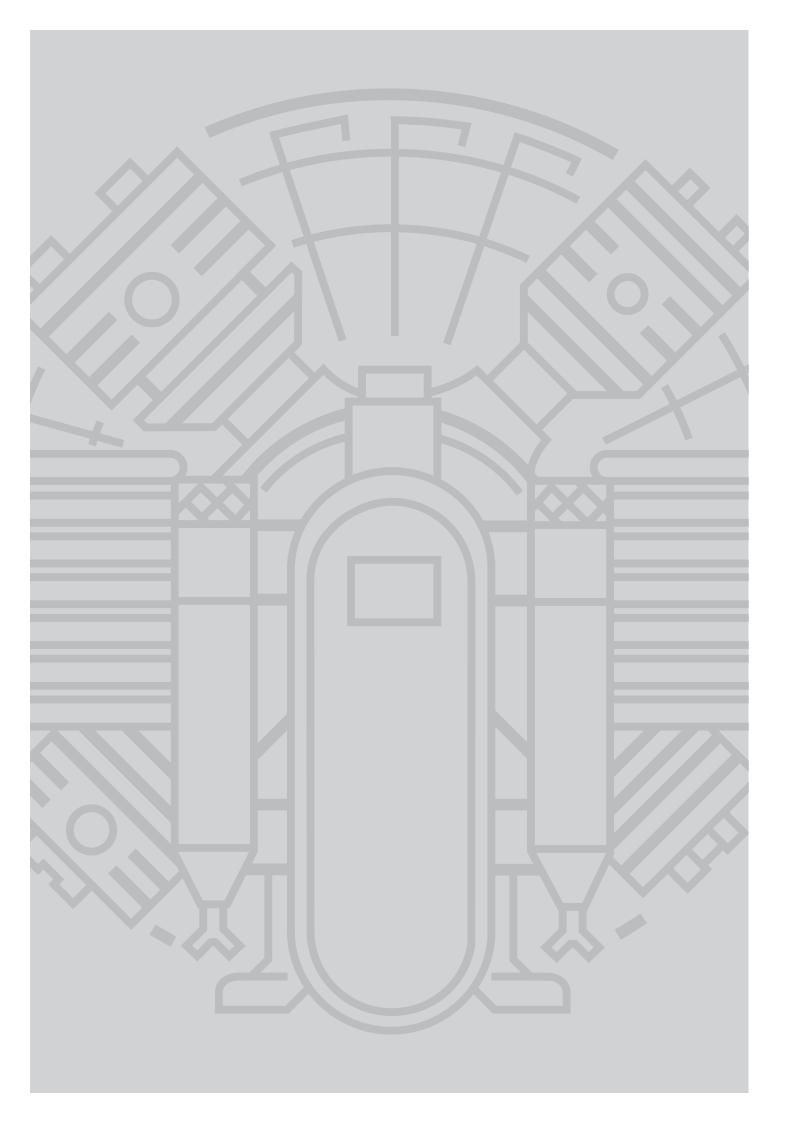


# PRODUCT OVERVIEW

COMPRESSOR SYSTEMS & ACCESSORIES FOR MEDIUM AND HIGH PRESSURE



SAFETY PRECISION INDEPENDENCE GLOBAL



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# HIGH PRESSURE PERFECTION

# BAUER KOMPRESSOREN IS A GLOBAL LEADER IN THE MANU-FACTURE 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 70 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 firefighters 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.

