



AERZEN

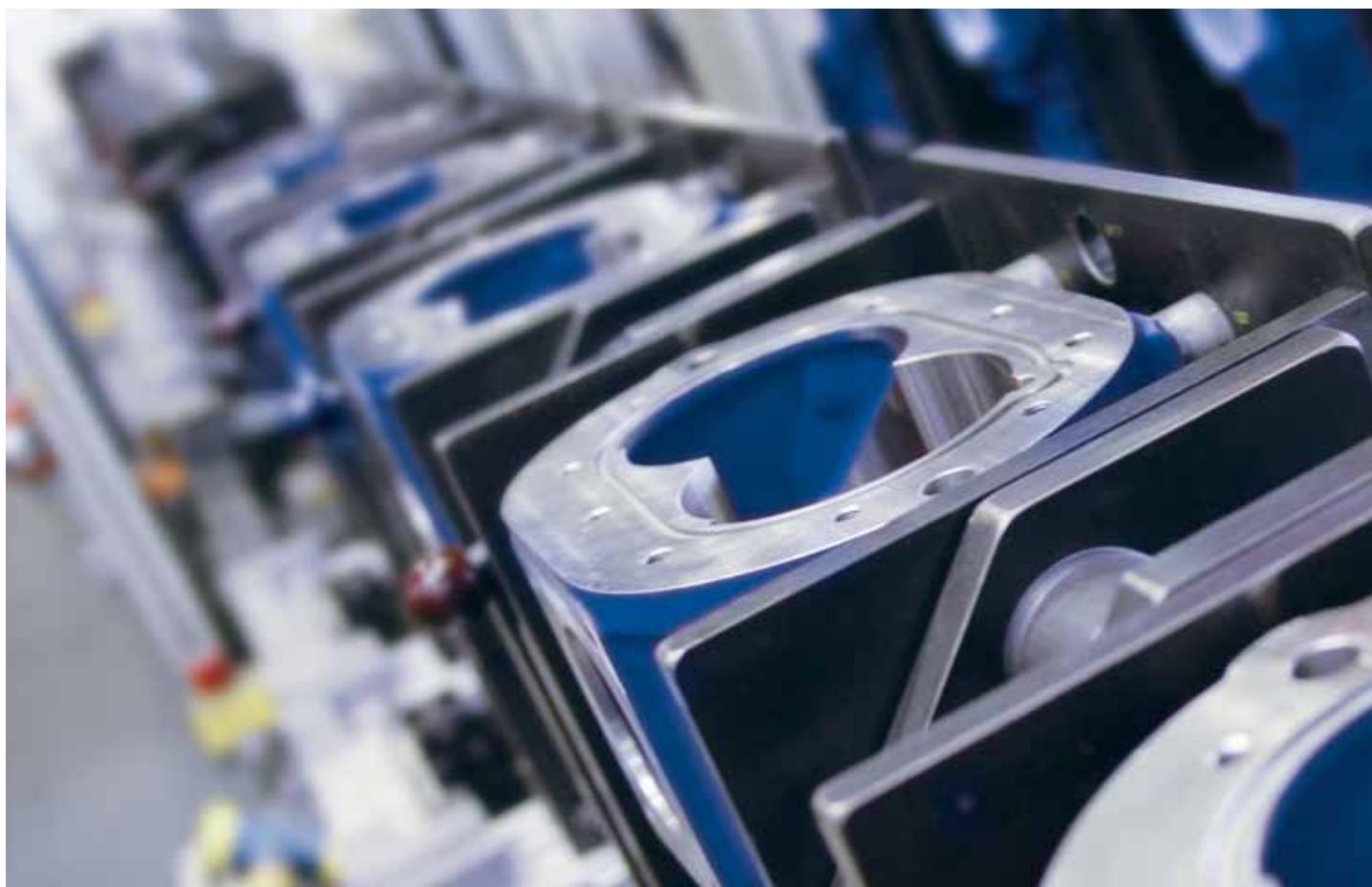
PRODUCT OVERVIEW

Positive displacement blowers, screw compressors, rotary lobe compressors,
turbo blowers and rotary piston gas meters



AERZEN

EXPECT A LOT. PREMIUM TECHNOLOGIES FROM AERZEN.



Expect Performance.

AERZEN history? It is the history of compressor technology. In 1868, we manufactured Europe's first positive displacement blower; in 1911, the first turbo blowers; in 1943, the first screw compressors; and, in 2010, the first rotary lobe compressor in the world. And today? Today our craft lies in designing these machines to be as efficient as possible – and adapting them to the hundreds of applications that our customers require of us.

What has stayed the same? Even today, in the fourth generation, we have retained our character as a medium-sized family firm. That is what inspires us to be innovative, and to develop products that enable our customers to get ahead in their global markets. Expect a lot. Expect performance!

Typical of AERZEN.

What characterises modern premium technologies? High performance and service throughout the world? Of course. Energy efficiency? Nowadays that is also a matter of course. But we at AERZEN think there is even more to it. Like more ideas, for example, as proven by our countless nationally and internationally awarded patents.

