

# AERaudit.

DO YOU KNOW THE SAVINGS POTENTIAL OF YOUR TREATMENT PLANT?



**AERZEN**

# AERaudit MAKES YOUR SAVINGS POTENTIAL VISIBLE.

Load operation in wastewater treatment plants is subject to large fluctuation; wastewater quantities and contamination levels sometimes change rapidly. Collecting and evaluating operating data from your blower station yields reliable results on the current capacity and cost-efficiency of your wastewater treatment plant. What's more, it reveals how you can design your blower station more efficiently in the future. Learn more about the precise methods that power AERaudit and our reliable analysis of optimal plant configuration with Performance<sup>3</sup>.

## AERZEN is your analysis specialist

Wastewater treatment plants are the largest consumers of energy in a given community. Biological aeration accounts for 60% to 80% of a wastewater treatment plant's total energy consumption. In worksheet DWA-A216, the DWA (German Association for Water Economy, Wastewater and Waste) has created a uniform method for determining existing energy potential in wastewater treatment plants. The complex nature of the process sequences in wastewater treatment requires a systematic approach and extensive expertise. AERZEN is your competent point of contact for conducting a substantive energy check and optimising the power consumption of your blower station.

## Stay competitive: Use less energy in production

As a member of the German Water Partnership network, AERZEN focuses on sustainably designed, innovative, and competitive water management. AERaudit is a service developed exclusively by AERZEN for improving the energy efficiency of our customers' wastewater treatment plants. Municipalities are especially reliant on savings; with AERaudit you can secure the best plant performance for your load profiles.

## AERaudit. Laying the foundation for a new future

As a market leader in wastewater technology, AERZEN was developing innovative technologies long before the boost in development provided by Water 4.0. Water 4.0 signifies a forward-looking orientation towards process in water management. The strategy focuses on digitalisation and automation, allowing operational procedures to be organised more flexibly, sustainably, and efficiently. Analyses of existing

blower technology invariably identify savings potential, which subsequently serves as a basis for investment decisions. AERaudit creates the database for you.

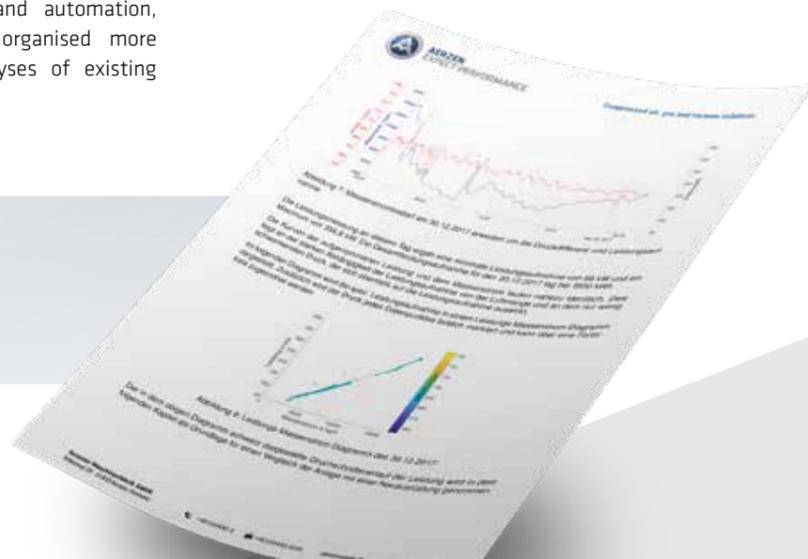
## Performance<sup>3</sup>. Three blower technologies, one goal: maximum efficiency

Performance<sup>3</sup> does not only mean our product portfolio, consisting of the Delta Blower positive displacement blower, the Delta Hybrid rotary lobe compressor, and the Aerzen Turbo turbo blower; it also and especially means individualised solutions and the best possible integration of technologies. Every technology has its strengths, as well as its physical limits. When searching for the most efficient solution, it's necessary to configure machine technologies in a way that meets the individual requirements of each plant. Whereas it used to be common practice to install blowers of just one size, today's plants often feature a mix of different sizes, or even technologies. Savings of up to 30% are possible.

## Profitable in a short time.

The usage of a variety of tailored machine technologies facilities a rapid ROI, because the energy balance connected with the conversion results in considerable savings. Depending on the plant, process optimisation can pay for itself within two years. AERaudit makes the savings potential of your wastewater treatment process transparent. Reports enable you to apply for government funding programmes in energy efficiency and CO<sub>2</sub> reduction.

WE DETERMINE YOUR EXACT LOAD REQUIREMENTS.



# THREE STEPS TO TRANSPARENCY.

A process and energy-efficient wastewater treatment operation begins with a status analysis and an evaluation of current operating data. This determines the actual load requirements, in order to identify saving potential. AERaudit is an innovative service from AERZEN that leads our customers to the most cost-effective and forward-thinking plant configuration in three steps.

## 01 | ON-SITE MEASUREMENT:

The AERZEN service team gives transparency to the numbers from your blower station. A mobile measuring station is used to record all relevant aeration data. Volume flow, system pressure, temperature, and kW rating are measured live and recorded in the form of load profiles.



SAVING POTENTIALS

## 02 | ANALYSIS:

The recorded data is carefully and extensively analysed at AERZEN headquarters; even the smallest low and peak loads are evaluated. Based on the results, our experts will tailor one or more concepts to your requirements, making them as efficient as possible.



## 03 | REPORT:

All the data from your blower station is presented transparently and in detail. Temperatures, load profiles, and energy expenditures are all visualised in the form of diagrams and explained in depth. We present you with a customised Performance<sup>3</sup> solution including the ideal machine configuration, a report on savings potential with regards to energy and CO<sub>2</sub>, and what ROI times might be achieved.





# LET'S TALK

**Markus Leiding, Application Specialist, Wastewater Technology**

☎ +49 175 9335602 ✉ [markus.leiding@aerzener.de](mailto:markus.leiding@aerzener.de)

Aerzener Maschinenfabrik GmbH  
Reherweg 28 – 31855 Aerzen, Germany  
Telephone: +49 5154 81 0 – Fax: +49 5154 81 9191  
[info@aerzen.com](mailto:info@aerzen.com) – [www.aerzen.com](http://www.aerzen.com)



**AERZEN**  
EXPECT PERFORMANCE