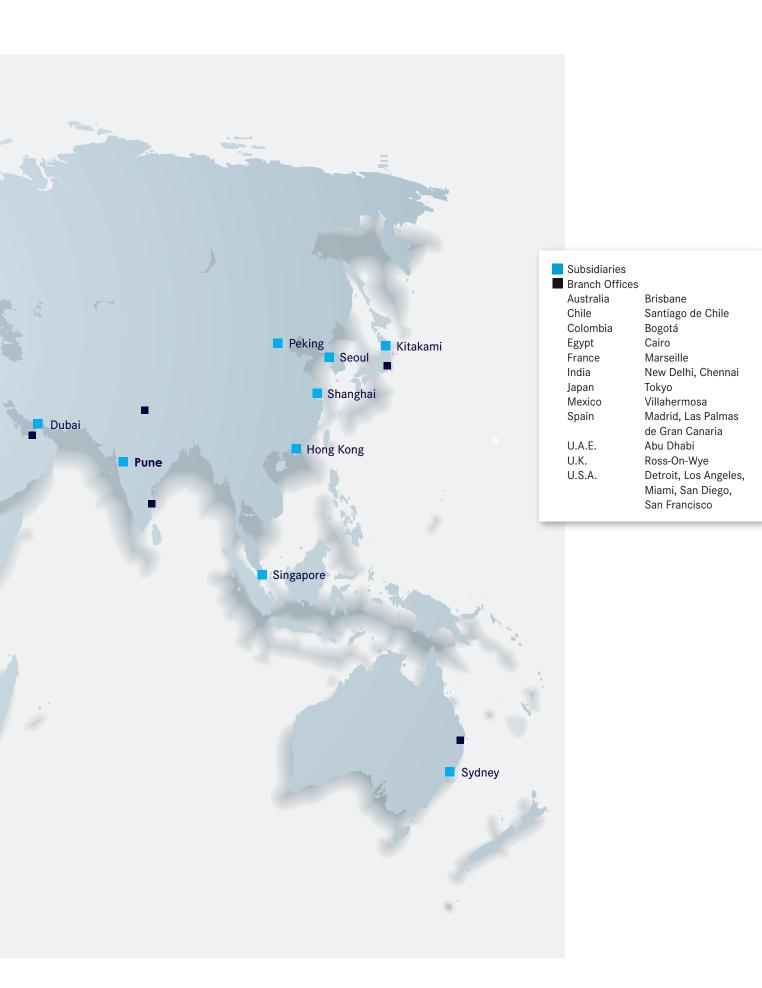
MODULAR UNIT CONCEPTS, TAILOR-MADE SOLUTIONS.

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# BAUER KOMPRESSOREN – WORLDWIDE SUCCESS, GLOBAL NETWORK



BAUER KOMPRESSOREN PRODUCT OVERVIEW | COMPANY | 7



8 | COMPANY | PRODUCT OVERVIEW BAUER KOMPRESSOREN

# 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.

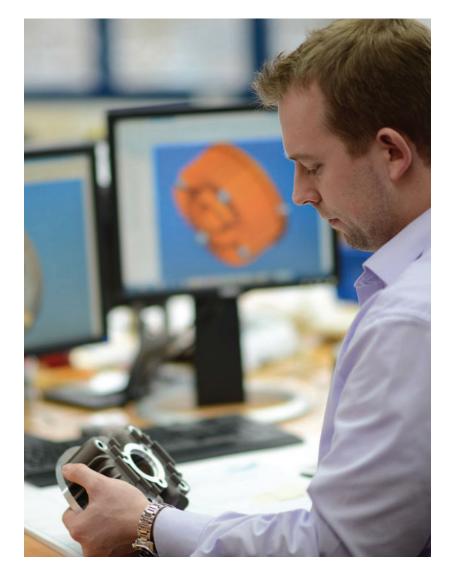
In 1946, his son Hans Bauer launched a post-war German success story. Bauer started by developing low-pressure compressors, quickly recognising the potential for novel high-pressure compression technology. Accordingly, in the 1960s, BAUER KOMPRESSOREN rose to become the global leader in the manufacture 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 highpressure 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 KOMPRESSOREN PRODUCT OVERVIEW | COMPANY | 9