But at AERZEN they are also to be seen in the less obtrusive aspects of our machines: in their particularly compact build; in their simple plug&play principle; in the delightfully easy to use operating concept. Or you could take as an example the unusually long intervals between oil changes and servicing – the emphasis here being on quality. Unconditional reliability, the extremely long lifetime of our technologies combined with ground-breaking energy efficiency – that is all typical of AERZEN.



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POSITIVE DISPLACEMENT BLOWERS. ROBUST ENDURANCE RUNNERS.

AERZEN made Europe's first positive displacement blower. That was in 1868. Today these stages and packaged units are numbered among the most successful compressors of all time. We manufacture highly-developed standard products for the most diverse range of applications that are used in all branches of industry. Our machines are high-performance, economical and extremely durable.

They are tried and tested – and more innovative than ever.

The roots design paved the way for the development of the AERZEN positive displacement blowers, and it is a good thing that it did. Even now, 150 years later, it is still one of our most successful construction designs. Today AERZEN twin-shaft positive displacement blowers for oil-free conveyance are more innovative than ever. The many developments in construction ensure first-class values when it comes to efficiency. AERZEN patented technology such as the integrated pulsation reduction ensure low noise emissions and vibrations. Also typical for AERZEN blowers is the ease of servicing and long-term reduction in life-cycle costs. And the list of innovative details goes on and on. But what matters most in practical everyday terms? The lasting quality of our blowers. That is what Made in AERZEN is known for.

Where reliability really counts.

AERZEN offers a wide range of products in the field of compression technology, possibly the widest that you will find anywhere. The highly-developed machines are available in a wide range of designs, sizes and special models; for conveying air, oxygen, neutral, aggressive or toxic gases; with vertical or horizontal flow; in negative pressure, positive pressure or vacuum modes. They can be used anywhere in the world where gas needs to be conveyed and compressed, and anywhere where reliable availability, energy efficiency and oil-free supply are the decisive factors.





AERZEN positive displacement blowers are highly-developed standard products. Manufactured using modern CNC-driven specialist technology. For minimal tolerances between components – and exceptional efficiency levels. For nothing short of precision. Made in AERZEN.

NEGATIVE PRESSURE/POSITIVE PRESSURE POSITIVE DISPLACEMENT BLOWERS

The pneumatic transport of bulk goods and waste water treatment are the main areas of application for positive displacement blowers. AERZEN delivers tailor-made solutions in this area. High-performance standard, compact and special blowers, tailored to the most diverse applications and individual customer requirements. Always the best choice. As functional as they are economical.



Delta Blower Generation 5 negative pressure packaged unit

A versatile compact packaged unit available in 14 sizes. Belt-driven and classified oil-free to class 0. Designed for side-by-side installation, very easy to use and readily adaptable to meet diverse customer specifications.

- Volume flow: 30 to 5,400 m³/h
- Negative pressure: -500 mbar
- Medium: air and neutral gases



GMa/b/c ... m negative pressure stage with pre-inlet cooling

Proven 2-lobe blower technology for plant engineering for forced conveyance at extreme negative pressure up to 80% vacuum. Oil-free and extremely robust. Belt or direct drive version.

- Volume flow: 60 to 50,000 m³/h
- Negative pressure: -500 mbar
- Medium: air and neutral gases



GM ... Sm/Lm negative pressure packaged unit with pre-inlet

Proven 3-lobe blower unit with or without acoustic enclosure. Available with belt or direct drive. Designed to cope with extreme negative pressure up to 80% vacuum, extremely robust and oil-free.

- Volume flow: 60 to 50,000 m³/h
- Negative pressure: -800 mbar
- Medium: air and neutral gases



Bulk goods vehicle GM 13.5..13.f7-1 positive pressure blower stage

Robust 2-lobe blower stage for installation in tankers and silo trucks with extended pressure differentials of up to 1.2 bar. Conveyance in two directions possible using either horizontal or vertical flow. Proven technology, oil-free.

- Volume flow: 600 to 2,250 m³/h
- Positive pressure: 1,200 mbar (g)
- Medium: air, oxygen, and neutral, toxic, flammable, explosive, corrosive or mixed gases



Delta Blower GM 3S ... 240S positive pressure packaged unit

Belt-driven 3-lobe compact unit with absorbent-material-free silencer and oil-free classification to class 0. Extremely low sound pressure levels, easy to use, space-saving side-by-side installation and easily adaptable to meet diverse customer specifications.

- Volume flow: 30 to 14,400 m³/h
- Positive pressure: 1,000 mbar (g)
- Medium: air and neutral gases



Positive pressure packaged unit 4/6 type GM 315L ...1080 S/L

Proven 3-lobe packaged blower unit for maximum volume supply. Designed to be belt-driven. Low pulsation levels and reduced pipeline noise. Classified oil-free to class 0 and extremely robust.

- Volume flow: 5,600 to 65,000 m³/h
- Positive pressure: 800 mbar (g)
- Medium: air and neutral gases



GM 3S ... 1080 L positive pressure blower stage

Robust 3-lobe blower stage for plant engineering. Suitable for a wide range of applications. Designed to be belt-driven. Low pulsation levels and reduced pipeline noise. Available as standard in 22 sizes.

