

PRODUCT OVERVIEW

COMPRESSOR SYSTEMS & ACCESSORIES FOR
MEDIUM AND HIGH PRESSURE



75
1946 – 2021

BAUER
KOMPRESSOREN

SAFETY

PRECISION

INDEPENDENCE

GLOBAL





CONTENTS

COMPANY	4
SPORTS & SAFETY.....	10
› Sectors	12
› PREMIUM LINE Compressors	14
› POSEIDON EDITION Compressors	16
› Nitrox Systems	18
› Special Applications	19
› Air Purification	20
› Monitoring and Measurement.....	22
› Storage	24
› Distribution and Control	25
INDUSTRY	26
› Sectors	28
› Air-cooled compressor and booster units.....	30
› Water-cooled compressor and booster units	32
› Compressor Controls	34
› Purification of Air and Gas	36
› Gas Measurement Systems	37
› Storage and Distribution.....	38
› Complete Systems	39
FUEL GAS SYSTEMS.....	40
› Reference Projects	42
› Refuelling Stations	44
› Indoor Systems / Accessories	46
› Biomethane Applications	48
› Natural Gas Supply for Test Benches	49
SERVICE	50
BAUER WORLDWIDE	53

FROM INITIAL IDEA TO PERFECT COMPRESSOR



HIGH PRESSURE PERFECTION

BAUER KOMPRESSOREN IS A GLOBAL LEADER IN THE MANUFACTURE OF MEDIUM AND HIGH PRESSURE AIR AND GAS COMPRESSION SYSTEMS.

BAUER KOMPRESSOREN is the market leader in the development and production of systems for generating breathing air with over 75 years of experience. BAUER's own certification system 'Pure Air' ensures air purification in accordance with strict international regulations, such as the breathing air standard DIN EN 12021:2014, thereby providing divers and fire-fighters worldwide with the confidence that they are breathing pure and safe breathing air at all times.

With respect to industrial applications, BAUER KOMPRESSOREN offers a complete range of compressors and boosters in the medium and high pressure range for the compression of air and gases. The modular unit concept enables BAUER to offer tailor-made solutions that cover a comprehensive spectrum of pressures, delivery capacities (F.A.D.s) and compressed gases. BAUER will perfectly match individual customer requirements.

Sustainability is an indispensable characteristic of BAUER KOMPRESSOREN. Since the early 1970s, BAUER has continued to produce and develop turnkey fuel stations for natural-gas-driven vehicles and continues to play a foremost role in the growing sector of biogas as a climate-neutral fuel.

**MODULAR UNIT CONCEPTS,
TAILOR-MADE SOLUTIONS.**

BAUER KOMPRESSOREN – WORLDWIDE SUCCESS, GLOBAL NETWORK





	Subsidiaries
	Branch Offices:
Australia	Brisbane
Egypt	Cairo
France	Marseille
India	Neu-Delhi, Chennai
Japan	Tokyo
Mexiko	Villahermosa
Spanien	Madrid, La Palmas de Gran Canaria
U.K.	Ross On Wye
USA	Detroit, Los Angeles, Miami, San Diego, San Francisco

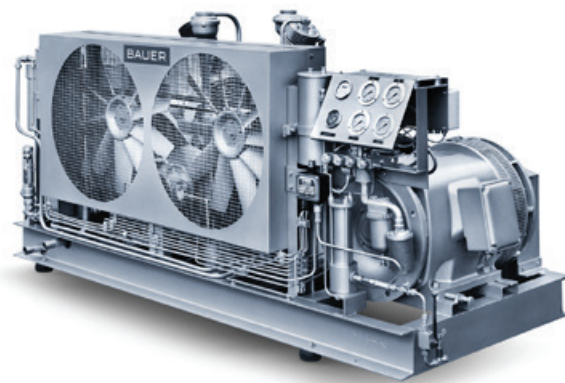
BAUER – SUCCESS ROOTED IN TRADITION SINCE 1946

BAUER Kompressoren can look back on a hundred years of mechanical engineering tradition. Company history recalls that as early as 1888, Johann Bauer, a blacksmith in the Bavarian village of Arnstorf, founded an agricultural machinery factory.

In 1946, his son Hans Bauer launched a post-war German success story. Bauer started by developing low-pressure compressors, quickly recognising the potential for novel high-pressure compression technology. Accordingly, in the 1960s, BAUER KOMPRESSOREN rose to become the global leader in the manufacture of breathing air compressors, especially in the area of scuba diving and fire fighting.

The cornerstones of BAUER's success remain targeted in global expansion, innovation and the highest quality standards. BAUER KOMPRESSOREN operates a global network of companies and is represented by its subsidiaries in many high-growth markets where German quality is especially appreciated.

The new millennium is confronting industry with the challenge of developing products which meet the strict requirements of climate-friendliness and sustainability. BAUER KOMPRESSOREN, aware of its great responsibility towards future generations, is significantly expanding its business activities in fuel gas systems, including fuel station systems for filling vehicles with environmentally friendly natural gas as well as systems for compressing and distributing the climate-neutral fuel biogas.



**RESPONSIBILITY FOR
FUTURE GENERATIONS.**



BAUER SUPPLIES EXPERTISE

Since its formation, BAUER has pursued technological leadership in the area of medium and high-pressure compression by offering products which continually set new standards of innovation and quality. To achieve this, many factors need to be integrated with each other seamlessly and perfectly. This commences in the areas of research and development in our engineering centre: here, before a new product goes into serial production it is submitted to comprehensive testing in our corporate Quality Inspection Centre. The experience thus gained contributes directly to the improvement of new products.

**INTENSIVE RESEARCH, TESTING
AND DEVELOPMENT IN THE
BAUER QUALITY INSPECTION
CENTRE.**

BAUER REDEFINES QUALITY

Units from BAUER are produced in one of the most modern manufacturing plants of its kind. Due to this high level of vertical integration, all steps of production are comprehensively optimised. The entire production process is 'e-collaborated', meaning that directly from the design office the design data is transferred to the production engineers who program the machining options via an online simulation.

The modern state-of-the-art machining equipment, with over 50,000 tool heads, transforms the unfinished castings with microprecision into high-quality basic components which are used to manufacture the compressor blocks.

Each individual compressor block, the heart of each compressor system, is submitted to an endurance test lasting several hours before being released for the unit assembly line. During the subsequent assembly processes, each unit is submitted to numerous further functional tests as well as a final check.



ALL PRODUCTION STEPS ARE COMPREHENSIVELY OPTIMISED FOR QUALITY.



BAUER DELIVERS COMPLETE SOLUTIONS

In BAUER KOMPRESSOREN you will find a competent and experienced partner for both complex system solutions and turnkey compressor systems. From the design and engineering of the unit and its commissioning, down to service and training performed by one of our 22 subsidiaries or world-wide service partners in your locality: there will always be a BAUER representative standing by!

BAUER guarantees maximum consistency in product quality by conducting comprehensive quality assurance during and after production, in accordance with DIN EN ISO 9001.



YOUR PARTNER – FROM PLANNING TO COMMISSIONING AS WELL AS TRAINING AND SERVICES.



**SAFETY IS
NON-NEGOTIABLE**

PURE AIR IS THE MOST IMPORTANT COMPONENT OF YOUR EQUIPMENT

For BAUER KOMPRESSOREN as the market leader in the field of Sports & Safety, safety is and will always remain our top priority during the development of high pressure compressors and systems for air purification and for monitoring and measuring air quality.

Divers going under water and fire fighters entering hazardous situations must be able to rely unconditionally on one thing in particular: a safe supply of pure air complying with the strict requirements of globally recognised breathing air standards, such as DIN EN 12021:2014.

Safety also means that air is always available on first demand, whenever and wherever required. We can ensure safety thanks to our renowned reliability and the long service life of our units.

In various areas of sports, reliable provision of pure air is the fuel for success. Take motor sports, where a split second makes all the difference between success and failure. Or in the field of shooting sports, where precise results depend on a reliable supply of pure air.

SAFE PROVISION OF BREATHING AIR IN ALL FIELDS OF APPLICATION

BAUER PURE AIR CERTIFICATION

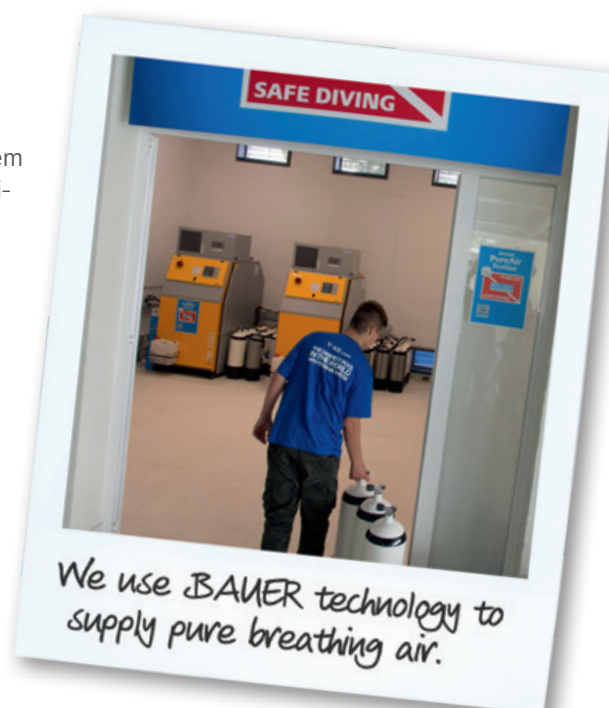
A further important component of our safety philosophy is our company's 'PureAir – Safe Diving' certification. Filling stations that undertake to meet these strict certification standards show their customers at a glance that the quality of their breathing air supply is their top priority. Pure breathing air is among the most important components of safe diving equipment. Inadequately purified air from compressors endangers divers' health – and possibly even their lives.

The BAUER KOMPRESSOREN 'PureAir' certification serves as a guide to divers in selecting a trustworthy filling station. BAUER only awards this exclusive seal of quality to companies that work with BAUER breathing air compressors which reliably deliver breathing air in compliance with the DIN EN 12021:2014 Breathing Air Standard.

BAUER PURE AIR STATIONS MEET STRICT CRITERIA

Under PureAir Certification, an authorised BAUER Partner inspects the system installation conditions and checks that all gases comply with the limits specified in the DIN EN 12021:2014 Breathing Air Standard. Ongoing monitoring of filter cartridge saturation levels is provided by a B-SECURUS system (PureAir Silver Certification).