# **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.



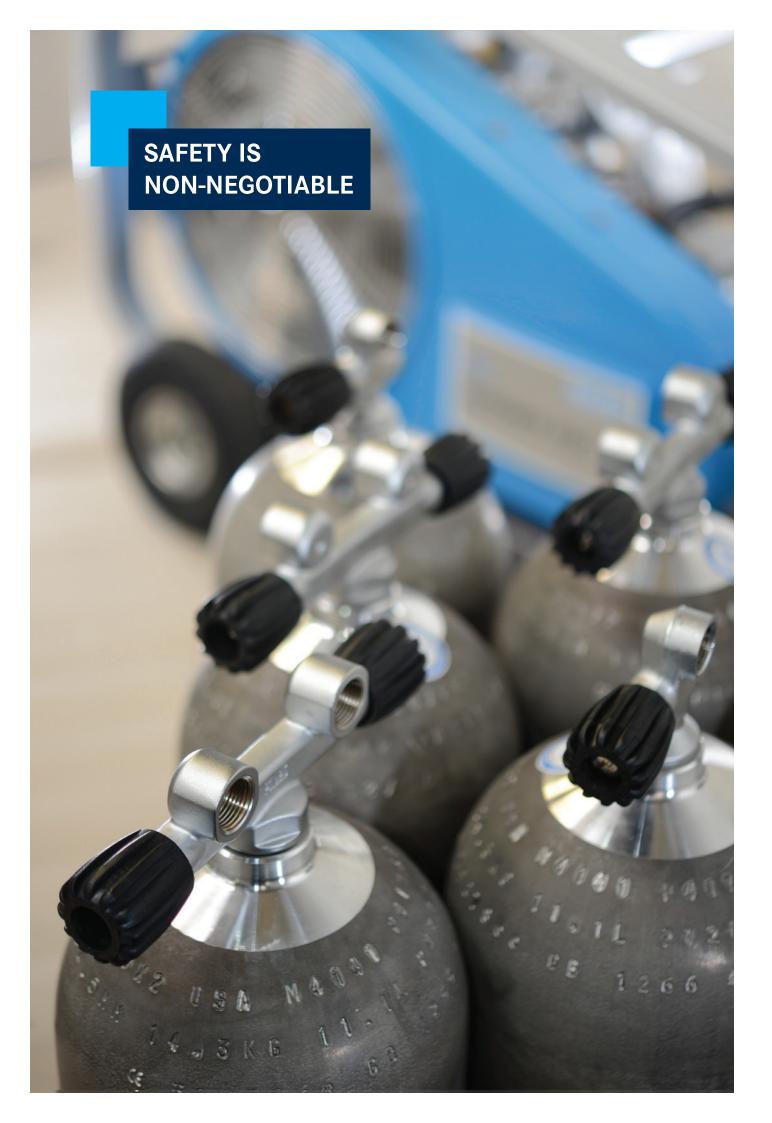
# BAUER DELIVERS COMPLETE SOLUTIONS

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.



# 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, CO<sub>2</sub>, O<sub>2</sub>, with functions for absolute humidity and total oil value (VOC)1 - ensuring you can breathe freely and safely.











#### **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 cylin-

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 I/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





#### **PROFILINE**

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.



Pressure range: 225 - 420 bar

Charging rate: 150 - 320 l/min

Motor power: 4 - 7.5 kW



> Pressure range: 225 - 420 bar

) Charging rate: 450 - 680 I/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 I/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.

# **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 I/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 - 330 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 I/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**

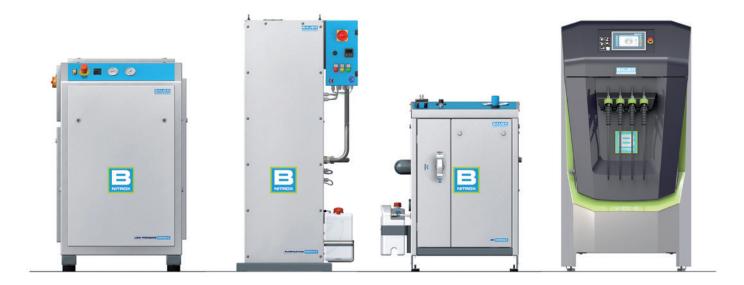
#### **B-NITROX MEMBRANE SYSTEMS**

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 bar
- ) Charging rate: 260 450 l/min
- Oxygen content: up to 40% O<sub>2</sub>



# **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 mem brane system.

Suitable for a compressor delivery capacity of:



> 260 - 450 I/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:



# H<sub>2</sub>S 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 H<sub>2</sub>S 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.



# 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.



# **AERO-GUARD**

# RELIABLE REDUCTION OF CO<sub>2</sub> CONTENT

AERO-GUARD assures efficient reduction of  ${\rm CO_2}$  content in unfavourable environmental conditions when the compressor intake air contains an increased proportion of  ${\rm CO_2}$ .

# **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 P 21, P 31, P 41 and P 42 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 alway 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.





### **B-APP**

B-APP allows users to remotely control and monitor compressors with the new B-CONTROL MICRO<sup>1</sup>. B-APP also offers additional features such as product-specific news, videos, an integrated dealer search function and calculation tools.





# 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 SPFFD 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

BAUER offers an extensive range of filling panels designed either for direct mounting on the unit or for external wall mounting. They can be used for all breathing air compressor units as an accessory; special versions of filling panels are also available.

Depending on your requirements, filling panels are offered with 1, 2, 4, 6 or 10 filling valves and in stainless steel versions. When filling panels are used with a pressure reducer, breathing air cylinders with different pressure ranges can be filled simultaneously.

The filling fittings are manufactured from highly pressure-resistant brass and are therefore extremely resistant to the extreme differences of climatic conditions throughout the world.

When equipped with an optional remote control, external filling panels are also suited for installation in a separate room.