- Volume flow: 30 to 65,000 m³/h
- Positive pressure: 800 mbar / 1,000 mbar (g)
- Medium: air and neutral gases



Positive pressure blower stage 4/6 type GM 10.0-20.21

Belt-driven 2-lobe blower stage for plant engineering for forced conveyance using the positive displacement principle. Low pulsation levels and reduced pipeline noise. Classified oil-free to class 0. Proven technology.

- Volume flow: 100 to 35,000 m³/h
- Positive pressure: 1,000 mbar (g)
- Medium: air and neutral gases

VACUUM PUMPS (BLOWERS)

AERZEN provides multiple solutions to the particular requirements of industrial vacuum and high vacuum technology: special blower series with canned drive. Vacuum-tight and air-cooled. Available in a wide range of models for the conveyance of neutral or aggressive gases – with or without pre-inlet. Suitable for a range of applications from foil and glass coating to the extraction of hydrogen – or even for use in the clean-room conditions.



GM ... CM/HM high-vacuum stage

Vacuum-tight, canned drive blower for plant engineering with ATEX certification for zone 0, also suitable for use under clean room conditions. With 14 sizes available in the CM model for aggressive gases and 9 sizes in the HM model for neutral gases, it is the biggest series available on the market.

- Volume flow: 110 to 15,330 m³/h
- Pressure: 10-5 bar abs. to 0.2 bar abs.
- Medium: air, oxygen, and neutral, toxic, flammable, explosive, corrosive or mixed gases



GMa/GMb/GMc ... HV fine vacuum stage

Vacuum-tight stage for plant engineering with ATEX certification for zone 0. Equipped with energy-saving IE3 motors as standard. Direction of flow variable in either vertical or horizontal directions. Delta p up to 200 mbar possible. With 19 different performance classes available this constitutes the biggest series on the market.

- Volume flow: 180 to 97,000 m³/h
- Pressure: 10-3 bar abs. to 0.2 bar abs.
- Medium: air, oxygen, and neutral, toxic, flammable, explosive, corrosive or mixed gases



GMa/GMb/GMc ... mHV low-vacuum stage with pre-inlet

Vacuum-tight blower stage for plant engineering. High pressure ratio thanks to pre-inlet cooling. With 11 different performance classes available, this constitutes the biggest series on the market.

- Volume flow: 250 to 61,000 m³/h
- Pressure: 0.01 bar abs. to 0.8 bar abs.
- Medium: air, oxygen, and neutral, toxic, flammable, explosive, corrosive or mixed gases

PROCESS GAS BLOWERS

AERZEN process gas blowers are high-performance machines. Developed for the oil-free conveyance and compression of industrial gases, which can also be aggressive. Designed in various materials and conveying chamber sealing.



GR positive pressure blower stage

Versatile blower stage (single and two-stage) for plant engineering for vertical and oil-free conveyance. Direct or belt drive. Optionally available with liquid injection for gas cooling or purification, as well as with special modifications and materials. 12 sizes available for just about every industrial or mixed gas. Delta p 1,500 mbar max possible.

- Volume flow: 100 to 50,000 m³/h
- Positive pressure: 5,000 mbar (g)
- Medium: air, oxygen, and neutral, toxic, flammable, explosive, corrosive or mixed gases



GQ positive pressure blower stage

Direct drive blower stage (single and two-stage) for plant engineering for the conveyance of process and cooling gases. Direction of flow horizontal. Recirculating oil lubrication system. Suitable for continuous water injection for cooling and purification. Available in 6 sizes for positive pressure ranges up to PN 6. Delta p 1,500 mbar max possible.

- Volume flow: 15,000 to 100,000 m³/h
- Positive pressure: 2,500 mbar (g)
- Medium: process, cooling and sealing gases



GM ... dz high-pressure blower positive pressure stage

Direct drive blower stage (single or two-stage) for oil-free conveyance. Separate recirculating lubrication system. Optionally available in stainless steel or as a special acetylene booster as per the TRAC standard. Delta p 2,000 mbar max possible.

- Volume flow: 60 to 6,000 m³/h
- Positive pressure: 25 bar (g)
- Medium: air and neutral gases