Gold Status PureAir stations use the B-DETECTION PLUS online gas measurement system to permanently monitor CO, CO₂, O₂, with functions for absolute humidity and total oil value (VOC)¹ – ensuring you can breathe freely and safely.



¹ Total oil measurement based only on volatile organic compounds (VOCs). Sensor calibration based on isobutene.

SECTORS

SCUBA DIVING

BREATHING AIR SUPPLY FOR DIVERS

Breathing air is the most important component of diving equipment – both for scuba diving and for professional diving. The safe supply of pure breathing air for the diver is therefore the top priority for BAUER KOMPRESSOREN. This applies to systems from portable breathing air compressors for private use to professional system installation in diving centres, as well as to our NITROX systems, with special TUV-certified compressor. Additionally, the BAUER's own 'PureAir' certification gives divers the assurance that they are diving in safety.



FIRE BRIGADES

BREATHING AIR SUPPLY FOR FIRE FIGHTERS

In the event of an emergency, whether at the heart of a fire or in contaminated environments, fire fighters must be able to rely on their equipment and, above all, an absolutely reliable supply of breathing air. BAUER KOMPRESSOREN offers tailored unit concepts for fire brigades and civil protection services. Whether the unit is located at the fire station for rapid, reliable deployment a mobile unit or is on site in the rescue vehicle, our systems provide assurance. 24 hours a day, seven days a week, 365 days a year.

SHIPPING

FIRE FIGHTING SYSTEMS ON SHIPS

Once on the high seas, ships become self-sufficient systems. Every technical device has to function reliably. For this reason, for numerous international agreements regulating are in place governing the safety standards afloat and under water an the protection of human life and our environment (SOLAS). Thanks to their excellent quality, the units from BAUER KOMPRESSOREN easily meet the technical requirements specified of SOLAS regarding safety and reliability, since the principle 'Safety is non-negotiable' applies to all our products. In sports and safety, our compressor systems reliably and assure breathing air supplies for fire fighting in the event of a fire.



MEDICAL ENGINEERING

PROVIDING BREATHING AIR TO PRESSURE CHAMBERS

For treatment purposes patients are exposed to increased atmospheric pressure in pressure chambers, as for divers following decompression accidents in order to protect them from the consequences of the 'bends'. Every second counts – as does a totally reliable provision of pure, oxygen-enriched breathing air.

Hospitals use pressure chambers for hyperbaric oxygen therapy (HBOT). The patient inhales medically cleaned pure oxygen under increased atmospheric air pressure. Thus, body cells are optimally supplied with oxygen for their rapid regeneration.



SHOOTING SPORT/PAINTBALL

FILLING OF COMPRESSED AIR CYLINDERS

Today, air guns used by sports marksmen and markers of paintball teams are powered by air from high-pressure cylinders.

The precision mechanism of the sports equipment requires pure and dry compressed air, which is provided by compressors from BAUER.

Our special user-friendly filling devices feed the required precisely measured quantity of air into the cartridges quickly and safely.

We offer complete mobile solutions for tournaments, and stationary installations for associations and event halls.

MOTOR SPORTS

PROVIDING PIT TEAMS WITH HIGH PRESSURE AIR

Whether DTM or Formula 1, motor racing is a highly competitive sport where fractions of a second make all the difference – particularly in the pits, where the interplay of driver and service team can clinch victory or defeat. Car jacks and tools are operated by compressed air. Our compressor systems assure complete, reliable and precise air logistics, which the pit team can rely upon during rapid servicing of the cars. Tailored storage solutions assure that even in case of demand peaks, the required air quantity is always available.



PREMIUM LINE COMPRESSORS

The BAUER breathing air compressors of the PREMIUM LINE excel through their robustness and outstanding quality. Scores of options and the wide spectrum of different charging rates, constructions and drive variants mean that

all units are individual and can thus be aligned to almost any application. Their sophisticated technology combined with our decades of experience stand for reliable operation with a ultra-long service life.

› Pressure range: 225 – 420 bar

› Charging rate: 100 – 1,480 l/min

› Motor power: 2.2 – 18 kW

MOBILE UNITS

COMPACT LINE

Our portable compressors in the COMPACT-LINE impressively demonstrate the state of the art for transportable breathing air compressors. The JUNIOR II and the OCEANUS in particular offer extremely compact dimensions and low weight and are therefore suited for wide-ranging fields of application. Unique feature: B-TIMER, the mini-computer for monitoring filter change and maintenance intervals.



› Pressure range: 90 – 330 bar

› Charging rate: 100 – 140 l/min

› Motor power: 2.2 – 5.1 kW



PROFI LINE

The compressors of the PROFI-LINE II are especially designed for high charging rates in mobile applications. The breathing air compressors CAPITANO and MARINER, which can be configured to meet your needs, are ideally suited for both private use and the professional operation of filling stations. For all users that appreciate the robustness and quality of a BAUER compressor and who prioritise efficiency, continuous operating capabilities and expandability.

› Pressure range: 90 – 420 bar

› Charging rate: 140 – 320 l/min

› Motor power: 3 – 8.8 kW

STATIONARY UNITS

MINI-VERTICUS AND VERTICUS

These proven classic models have been completely redeveloped. The ultra-modern design combines legendary BAUER quality with improved ergonomics, noise reduction and simple operation on a single platform.

The MINI-VERTICUS and VERTICUS series impress when performance requirements are high during continuous operation thanks to a long service life and low operating costs.

Every important compressor unit parameter can be monitored and controlled using the integrated B-CONTROL MICRO control. The expanded modularity means that the compressor units can easily be adapted to provide the best possible solution to your requirements and wishes.



MINI-VERTICUS

- › Pressure range: 225 – 420 bar
- › Charging rate: 150 – 320 l/min
- › Motor power: 4 – 7.5 kW



VERTICUS

- › Pressure range: 225 – 420 bar
- › Charging rate: 450 – 680 l/min
- › Motor power: 11 – 15 kW

KAP-LINE

KAP-LINE compressors feature horizontal construction, corrosion resistance and a high charging rate. Designed for heavy-duty continuous use in industrial applications, these units have a low centre of gravity and are particularly suited for extreme inclinations, such as those encountered on the high seas or in-vehicle installations.

KAP-LINE compressors are available with electric motor or diesel engine, and are thus suited for use in the most remote regions.



- › Pressure range: 225 – 330 bar
- › Charging rate: 370 – 680 l/min
- › Motor power: 7.5 – 18 kW

POSEIDON EDITION COMPRESSORS



The renowned robustness, high degree of safety and pure breathing air quality required to meet international norms and standards combine to make units in the POSEIDON

EDITION a reflection of the BAUER KOMPRESSOREN hallmark quality. These standards are applied to bring together proven core BAUER components in reliable equipment.

› Pressure range: 225 – 420 bar

› Charging rate: 100 – 850 l/min

› Motor power: 2.2 – 18.5 kW

MOBILE UNITS

PE 100

The PE 100 is the smallest and lightest compressor unit of the PE Series. PE 100 is suitable for a wide variety of applications on land or in vehicles, with its three drive variants, petrol engine, three-phase and single-phase alternating current. The possible applications of the PE 100 are extremely diverse, from a breathing air compressor for diving groups and fire fighters to filling cartridges used by marksmen or for paintball competitions.



› Pressure range: 225 – 330 bar

› Charging rate: 100 l/min

› Motor power: 2.2 – 4.2 kW



PE-TE/TB

PE 200/PE 250/PE 300-TE/TB Compressors represent practical alternatives in mobile applications requiring higher charging rates. The compressors are available with electric motor or optionally with petrol/gasoline engine.

Owing to their compact construction, the units are easy to transport and to load into vehicles.

Inclinations of 15° are possible, making the units in this series especially suited for use on ships or in vehicles.

› Pressure range: 225 – 330 bar

› Charging rate: 200 – 300 l/min

› Motor power: 4 – 8.9 kW

STATIONARY UNITS

PE-HE

The PE 250-HE and PE 300-HE horizontal units are among the most compact stationary units of this performance class. Due to the space-saving arrangement this block and drive, the units of the HE range take up a minimum footprint whilst offering high output. The standard versions of these units are supplied already fitted with automatic condensate drain and an easy-to-use control system.

- › **Pressure range: 225 – 330 bar**
- › **Charging rate: 250 – 300 l/min**
- › **Motor power: 5.5 – 7.5 kW**



PE-MVE

The PE-MVE is designed for all users who require an average free air delivery for vertical unit designs. Equipped with noise insulation housing as standard, it is also ideal for use in environments where noise is a key concern.

What's more, the units are already equipped with an automatic condensate drain and an easy-to-use control, which has a fully automatic mode for filling storage cylinders.

- › **Pressure range: 225 – 420 bar**
- › **Charging rate: 250 – 300 l/min**
- › **Motor power: 5.5 – 7.5 kW**

PE-VE

The new generation of the PE-VE Series features a cost-efficient peak capacity rate of up to 850 l/min. Tailored to the special requirements of breathing protection and scuba diving, the units offer cost-efficient equipment for reliable operation.

- › **Pressure range: 225 – 420 bar**
- › **Charging rate: 300 – 850 l/min**
- › **Motor power: 5.5 – 18.5 kW**



B-NITROX SYSTEMS

B-NITROX MEMBRANE SYSTEMS

The B-NITROX Membrane System filters the breathing air to separate out the amount of nitrogen required to reach the desired oxygen content.

All components are exactly matched for maximum safety.

The B-NITROX Membrane System is ideal for professional diving centres that prioritise safety, high free air delivery, low maintenance and low operating costs.

- › **Pressure range: 225 - 330 bar**
- › **Charging rate: 260 – 450 l/min**
- › **Oxygen content: up to 40% O₂**



B-BLENDING

The B-BLENDING system combines simple operation with particularly high levels of safety. Pure oxygen and pre-cleaned ambient air are brought together in a mixing panel to make a homogeneous gas mixture.

This enables the production of nitrox at an affordable cost and wherever space is at a premium.

