

AERZEN Services

Value factor for your blower,
Turbo and compressor technology



AERZEN
EXPECT PERFORMANCE

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Excellence in service

Fast, competent and reliable support

Good service is not randomly chosen, but a question of setting - and a decisive success factor. That's why AERZEN has been saying "There's no such thing as impossible" for 160 years. Whether classic commissioning at wastewater treatment plants, major overhauls at power plants, on-site repairs or uncomplicated support in times of disaster: AERZEN Service is on hand and has a solution for every challenge.

Service provider with leading expertise and many years of experience

The satisfaction of our customers is our top priority. We have therefore always focussed on open, honest and respectful communication as well as fast response and processing times. Our customised services offer quotations for every phase of the life of our blowers, compressors and turbos and ensure the highest possible machine availability. In concrete terms, this means over 200 excellently trained service technicians, a dense net of service centres and decentralised parts warehouses worldwide, 50 subsidiaries, high-quality spare and wear parts, customer training by experts at the main plant in Lower Saxony. Complete solutions for short and medium-term rental (Aerzen Rental), customised service kits, oil, filter and V-belt changes, machine diagnostics, bearing checks, clearance measurement, vibrational monitoring, acoustic optimisation, comprehensive maintenance contracts with variable terms and scope of services and much more.

Competent service worldwide - also on site at the customer's premises

LET'S TALK

"... about process reliability, machine availability and efficient maintenance concepts."

AERZEN machines are designed for continuous operation. Should any unexpected problems arise, AERZEN Service provides fast, competent and pragmatic support. Whether on-site or remote, local or international, onshore or offshore: we are there where you are and take care of your questions, problems and challenges - be it commissioning, maintenance, servicing, revision, monitoring or repair.

Our blowers, compressors and turbos are often used in critical infrastructures such as energy, food and water treatment and are an indispensable part of an overall system that must be maintained and kept in operation under all circumstances. The primary objective is to avoid unplanned downtime. Our services increase availability and ensure your investments, productivity, cost efficiency and a decisive protrusion over the competition.

- Which services are the most effective to ensure your production capacity in the long term?
- How can digital services support you in making the operation of your machines and plants even more reliable, energy efficient and safe?

On the following pages we are presenting our answers to you.

The service world of AERZEN

Matured to perfection in 160 years

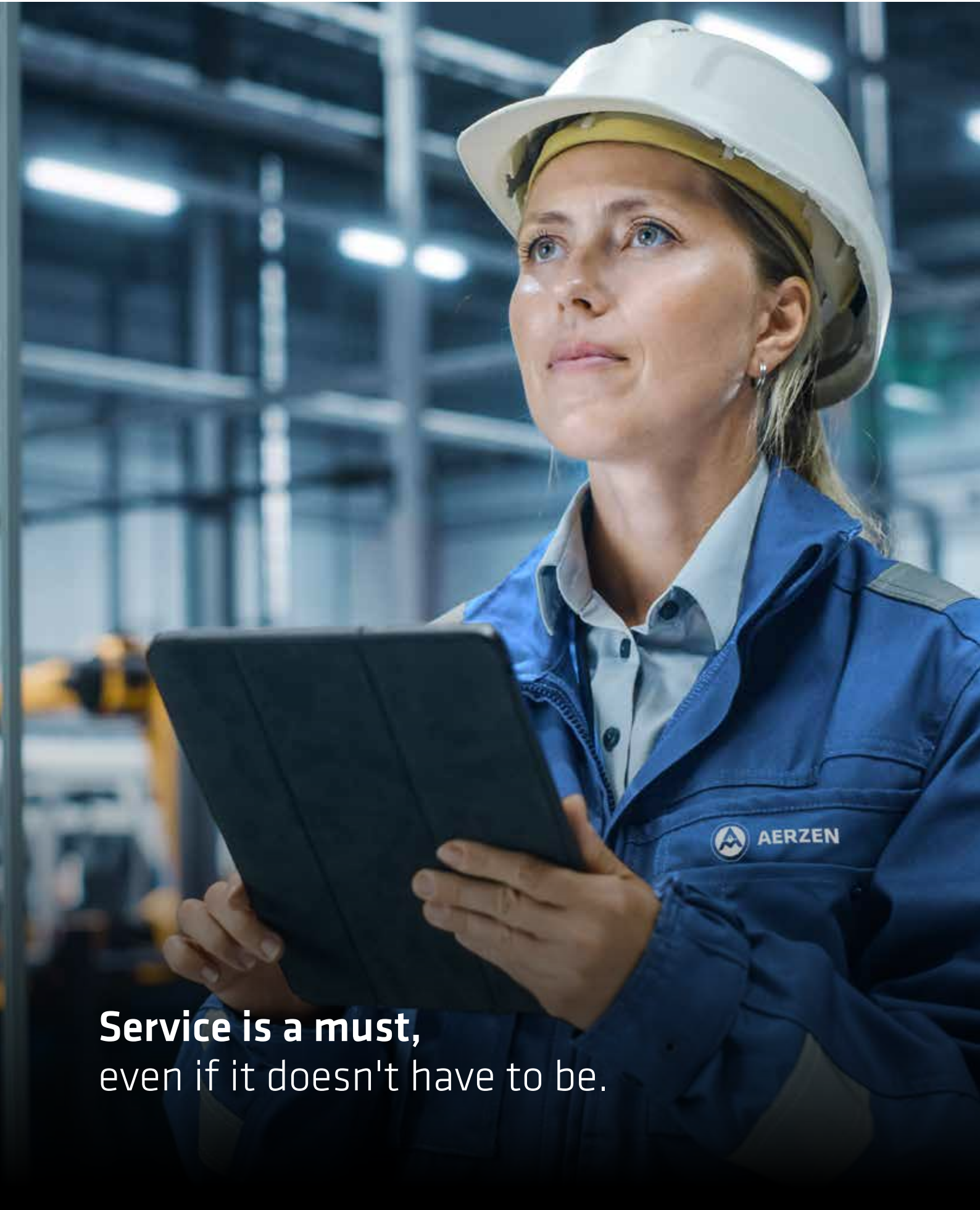
AERZEN blowers, compressors and turbos combine the expertise and experience of more than 160 years of technological leadership and prove themselves successfully every day in the most demanding applications worldwide. If necessary, for decades. But even the best technology needs support. But not just any old one. Only AERZEN Service warrants the highest possible availability, the best possible productivity and the longest possible service life of your machines. Our expertise ensures your success.