BIOGAS BLOWERS

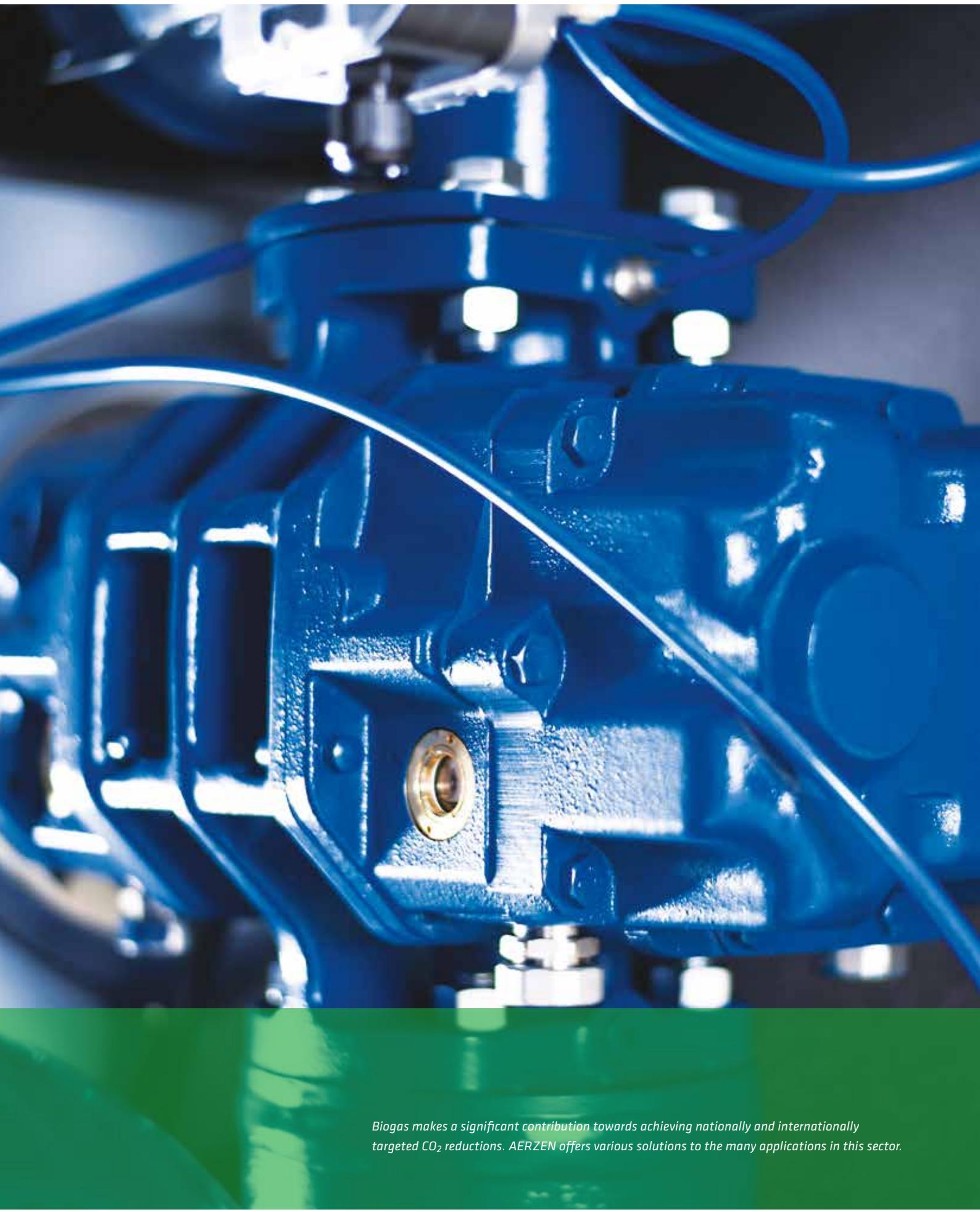
Specially developed for use with biogas, AERZEN GM series biogas blowers ensure maximum performance and efficiency. Available in a range of different sizes. What is more, in compliance with the ATEX directive 94/9/EC, the Standard for Compressors and Vacuum Pumps (EN 1012-3) and the DVGW regulations, they can all be used in explosion protection zones I and II.



Delta Blower GM 3S ... 50L biogas packaged unit

Belt-driven, 3-lobe compact packaged unit. Blower stage and packaged unit available in special materials and with many modifications possible. ATEX certified. A wide range of accessories available, such as overflow regulator and isolating equipment.

- Volume flow: 30 to 2,700 m³/h
- Positive pressure: 1,000 mbar (g)
- Medium: landfill gas, biogas, natural gas, town gas



Biogas makes a significant contribution towards achieving nationally and internationally targeted CO₂ reductions. AERZEN offers various solutions to the many applications in this sector.

AERZEN TURBO BLOWERS TURBO. COMPACT POWER IN AERATION TANKS.

AERZEN turbo blowers. Over the decades we have developed these packaged units to technical excellence. In doing so we have acquired expertise that sets standards throughout the world. This is reflected in improved energy efficiency, low life-cycle costs and specially developed core components. To sum it up: it can be seen in every detail of **AERZEN**'s continuous flow machines.



The AERZEN turbo impeller. Individually designed for every performance class – and for that reason unbeatably effective.

Sending out positive signals.

They are developed to cope with large intake volume flow rates, yet are speed-controlled, 100 per cent oil-free, and tailored for use in the most demanding areas of application in industrial and municipal waste water treatment: AERZEN turbo blowers. We have been working intensively to develop this technology further since 1911. Every generation has boasted an innovative leap forward. The newest generation guarantees an outstanding energy balance and a whole host of unique details. The design of the stainless steel impellers, single air gap permanent magnet motors, actual airflow measurement – these are concepts which send out positive signals in the world of compressors.

In just the same way as Performance3. With this concept AERZEN is able to provide the best performing portfolio of solutions to meet the fluctuating demands of biological waste water treatment plants currently available. We are referring to the compound system comprising the Aerzen Turbo, the Delta Blower positive displacement blower and the Delta Hybrid rotary lobe compressor. This mix of technologies guarantees unique performance. With maximum energy savings and the best possible control ranges – an ROI of just 2 years is possible depending upon the conditions in the plant.



Aerzen Turbo Generation 3

Compact continuous flow machine for lower volume flow rates. Driven by high-performance permanent magnet motors. Air foil bearings, integrated frequency inverter, active pump protection (High-Rise-to-Surge). Particularly energy efficient.