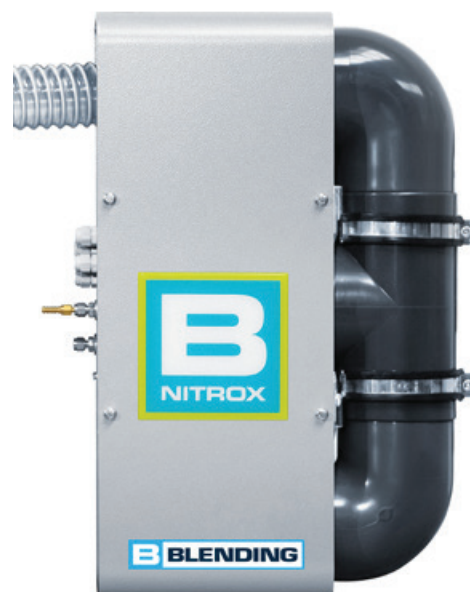
B-BLENDING is available as an integrated compressor unit or wall-mounted external unit. Keeping you flexible.

The B-BLENDING system is particularly suitable for diving centres with low or medium nitrox needs seeking a simple, yet safe nitrox production system.

If your nitrox needs increase over time, all B-NITROX series compressors can be retrofitted with elements from the BAUER B-NITROX range and converted into a full-scale membrane system.

Suitable for a compressor delivery capacity of:

- › **260 - 450 l/min**



B-BLENDING Panel

SPECIAL APPLICATIONS

BAUER KOMPRESSOREN is the ideal partner for realising special solutions, thanks to its strong engineering base and decades of experience. Shown below are examples of BAUER project solutions:



H₂S PROTECTION SYSTEMS ON IBEEV SHIPS

During the winter months, a number of special icebreakers – IBEEVs – operate in the Caspian Sea for the purpose of evacuating endangered crews from oil platforms in the event of emergency. Escape rooms located on these boats provide protection in the event of most significant danger, namely an escape of highly toxic H₂S gas from the borehole. The escape rooms are supplied with pure breathing air by breathing air compression systems from BAUER KOMPRESSOREN.

VEHICLE-MOUNTED MOBILE FILLING CENTRES

In locations in which large distances need to be covered between fire stations and fire outbreaks, the BAUER vehicle-mounted special system is especially suited. Tailored to meet individual needs, the vehicle-mounted mobile filling centre makes it possible to provide a stationary, or even a completely autonomous mobile system on location. Using the BAUER online measuring system, the compressed air can be permanently monitored for compliance with the DIN EN 12021:2014 Breathing Air Standard.



AIR PURIFICATION

P-PURIFICATION SYSTEMS FOR PURIFYING BREATHING AIR

All breathing air compressors from BAUER KOMPRESSOREN are equipped with integrated P-Purification systems. In addition, our product range offers a wide spectrum of external purification systems for separate installation. Special filter cartridges adapted to the specific intended use are available for removing humidity, oil, hydrocarbons and CO. This ensures that the valid thresholds of breathing air standards such as DIN EN 12021:2014 or other international standards are safely met.



SECCANT

REGENERATION DRYER FOR ADVANCED REQUIREMENTS

For applications demanding very high air flow rates in continuous operation, a SECCANT regeneration dryer is a wise choice. SECCANT reduces replacement of filter cartridges to a minimum, providing for cost-effective and uninterrupted operation of the compressor.

B-VIRUS FREE

REMOVES VIRUSES, BACTERIA, MOULDS AND POLLEN FROM BREATHING AIR

Invisible, easily transmitted and not measurable by any sensor, viruses, bacteria and moulds are a threat not to be underestimated. B-VIRUS FREE ensures that the genetic material of pathogens is destroyed, thus preventing further reproduction of these. This protective filter ensures that only harmless breathing air is compressed.



AERO-GUARD

RELIABLE REDUCTION OF CO₂ CONTENT

AERO-GUARD assures efficient reduction of CO₂ content in unfavourable environmental conditions when the compressor intake air contains an increased proportion of CO₂.

B-KOOL

FOR SIGNIFICANTLY EXTENDING FILTER SERVICE LIFE

Depending on the ambient conditions, the B-KOOL refrigeration dryer significantly extends the service life of the filter cartridges. This vastly reduces ongoing compressor operating costs whilst reducing the burden on the environment.



MONITORING AND MEASURING AIR QUALITY

B-TIMER

FILTER CARTRIDGE REPLACEMENT MADE EASY

In the P21, P31 und P41 integrated purification systems, the mini computer tracks the operating hours and reliably computes the remaining cartridge life. Cartridge replacement and/or maintenance due are clearly indicated.



B-SECURUS

MONITORING FILTER SATURATION

Every filter cartridge always has a limited life which must be adhered to. The SECURUS system gives timely warning of filter cartridge saturation. Special sensor technology creates a safety buffer integrated into the filter cartridge in the event that the fully saturated filter cartridge is not promptly exchanged or where cartridge replacement and/or maintenance is due.

B-DETECTION PLUS

ONLINE GAS MEASURING SYSTEMS

Even when your compressor is operated and maintained in line with professional standards, critical conditions may cause breathing air to become contaminated with hazardous substances. The consequences may be serious, endangering health or even life.

Breathing air thus requires continuous monitoring. B-DETECTION PLUS is available as a compressor-integrated, standalone or mobile solution – providing three reliable online gas measurement systems to suit any application.

With the new generation B-DETECTION PLUS, you can test not only the ambient air but, if desired, also measure the quality of the breathing air in the cylinder itself as well as in the intake hose.



B-APP

With the B-APP, remote control and monitoring of the compressor via smartphone or tablet is now also possible!¹

On the respective smartphone or tablet, current actual values of the BAUER compressor or the gas measuring system B-DETECTION PLUS can be read in real time, for example.

In addition, the B-APP offers further features such as product-specific news and videos on general information about the BAUER GROUP, BAUER products as well as maintenance and commissioning of BAUER compressors.

Available in the App Store (iOS) and on Google Play (Android).



B-CLOUD

NEW! With the BAUER B-CLOUD you always have everything in view. One look at the B-APP or the B-CLOUD browser app is enough and all important information is available to you. Whether you want to check the status of your equipment or need the help of our service technicians in case of a problem, BAUER and the B-CLOUD will support you.

The B-APP reports malfunctions with a machine diagnosis in plain text so that you know immediately where the problem lies. In addition, the B-CLOUD informs you regularly about upcoming maintenance work and, if desired, networks with your BAUER-authorized service partner. The archiving of all important data and the automated creation of monthly reports also works completely stress-free via the B-CLOUD.

To use B-CLOUD, you need a system with B-CONTROL MICRO +net control with software version 3.65 or higher. Older systems from version 3.0 can receive a software update and thus become B-CLOUD compatible.

DATA SECURITY

An integral part of B-CLOUD² involves ensuring the security of compressor systems and the data they transmit.

Particularly rigorous protection applies to compressor authentication, communication and identification.

End-to-end encryption is in place for all data transmitted between control unit and cloud.



¹ The prerequisite is that the B-CONTROL MICRO (+Net) controller with a valid IP address is integrated in the same local network (LAN/WLAN) as the smartphone.

² All data stored in B-CLOUD is located in a highly secure data center in Western Europe. B-CLOUD is DSGVO compliant and uses SSL encryption.

Please note that B-CLOUD services are not available in all states. You can find more information about the B-CLOUD on our website: bauer-kompressoren.com/b-cloud

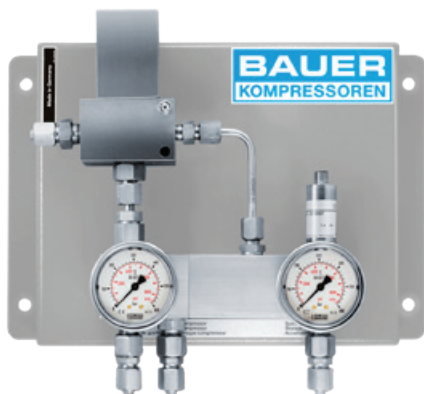
STORAGE

HIGH-PRESSURE STORAGE SYSTEMS

If you have to fill a large number of cylinders within a short period of time, but are unable to install a compressor with appropriate charging rate due to lack of space and/or of limited electrical supply, BAUER offers an ideal storage solution.

The high-pressure storage vessel is filled in advance to provide the air required for filling the compressed breathing air cylinders later, when an actual requirement arises.

Another advantage of the storage solution: The compressor only switches on when the pressure in the storage vessel falls below the set minimum value, thus protecting the compressor from wear and tear, as the compressor starts less often and runs more regularly. Thanks to the reduced number of load cycles, the service life of the unit components under pressure load, such as filter housings or final separators, increases accordingly.



AUTOMATIC SELECTOR UNIT

The automatic selector unit allows for quick, simultaneous filling of compressed breathing air cylinders in parallel both from a storage system (intermediate buffer) and from the compressor.

Priority is given to filling the cylinder connected to the filling panel, i.e. the storage system and compressor always fill the cylinder on the filling panel first. When this filling process is completed, the storage bank is refilled via the automatic selector device. Once the maximum filling pressure of the storage bank is reached, the compressor shuts off. As soon as an empty cylinder is connected to the filling panel, the automatic cycle restarts.

FSC – FILL SPEED CONTROL

The FCS regulates the speed with which breathing air cylinders are filled. A moderate fill rate is applied, therefore minimising the dynamic loads which result from extreme pressure variations. This is particularly important for pressure cylinders made of composite materials. At the same time, loss of cylinder filling volume due to high filling speeds is avoided.

DISTRIBUTION

FILLING PANELS

With the BAUER B-FILL external filling panel, you can quickly fill breathing air cylinders - now also with a stylish new design. The B-FILL is now modularly expandable and even retrofittable.

Each module has two filling connections, either with hoses or direct connections depending on your preference, both of which can fill up to 200, 300 or 500 bar respectively.

A B-CONTROL MICRO can be fitted in an additional B-FILL module for optional control and monitoring of the system. For systems that do not have a B-CONTROL, a simple hardwire control with on/off switching, as well as an emergency stop button, can be attached. Any number of B-FILL modules can be combined so that you can create your perfectly customized filling bar.



EXTERNAL DISPLAY

The new external display from BAUER KOMPRESSOREN offers a sleek and practical solution for remote operation of the compressor. This is particularly useful given that very often, the compressor unit is physically separate due to installation conditions, and is frequently located far away from the filling devices in a different area.

The external display allows the compressor unit to be operated remotely even across large distances. The compressor can therefore be set up in a different building or part of the building, for example, while the external display is installed close to the operator in a control room, in the customer area of a diving shop or in a fire services compressor room.



B-SAFE

B-SAFE safety filling chamber ensures a high degree of personal safety for the operating staff.