# **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.



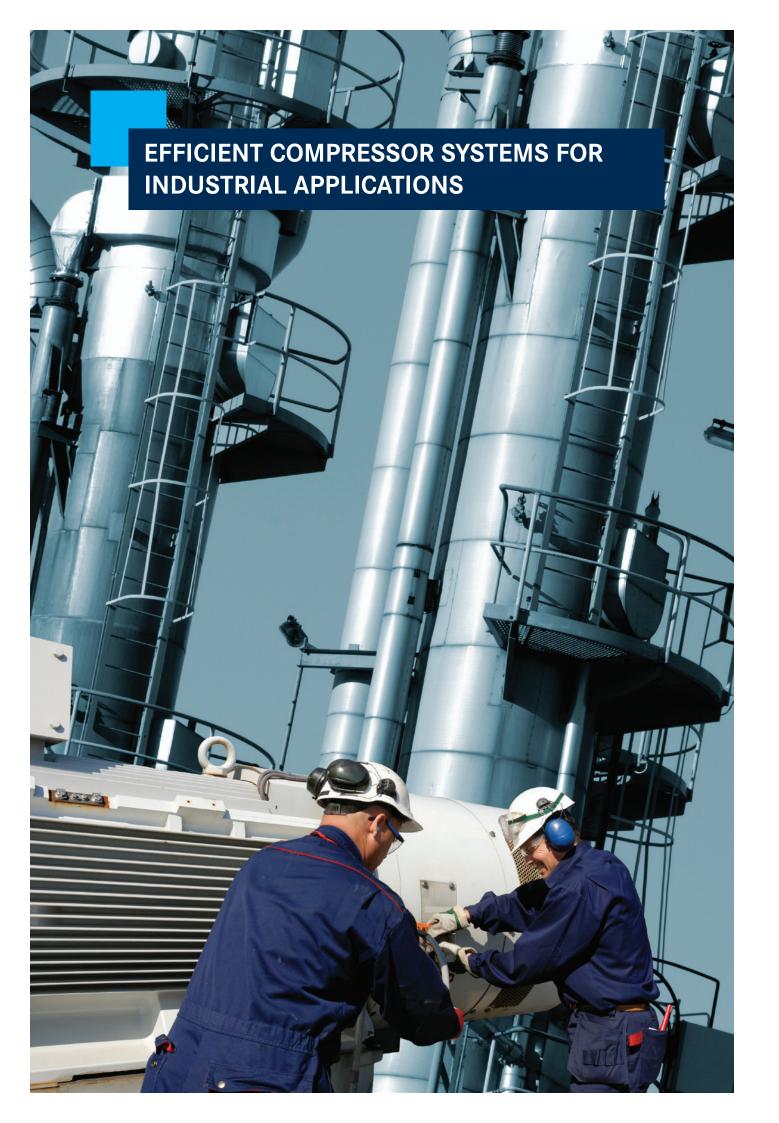


#### **B-SAFE**

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.



# 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



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# AIR-COOLED COMPRESSOR AND BOOSTER UNITS

# **DS SERIES**

The compressors of the DS Series are direct-coupled and air-cooled. Because of their low centre of gravity and conventional compressor control system in addition to optional electrical or diesel drive, these units are perfect for use on board ships. Furthermore, their compact design allows for space-saving installation in confined spaces.

Pressure range: 35 - 40 bar

) Charging rate: 200 - 3,020 I/min

Motor power: 4 - 45 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.

The tailor-made electronic B-CONTROL controls support the option to operate the compressors in this series as standalone units, combined with other units and on a higher-level network.

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 - 750 l/min

Motor power: 3 - 15 kW





# K 22 - K 28 SERIES

Horizontal design, V-belt drive, a robust and proven system. Whether for standard industrial applications using compressed air or mounted as mobile systems for off-road use, these air-cooled units are reliable, robust, and the first choice for many customers.

> Pressure range: 30 - 500 bar

> Charging rate: 800 - 6,800 I/min

Motor power: 15 - 110 kW



#### **PE-VE INDUSTRIE**

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: 90 - 420 bar

) Charging rate: 85 - 750 I/min

Motor power: 3 - 15 kW



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# 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 - 420 bar

> Charging rate: 1,300 - 22,800 I/min

Motor power: 30 - 315 kW



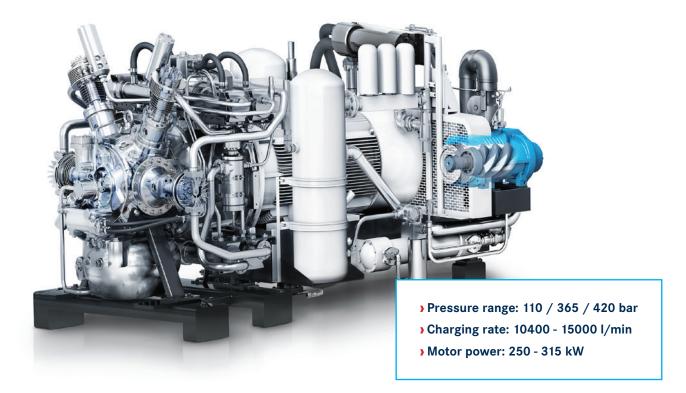
# **GIB-SP SERIES**

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.