- Volume flow: 300 to 6,400 m³/h
- Positive pressure: 1,000 mbar (g)
- Medium: air and neutral gases



Aerzen Turbo Generation 4.5

Compact continuous flow machine for high volume flow rates. Driven by high-performance permanent magnet motors. Air foil bearings, integrated frequency inverter, active pump protection (High-Rise-to-Surge). Particularly energy efficient.

- Volume flow: 1,000 to 13,200 m³/h
- Positive pressure: 1,000 mbar (g)
- Medium: air and neutral gases



Aerzen Turbo Generation 5

Compact latest generation packaged turbo unit. Highly efficient with efficiency levels of up to 80%. Speed-controlled and driven by high-performance permanent magnet motors. Air foil bearings. Practically free from wear, side-by-side installation. Heat recovery possible, active pump protection (High-Rise-to-Surge).

- Volume flow: 1,200 to 16,200 m³/h
- Positive pressure: 1,000 mbar (g)
- Medium: air and neutral gases

SCREW COMPRESSORS. THE ALL-ROUND GENIUSES.

Unrivalled versatility. These two words describe in a nutshell exactly what makes AERZEN screw compressors so special: the biggest range of models; the highest number of possible modifications and the widest range of accessories. But these stages and packaged unit series have a lot more going for them, not least the development capability of the global market leader, which has been continuously working on innovations, optimisation and completion of its successful compressors since 1943.

Freeing up potential.

Screw compressors are perforce twin-shaft rotating lobe machines. They work on the positive displacement principle with internal compression and are so-called compulsive conveyors. This applies for all screw compressors. However, what makes AERZEN screw compressors special is that we have made reliability, ease of maintenance, user-friendliness, flexibility and energy efficiency a matter of principle. The result is a range of unique design features. Take the efficiency coefficients for example, such as the AERZEN 3+4 VML profile or the 4+6 VM profile. Compared to standard compressors they deliver an considerable energy saving. And what is the ultimate in compressor technology? That is AERZEN new E-compressors. With an increase in efficiency of around 6% they free up even more valuable potential.

Demonstrating their versatility.

For decades, leading packagers and industrial users have insisted upon AERZEN compressor stages and packaged units. Why? Because with their exceptional versatility these machines are the ideal solution for every application. Originally designed for compressing air, nitrogen and neutral gases, these all-round geniuses are also developing their strengths in use with special gases, in vacuum operation and in inlet pressure applications. Direct and belt-driven, dry running and classified oil-free to class 0 or with oil and water injection, with or without pre-inlet. Let's put it this way: AERZEN has the right compressor for every application.





Special rotor profiles are characteristic of AERZEN's screw compressors. And they ensure significantly better performance in negative and positive pressure operation.

OIL-FREE SCREW COMPRESSORS

There are hardly any limits to the possible applications for AERZEN screw compressors. They can be relied upon to create pressure for the pneumatic transport of powders, bulk goods or ash. They aerate sewage tanks, keep lakes and harbours clear of ice, supply oxidizing air for power plants or start jets for aircraft turbines.



VM/VML Delta Screw Generation 5 Plus negative pressure/positive pressure packaged unit

Highly efficient, belt-driven compressor unit (single-stage). Optionally available in a pre-inlet version for high negative pressure of up to -850 mbar. Also suitable for suction/presurised operation. Classified oil-free to class 0. Extremely resilient, durable and low-maintenance.

- Volume flow: 120 to 2,650 m³/h
- Neg. pressure: -850 mbar/ pos. pressure: 3,500 bar (g)
- Medium: air, and neutral, toxic, flammable, explosive or corrosive or mixed gases



VM/VML negative pressure/positive pressure stage ... Belt-driven

Belt-driven compressor stage which can be used anywhere. Classified oil-free to class 0, highly energy efficient and compact. A wide range of models available in 7 sizes.

- Volume flow: 120 to 2,650 m³/h
- Neg. pressure: -850 mbar/ pos. pressure 3,500 mbar (g)
- Medium: air, and neutral, toxic, flammable, explosive, corrosive or mixed gases



Delta Screw VM/VML (E-Compressor) negative pressure/positive pressure packaged unit

Highly efficient compressor unit (single-stage) with direct drive. Low maintenance costs. Extremely resilient and easily adapted for the most diverse range of applications.

- Volume flow: 770 to 15,000 m³/h
- Neg. pressure: -850 mbar/ pos. pressure: 3,500 bar (g)
- Medium: air, and neutral, toxic, flammable, explosive, corrosive or mixed gases



VM/VML negative pressure/positive pressure stage

Compressor unit (single-stage) that can be used anywhere. Low-maintenance and extremely versatile for the most diverse range of applications. A wide range of models available in 9 sizes

- Volume flow: 770 to 15,000 m³/h
- Neg. pressure: -850 mbar/ pos. pressure: 3,500 mbar (g)
- Medium: air, and neutral, toxic, flammable, explosive, corrosive or mixed gases

OIL AND WATER-INJECTED COMPRESSORS

Some of these have been developed for special applications in the refrigeration and shipping industries – others for extremely sensitive processes which require 100% oil-free compressed air. All together, AERZEN oil and water injected screw compressors are the best choice. Wherever low investment and operating costs are as important as high levels of reliability and efficiency.