As a result of filling accidents arising from exploding breathing air cylinders, explosion protection is now standard or even mandatory in many countries.

B-SAFE is the alternative to expensive protective measures for compressor rooms while still providing the maximum legally required safety for the operator. The robust safety chamber made of welded steel offers protection against injuries from exploding cylinders or filling hoses in the event of a filling accident.

A low-angle photograph of a large industrial compressor system. Two workers in blue uniforms and white hard hats are working on a large, white, cylindrical component of the system. The background features several tall, silver, vertical pipes and metal walkways with railings, set against a clear blue sky. A blue square graphic is located in the top left corner.

EFFICIENT COMPRESSOR SYSTEMS FOR INDUSTRIAL APPLICATIONS

WE PROVIDE THE SOLUTION TO MEET YOUR NEEDS

The extensive product portfolio with a wide range of flows and pressures (25 to 500 bar) from BAUER KOMPRESSOREN allows the Design Team to provide optimum solutions to meet each customer application requirement.

Our systems engineering is designed to guarantee you a high degree of investment protection thanks to long unit service life, excellent continuous operation properties and minimised maintenance requirements, thus providing you with economic and efficient operation.

Gases for compression include air, nitrogen, methane or rare gases, and both air- and water-cooled machines can be supplied. Additionally, mobile or stationary installations, indoor or outdoor and container solutions can be supplied. BAUER KOMPRESSOREN is your reliable partner, starting with unit design and project planning, construction and installation right through to turnkey commissioning, including provision of the necessary certifications and TUV approvals.

You benefit from the experience we have gathered over past decades in countless successful projects completed in the industrial sector.

During the entire operating life of your unit, we will support you as required with reliable service, availability of spare parts over future decades and training for your staff.

**HIGH INVESTMENT
PROTECTION THROUGH
LONG SERVICE LIFE**



SECTORS

AUTOMOTIVE INDUSTRY AND AUTOMOTIVE SUPPLIER INDUSTRY

Highly specialised component suppliers to the automotive industry work under extreme time and efficiency pressures. Here, compressor systems from BAUER KOMPRESSOREN, with their renowned reliability, support the availability, safety and quality of the production process.

- › Supply of test benches with air, gas and mixed gas
- › Gas injection technology for plastic components
- › Filling of pneumatic springs and hybrid cold gas generators (airbags)
- › Acceleration of crash test sledges



OIL AND GAS INDUSTRY

Drilling for oil and gas is a tough business. It often takes place in remote regions to which access is difficult and under extreme climatic conditions. Reliable equipment is vital to these operations, and is their key to success. Here BAUER KOMPRESSOREN, with its compressor systems, is a reliable partner in the fields of prospecting, exploration, production and safety technology.

- › High-pressure supply for seismic reflection
- › Compressed air supply for motion compensation
- › Generation of pressure for secondary extraction
- › Nitrogen supply for BOPs

ENERGY SECTOR

The energy sector is multifaceted, but all types of power stations require compressed air and gases in a variety of applications. Moreover, all rely on a supply of compressed air – round the clock. Compressor systems from BAUER KOMPRESSOREN offer the required security of supply.

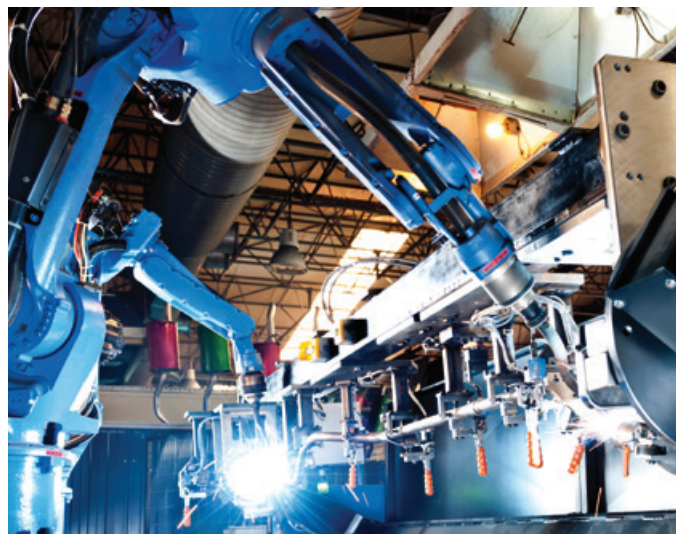
- › Filling of air vessels
- › Starting of emergency generators
- › Sampling for radiation monitoring
- › Pneumatic cleaning of turbines



PRODUCTION

In the domain of globalised production, diverse manufacturing methods and their accompanying quality processes are dependent on compressed air and gases as an indispensable element. As a globally positioned company with 22 subsidiaries and a close-knit service network, BAUER offers the necessary preconditions for successful cooperation.

- › Generation of air cushions in isobaric double belt presses
- › Bulk handling with high-pressure air
- › Supply of test benches with air, gases and gas mixtures
- › Metal forming



GAS LOGISTICS

In the sector of gas logistics, production reliability, efficiency and – most importantly – the purity of the gases are core requirements for economic business operation. Thanks to the company's legendary reliability and the experience gained from decades in air and gas purification, compressors and purification systems from BAUER KOMPRESSOREN easily meet the strict requirements of this sector.

- › Filling of helium, argon, nitrogen, nitrous oxide and gas mixtures
- › Decanting of gases
- › Recovery of residual gases
- › Generation and filling of breathing and medical air

FURTHER SECTORS

- › Shipping
- › Chemical industry
- › Petrochemical industry
- › Mining
- › Research facilities
- › Food industry
- › Aerospace industry



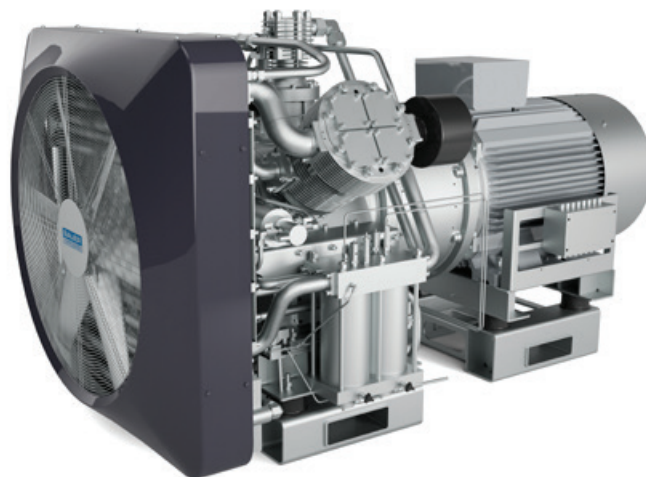
AIR-COOLED COMPRESSOR AND BOOSTER UNITS

BM SERIES

The BAUER BM series offers a wide power range from 11 – 132 kW with delivery rates from 620 – 7800 l/min. The units in 2 and 3-stage design are air-cooled and directly coupled.

Low centre of gravity with the ability to operate at inclinations up to 30° under motion makes this an ideal product for shipboard and offshore applications.

- › **Pressure range: 30 – 110 bar**
- › **Charging rate: 620 – 7,200 l/min**
- › **Motor power: 11 – 132 kW**



MINI-VERTICUS and VERTICUS SERIES

The new MINI-VERTICUS and VERTICUS combine the legendary BAUER compressor blocks with improved components and ultra-modern design! During the redesign, the focus was on ergonomics, making operation as easy as possible, reducing noise and boosting efficiency.

Suitable for all common, non-aggressive gases and gas mixtures, these compressors can be used in practically every industrial application.

Storage units, gas measuring systems, an extensive range of accessories and purification systems that can be integrated complete these compact system solutions.

- › **Pressure range: 30 – 525 bar**
- › **Charging rate: 85 – 950 l/min**
- › **Motor power: 3 – 15 kW**

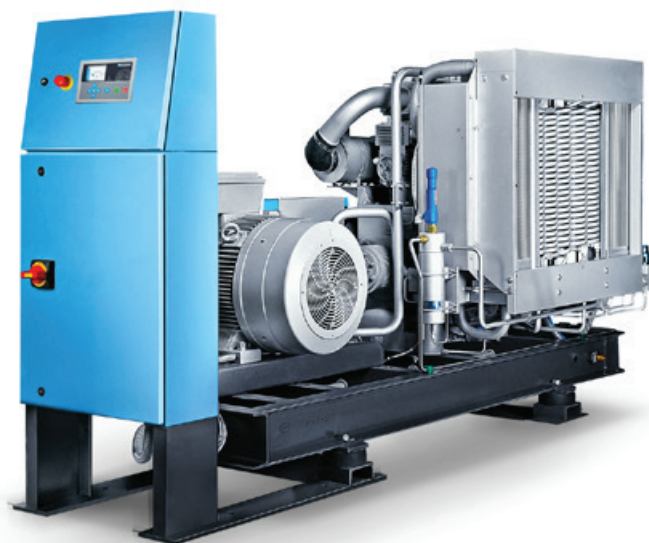


K 22 – K 28 SERIES

Whether they are found in standard compressed-gas applications in industry or built into vehicles for mobile use: The air-cooled high-pressure compressor units in the K 22 – K 28 series are reliable, durable and the solution of choice for demanding customers.

The units of the new K 22 series are designed with direct coupling, while the units K 23 – K 28 are driven by means of V-belts.

- › **Pressure range: 30 – 525 bar**
- › **Charging rate: 600 – 6,800 l/min**
- › **Motor power: 22 – 110 kW**



PE-VE INDUSTRY

With the new PE-VE, BAUER has designed a series of system components that combines interesting features with an outstanding price-performance ratio, even in the basic version.

In combination with the numerous system options and a wide range of accessories, tailored solutions for almost all tasks in the air and nitrogen sector can be implemented.

- › **Pressure range: 25 - 420 bar**
- › **Charging rate: 85 - 1470 l/min**
- › **Motor power: 3 - 15 kW**



G60V

The new G60V adds an easy-install turnkey system to BAUER's product portfolio. The helium is captured in the integrated collection balloon and compressed to pressures of up to 200 bar by the compressor. Impurities in the medium are removed by the filter system.

