# AERaudit.

DO YOU KNOW THE SAVINGS POTENTIAL OF YOUR TREATMENT PLANT?



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# **AERaudit** MAKES YOUR SAVINGS POTENTIAL VISIBLE.

Load operation in wastewater treatment plants is subject to strong fluctuations; wastewater quantities and contamination levels sometimes change rapidly. Collecting and evaluating operating data from your blower station provides you with 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 far more efficiently in the future. Learn more about the highly precise methods behind AERaudit and our reliable analysis of your optimal plant configuration with Performance<sup>3</sup>.

#### AERZEN is your analysis specialist.

Wastewater treatment plants are the biggest energy consumers in a 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. A systematic approach and extensive expertise are required, because the process sequences in wastewater treatment are complex. AERZEN is your competent point of contact for conducting a substantive energy check and optimising the power consumption of your blower station.

#### Use less energy in production, stay competitive.

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 your wastewater treatment plant. Municipalities are especially reliant on savings; with AERaudit you can secure the best plant performance for your load profiles.

#### AERaudit. The basis 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 represents forward-looking process orientation in water management. The focus of the strategy is on digitalisation and automation, so that operational procedures can be organised more flexibly.

sustainably, and efficiently. Analyses of existing blower technology invariably identify savings potential, which 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> means not only the product portfolio consisting of the Delta Blower positive displacement blower, the Delta Hybrid rotary lobe compressor, and the Aerzen Turbo turbo blower, but also and especially the individual solution and the possible interplay of technologies. Because every technology has its strengths, as well as its physical limits. When searching for the most efficient solution, it's therefore necessary to configure the machine technologies to meet 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. Performance<sup>3</sup> process optimisation can pay for itself within two years, depending on the plant. AERaudit makes the savings potential of your wastewater treatment process transparent. Reports enable you to apply for government funding programmes for energy efficiency and CO<sub>2</sub> reduction.

### WE DETERMINE YOUR EXACT LOAD REQUIREMENTS.

# THREE STEPS TO TRANSPARENCY.

The basis for an energy-efficient waste water treatment operation is a status analysis and an evaluation of current operating data. This determines the actual load requirements, so that potential savings can be identified. AERaudit is an innovative AERZEN service that leads you in three steps to the most cost-effective and forward-thinking plant configuration.

#### 01 | ON-SITE MEASUREMENT:

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



### 02 | ANALYSIS:

The recorded data is analysed carefully and extensively at AERZEN headquarters. Even the smallest low and peak loads are evaluated. Based on the results, our experts develop one or more concepts that are tailored to your requirements and 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 visualised in the form of diagrams and explained in depth. We also show you your individual Performance<sup>3</sup> solution with the ideal machine configuration. In addition, we show how much savings potential there is in terms of energy and CO<sub>2</sub> and what ROI times could be achieved.



Aerzener Maschinenfabrik GmbH Reherweg 28 – 31855 Aerzen, Germany Telephone: +49 5154 81 0 – Fax: +49 5154 81 9191 info@aerzener.de – www.aerzen.com