VMX compressed-air stage with oil-injection

A positive pressure stage (single-stage) suitable for diverse applications in plant engineering. Drive: Belt-driven or directly coupled. Highly energy efficient, robust, durable and low-maintenance. Available in 10 performance classes up to a max. 355 kW.

- Volume flow: 69 to 3,180 m³/h
- Positive pressure: 13 bar (g)
- Medium: air and neutral gases



VMW compressed-air stage with water injection

Direct drive positive pressure stage (single-stage) for plant engineering. Classified oil-free to class 0 for highly sensitive processes. Smooth, low-maintenance, robust and extremely durable. Performance up to max. 110 kW.

- Volume flow: 150 to 1,080 m³/h
- Positive pressure: 13 bar (g)
- Medium: air and neutral gases



VMY compressor unit for refrigeration technology and process gas

Reliable compressor unit with oil injection. Variable volume control by means of hydraulically operated control flaps (gate control). API 619 version possible. Bespoke solutions and modifications. Low operating and maintenance costs.

- Volume flow: 300 to 9,500 m³/h
- Positive pressure: 25 bar (g)
- Medium: neutral and flammable gases, mixed or process gases, coolants



VMY compressor stage for refrigeration technology

Reliable compressor stage with oil-injection for plant engineering. Variable volume control by means of hydraulically operated control flaps (gate control). API 619 version possible. Low operating and maintenance costs.

- Volume flow: 300 to 9,500 m³/h
- Positive pressure: 25 bar (g)
- Medium: coolants

PROCESS GAS COMPRESSOR

Specially designed and certified for chemical, petrochemical, raw material and energy recovery plants, as well as many other areas of process technology. For single or multi-stage configurations. Depending upon the requirements, AERZEN's process gas screw compressors meet all the specifications of a range of industrial sectors and classification bodies.



VR positive pressure packaged unit for process gas technology

Compressor unit (single or multi-stage) for the compression of process gases (except O₂ and Cl). Oil-free compression. Variable drive types: direct, with flanged or separate spur gear. Design to meet international standards such as APIs or customer specifications.

- Volume flow: 650 to 120,000 m³/h
- Positive pressure: 52 bar (g)
- Medium: air, neutral, toxic, flammable, corrosive and contaminated gases or mixed gases



VMY positive pressure packaged unit for process gas technology

Reliable compressor unit with oil injection. Ideal for gases with a low molecular weight, high compression ratio or gases whose composition fluctuates. Variable volume control by means of hydraulically operated control flaps (gate control). Design according to API 619 possible. Individually customised solutions and modifications.

- Volume flow: 300 to 9,500 m³/h
- Positive pressure: 25 bar (g)
- Medium: coolants, neutral and flammable gases, mixed or process gases

BIOGAS COMPRESSORS

Biogas applications make particular demands on compressor technology. Whether you are concerned with the production of biomethane, feeding into kilometre-long supply networks or creating inlet pressure for combined heat and power plants, AERZEN's biogas compressors are designed for the task. Reliable in 24-hour operation and consistently conforming to all ATEC or DVGW regulations.



VMX biogas packaged unit with oil injection

Reliable compressor unit with oil injection. Variable drive types with belt or direct drive. Extremely robust, durable and energy efficient. 5 sizes.

- Volume flow: 300 to 3,080 m³/h
- Positive pressure: 13 bar (g)
- Medium: biogas, biomethane, process gases such as CH mixed gas



VMY biogas packaged unit with oil injection

Reliable compressor unit with oil injection. Variable volume control by means of hydraulically operated control flaps (gate control). 3 sizes.

- Volume flow: 300 to 9,500 m³/h
- Positive pressure: 25 bar (g)
- Medium: biogas, biomethane, process gases such as CH mixed gas



C oil-free biogas packaged unit

Durable compressor unit (single-stage) with direct drive, oil-free conveyance. Unique versatility of application. High-quality industrial standard. Robust, durable and low-maintenance. A comprehensive range of accessories and individual customer-specific modifications possible. 3 sizes.

- Volume flow: 300 to 1,900 m³/h
- Positive pressure: 3,500 (g)
- Medium: biogas, biomethane

THE BEST OF BOTH WORLDS. ROTARY LOBE COMPRESSOR DELTA HYBRID.

This is one of the most innovative solutions in compressor technology, and one of the most efficient machines by far in the vast 25 to 100 per cent control range. Delta Hybrid has long been the only packaged unit in the world to bring together the benefits of blower and compressor technology in one single unit. For completely new possibilities in creating positive and negative pressure. And for savings of up to 15 per cent.



With seven patents or patent applications, Delta Hybrid is one of the most innovative solutions in compressor technology. And one of the most efficient machines by far in the vast 25 to 100 per cent control range.

Two profiles. One unit.