- › **Pressure range: 90 – 230 bar**
- › **Charging rate: 60 l/min**
- › **Motor power: 2.2 kW**



WATER-COOLED COMPRESSOR AND BOOSTER UNITS

BK 23 – BK 52 SERIES

This water-cooled high pressure compressor series is optimally suited for installation in conditions which do not allow for conventional air-cooling. By using targeted water cooling between the interstage, final stage coolers and individual valve heads the system enables the majority of the heat produced to be absorbed by the cooling water. For this reason, the units are exceptionally maintenance-friendly, durable and robust, and at the same time are quieter than comparable air-cooled units – optimally designed for industrial continuous operation/heavy duty use.

The booster series features a pressure-resistant crankcase up to 17 bar, allowing compression to the desired final pressure while minimising the blow-by losses that are commonplace with normal recompressors. For the drive, we offer directcoupled or V-belt driven solutions in horizontal or vertical design.

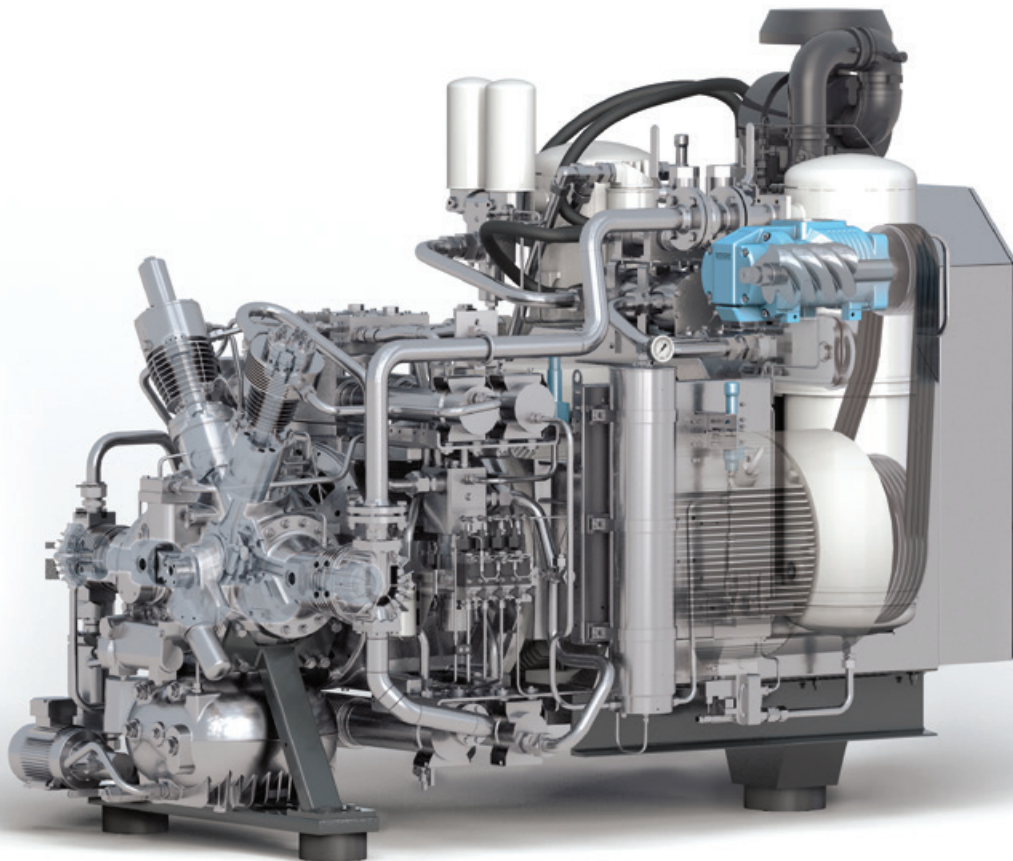
- › **Pressure range: 30 – 520 bar**
- › **Charging rate: 760 – 22,800 l/min**
- › **Motor power: 30 – 315 kW**



GIB-SP SERIES

When cost-effectiveness or limited space are critical factors, high-pressure compressors that deliver top performance from a compact footprint are the answer. However, conventional high-pressure models are unlikely to fulfil these requirements.

BAUER's SP Series offers the ideal solution. The series combines a BK 26 Series advanced high-pressure compressor block with a ROTORCOMP EVO screw block. The screw block supplies air or gas at the intake pressure, which is then compressed to the defined final pressure by the high-pressure block. This design enables BAUER's SP systems to deliver extremely high F.A.D. rates despite their ultra-compact design. All technology used in the SP system is developed within the BAUER GROUP. The perfect combination for a high-performance, compact compressor solution.



- › **Pressure range: 110 - 520 bar**
- › **Charging rate: 10400 - 15000 l/min**
- › **Motor power: 250 - 315 kW**

COMPRESSOR CONTROLS

A major requirement for cost-effective and safe operation of complete BAUER systems is a powerful compressor control unit which is fully adapted to the system, therefore securely monitoring the compressor functions.

B-CONTROL MICRO



The B-CONTROL MICRO is a modern, easy-to-use compressor control unit for the intelligent control and reliable monitoring of all basic functions.

The colour display shows relevant information including final pressure, oil pressure and temperature of the final stage. If maintenance is due, this is also indicated on the display. In the event of deviations from normal conditions, the control unit will shut down the compressor automatically and indicate the source of the fault on the display.

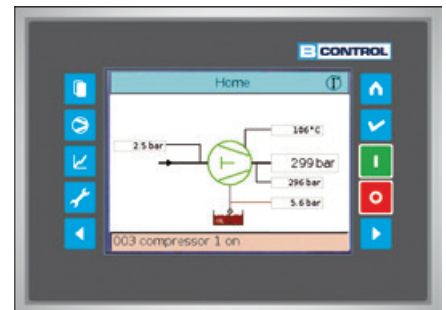
The advanced B-CONTROL MICRO is more powerful and ready to communicate with the B-APP and B-CLOUD for remotely controlling and monitoring the compressor.

B-CONTROL II

The BAUER B-CONTROL II is the advanced version of the B-CONTROL MICRO basic compressor control.

The 5.7" colour display touch screen with 10 keys displays values including final pressure, oil pressure, the temperature of the last stage and the ambient temperature.

As well as supporting the control and monitoring of important system functions, the B-CONTROL II also features user-friendly additional features such as a data logger, USB port and accessible interfaces such as Modbus, CAN Bus or Profibus. It can even be used for integrated control of an interconnected system with up to four compressors. Additional sensors and devices can be connected.



EXTERNAL DISPLAY

The new external display from BAUER KOMPRESSOREN offers a sleek and practical solution for remote operation of the compressor. This is particularly useful given that very often, the compressor unit is physically separate due to installation conditions, and is frequently located far away from the filling devices in a different area.

The external display allows the compressor unit to be operated remotely even across large distances. The compressor can therefore be set up in a different building or part of the building, for example, while the external display is installed close to the operator in a control room, in the customer area of a diving shop or in a fire services compressor room.



B-CONTROL SUPERIOR

As a superordinate and external control unit, the B-CONTROL SUPERIOR enables integrated operation with base and peak load as well as standby-duty operation. Up to five compressors can be controlled selectively in active (CAN bus), passive (via remote ON/OFF contact) or mixed operation.

As a rule, the B-CONTROL SUPERIOR can be retrofitted to existing compressor units.



B-APP

B-APP allows users to remotely control and monitor compressors with the new B-CONTROL MICRO¹. B-APP also offers additional features such as product-specific news, videos, an integrated dealer search function and calculation tools.



B-CLOUD

NEW! With the BAUER B-CLOUD you always have everything in view. One look at the B-APP or the B-CLOUD browser app is enough and all important information is available to you. Whether you want to check the status of your equipment or need the help of our service technicians in case of a problem, BAUER and the B-CLOUD will support you.

The B-APP reports malfunctions with a machine diagnosis in plain text so that you know immediately where the problem lies. In addition, the B-CLOUD informs you regularly about upcoming maintenance work and, if desired, networks with your BAUER-authorized service partner. The archiving of all important data and the automated creation of monthly reports also works completely stress-free via the B-CLOUD.



An integral part of B-CLOUD² involves ensuring the security of compressor systems and the data they transmit. Particularly rigorous protection applies to compressor authentication, communication and identification. End-to-end encryption is in place for all data transmitted between control unit and cloud.

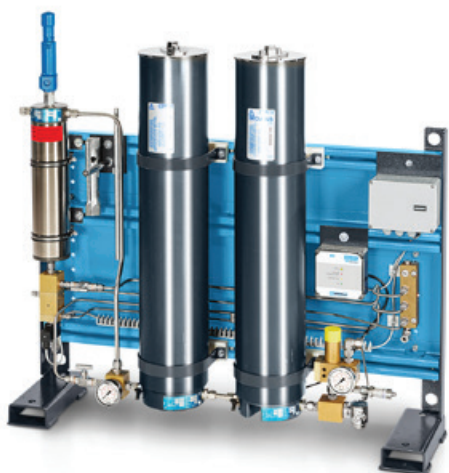
¹ Integrated into BAUER units from Spring 2017

² All data stored in B-CLOUD is located in a highly secure data center in Western Europe. B-CLOUD is DSGVO compliant and uses SSL encryption.

Please note that B-CLOUD services are not available in all states. You can find more information about the B-CLOUD on our website: bauer-kompressoren.com/b-cloud

PURIFICATION OF AIR AND GAS

For decades BAUER KOMPRESSOREN has been the leading manufacturer of high-pressure air and gas purification systems. The purification of air and gases is indispensable for many industrial processes. Depending on requirements, our purification systems reduce humidity, oil, hydrocarbons, CO, CO₂ and H₂S, and particulate to the level required by law and/or required during the process.



P-SERIES PURIFICATION SYSTEMS

P-Series purification systems from BAUER KOMPRESSOREN are the classics amongst the purification systems from BAUER.

With decades of success behind them, these purification systems are well-respected solutions in industrial high-pressure applications for purifying air, nitrogen, helium, argon and methane. Accordingly, cartridges are individually tailored for the respective applications.

The extensive product portfolio contains suitable variants for most compressors from BAUER in the 350, 420 and 500 bar pressure ranges. In combination with the SECURUS system from BAUER, moisture saturation of the filter cartridge is electronically monitored.

- › Pressure range: 90 – 550 bar
- › Charging rate: 85 – 3,500 l/min

SECCANT – REGENERATION DRYER

These regeneration dryers operate in the 25 to 420 bar pressure ranges. SECCANT is suited for drying air and gases at high service performances and F.A.D.s or at higher ambient temperatures. Furthermore, the regeneration dryer is equipped as standard with electronic control, soft change-over between regeneration and load cycle, pre-separation and a particle filter. Even the basic version of the SECCANT is designed for easy integration into the complete system. Also, these dryers can be expanded as required to include activated carbon adsorbers for removing oil and transforming CO.

