

**AERaudit** Do you know the savings potential of your treatment plant?



**AERZEN**  
EXPECT PERFORMANCE

# 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 facilitates 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.

## 1. On-site measurement

The AERZEN service team brings transparency to the key figures of your blower station. With a mobile measuring station, all relevant data of your process air generation and load curves are recorded: volume flow, system pressure, temperature and rating. This is done over a longer period of time, in order to take different load profiles into account.

## 2. Analysis

The recorded data are carefully and extensively evaluated and each low and peak load is assessed. Based on the results, AERZEN develops tailor-made concepts which are as efficient as possible for you.

## 3. Report

All data of your blower station are displayed in detail and transparently. We will also show you your Performance<sup>3</sup> solution, i.e. the optimised adaptation of the blower capacity to individual load fluctuations with the optimum machine configuration. This illustrates how great the potential for saving energy or CO<sub>2</sub> is and what amortisation times can be achieved.



## Savings potential

Benefit from energy saving potentials of 30% on average and amortisation times of less than two years.

## **AERZEN** Compression is the key to success

AERZEN was founded in 1864 as Aerzener Maschinenfabrik. 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.

AERZEN is among the undisputed market leaders in many areas of application. At our 50 subsidiaries around the world, more than 2,500 experienced employees are working hard to shape the future of compressor technology. Their technological expertise, our international network of experts, and the constant feedback we get from our customers provide the basis for our success. AERZEN products and services set the standard in terms of reliability, value and efficiency. Challenge us.



## **LET'S TALK**

**Find your local contact**

[www.aerzen.com/worldwide](http://www.aerzen.com/worldwide)

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