# **NITROGEN GENERATORS**

# **SNG RANGE**

Integrated complete solutions for mobile or stationary use: with proven membrane technology in combinaition with reliable high pressure compressors from BAUER KOMPRESSOREN.

) Pressure range: 345 - 410 bar

) Charging rate: 200 - 710 I/min

Motor power: 22 - 45 kW



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# **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 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-MESSENGER**

The B-MESSENGER allows remote access to the compressor via mobile radio/internet. Thus, it is possible to access the B-CONTROL II or B-CONTROL SUPERIOR compressor control units from almost anywhere via PC or laptop, using protected VPN access.

In addition, warnings and malfunction messages can be sent from the compressor to the operator's mobile phone. In this way, the operator is always informed of the compressors' status, even from remote locations.

# **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.







#### REMOTE MAINTENANCE

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



ONLINE CONNECTION ROUND THE CLOCK

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# **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, CO<sub>2</sub> and H<sub>2</sub>S, 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 - 500 bar

> Charging rate: 85 - 3,500 I/min

# SECCANT - REGENERATION DRYER

These regeneration dryers operate in the 90 to 350/420 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 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: 90 - 420 bar

> Charging rate: 500 - 3,500 I/min



# **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 to approx. +3°C 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 I/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  $CO_2$  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 I/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.

For sampling, fast analysis or sampling devices for laboratory evaluation are available, such as AEROTEST for measuring  $H_2O$ , CO,  $CO_2$  and oil indication, or the RCS Oiltube for separate sampling in order to perform further analysis in accredited laboratories. Both systems are suitable for high-pressure applications.

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.



# 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, 360, 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.





# **MAKING A CLEANER ENVIRONMENT**

Natural gas (CNG) and biogas are increasingly gaining importance as alternative fuels to petrol and diesel, because combustion of mineral oil products increases the impact on the environment as well as being highly expensive.

Natural gas has to be compressed to high pressures for transport, storage and selling on. Therefore, a high level of safety, proven quality of the compressor units and the purity of the natural gas are the essential requirements for safe and economic natural gas operations.



# **OUR CNG REFUELLING STATIONS**

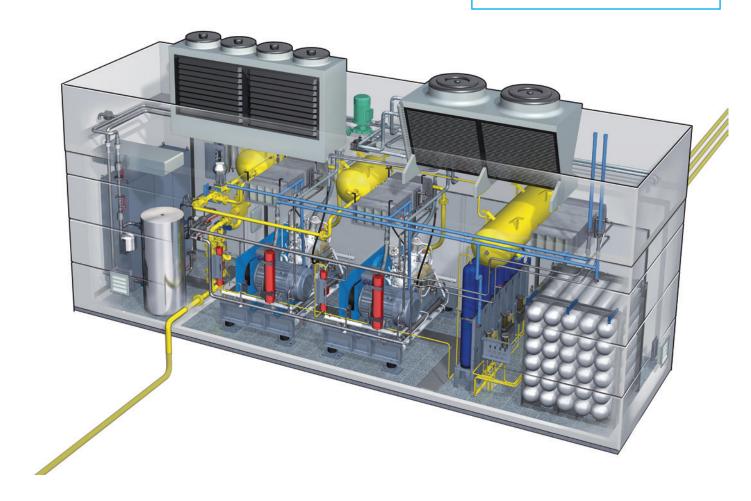
Whether for CNG, biomethane refuelling stations, biomethane feed and recompression, natural gas engine test benches or other special gases - we are the high-pressure specialists at your side. Our relevant expertise guarantees you the best possible advice regarding the design of your projects, whatever the application.

Our FGS systems are modular, scalable and renowned for their reliability. They enable solutions to be sourced from a single supplier covering all system components such as compressors, gas dryers and purification systems, storage units, refuelling devices, and our own services. All system components are coordinated to run smoothly together.

We offer you: 100% BAUER quality, made in Germany.

# **OUR COMPRESSOR UNITS** FOR EACH APPLICATION

- Mini Fill ECO Series
- > COMPACT Series
- > M-SERIES
- > CFS ECO Series
- X-FILL Series
- > INDOOR Series
- Accessories



# 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 biggest oil corporations in the Arabian Gulf, specialising in marketing and sales of petroleum products within the United Arab Emirates (UAE). Using the expertise of BAUER KOMPRESSOREN, ADNOC Distribution built a nationwide network of efficient CNG refuelling stations, bringing eco-friendly mobility to municipal vehicles and private cars. An impressive paradigm shift in terms of environmentally friendly transport solutions.

