

# PERFORMANCE<sup>3</sup>. MANAGE LOAD CHANGE EASILY: THE EFFICIENT TRIO FOR YOUR AERATION TANK.



Technical and structural features of sewage treatment plants, combined with an ever changing air consumption in aeration tanks, pose significant challenges for any plant operator. They lead to extremely high energy demands, which can run as high as 80% of total costs. The solution: the innovative combination of Blower, Hybrid and Turbo from AERZEN. Optimal energy efficiency for basic loads and precise compensation for demand spikes. The result: unparalleled efficiency for operations as a whole. The investment can pay for itself in as little as 2 years!

[www.aerzen-performance3.com](http://www.aerzen-performance3.com)



**AERZEN**  
EXPECT PERFORMANCE

# EXACT LOAD CYCLE MANAGEMENT. NEW LEVELS OF EFFICIENCY FOR AERATION TANKS.

Strong fluctuations are the hallmarks of load operations in biological sewage treatment plants. They can come on suddenly, since waste water pollution levels can change depending on the region, time of day and season, or precipitation. AERZEN has the most effective solution for this kind of challenge: the combination of advanced Turbo blowers, rotary lobe blowers, and rotary lobe compressors in an almost revolutionarily efficient network system.

## Performance<sup>3</sup>.

### The new stage of efficiency in aeration tanks.

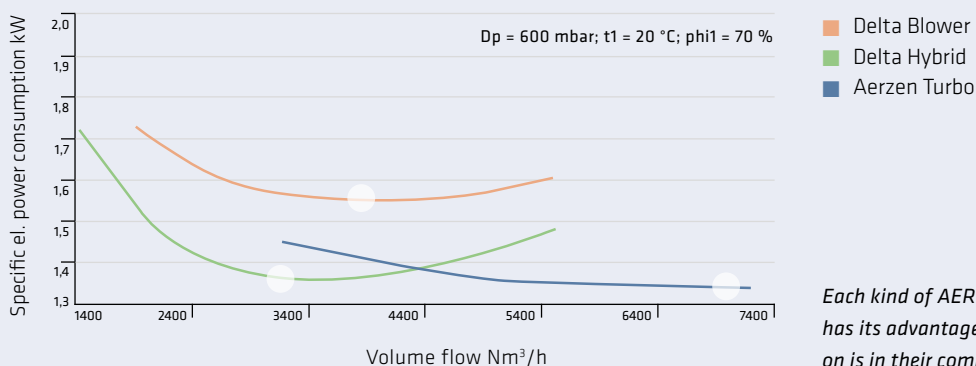
There is now a unique portfolio of solutions for oil-free oxygen supply to aeration tanks provided by three high-performance machines – all from the same manufacturer: the Aerzen Turbo Generation 5 blower, the rotary lobe Delta Blower, and the Delta Hybrid rotary lobe compressor. With a number of models to choose from, these units can be used to satisfy a wide variety of plant-specific requirements. In combination they can guarantee performance that for the first time can be cut precisely to the needs of an ever-changing load profile – from basic loads to peak demand.

This solution portfolio is what we call Performance<sup>3</sup>.

### Energy saving potential – optimally exploited.

Regardless of whether plants are being operated for municipalities or industry, the best mix of machine types and performance is always tailored to the individual instance. The final configuration requires solid knowhow and a lot of experience along with a team of experts from AERZEN who can play the whole range of available technologies. That is how you will discover the potential for process performance and energy efficiency in your plant.

## Power requirements compared with volume flow ranges



*Each kind of AERZEN technology has its advantages: the best solution is in their combination*

**We can support you as a plant operator in a lot more ways than just supplying top technological solutions. We can offer you all round spelling availability of our application know how, experience and expertise. Around the world, 24 hours a day, 7 days a week.**

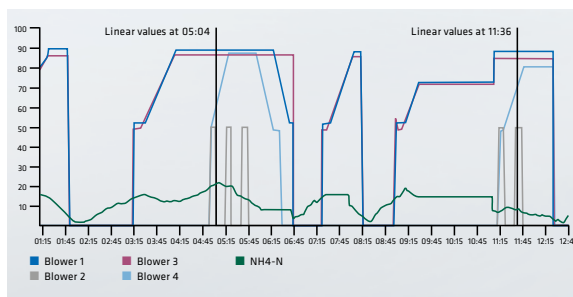
#### **Fast ROI.**

Each technology, regardless whether it is a displacement machine or a turbo machine, has its strengths and weaknesses. With the focus on energy efficiency, the design of the turbo blowers cannot be beaten. The control range is approximately between 40% and 100%. In case of part-load operation, turbo machines are less efficient. On the other hand, displacement machines, such as Delta Blower and Delta Hybrid are ideal for part-load operation. They are strong in high control ranges between 25% and 100% and have good efficiency, also in part-load operation. In a combined system, the advantages of the three high-performance technologies add up to hitherto unknown energy efficiencies in the operation as a whole: the highest possible energy savings, best possible control range, and lowest possible investment costs. These savings can make conversion pay for itself within two short years, depending on the plant involved.

**Sound interesting? Give us a call. We'd be happy to provide you with detailed information – without obligation, of course.**

#### **AERZEN's clever trio**

These combine the advantages of various machine technologies – efficiency and adjustment ranges – while guaranteeing for the first time a requirement led process air supply to the aeration tank. Basic loads are served reliably and in an energy saving manner, while supply peaks are covered precisely as required.



*The clever trio: Blower, Hybrid and Turbo serve every load variation*

# AN INVESTMENT IN THE FUTURE: AERZEN'S WORLD OF SERVICES.

**At AERZEN, we have been providing after-sales services long before the term was invented. Ours is a well-balanced system of tailor-made services.**

## **Arranges for fast processing times – the new service centre.**

Our 1,500 m<sup>2</sup> Service Centre is designed to make the time between receiving your order and delivering your machine as short as possible. We can accelerate the process by using our own cleaning facilities and paint shops, as well as our in-house testing station. Our range of over 2,500 different standard parts is updated on a continuous basis, and a computer-guided lift system supplies repair shops and replacement delivery centres with just the parts they need. Meaning we can supply you with blower and compressor units in just 5 to 15 days.

## **Must haves: original parts.**

Only "Original Equipment Manufacturer" (OEM) parts can guarantee the pinpoint accuracy you need. Despite standardised terminology, there are always small differences in the manufacturing process that in extreme cases can drastically reduce a machine's lifespan. You're on the safe side with OEM parts. We guarantee it.



## **AERZEN's rental service – and your company remains flexible.**

Good to know that you can be prepared for anything. AERZEN Rental Division (ARD) can quickly deliver solutions for 100% oil-free air. For almost all industry segments. Ad hoc or contractual (service level agreements). Our rental machine park contains a large number of blowers, turbos and compressors with a vast range of performance levels for all normal pressure ranges, all ready for immediate use. Our engineering department is intimately familiar with your applications and can provide solutions that integrate seamlessly with your processes.



*AERZEN Servicecenter*

## **Further AERZEN services:**

- Original spare parts
- Service kits
- Oils and lubricants
- Service contracts
- Machine diagnostics
- Motor and relubrication facilities
- Sound technical optimisations
- Trainings/Training centre

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