You are in the best hands with us.

We know what is important in the various sectors, processes and applications and get the best out of your machines. Our customised services include quotations for every phase of the life cycle of our blowers, compressors and turbos and are geared towards the current market requirements and needs of our customers.

We are on site worldwide and reconcile all services individually to your specific needs. Our promise to you: high availability, significant increases in efficiency, consistent customer focus and optimised cost efficiency.



Service is a must,
even if it doesn't have to be.

Worldwide service and spare parts centres. Decentralised spare parts warehouse near you

Our machines are absolute high performers and often run for decades. Should this not be the case – for maintenance or servicing reasons – then the AERZEN After Sales Service will take care of it for you. Our service technicians are specialised in preparing your machines for tough daily business in the shortest possible time. Independent of our in-house machine production.

Decentralised service centres worldwide.

We have established a dense net of service centres, decentralised parts warehouses and over 50 foreign subsidiaries round the globe. So we are always close to you - anytime, anywhere.

Through the targeted development of the individual service centres with an almost unique training programme, which is planned and carried out over several months at the main plant, our service technicians are comprehensively trained on the entire product portfolio so that overhauls/repairs can also be carried out directly on site at the customer's premises. Repair and wear parts for all standard products are available from stock, reducing downtimes to an absolute minimum.

Short lead times as the primary goal

If an on-site repair is not possible or not desired, the packages will be restored to working order in our international service centres - including collection of the machines and installation and removal service, of course. The service centres are designed to ensure that the blower, compressor and turbo stages are ready for tough daily business again in the shortest possible time.

A defined range of over 2,500 different standard parts is constantly kept up to date, and a computerised lift system supplies repair workplaces and spare parts delivery with spare and wear parts in time.



Contact around the world

2,900 employees work for AERZEN. We are on site for you with numerous service centres. And with over 50 subsidiaries in more than 100 countries around the world. This ensures short distances to you - wherever you need us.

Use the direct link for your regional service contact or service hotline under:
<https://www.aerzen.com/services> or use the QR code



Customer Net

Where you can learn more about the company and the leading compressor technologies from AERZEN? It's simple: in our Customer Net on our homepage. There, we have made available everything you need to know:
www.aerzen.com



Advantages at a glance

- | | |
|---|---|
| ✓ Collection of the machines incl. installation and removal service | ✓ Optimised warehouse, workflow and spare parts logistics |
| ✓ Use only AERZEN original spare parts | ✓ Replacement machines |
| ✓ Full warranty on components replaced | ✓ Rental machines |
| ✓ Complete painting before delivery | ✓ Purchase of used machines |
| ✓ Power measurements | |

International service centres with spare parts warehouses near you

Decentralised service centres ensure a fast supply of spare parts. A defined assortment of over 2,500 different standard parts is permanently kept in stock. Only components from the manufacturer ensure the highest quality and reliable use. Despite the standardisation of designations, there are design differences that can drastically reduce the service life in extreme cases. With AERZEN components you are on the safe side.



AERZEN Original spare parts

Quality from the manufacturer pays off

Only the manufacturer's original spare parts (OEM) ensure the highest quality and reliable use. AERZEN original spare parts are specially designed for the AERZEN compressors and blowers. They have optimum compatibility and enable full functionality for smooth operation and a long machine service life.

AERZEN filters

Significant energy savings and considerable reduction in CO₂ emissions

Minimising the energy costs of a compressor station is of central importance for economical and environmentally friendly operation. Even the smallest optimisations have a decisive impact on the overall efficiency of plants and significantly reduce running operating costs. A clogged or even partially clogged air filter causes significantly increased pressure losses. This results in significant additional expenditure over the annual operating hours, as in our example.

A significant reduction of the energy and cost efficiency of the entire system is the logical consequence. This can be prevented by changing filters regularly. We will immediately and directly

determine for you what calculatory savings potential can be achieved - gladly on your premises.

AERZEN offers you a whole series of filter options, tailored to the different machine technologies (rotary piston, screw and turbo blowers or screw compressors) and to the different room air conditions. For example, the F7 filter solution for increased requirements. To be able to operate blower and compressor packages safely even in potentially explosive areas, we have designed suitable zone separation filters for various ATEX requirements and zones.

Zone separation filter ATEX class 2

- Permeability value of 90% at 0.2-2 µm
- TÜV tested filter element acc. to 2014/34/EU
- Cost saving: on-site zone separation filter is not required
- Filter monitoring by means of differential pressure switch

Special air filters, e.g. class F7

- Separation value < 90% at 5 µm
- Standard: filter monitoring
- Further special filters available



Standard air filter class G4

- Separation value 60% - 90% at 5 µm
- Optional: filter monitoring



Savings potential using the example of a common case of application:

4 blowers, DN 100 version, in operation	
+	Power absorbed per machine: 37 kW
+	Operating hours: 6,900 Oh
+	Electricity costs: 20 ct/kWh
+	Differential pressure: 500 mbar
+	Filter contamination: 35 mbar
=	9,544 €/year 47,720 kWh/year

* Fictitious electricity price. Local price levels must be taken into account in the calculation. Subject to change without notice.

Determining the degree of contamination of your air filter

The change interval of the air filter depends on the degree of contamination of the medium being sucked in and can be determined precisely using the service indicator.

A brand-new filter has a pressure loss of approx. 10 mbar. Due to the operation of the plant, the degree of contamination also increases continuously. From a pressure loss of approx. 45 mbar, the filter should be changed immediately to avoid additional costs due to increased power consumption. Under certain circumstances, an earlier filter change would even pay off, as the following example impressively demonstrates.