Since 2008, BAUER KOMPRESSOREN has been the privileged CNG partner and supplier for ADNOC Distribution. During the realisation of their showcase project in the Gulf region, over 33 units have been successfully installed to date, equipped to cope with extreme climatic conditions. Further expansion of the refuelling stations network is imminent.







# GAZPROM - RUSSIA

# CLEAN FUEL FOR A BEAUTIFUL REGION OF OUR PLANET

Clean fuel for a beautiful region of our planet. The gasification initiative in Russia envisages the increasing use of methane as clean fuel. In addition to the creation of new sales markets for the region's natural gas, protection of the environment is of primary importance. Thus, BAUER's co-operation with Gazpromtransgaz Tomsk provided Gornij Altaj with a newest-generation refuelling station with stateof-the-art technology, developed for extreme conditions of -50 °C to +50 °C.

"Gazprom started a major project in the field of CNG for public and private transport methods. We took a close look at distinguished compressor manufacturers from all over the world... At that time we decided to test compressors from BAUER on Gazprom devices ... and here we see the result of our successful co-operation."

Vitaly Markelov - Deputy Chairman of OAO Gazprom during the inauguration of the project.





# **REFUELLING STATIONS**

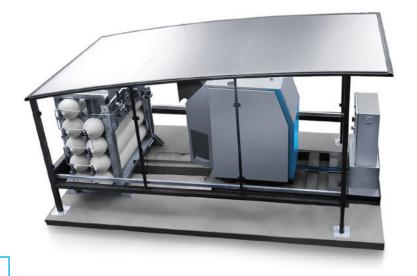
# **ENTRY LEVEL**

# MINI FILL ECO 120 SERIES

Small in terms of capacity, but uncompromisingly big on safety, the MFS 120-ECO Series is an excellent entry-level solution for low demand and for very confined spaces for refuelling your vehicles with CNG.

With an output capacity of up to 10 cars/day, the units are particularly suited for refuelling small fleets (cars or fork-lift trucks).

- Intake pressure range: 0.02 0.3 barg
- ) Capacity: 11 15 Nm<sup>3</sup>/h



ESPECIALLY SUITED FOR REFUELLING SMALL FLEETS.



DEVELOPED FOR HIGH SAFETY LEVELS AND CONFINED SPACES.

# **SMALL REQUIREMENTS**

# COMPACT 15 - 22 SERIES

These systems are designed and built to provide extra-high safety levels and small footprints, and are ideal for refuelling fork-lift trucks or fleet vehicles. The systems in the series are also suitable as entry-level systems for public refuelling stations and have a capacity of up to 70 cars or 7 lorries per day.

Despite their compact dimensions, these systems also offer all the benefits of drying on the high-pressure side, including pressure dew point monitoring – an extra safety feature that is rare in this class of system. Thanks to the modular design of the COMPACT Series, the systems can be used with the ideal compressor type for the application at hand.

- Intake pressure range: 0.02 4 barg
- ) Capacity: 30 78 Nm<sup>3</sup>/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.

- Intake pressure range: 0.02 38 bar.
- ) Capacity: 64 311 Nm<sup>3</sup>/h

# MAJOR REQUIREMENTS

# X-FILL SERIES

The X-FILL Series is especially suited for large public refuelling stations with a high daily capacity of more than 200 cars/day or 25 lorries/day. Flexibly designed, it can be customised to match every situation.