- › Pressure range: 25 – 420 bar
- › Charging rate: 500 – 29,000 l/min



PX-FILTER

BAUER PX series of medium and high-pressure coalescing and active charcoal filters are designed to remove particulates, oil droplets and aerosols. They are suitable for air, nitrogen, helium, argon and other gases. Various air/gas quality standards in accordance with ISO 8573 up to class 1 can be produced depending on the filter type and filter combination.

- › Pressure range: 25 – 420 bar
- › Charging rate: up to 2,340 m³/h

B-KOOL – REFRIGERATION DRYER

The B-KOOL refrigeration dryer can extend the service life of filter cartridges many times over. The compressed air is cooled in the compressor, condensing out most of the oil and water vapour for removal by the final separator. As a result, less water vapour enters the filter cartridge, thus increasing its service life.

This leads to reductions in compressor running costs whilst simultaneously protecting the environment.

- › **Pressure range: 100 – 350/500 bar**
- › **Charging rate: 200 – 700 l/min**



CPF SYSTEMS

These cartridge filter systems purify air for use in Joule-Thomson coolers. To operate this kind of cooler, extremely high air quality is required. This applies particularly to humidity and CO₂ content. The most common standard describing this air quality is DEF STAN 58-96.

Throughout the entire cartridge life of our CPF system, the values delivered remain far below the strict thresholds of this standard.

- › **Pressure range: 120 – 420 bar**
- › **Charging rate: 30 – 1,500 l/min**

GAS MEASURING SYSTEMS

B-DETECTION

‘Safety through measurable quality’ was our principle in developing our gas measurement systems. Our customers have increasingly specific requirements relating to the purity of air and gases, such as those described in DIN ISO 8573-1. Depending on requirements, measurements can be performed on a random basis or during the operational phase.

B-DETECTION Series online measurement systems can be directly integrated into the B-CONTROL system, which allows the measuring values to be read and monitored on the compressor display.

The B-DETECTION PLUS is B-CLOUD compatible.

- › **NEW!** Shorter response time during humidity measurement
- › **NEW!** Lower running costs through optimised calibration



STORAGE AND DISTRIBUTION

HIGH PRESSURE STORAGE SYSTEMS

Modular high-pressure storage systems from BAUER KOMPRESSOREN are the ideal complement to a compressor system, enabling rapid discharge of greater quantities of air and gas at a constant volume flow rate. Simultaneously, an appropriate storage module ensures optimal running time for the compressor and additionally serves as a pulsation damper. Our storage systems are available for pressure stages 330, 420 and 500 bar. Used with storage cylinders of 50 or 80 l, they can be extended as required. We offer vertical or horizontal storage modules.

► **Pressure range: 330 – 500 bar**



HIGH-PRESSURE REDUCING UNIT

FOR AIR AND NITROGEN

The high-pressure reducing stations from BAUER KOMPRESSOREN offer turnkey complements to the storage system. These stations are equipped with high-quality pressure reducers, gauges, ball valves and safety valves for secondary pressure and can be safely installed without major effort.

FCC DISTRIBUTION PANEL

DISTRIBUTION PANEL WITH PROPORTIONAL VALVE FOR AIR AND NITROGEN

By controlling the variables of pressure and time, the distribution panel FCC allows exact gas dosing in the high- and medium-pressure range.

Using the integrated PLC control, up to four proportional valves can be activated independently of each other - at pressures of up to 400 bar!

The FCC distribution panel is already the fifth generation to operate in the field of gas injection technology and has proven ideally suited for checking/testing.



COMPLETE SYSTEMS

A great strength of BAUER KOMPRESSOREN is the company's expertise in the construction and manufacturing of complete systems that have to withstand particular climatic conditions and often operate autonomously in the world's most remote places. The climatic conditions may vary from extremely low temperatures in winter and salty, moist air to high desert temperatures and sand drifts.

CONTAINERISED SOLUTIONS

We can also offer all our compressors, purification and storage systems as containerised solutions. Optionally, the compressors can also be driven by diesel engines. Due to their relatively small footprint and adaptation to the conditions at hand, these systems are ideal for offshore applications, pipeline service and external installation.



CONCRETE BUILDING SOLUTIONS

We offer industrial compressors for stationary installation in concrete enclosures, well-constructed as proven in the field of CNG refuelling stations. The complete systems are delivered fully plumbed, electrically connected and tested. With minimal effort and expense, our service team installs the turnkey units on site, integrates them into your existing infrastructure and puts them into operation. Versions for installation in ex-protection zones according to ATEX are available as standard.

SKID-MOUNTED COMPACT UNITS

Complete systems mounted on a common base frame are especially suited for indoor installation in production halls or compressor rooms where a small footprint is essential. All skid-mounted solutions can be delivered as turnkey, pre-tested units with the desired approvals and put into operation on site without problems.



**WORKING AT FULL SPEED FOR THE ENVIRONMENT,
MOBILITY AND ECONOMY**



FOR A CLEAN ENVIRONMENT

Natural gas (CNG) and biomethane are becoming increasingly important as alternative fuels to petrol and diesel. The reasons for this, apart from high fuel prices, are in particular the environmental pollution that occurs during the combustion of mineral oil products.

For transport, storage and its resale, natural gas must be compressed to high pressures. High safety, the quality of the facilities and the purity of the natural gas are therefore the essential requirements for safe and economical natural gas operations.



OUR BIOMETHAN AND CNG REFUELLING STATIONS

Whether for natural gas and biomethane filling stations or for biomethane injection and recompression, for natural gas engine test benches and other special gases, we are the high-pressure specialist at your side.

Our relevant expertise guarantees you the best possible advice on the design of your projects. For every application.

Our fuel gas systems are modular, scalable and renowned for their reliability. They enable customised solutions made to measure and from a single source: including comprehensive services and all system components such as compressors, gas dryer and filter systems, storage units and fuelling equipment.

OUR COMPRESSOR UNITS FOR EACH APPLICATION

- › Series CTA/CS 120
- › Series CTA/CS 15-22
- › Series CTA/CS 23-52
- › Medium pressure series
- › HTA Series (hydrogen)
- › Accessories



Container Solution CS 15.2

REFERENCE PROJECTS

E.ON GAS MOBIL – GERMANY

E.ON & BAUER – A Success Story in environmentally friendly mobility.

Over the last couple of decades, E.ON, the world's largest private energy company, and BAUER have enjoyed a significant success story in the form of a reliable partnership between BAUER and several E.ON entities throughout Europe.

It started around the turn of the millennium, when E.ON Sverige AB, now known as E.ON Biofor Sverige AB, began work on establishing Biogas refueling stations for cars and buses in Sweden. Working as E.ON's sole partner from the very first moment, BAUER has carried out more than 50 refueling station projects in Sweden and Denmark. E.ON Denmark only recently started its activities, and has followed in the footsteps of E.ON Biofor Sverige.

BAUER also operates as one of the main CNG equipment suppliers for E.ON Gas Mobil in Germany, and has so far realized over 40 public CNG refueling station projects. This success led to new projects with E.ON in the Czech Republic, starting three years ago.

To meet the challenges involved in this work and E.ON's exacting quality requirements, BAUER is assisting the E.ON's various European companies by supplying safe and reliable equipment for NGV refueling stations.

In total, since the beginning of the millennium, BAUER has successfully put into operation more than 100 refueling stations for E.ON, spread throughout Germany, Sweden, Denmark and the Czech Republic.



ADNOC – UNITED ARAB EMIRATES

ADNOC Distribution, a subsidiary of ADNOC (Abu Dhabi National Oil Company), is one of the largest oil companies in the Arabian Gulf region, specialising in the marketing and distribution of petroleum products within the United Arab Emirates (UAE). With the expertise of BAUER KOMPRESSOREN, ADNOC Distribution is building a nationwide network of high-performance natural gas filling stations, providing environmentally friendly mobility for buses, municipal vehicles and private cars. An impressive paradigm shift in terms of environmentally friendly transport solutions.

BAUER KOMPRESSOREN has been the preferred CNG partner and supplier for ADNOC Distribution since 2008. During the realisation of their showcase project in the Gulf region, more than 3 plants equipped for particularly extreme climatic conditions are successfully in operation to date. A further expansion of the filling station network is already imminent.



E.ON - SWEDEN

E.ON AND BAUER – TOGETHER SUCCESSFUL IN CLIMATE PROTECTION

Since the beginning of February 2020, the Gothenburg transport authority in Sweden has been making an important contribution to climate protection with a new natural gas filling station: BAUER KOMPRESSOREN was commissioned by EON Sweden to construct a network of 3 filling station buildings. Inside the buildings, a total of 5 powerful compressor units of the type CS 26.10 generate a total gas delivery volume of 1960 m³/h in alternating operation.

The maximum total delivery volume of about 10 to 12 tonnes of gas per day provides the necessary capacity to refuel up to 120 buses daily. In order to ensure the climate neutrality of the filling station's operation, EON feeds the biogas required for this purpose into the gas grid in the amount refuelled. The new filling station in Gothenburg is the latest of over 40 filling station projects that have been implemented together with EON Sweden. Thanks to the smooth cooperation, the filling station was installed and commissioned on schedule.



3 x CS 26.10 DUO II



Fuelling up to 120 buses daily

BIOMETHANE / NATURAL GAS FILLING STATIONS

ENTRY LEVEL

SERIES CTA / CS 120

The CTA/CS 120 offers you the optimal entry in the tightest of spaces and with low delivery volume requirements.

The CTA/CS 120 is a compact, modular and economical solution and is particularly suitable for refuelling small fleets (cars or forklift trucks) with a daily output of up to 10 cars/day.