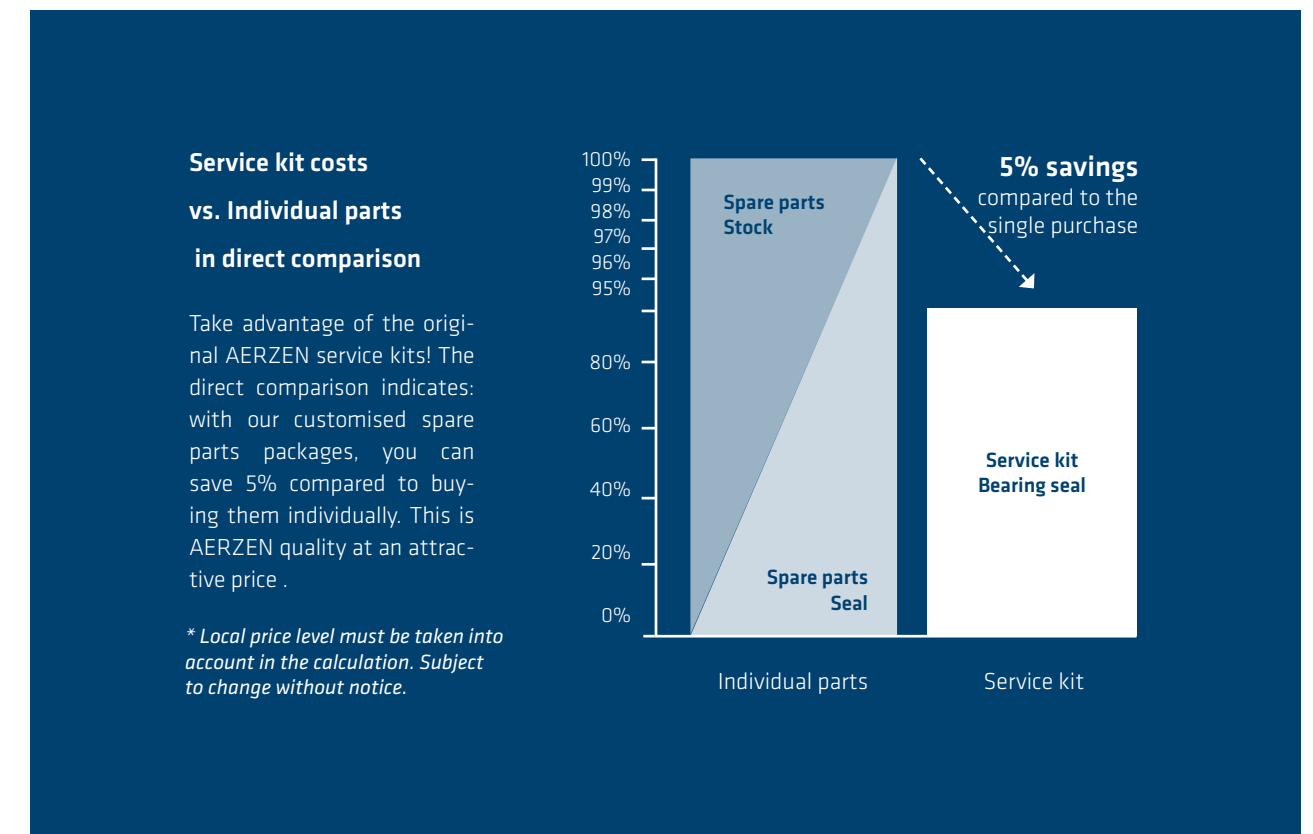
Calculate your personal savings potential
Click here for the online calculator
www.aerzen.com/filter



Regular filter changes save money!

- ✓ Energy and cost efficiency increase of the overall system
- ✓ Durability and reliability of the machines
- ✓ Fast plug & Play replacement concept





AERZEN service kits

Our customers know how valuable AERZEN original spare parts are. It's even easier with our customised service kits. These are carefully compiled kits with exactly the components you need for the maintenance, repair and durability of AERZEN packages. Approx. 1.000 different options are available in our programme.

Each individual kit is assembled and packed to order. No more working through parts lists, no more hassle due to incorrect orders or deliveries. Long waiting times and unnecessary downtime belong to the past.

Manufacturer quality ensures optimum performance

If you want to achieve outstanding results, you can only do so with original technology. Our spare parts are optimally reconciled with our machines and ensure the highest level of safety with regard to the respective product and application-specific requirements.



Always a good choice: AERZEN service kits

- ✓ Warranty and Investment security
- ✓ Original spare parts at an attractive price
- ✓ Significant reduction in maintenance costs
- ✓ Increase the machine service life
- ✓ Fast and reliably available worldwide from stock

Spare stages

Maintenance or repairs prevail and you need a replacement quickly to avoid lengthy interruptions to operations? AERZEN stages are your problem solver. We have a large quantity of blower, compressor, turbo or screw compressor stages in stock at all times and will get you back on the road to success immediately. This ensures your productivity and avoids costly downtime.

All AERZEN spare stages are certified in accordance with ISO 9001, ISO 14001 as well as ISO 15001 and are always state of the art thanks to constant further developments. Fitting and commissioning are carried out by our competent service technicians.



AERZEN spare stages are your problem solver

- ✓ Fitting and commissioning by our technicians
- ✓ Warranty, from date of delivery
- ✓ All AERZEN spare stages are certified according to ISO 9001, ISO 14001 and ISO 15001
- ✓ An inexpensive alternative to buying a new package



Calculate your personal savings potential now
Click here for the online calculator
www.aerzen.com/ersatzteile



AERZEN oils

Longer change intervals without compromising quality

AERZEN oils offer real added value. Not all oils are the same! We know from decades of experience: 72% of all anti-friction bearing damage is due to unsuitable, unclean or rapidly ageing lubricants. Respond to high mechanical loads and changing requirements. Extend the service life of your machines.