The latest generation technology from AERZEN brings a new principle to compression, namely the perfect synthesis of positive displacement blower and screw compressor in one packaged unit. The innovative Delta Hybrid rotary lobe compressor uses two different rotor profiles. A 3+3 blower profile tailored for low pressure differentials of up to 800 mbar – and a 3+4 compressor profile designed for higher pressures of up to 1,500 mbar. This enables the Delta Hybrid to close the gap in the existing range of machines. It also offers a broad performance range to enable perfect tailoring to meet the most diverse process requirements – with energy savings of up to 15% compared to standard compressors.

Higher temperatures. Improved safety.

The Delta Hybrid rotary lobe compressors can be used for an extremely wide range of key industrial applications. Economic as a stand-alone and highly efficient in compound machines. The packaged units can be used anywhere, including areas with very high ambient temperatures, or for applications with extreme intake temperatures. Nowadays the Delta Hybrid makes final temperatures of 160 °C to 230 °C possible. A vital prerequisite for high levels of operational safety in all processes.



Delta Hybrid D12 ... D152 S/L/H positive pressure packaged unit

Highly economical rotary lobe compressor unit with belt drive. Extended pressure range. Classified oil-free to class 0. Absorbent-material-free silencer, low sound pressure levels. Reduced maintenance costs and lower energy consumption for a sustainable low TCO. Extremely reliable and durable.

- Volume flow: 110 to 9,000 m³/h
- Positive pressure: 1,500 mbar (g)
- Medium: air and neutral gases



Delta Hybrid D12 ... D152 S/L/H positive pressure stage

Highly economical rotary lobe compressor stage for belt drive. Reduced maintenance costs and lower energy consumption for a sustainable low TCO. Extremely reliable and durable. Extended pressure ranges.

- Volume flow: 110 to 9,000 m³/h
- Positive pressure: 1,500 mbar (g)
- Medium: air and neutral gases



Delta Hybrid D12 ... 152E negative pressure packaged unit

Highly economical rotary lobe compressor unit with belt drive and internal compression of up to 70 % vacuum. Classified oil-free to class 0. Absorbent-material-free silencer, low sound pressure levels. Reduced maintenance costs and lower energy consumption for a sustainable low TCO. Extremely reliable and durable.

- Volume flow: 110 to 9,000 m³/h
- Negative pressure: -700 mbar
- Medium: air and neutral gases

ROTARY PISTON GAS METERS. PRECISION TECHNOLOGY FOR THE ENERGY SUPPLY INDUSTRY.

AERZEN is one of the oldest and biggest manufacturers of rotary piston gas meters in the world. With the current generation, the expert in rotary lobe machines supplies high precision meters for the energy supply industry. Analogue or digital. Designed in accordance with the harmonised EU regulations for use in the European market. Made by AERZEN in compliance with the quality assurance system DIN ISO 9001 and the Pressure Equipment Directive DGRL 97/23/EC.



Intelligently designed and with versatile equipment options – AERZEN rotary piston gas meters can be easily adapted to meet diverse customer requirements.

Precision for every medium.

AERZEN rotary piston gas meters can measure all non-aggressive gases as per the DVGW Worksheet G 260, including natural gas, town gas, coke oven gas, refinery gas, propane, butane, liquid gas and air mixtures, methane, ethylene, hydrogen and other gases. The gas meters are equipped for horizontal and vertical flow directions. For this, they are fitted with either a special double-roller counter or a digital counter. This is a decisive advantage, because it means that the direction of flow can be adjusted without necessitating any changes to the counter, and without requiring supervised calibration. This not only reduces storage requirements, but also brings reductions in additional costs for short-term adjustments. Switching to the required direction of flow on site is easy and requires no tools.

Tested & certified.

AERZEN rotary piston gas meters meet the key requirements of the European standard for gas meters EN 12480. At the same time, those statutory regulations (Weights and Measures Act, calibration regulations) which AERZEN complies with in designing, testing and approving its products also apply. All AERZEN gas meters comply with the design requirements specified in DVGW Worksheet G 492/II and with DIN 30690 T 1, DIN 3230 T 5 and the Pressure Equipment Directive DGRL 97/23/EC. They are subjected to the pressure and leakage tests prescribed therein. The housing materials meet the requirements of DIN EN 13445-2 with PED-QM certification with acceptance test certificate EN 10204/3.1.B.

GAS METERS AND VOLUME CONVERTORS



Rotary piston gas meter Za/Zc/Ze

With its Za/Zc/Ze series gas meters, AERZEN provides reliable precision measurement technology for the energy supply industry – and the biggest series available on the market. Developed for measuring gaseous media in the extended range 1:160. Extremely low-maintenance, with an oil-change interval of 16 years. And approved to MID (European Measuring Instruments Directive 2004/22/EC). AERZEN gas meters are available with an analogue counter or with an integrated smart encoder. This digital counter offers a range of benefits, such as the elimination of measuring errors, precise calculation of gas consumption and much more, and can be retrofitted economically at any time.

- Volume flow: 0.6 to 6,500 m³/h
- Positive pressure: 16 bar (g)
- Medium: non-aggressive gases and natural gas, town gas, coke oven gas, refinery gas, propane, butane, liquid gas and air mixtures, methane, ethylene, hydrogen and other gases



Compact electronic volume converter

The UNIGAS PTZ Compact volume converter converts the gas volumes measured by a gas meter in an operational state V_b into cubic metres of dry gas in its normal state P_n = 1,01325 bar and T_n = 273,15 K. And it does this with a level of accuracy of +- 0.5 % of the measured value. The actual volume in its normal state is shown on the LCD display. What is more, a wide range of other parameters can be accessed at the touch of a button.