- › Intake pressure range: 0.05 – 0.3 bar
- › Capacity: 11 – 14 Nm³/h

**ESPECIALLY SUITED FOR
REFUELLING SMALL FLEETS.**

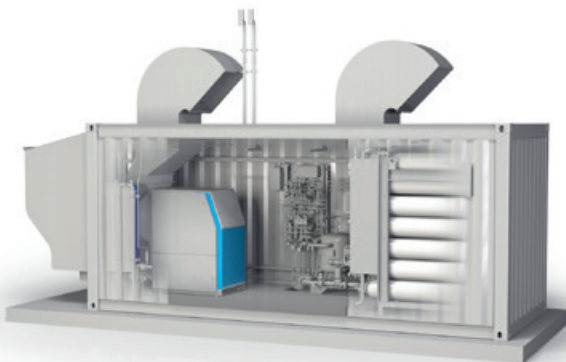


SMALL REQUIREMENTS

SERIES CTA / CS 15 - 22

Designed for a particularly high level of safety and tight spaces, these units are ideally equipped for refuelling forklift trucks or fleet vehicles. The series can be the ideal entry into the business of public filling stations and supplies natural gas for up to 100 cars/day or 10 trucks/day.

Even with these compact units, the advantages of drying on the high-pressure side, including monitoring of the pressure dew point. This increases safety and is something special on this scale.



**DEVELOPED FOR HIGH SAFETY
LEVELS AND CONFINED SPACES.**

- › Intake pressure range: 0.05 – 4 bar
- › Capacity: 35 – 72 Nm³/h

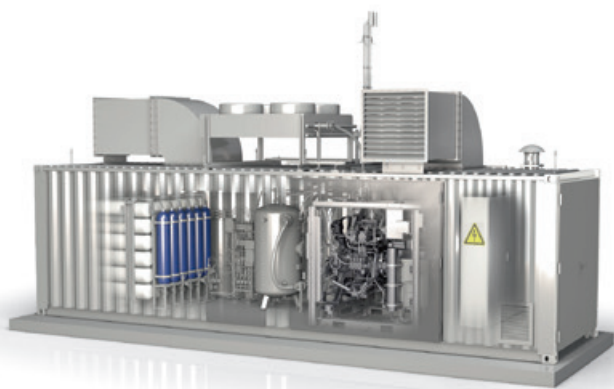
MEDIUM REQUIREMENTS

M-SERIES

This compact and expandable unit is designed for especially high safety requirements such as large depots and public refuelling stations with a daily capacity of up to 200 cars/day or 20 lorries/day.

The modular design of the M Series enables the system to be upgraded by adding a suitable compressor from our portfolio.

The saving in weight achieved by the metal housing of the system dramatically simplifies handling of the system without compromising on safety or increasing noise emissions. The modular compression system can be combined with an array of external storage systems. Our suitable compressor types offer a broad range of intake pressure options.



**PARTICULARLY SUITABLE FOR
REFUELLING OF LARGE FLEETS.**

- › Intake pressure range: 0.05 – 38 bar
- › Capacity: 62 – 711 Nm³/h

HYDROGEN

HTA SERIES

In order to achieve the energy turnaround, away from fossil fuels towards future-oriented energy sources, a worldwide conversion and restructuring is required.

The key component for compression and for fuelling hydrogen-powered vehicles, is the purity of the highly compressed fuel.

BAUER KOMPRESSOREN has started the development of hydrogen fuelling stations in the field of gas compression/gas processing/gas storage/gas distribution. In concrete terms, this means that BAUER KOMPRESSOREN will in future be able to offer you complete solutions for gas compression/gas conditioning systems/high-pressure storage systems and refuelling facilities in accordance with your specifications. The quality and durability of the products used in complex systems is an absolute prerequisite for hydrogen systems with regard to long-lasting solutions.

**BAUER - WITH DURABLE SOLUTIONS AND
RELIABLE SYSTEMS FOR HYDROGEN
APPLICATIONS**

- › Intake pressure range: 0.02 – 4 bar
- › Capacity: 0.8 – 35 Nm³/h



ACCESSORIES FOR HIGH PRESSURE NATURAL GAS APPLICATIONS



STORAGE SYSTEMS

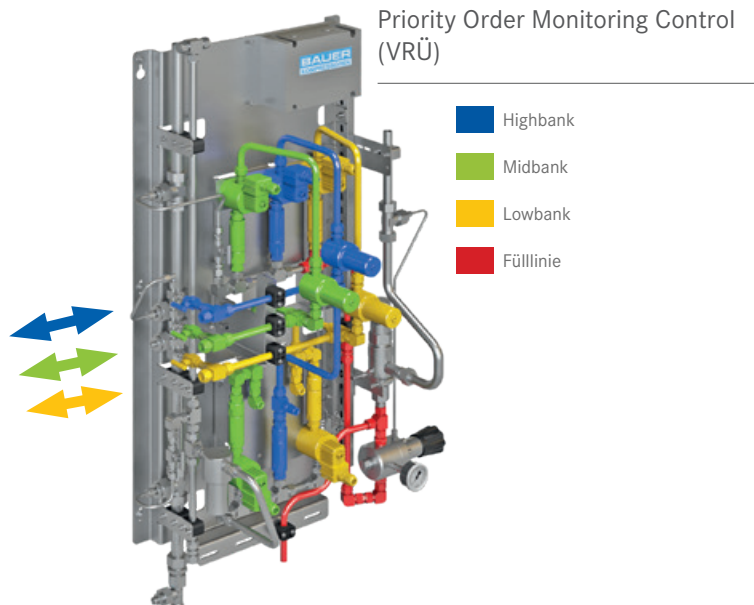
The natural gas high-pressure storage system consists of individual high-pressure tanks which are mounted together on a frame. The storage tank is designed for indoor and outdoor installation and can be optionally designed with a separate weatherproof sheet metal enclosure. Capacities range from 265 m³ - 1105 m³ of stored gas volume at 300 bar.



B3360

FILLING AND REFUELING CONTROL

It is used to control the priority filling of the high-pressure accumulator and the sequential gas withdrawal from the high-pressure accumulator. Control of one or more filling lines is possible.



DISPENSER / DISPENSER COLUMN

On request, the dispensing device can be designed with a calibratable flow measuring device, display of the dispensed refueling quantity in kg or m³, indication of the specific gas price as well as the total price in the desired currency.

The filling process is controlled by the filling and refueling control system. With the help of integration into the BAUER overall control system, economical refueling with short filling times is guaranteed.

Natural gas
pump

Natural gas tap

BIOMETHANE APPLICATIONS

In recent years, the processing of biomethane has become increasingly established. As an alternative to feeding it into the natural gas grid, it is also possible to use the biomethane directly as a fuel. In both cases, the processed biomethane is compressed and made available for further transport or storage.



1 FEEDING OF BIOMETHANE INTO THE NATURAL GAS GRID

Feeding of biomethane into a natural gas grid assures a continuous demand for gas covering a large area and guaranteed delivery of biomethane. Feeding biomethane using BAUER's proven technology can be carried out for different network types with pressure stages from PN10 (10 bar operating pressure).

In addition to biomethane filling stations, which provide the biomethane as fuel for vehicles in the same way as natural gas, BAUER has developed and successfully implemented the following biomethane applications based on its many years of experience with high-pressure systems:

2 RECOMPRESSION INTO A HIGHER-LEVEL NETWORK

This application is closely related to the production of biomethane and is the ideal system for seasonal compensation of transport network fluctuations and network overloads. In the event of overload of a low-pressure line, for example from increased feed-in of biomethane, the excess natural gas/biomethane mixture can be transferred into a higher-level network and fed into it. In this way, existing buffer volumes in high-pressure transport networks can be exploited and possible gas flaring thereby prevented.





CNG TEST BENCH SUPPLY

The development of CNG-driven engines requires extensive testing under real conditions. For this reason, continuous running operation is simulated under extreme conditions, checking the engine characteristics and performance data in detail.

BAUER KOMPRESSOREN has developed and successfully launched special systems for supplying CNG to engine test benches. From supplying a single test point or several in parallel, to new installations or expanding existing test benches – we offer solutions made to measure and, of course, in accordance with local and international regulations.

The natural gas supply is designed to match the existing infrastructure in accordance with the effective needs of the test benches. CNG transfer points with the required final pressure, the corresponding safety infrastructure and data interfaces for the test bench control station complete the safe supply of gas.

All system components are coordinated to run smoothly together. The modular design of the system makes it possible to achieve small, medium or high daily capacities, according to the needs of the engine test benches.

A man with dark hair and a focused expression is working on a piece of industrial machinery. He is wearing a blue long-sleeved shirt. The machinery features a large, prominent silver-colored fan with many blades. The background is slightly blurred, showing more of the industrial environment. A blue square graphic element is positioned to the left of the text box.

**FOR US, SERVICE IS ALL
PART OF THE PRODUCT**

SERVICE

A CLASS OF ITS OWN

BAUER KOMPRESSOREN is here for you, all over the world. With our 22 subsidiaries and over 50 national representatives with their extensive service networks, we offer our customers the shortest possible service routes, together with a comprehensive range of services ranging from spare parts delivery to service contracts and an extensive training programme.

SERVICE CONTRACTS

The satisfaction of our customers is our benchmark. That is why BAUER KOMPRESSOREN supplies you not only with the product, but also a service package that precisely meets your requirements. Choose from a wide range of grades and variants: from a simple and low-priced inspection contract up to a full service or 24-hour contract.

MODERNISATION

If needed, we will update your compressor unit to state-of-the-art technology – for example, when replacement of a pressure vessel is due or a purification system with increased capacity is required. We update electrical controls and programs or replace your old compressor block for a new one.

REMOTE MAINTENANCE

If required we can offer comprehensive monitoring of your compressor unit from BAUER, in combination with our 24-hour service. Settings can be done around the clock using an online connection via the internet or mobile. Status messages such as operating hours and volumes of sold (air/gas) quantities, maintenance requirements and/or malfunction messages are transmitted as text messages or e-mails.



**BAUER SERVICE: FROM SIMPLE INSPECTION
UP TO A FULL SERVICE CONTRACT.**

SPARE PARTS

Because true quality remains important even after decades, you are guaranteed spare parts for years, even for models which have long been discontinued in our delivery programme. BAUER KOMPRESSOREN keep stocks of most spare parts for models for as long as 25 years after discontinuation of the respective compressor type – and these parts are available for delivery immediately. Even spare parts for very old models can be delivered on request. Spare parts for units under 5 years old can be supplied within 24 hours! For electronic components such as controls, BAUER KOMPRESSOREN offers a replacement service. Parts in need of replacement are returned and replaced with an equivalent, tested component. The repair times normally involved are no longer critical.