Delta Lube 06: durable protection against wear and corrosion

- ✓ Longer running times ensure lower maintenance costs
- ✓ No need to change the initial oil after 500 operating hours
- ✓ Extended oil change intervals up to 16,000 operating hours
- ✓ High temperature and oxidation stability
- ✓ Outstanding viscosity and temperature behaviour
- ✓ Perfect corrosion and ageing protection
- ✓ Warranty of optimum running performance and longer bearing service life
- ✓ High resistance even under exceptional mechanical and thermal loads
- ✓ Numerous application-specific special oils available

Delta Lube 06 For a longer service life of your AERZEN machine

With AERZEN Delta Lube 06, the engine oil can remain in the blower or compressor stage for longer. This significantly extends the oil change intervals. By adding additives, Delta Lube is specially optimised for immersion sump lubrication. This achieves high lubricity and maintains the original quality for longer. This saves maintenance time and costs.

Delta Lube 06 also reduces the risk of corrosion and prevents friction between movable components. It also absorbs suspended particles better and thus cleans the driver itself. Instead of the usual 8,000 operating hours, the AERZEN special oil only needs to be changed after 16,000 operating hours and the usual initial oil change can also be omitted. Especially under extreme operating conditions, such as exceptionally high temperatures, an early oil change can still have a positive effect on the running properties.



AERZEN special oils The perfect lubrication for every application

Our quotation of original AERZEN special oils offers you the right solution. These are modern high-performance oils that have been selected for use in our precision machines and have been tested over many millions of operating hours in our customers' applications. High temperature and oxidation stability, proven viscosity/temperature behaviour and outstanding cold flow behaviour not only ensure optimum running performance, but also extend the service life of your blowers and compressors. A balanced combination of supplements also offers perfect protection against corrosion and ageing.



Extend the service life of your machine Even under extreme operating conditions

High mechanical loads, changing pressures or high temperatures and air humidity require special oil properties. AERZEN special oils have been specially developed for such difficult applications. Impairment or even loss of the lubricating effect is avoided in the long-term and prevents bearing damage from occurring in the first place.



Calculate your personal savings potential
Click here for the online calculator
www.aerzen.com/oel



Worldwide After Sales Field Service

Short distances, fast solutions, worldwide support

Do you need a regular inspection, maintenance work on your AERZEN package or do you have a technical problem? Then, the AERZEN Field Service will help you! More than 350 highly qualified and certified service technicians are on call for you every day worldwide and bring the entire technical expertise of AERZEN directly to your production. Our on-site service ensures optimum, trouble-free operation of your AERZEN packages and offers fast, competent support in an emergency - wherever our machines are.

Professionalism quickly on site

With our worldwide After Sales Field Service, you have a strong partner at your side who will provide you with optimum support throughout the entire life cycle of your machine. No matter whether you need maintenance, inspection, servicing or repair work on your AERZEN package: the AERZEN on-site service has service bases all over the world and supports you in minimising downtimes and increasing machine and system availability - with excellently trained service technicians, customised services, fast response and processing times and decentralised spare parts storage and supply. We answer urgent technical questions via regional service hotlines, even outside our business hours.

Manufacturer expertise with a safety passport

Expertise and years of experience qualify our service technicians to implement the correct measures for the safe operation of your packages. These technicians have completed safety training courses valid worldwide and are certified accordingly for countless fields of application. This helps to avoid time-consuming ad hoc training sessions. The AERZEN Group can rely on qualified technicians who have all the usual certifications required by customers in the chemistry and petrochemical industry, such as SCC/ Security Certificate Contractors.

Fit for offshore use

AERZEN Services also prove their worth on drilling platforms and other offshore facilities. Specially trained experts take care of your AERZEN assemblies even under the extreme conditions prevailing there. Our technicians have completed the basic course on safety at sea and the HUET (helicopter underwater escape training = escape from a sinking helicopter).



AERZEN on-site services

- ✓ Inspections
- ✓ Commissioning
- ✓ Overhauls
- ✓ Repairs
- ✓ Repair work
- ✓ Product and service training
- ✓ Maintenance according to AERZEN checklist
- ✓ Retrofit
- ✓ Upgrades
- ✓ Technical advice



Details of our local bases and services can be found on our website: www.aerzen.com/aerzen-worldwide



Fast on site, competent and reliable in action.

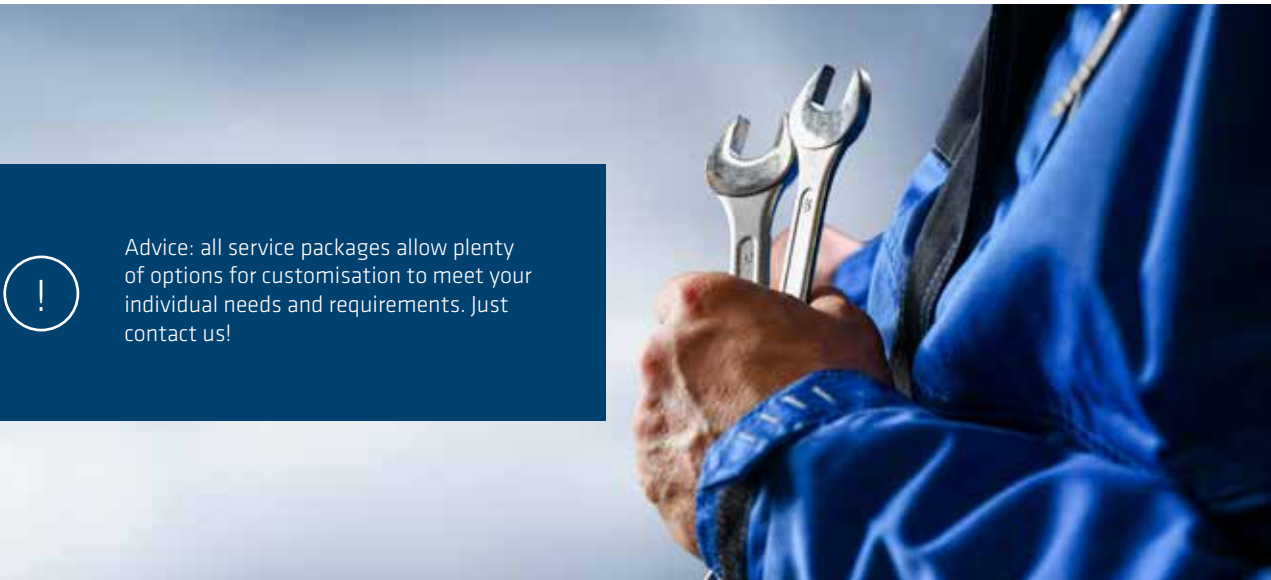
Service contracts

Maximum system availability,
planning and investment security

Use your own personnel resources in a targeted manner and benefit from the manufacturer's unique expertise. Our service packages are specially tailored to your needs and offer additional scope for customised requirements.