- Pressure ranges: P_{abs} = 0.9 bar to 6.0 bar or P_{abs} = 4.0 bar to 10.0 bar
- Gas temperatures: -10 °C to 40 °C
- Ambient temperatures: -10 °C to 40 °C
- Storage temperatures: -20 °C to 50 °C

COUNTLESS PROCESSES. NO COMPROMISE. FIELDS OF APPLICATION.

AERZEN offers you compressor technology that has been precisely designed right down to the last detail. We really have something for every application, and for every region on our planet without exception. We give you our word. Because if it is not already included in the widest range of standard models, modifications and accessories available to date, then we will make it for you as a special solution.

Compression under any conditions.

Because compressed gases are used under all possible conditions, our technologies are suitable for use in all possible circumstances. Whatever the model or specification, whether indoor or out, onshore or offshore, stand-alone or as part of a compound system, they work in any ATEX zone or temperature zone in the world – even under the most extreme conditions. As reliable at +60 °C as they are at -40 °C. As safe in lulls as in wind speeds of up to 150 km/h; in the desert, the Arctic and in earthquake zones; and for any other static or mobile application. Are there any exceptions? Not so far. Why not set us a challenge?

Understanding applications.

Only compressor technology that is precisely tailored to the application is really economical. You might call it the perfect fit. To achieve that you have to know the processes. This is something we at AERZEN are sure about. That alone makes it important to us to be in close contact with our customers. That is why it is so important to us that we fully understand your applications in precise detail. Our exceptional history helps us in that respect. A history of over 150 years, during which we have configured machines in every possible specification, dealing with hundreds of thousands of projects of every possible size across every continent. This wealth of experience is unique and makes us a valuable consultant for all your questions about applications.

Sectors

- Chemical and petrochemical
- Cement industry
- Foodstuffs and luxury food industry
- Power plant technology
- Glass industry
- Paper industry
- Plastics industry
- Steel and iron industry
- Textiles industry
- Pharmaceutical and cosmetics industry
- Medical technology
- Mining and metallurgy
- Electronics industry, solar power
- Municipal or industrially operated waste water treatment plants
- Oil and gas industry
- Process gas industry
- Biogas industry
- Energy suppliers

and more





Application know-how – one of our particular strengths. That is why compressor solutions from AERZEN are always the perfect fit.

ANYTHING BUT ORDINARY. THE AERZEN SERVICE WORLD.

The long service life of AERZEN machines is legendary. So why is service an issue at all? Because for us it is about more than just availability and original OEM parts. AERZEN services safeguard investments and productivity and ensure you get ahead of the competition. And that is true throughout the world.

Take advantage of AERZEN's OEM competence – any time wherever you are in the world.



AERZEN on-site service.

Our service teams work wherever our machines are: anywhere in the world; onshore or offshore; frequently under extreme conditions. How do we manage that? Because we are never far away. AERZEN has spread a thick net of service support centres and decentralised parts depots around the globe. There you will find over 200 well-trained service technicians ready to support you, whenever and wherever you need us.

About our rental and other services.

The AERZEN service world has plenty to offer you. Specially tailored service kits for example. Replacement stages, machine diagnosis, acoustic optimisation. One of the most important services we offer is the AERZEN Rental Division, which boasts a large stock of rental machines: AERZEN blowers, turbos and compressors, in a wide range of performance classes; for all standard pressure ranges; for immediate use and delivered turnkey ready upon request. What does that mean for you? Even in the event of unanticipated need you are always well equipped.



Contact around the world

AERZEN employs 2,000 staff members across every continent. With six sales offices in Germany alone, we are always close at hand. And with 43 subsidiary companies spread across 100 different countries, we are never far away if you should need us. Call on:

+49 5154 81-0

Service Hotline

We are there for you, even when we are not actually there – outside of our normal business hours. Take advantage of a direct connection to AERZEN via our regional service hotlines:

+49 171 3511834

Customer Net

Where can you learn more about the company and about AERZEN leading compressor technology? It's quite simple: in our Customer Net and on our home page. Here we have made available everything you need to know:

www.aerzen.com



AERZEN. Compression as success principle.

AERZEN was founded in 1864 as Aerzener Maschinenfabrik. In 1868 we built Europe's first rotary lobe blower. The first Turbo compressors followed in 1911, the first screw compressor in 1943, and in 2010 the world's first rotary lobe compressor unit. Innovations "made by AERZEN" keep driving the development of compressor technology. Today, AERZEN is among the world's oldest and most significant manufacturers of rotary lobe blowers, rotary lobe compressors, rotary lobe meters, screw compressors, and Turbo blowers. And among the undisputed market leaders in many areas of applications.

More than 2,000 experienced employees in over 40 subsidiaries the world over are fully engaged in the advancement of the compressor technology. Their technological expertise, our international network of experts, and constant feedback from our clients form the basis for our success. Products and services from AERZEN are setting standards when it comes to reliability, lasting value, and efficiency. Go ahead: challenge us!

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EXPECT PERFORMANCE