SPARE PARTS IN STOCK UNTIL 25 YEARS AFTER PRODUCTION STOP

RENTAL UNITS

Even if you need a rental or exchange unit, BAUER will provide you with fast and uncomplicated support, so that your operations can continue seamlessly and smoothly. Rental and exchange units are available in the usual sizes. Returning or trading in old units is also possible. In case of outstanding maintenance works, we can place replacement units at your disposal for the duration of the works.

TRAINING

In order to continuously keep your personnel up-to-date, we offer our customers an extensive practice-based training programme. Here, we share our expertise directly with users and operators with easy-to-understand courses that are adapted to individual requirements. Training for all BAUER units, controls and accessories takes place at qualified BAUER locations or service partners; also, if you wish training can be arranged at your company.



BAUER WORLDWIDE

AUSTRALIA

BAUER KOMPRESSOREN Australia Pty. Ltd.

19 Cavasinni Place
Wetherill Park
Sydney, NSW 2164, Australia
Tel: +61 (0) 2 9756 2700
Fax: +61 (0) 2 9756 1700
enquiries@bauer-kompressoren.com.au
www.bauer-kompressoren.com.au

AUSTRIA

BAUER KOMPRESSOREN Ges.m.b.H

IZ NÖ, Süd Str. 3, Obj. 26
2355 Wiener Neudorf, Austria
Tel: +43 (2236) 63625
Fax: +43 (2236) 62952
info@bauer-kompressoren.at
www.bauer-kompressoren.de

CHINA/HONG KONG

BAUER KOMPRESSOREN China Ltd.

Unit 1802 Seaview Centre
139-141 Hoi Bun Road
Kwun Tong, Kowloon
Hong Kong, China
Tel: +852 2595 1898
Fax: +852 2595 0878
bkc@bauerchina.com
www.bauerchina.com

BAUER KOMPRESSOREN Shanghai Ltd.

#97, Honghe Road
Min Hang, Shanghai 200245, China
Tel: +86 21 5471 3598
Fax: +86 21 5471 3818
sales.sh@bauerchina.com
www.bauerchina.com

BAUER KOMPRESSOREN Beijing Ltd.

4-1012 Purple International
#2 Yinhe South Str.
Shijingshan, Beijing, 100040, China
Tel: +86 10 6870 5035
Fax: +86 10 6870 5036
sales.bj@bauerchina.com
www.bauerchina.com

EGYPT

BAUER KOMPRESSOREN EGYPT Ltd.

1, Road 273, New Maadi
11728 Cairo, Egypt
Tel: +2 02 275-45076
Fax: +2 02 270-49755

El Nasr Street, El Dahar
Hurghada - Red Sea, Egypt
Tel: +2 065 355-2747
Fax: +2 065 355-2747
info@bauer-compressors.com.eg
www.bauer-compressors.com.eg

FRANCE

BAUER COMPRESSEURS SAS

60 Ave. Franklin D. Roosevelt
73100 Aix-Les-Bains, France
Tel: +33 (4) 7988 21 00
Fax: +33 (4) 7988 21 14
info@bauer-compresseurs.com
www.bauer-kompressoren.com

INDIA

BAUER KOMPRESSOREN India Pvt. Ltd.

Plot No. 128, T Block, MIDC,
Bhosari Pimpri-Chinchwad
411026 Bhosari I.E., India
Tel: +91 (20) 673 081 00 -07
Fax: +91 (20) 274 870 00
info@bauer-kompressoren.in
www.bauer-kompressoren.com

ITALY

BAUER COMPRESSORI S.R.L. Unipersonale

Via Galileo Galilei 9
36057 Arcugnano (VI), Italy
Tel: +39 0444 653 53
Fax: +39 0444 653 600
info@bauer-compressori.com
www.bauer-kompressoren.com

JAPAN

BAUER COMPRESSORS Co. Ltd.

10-36 Ryutsu-Centre
Kitakami-shi
Iwate-ken
024-0014, Japan
Tel: +81 19 768 2251
Fax: +81 19 768 2225
t-oitome@bauer.co.jp
www.bauer.co.jp

MIDDLE EAST

BAUER KOMPRESSOREN GCC FZE

P.O. Box 261413
Warehouse Unit # AF07
Jebel Ali Free Zone, South 1
Dubai, UAE
Tel: +971 4 8860259
Fax: +971 4 8860260
info@bauer-kompressoren.ae
www.bauer-kompressoren.com

RUSSIA

BAUER KOMPRESSOREN OOO

Polkovaya ulitsa 3, Build. 4
Office 1
Moscow, 127018, Russia
Tel: +7 499 951-9552
Fax: +7 499 951-9554
office@bauer-compressors.ru
www.bauer-kompressoren.com

SINGAPORE

BAUER COMPRESSORS ASIA Pte Ltd.

25 Pandan Crescent
#01-10 Tic Tech Centre
Singapore 128477, Singapore
Tel: +65 6271 6271
Fax: +65 6272 3345
info@bauer-asia.com
www.bauer-asia.com

SOUTH KOREA

BAUER KOMPRESSOREN Korea Ltd.

#607, KolonTechnoValley, 56,
Digital-ro, 9-gil (RD),
Geumcheon-gu
Seoul, 153-770, South Korea
Tel: +82 2 868 9974
info@bauercomp.co.kr
www.bauer-kompressoren.com

SPAIN

BAUER KOMPRESSOREN IBÉRICA, S.L.

Polígono Industrial Sesrovires
C/Ricardo de la Cierva, 54
08635 Sant Esteve Sesrovires
Barcelona, Spain
Tel: +34 936726036
Fax: +34 936531322
info@bauer-kompressoren.es
www.bauer-kompressoren.com

UNITED KINGDOM

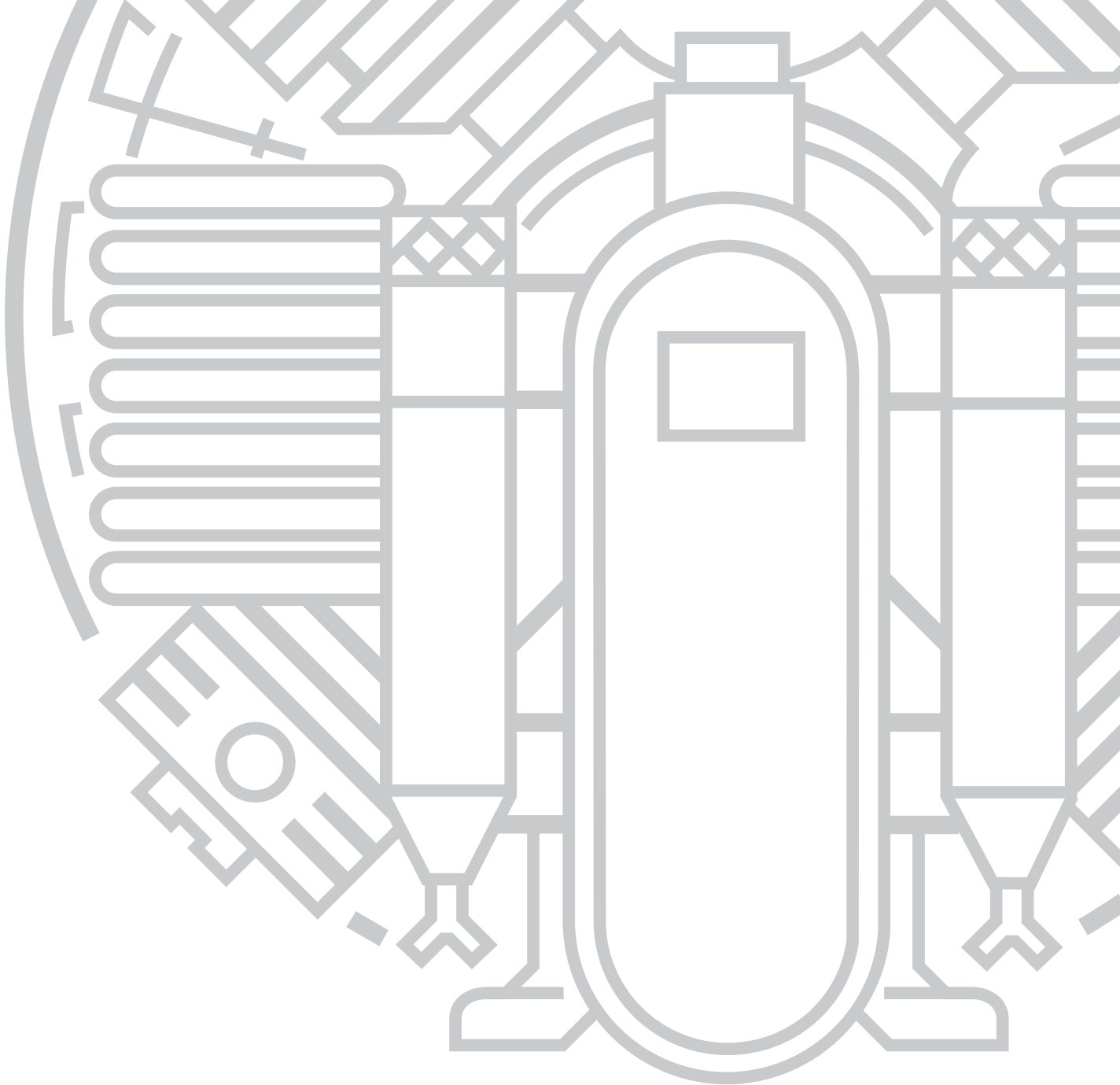
BAUER KOMPRESSOREN UK Ltd.

Unit 410 Haydock Lane
Haydock Industrial Estate
St Helens, Merseyside, WA11 9TH,
United Kingdom
Tel.: +44 (0) 1942 724248
Fax: +44 (0) 1942 725640
general@bauer.uk.com
www.bauer-kompressoren.com

USA

BAUER COMPRESSORS INC.

1328 Azalea Garden Road
Norfolk, Virginia 23502, USA
Tel: +1 (757) 855 60 06
Fax: +1 (757) 857-1041
sls@bauercomp.com
www.bauercomp.com



INTERESTED IN ONE OF OUR PRODUCTS?

CONTACT US – WE ARE HAPPY TO PROVIDE
INFORMATION AND ASSISTANCE.

BAUER KOMPRESSOREN GmbH
Stäblistr. 8
81477 Munich, Germany
Tel. +49 (0) 89 78049-0
Fax +49 (0) 89 78049-167
info@bauer-kompressoren.de
bauer-kompressoren.de



PRODUCT OVERVIEW EN

N37488

03.2023

Subject to change without notice