AERZEN liability for defects.
Come with us to extended service

Good feeling and better than any insurance: our warranty extension. We take care of all maintenance tasks for you according to the operating manual as well as any unforeseen repairs. For detailed information on our warranty, please get in touch with your local contact.



Basic or carefree package?
You decide

Regular maintenance and services extend the life cycle of your AERZEN package. These preventive measures ensure maximum safety in the long term, cost transparency and avoid machine downtimes.

With our service packages, we simplify processes in your production and relieve your resources so that you can concentrate fully on your core business. This also helps to maintain the value of the AERZEN packages. In the event of a repair, only original AERZEN spare parts are used, and these are installed by our trained and experienced AERZEN specialists. As a result, we can ensure the highest technical reliability, while also ensuring absolute financial planning certainty. We offer various levels of support to best meet the different needs of your applications.

Each maintenance assignment includes service protocols specially developed for AERZEN packages, which have been continuously improved and further developed on the basis of our more than 160 years of experience. They perfectly cover the necessary scope of work, which contributes significantly to long-term operational reliability and consistent value retention.

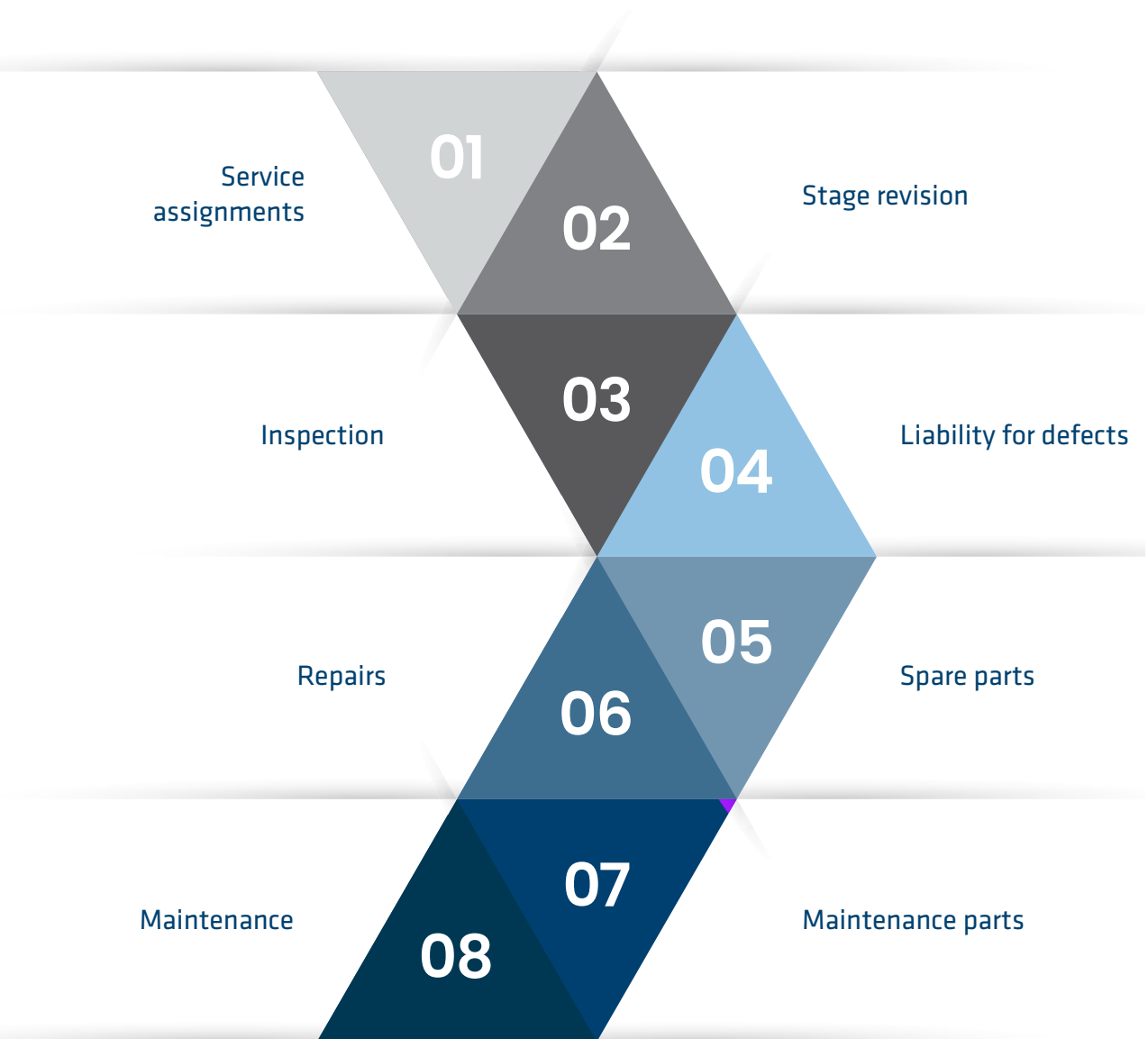
Availability can be agreed -
AERZEN service contracts

- ✓ Regular inspection and maintenance appointment
- ✓ Fixed price for the implementation of your service order
- ✓ Exclusive use of original AERZEN spare and wear parts
- ✓ Financial planning and investment security
- ✓ Scheduling and automatic shipment of all required original AERZEN spare parts

AERZEN service contracts
The right support level for every need

AERZEN service contracts stand for excellent support, consistent customer orientation, fast reaction times as well as financial planning and investment security and are a guarantee for optimum support, reliable operation, highest quality and minimum downtimes.