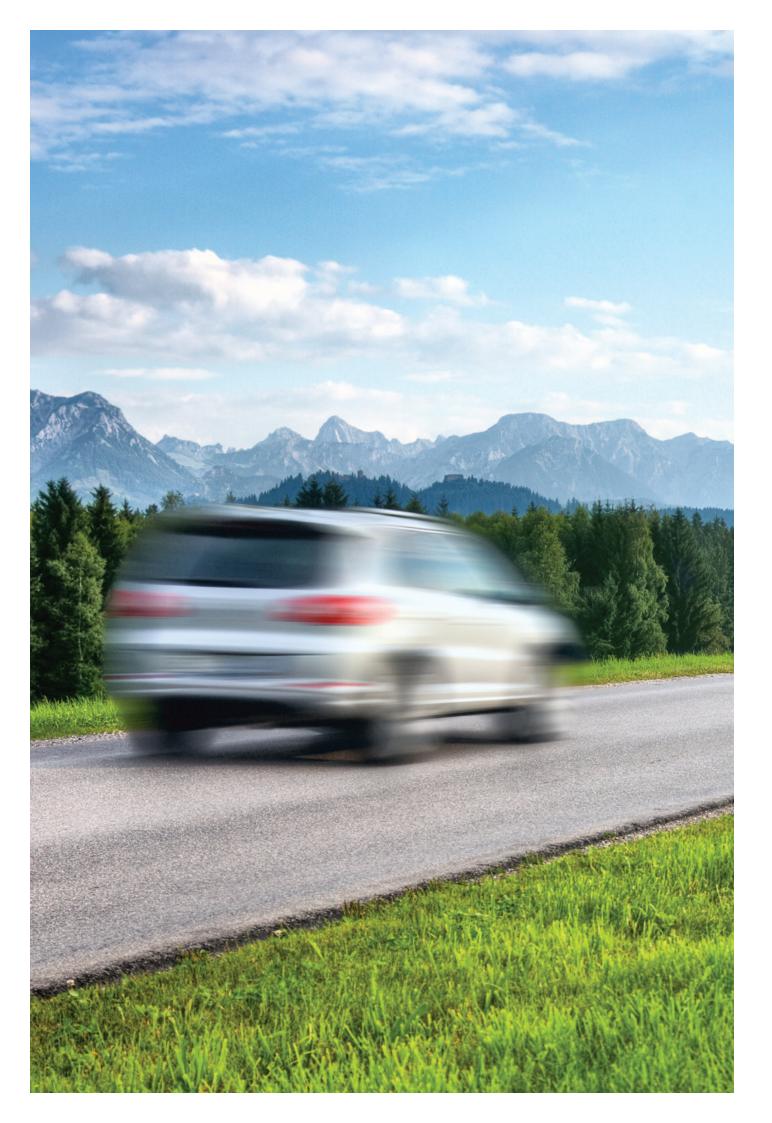
Here too, weight savings were a top priority to simplify transport of the turnkey system. The complete compressor system is therefore integrated into a weatherproof metal housing. With its modular design and extensive array of suitable compressor models and storage units, the system matches a wide range of project requirements.

The water-cooled compressor model delivers optimum cooling at low noise emission levels.

- Intake pressure range: 0.02 38 barg
- ) Capacity: 177 1505 Nm<sup>3</sup>/h

# SIMPLE TO OPERATE AND EASILY EXPANDABLE AS VEHICLE REFUELLING NEEDS INCREASE.





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# **INDOOR RANGE**

# FROM COMPACT TO X-FILL

If the customer already has premises available for the CNG application and the installation needs to be carried out within existing infrastructure, the CTA Indoor range is the right choice.

The refuelling units of the CTA Indoor range have been designed for indoor installation based on all available CNG compressor types used in the BAUER portfolio. The modular construction of the system allows for low, medium or high daily capacities.



# **ACCESSORIES FOR CNG APPLICATIONS**

# STORAGE SYSTEMS

The CNG high-pressure storage system is based on individual high-pressure vessels which are mounted together on a frame. The storage system is destined for indoor and outdoor installation and can optionally be executed with a separate, weatherproof steel plate or concrete enclosure.

EXPANDABLE AT ANY TIME THANKS TO ITS MODULAR DESIGN.

# FILLING AND REFUELLING CONTROL SYSTEM

The control system regulates the priority filling of the high-pressure storage system as well as sequential gas extraction from the high-pressure storage system. Control of a single or multiple filling lines is possible.

# FILLING POST/CNG DISPENSER

These are used for depot refuelling or for public refuelling stations. The dispensing device can be executed with a calibrated flow meter, display of the discharged fuel amount in kg or m³, indication of the specific gas price and of the total price in the desired currency.

The filling process is regulated by the filling and refuelling control system. Thanks to the integration into the overall control system from BAUER, economical refuelling with short filling times is ensured.

# **BIOMETHANE APPLICATIONS**

In recent years, purification of biomethane has become increasingly established. It is possible to use biomethane directly as an alternative fuel, or feed it into the natural gas grid. In both cases, the purified biomethane is compressed and made available for further storage or transportation.

