, or inspection:
You can rely on the know-how and experience of our qualified experts – at all times.
Hotline Mobile Service: +49 5206 601-130

EMERGENCY ASSISTANCE

In the case of an emergency where immediate technical support is required, the BOGE product support trouble shooters or the BOGE Helpline team are available to you 24/7.
Product Support Hotline:
+49 5206 601-140
BOGE Helpline: +49 170 4400444

AIR AUDITS

By analysing your existing compressed air system, our energy efficiency experts can identify where savings can be made. The BOGE AIReport includes measurement of: dew point control, vibration control, leakage, noise, oil check and TAN check.



TRAINING COURSES

The BOGE Compressed Air College was established in order to train and certify internal employees and external partners as qualified BOGE Service Technicians. Attendance of training courses held in the in-house training centre further assist in refreshing existing BOGE Service Technician's knowledge at regular intervals.

BOGE COMPRESSED AIR SYSTEMS

BOGE AIR. THE AIR TO WORK.

For four generations, customers from mechanical engineering, industry and trade have relied on BOGE know-how when it comes to planning, developing and manufacturing compressed air systems. They are fully aware of the fact that BOGE AIR is more than just ordinary compressed air: utmost safety, outstanding efficiency, excellent quality, maximised flexibility along with dependable service are the ingredients to transform BOGE AIR into air to work with – in Germany, in Europe and in more than 120 countries around the world.

Our ranges of services include the following:

- Energy efficient systems development
- Plant design and engineering
- System control and visualisation
- Oil-free piston and screw compressors
- Oil injected screw compressors and oil lubricated piston compressors
- Compressed air treatment
- Compressed air distribution and storage
- Compressed air accessories
- Compressed air service

GL ISO 9001 ISO 14001
GL Systems Certification

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