Every process is different and every application has its own needs. That's why we offer you a range of different performances, which we put together for you in a service package customised to your specific requirements - from a basic version to an all-round carefree service.



The availability of the individual service contracts depends on the regional offer of your sales company. Find out more now at:
www.aerzen.com/aerzen-worldwide

Machine diagnostics and acoustic optimisations

Your satisfaction with our products prevails for us. We therefore offer you a broad portfolio of customer-specific services - from analysis and consulting to optimisation strategies and practical training. Benefit from our expertise and experience!



Professional data analysis with the AERZEN Detector



Training is the key to success

Machine diagnostics

During machine diagnostics, the machines are examined for vibrations using the AERZEN Detector and the main wear parts of the blower or compressor stage, such as the condition of the bearings, are assessed.

Our services

- Data recording:
- Determination of the measured length and its documentation
 - Worldwide recording of vibration data with the AERZEN Detector
- Data assessment:
- Evaluation and assessment based on VDI 3836
 - Discussion of results in the form of status reports and/or optimisation proposals

Your advantages

- ✓ Identification of imminent wear, machine failures and damage
- ✓ Assessment of the necessity of machine overhauls
- ✓ Increase in machine availability
- ✓ Improved planning of necessary service assignments

Acoustic optimisation

AERZEN machines run quietly. But every environment is different. Our acoustic evaluation specialists will help you quickly and sustainably.

The acoustic evaluation includes:

- Analysis of the conditions at the installation site
- Acquisition of measurement data
- Determination of disturbance variables according to ISO 9614
- Optimisation proposals

We carry out acoustic evaluations for you in the planning and project planning phase or carry out acoustic optimisations for existing plants.

Training/training centre

Your specialist staff know their trade. Reason enough to further increase the value of this resource. Because more expertise also increases the added value of your company.

More expertise for your technical staff

- Training either at your location or at our factory
- Basics for operation and maintenance of AERZEN packages
- Manufacturer expertise as an internal resource, quickly available in your company

The trainings refer to the AERZEN standard packages: Delta Blower, Delta Hybrid, Delta Screw and Aerzen Turbo. The courses are practice-oriented and also include packages accessories.

Oil-free pressure or process air for hire. Flexible, reliable rental solutions for every application

Aerzen Rental, a subsidiary of the AERZEN Group, has an extensive and comprehensive rental programme, consisting of machines and accessories, which enables us to offer complete solutions for every sector. In an emergency, we deliver our products from our European depots all year round, 7 days a week, 24 hours a day.

Our application specialists understand your process

We know that your production process must fulfil the highest possible standards. When you choose Aerzen Rental, you are choosing a specialist with years of experience in countless applications in pressure ranges from -650 mbar to 10.5 bar. Our rental machines and auxiliary parts are specifically designed for different requirements and always offer the optimum pressure and volume flow range for efficient integration into your production process.

Our knowledge includes applications such as:

- Water and wastewater treatment
- Pneumatic conveying
- Closed-loop systems
- Burner optimisation
- Research and development
- Compressed air supply for tunnel systems
- and much more

We look forward to supporting you with an efficient and reliable solution. We are happy to customise our machines and modifications exactly to your processes.

Complete solutions

Aerzen Rental is the ideal partner for the realisation of complete solutions. Choose from a wide range of rental machines with accessory components, such as for temporary power supply (transformers/diesel generators), distributors, piping, coolers, dryers, condensate separators, aerator plates for oxygen input into waste water and waters, etc. On request, we can also hand over the complete rental system on a turnkey basis.

Local depots on site

Aerzen Rental has depots in strategically favourable locations throughout Europe, North America (USA) and Asia. This means that our rental solutions are always close to you. Just like our regional specialists, who can provide you with the support and advice you need at any time.



Contact us:
24/7 Hotline: +31 (0) 88 9100 000
info@aerzenrental.com
www.aerzenrental.com



Aerzen Rental will ensure your productivity

- ✓ 24/7 service and delivery, whenever and wherever you need it
- ✓ Support of the production process by application specialists
- ✓ Wide range of rental products from -650 mbar underpressure to 10.5 bar (g) positive pressure
- ✓ Large fleet of 100% oil-free packages for both underpressure and compressed air operation
- ✓ Depots distributed throughout Europe, North America (USA) and Asia
- ✓ Specialists for customised solutions
- ✓ Blower, compressor and turbo technology in premium quality from AERZEN
- ✓ Inexpensive, always the most efficient solution in the correct pressure range
- ✓ Large selection of accessories and modifications



AERprogress: data-based services for the entire life cycle of your machines

AERprogress takes AERZEN compressors and blowers into the digital age and supports you in successfully mastering current and future challenges. The innovative IIoT platform offers a scalable, flexible infrastructure with a wide range of tools and services and makes it easier for you to operate, monitor and maintain your machines. This is process optimisation at its best.

Machine Park Management

Thanks to the decentralised monitoring of all plants installed worldwide, operators of blower and compressor packages benefit from maximal transparency. All relevant data on machine performance can be viewed at any time and from anywhere. Time-consuming, provisional inspections of individual locations become superfluous and routine measures are reduced to a necessary minimum. With one glance at the platform, the user is always aware of the status of his machines.

Energy Management

Energy Management gives you the opportunity to view and compare the energy consumption of all plants transparently at a central point at any time. Existing potentials for optimising energy efficiency and reducing costs can be quickly and easily identified. This is not just about implementing the legal requirements, but rather energy management is an ongoing process, the only way to ensure continuous optimisation.

Condition Monitoring

Condition monitoring permits two maintenance strategies, a usage-based or a time-based strategy, for optimising system availability. By continuously recording and evaluating the process and machine data, the condition of individual components can be accurately represented. Long before a component reaches the end of its lifetime and causes a time-consuming and costly plant shut-down, the Aerzen Digital Platform generates corresponding advisory messages.