In addition to developing biomethane filling stations which supply biomethane as vehicle fuel under the same conditions as natural gas, BAUER has used its long-standing experience with high-pressure systems to successfully realise the following biomethane applications:



# 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).

# 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.





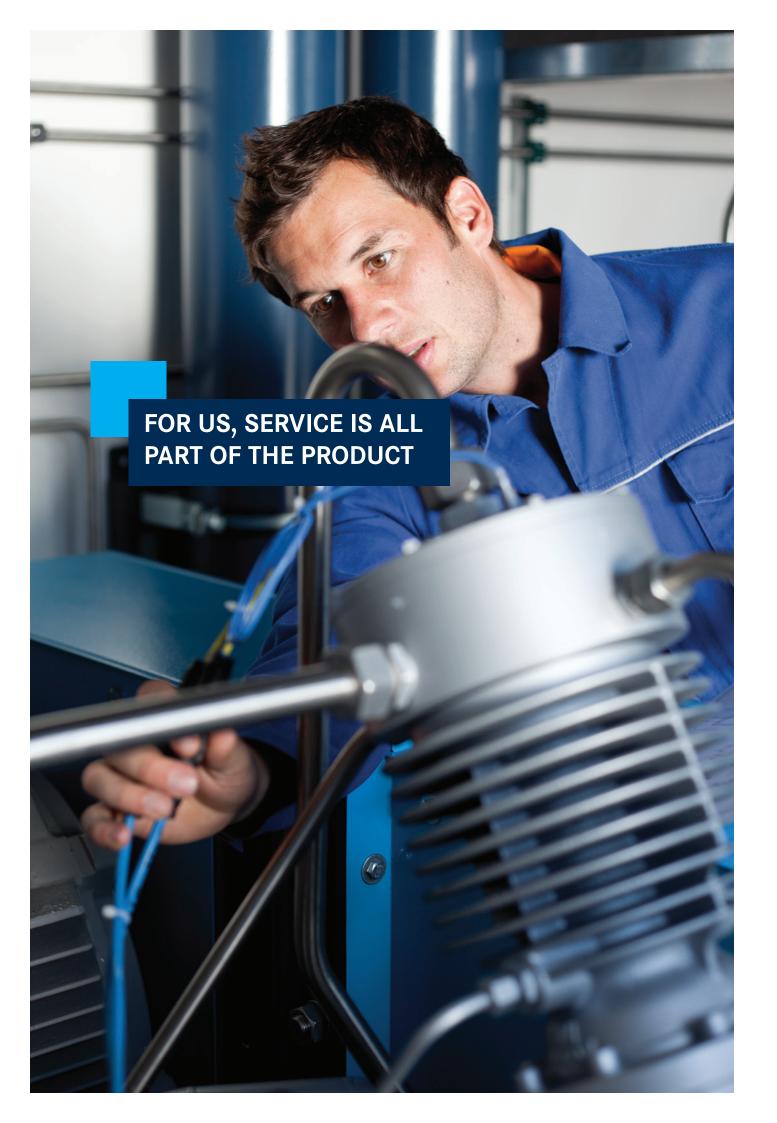
# **NATURAL GAS SUPPLY FOR TEST BENCHES**

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 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.





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# 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**

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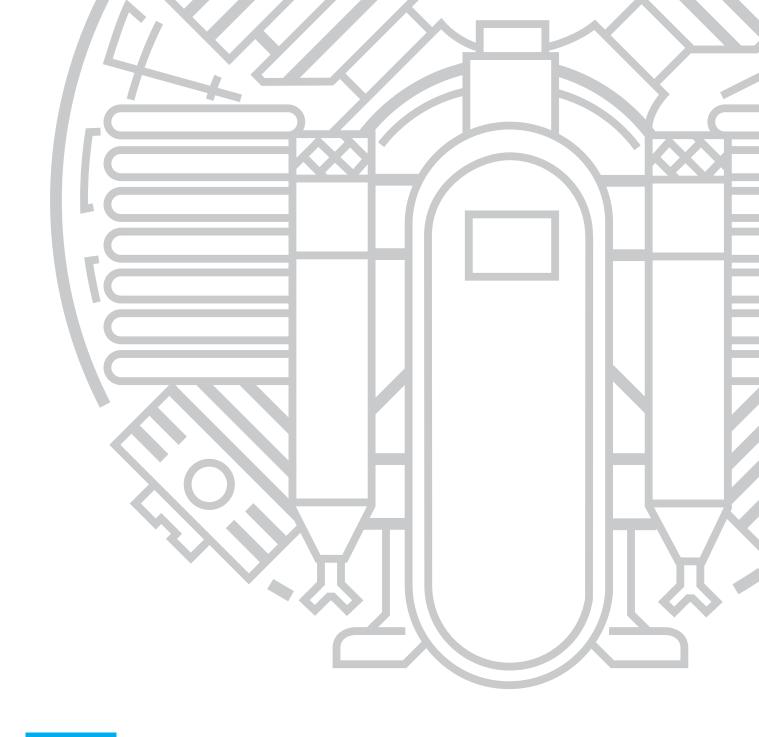
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# INTERESTED IN ONE OF OUR PRODUCTS?

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

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# PRODUCT OVERVIEW EN

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