Focus on cyber security

- ✓ The IoT gateway is connected to the cloud platform via https with its own private and public key for authentication.
- ✓ Data communication takes place via secure TLS encryption.
- ✓ The platform is operated and hosted in European data centres on Infrastructure as a Service from Microsoft Azure.
- ✓ A central user management with roles & rights as well as a 2-factor authentication allows each access only personalised and authorised.
- ✓ Both the IoT device and the platform are developed according to the IEC 62443 standard.



	MPM	EM	CM
Display of machine status / decentralised system management (operation, disturbance, maintenance)	✓	•	•
Display of process data via KPIs (across locations)	✓	•	•
Diagrammes and trend display	✓	•	•
Transparency of plants and machines (condition monitoring)	✓	•	•
Transparency of process data (at any time and independent of location)	✓	•	•
Reduce / minimise maintenance costs	✓	•	•
Reduction in mean time to repair (MTTR)	✓	•	•
Reduction of the diagnosis time (MTTI)	✓	•	•
Structured maintenance planning	✓	•	•
Machine/device detail pages	✓	•	•
Threshold and limit definitions incl. alarming	✓	•	•
Event alerts and events by e-mail	✓	•	•
Reports / obligation to provide evidence in accordance with ISO 50001:2018	•	✓	•
Compare energy efficiency of locations	•	✓	•
Increased efficiency or avoidance of efficiency losses of up to 8%	•	✓	•
Dependencies on other values/ suggestions based on historical data	•	•	✓
Automatic anomaly detection up to 14 days in advance	•	•	✓
Optimisation recommendation for plant maintenance and operation	•	•	✓
Use-related maintenance intervals	•	•	✓

MPM = Machine Park Management, EM = Energy Management, CM = Condition Monitoring

Real-life cost example

By using AERprogress, it was determined that the intake temperature of a Delta Hybrid rotary lobe compressor was too high. The delta (ΔT) between ambient temperature (T_{amb}) and intake temperature (T_1) was between 15 and 20 Kelvin. An installed temperature sensor provided the data.

Delta ($T_1 - T_{amb} = \Delta T$) in Kelvin	15 Kelvin
Days in operation	210 days
Operating hours	2100 hours
Energy consumption + 1% consumption per 3° Kelvin	0.05
Motor rating	85 kW
Energy costs per kW	0.30 €

The delta (ΔT) was quickly detected by using the AERprogress solution, the cause was found early on and high energy costs were avoided. A too high temperature difference (ΔT) means that the machine consumes more energy at the same volume flow. Due to increased suction temperatures of three Kelvin, approx. 1% higher energy consumption is to be expected.

Calculation:
supplementary energy consumption:
(motor rating * supplementary energy consumption) *
operating hours (85kW * 5%) * 2100 = 8,925kW
Supplementary costs:
supplementary energy consumption * energy costs =
8.925kW * 0.3€ = 2,677.50€

Additional energy costs per month €382.50

Premium service for Process gas machines

Process gas machines have special requirements in terms of process reliability, service life and efficiency - and therefore also in terms of service. As an experienced partner to the process gas industry, we know exactly what the application-specific challenges are and can support you with customised solutions. This ensures maximum safety, availability and cost-effectiveness.



High requirements for service

In the process gas sector, the requirements for plant design, engineering, documentation and global service are often as extraordinary as the safety and environmental guidelines to be complied with. We therefore offer a comprehensive range of services for our sophisticated process gas machines to ensure the durability and reliability of your AERZEN packages even under the most challenging conditions. Specially trained technicians for process gas machines are on hand around the clock to help you quickly, competently and unbureaucratically if the worst comes to the worst. For a reliable, uninterrupted and economical production process.

Leading specialist for demanding process gases

AERZEN is one of the leading manufacturers in the field of compressed air and process gas conveying. The packages stand for unconditional reliability, maximal efficiency as well as reduced investment and operating costs and are configured to fulfil all relevant international regulations, building codes or specifications of the most diverse industries or purchasing companies. They are designed for continuous operation and often run flawless for decades with minimum maintenance.

This reduces downtime and saves costs. Maintenance work is planned and carried out in close co-operation with our After Sales department. This means that spare parts deliveries, repairs and overhauls can be prepared quickly and easily.

Comprehensive repairs and modernisations

With our extensive quotation for service and modernisation options, we can keep the service life of your machine at a consistently high level. As repairs to movable components always take time, it is very important - especially in critical parts of the plant - to take this into close consideration when thinking about the operation of a plant. In addition to on-site service, we also realise in-house repairs at our headquarters in Aerzen (Germany). Here, the machine receives an all-round carefree package including detailed findings, in-house production and testing options for all products repaired at Aerzen. To minimise downtimes, we offer individually assembled spare parts and replacement machines.

AERZEN Revamp System planning with 3D laser scanning

Have you been an AERZEN customer for years? Then, you know the high reliability and long service life of our blowers and compressors from your own experience. But even the best machines need an upgrade from time to time. With AERZEN Revamp, this is easier than ever before.

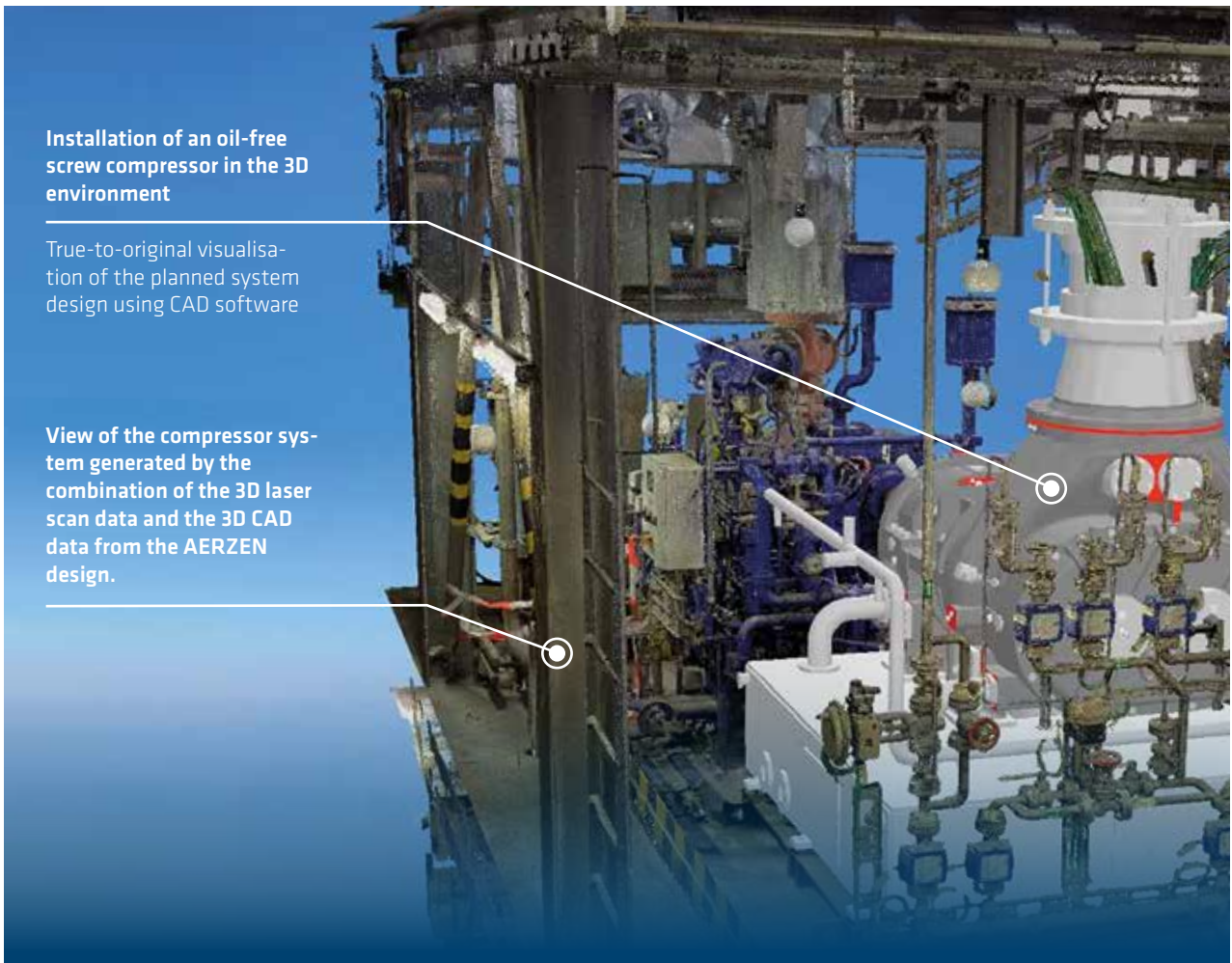
Modernisation of existing systems

Whether automation, efficiency improvement, speed control or upgrading the entire system to a modern standard: anything is possible with AERZEN. Depending on the requirements, a system or parts thereof can be modernised from many different perspectives with a focus on preserving what is tried and tested and/or necessary.

- Control, instrumentation or Upgrade to a modern basic concept
- Conversion with the help of modern engineering and planning tools

Revamp made easy

Integrating new blower and compressor technology into an existing system requires precise planning and perfect engineering. Digital innovations such as virtual reality facilitate this process and are a real game changer for retrofit projects. AERZEN has been working closely with partners in the field of 3D laser measurement in system manufacturing for many years. 3D laser scanners provide perfect planning, engineering and documentation data and simplify the retrofitting and modernisation of existing systems.



Virtual planning, real added value

- | | |
|---|--|
| ✓ Individual compressors and blowers are replaced in the existing package.
<i>Significant reduction in investment costs!</i> | ✓ Safety in design planning |
| ✓ The need for disassembly of individual subassemblies is reduced | ✓ Precise and complete collision check |
| ✓ Fast, complete and precise data capture of the original environment | ✓ Risk minimisation when fitting the new plant |
| ✓ Short downtimes | ✓ Easier handling of space restrictions |
| ✓ Early visualisation of the target state | ✓ Accurate and comprehensive documentation with "as built" data for further projects and correction of "as built" data |
| ✓ Safety in adhering to project goals and budgets | |

Precise measurement

Using ultra-modern scanning technology, the plant and its surroundings are captured from various perspectives without any gaps, generating a complete 3D representation in the highest resolution and with minimum tolerance.

- Detailed record of the existing infrastructure, utilities as well as foundations and parts of buildings

Thanks to the true-to-original visualisation, design engineers work directly in the customer's original environment with all actual dimensions and full transparency when retrofitting and modernising existing systems. This ensures absolute planning and design reliability and leads to a considerable reduction in investment costs.

State-of-the-art control and regulation concepts

AERZEN also pays tribute to the fact that innovations in the control and regulation sector are making great strides. The portfolio includes modern control and regulation concepts for AERZEN machines that meet today's requirements in terms of safety and machine durability and utilise the latest components from the relevant manufacturers and their standards. Based on this, old becomes new!

AERZEN. Compression is the key to our success

The Aerzener Maschinenfabrik GmbH was founded in 1864. In 1868, we built Europe's first positive displacement blower. The first turbo blowers followed in 1911, the first screw compressors in 1943, and in 2010 the world's first rotary lobe compressor package. Innovations "made by AERZEN" keep driving forward the development of compressor technology. Today, AERZEN is among the world's longest established and most significant manufacturers of positive displacement blowers, rotary lobe compressors, screw compressors and turbo blowers. And among the undisputed market leaders in many areas of application.

In more than 50 subsidiaries around the world, more than 2,900 experienced employees are working hard on shaping the future of compression technology. Their technical competence, our international network of experts and the continual feedback from our customers are the basis of our success. AERZEN products and services set standards. In particular, with regard to reliability, stability of value and efficiency. Challenge us.



LET'S TALK

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