

powietrze w miesiącach letnich, zastosowanie znajduje turbo dmuchawa Aerzena jako maszyna efektywnego zapotrzebowania bazowego; dmuchawa rubowa Delta Hybrid jest złączana tylko w przypadku obciążenia szczytowego. W tym celu typ AT 100-0.6 S pokrywa przepływ do 4.200 m³/h i charakteryzuje się zakresem regulacyjnym 40% do 100%. Zimą, system opiera się na Delta Hybrid, gdy w tej porze roku występuje mniejsze zapotrzebowanie na tlen do celów napowietrzania. Maksymalny przepływ wytwarzany przez typ D 36 S wynosi 2.150 m³/h z zakresem regulacji 25% do 100%. The major difference evident at Wallau is the result of its special geology, as the sewer system carries a comparatively high level of groundwater via connected drainages and this strongly dilutes the waste water. The reason for this is a schist layer, because of which the rain seeps away very slowly in the region of the river Lahn.

Eventually, however, the energy savings of 15% forecast at the beginning of the project in Wallau were considerably exceeded. The new combined system has already achieved savings of 26% in respect of the electricity demand of the entire wastewater treatment plant. In view of the fact that the aeration needs half of the electricity demand, "the retrofitting in this sector yields savings of more than 50%", demonstrates Gernot Wege. "For us, it is a tremendous step forward - ecologically and economically."



Conclusion.

The variable air demand for the cleaning of wastewater can be controlled more energy-efficiently with cascaded and speed-controlled systems. But since each machine only operates in a determined operation range at its optimum efficiency, AERZEN makes a further step with Performance3 and combines different types of machines to a highly energy-efficient combination. "We can use and combine ideal blowers for the individual load case. The solution offered by AERZEN has the advantage that we can buy all types from one hand and this is something that our customers appreciate." Standardisation makes the complete service much easier. The fact, that the discharge silencer has a patented bearing and operates without absorption material and without oil to 100%, is a guarantee for the durability of the installed membrane aeration technology and the process safety. "All I have to do is to call the company of my confidence and ask for maintenance or repair," remarks Gernot Wege.



AERZEN. Compression as success principle.

AERZEN was founded in 1864 as Aerzener Maschinenfabrik. In 1868 we built Europe's first rotary lobe blower. The first Turbo compressors followed in 1911, the first screw compressor in 1943, and in 2010 the world's first rotary lobe compressor unit. Innovations "made by AERZEN" keep driving the development of compressor technology. Today, AERZEN is among the world's oldest and most significant manufacturers of rotary lobe blowers, rotary lobe compressors, rotary lobe meters, screw

compressors, and Turbo blowers. And among the undisputed market leaders in many areas of applications.

More than 2,000 experienced employees in over 45 subsidiaries the world over are fully engaged in the advancement of the compressor technology. Their technological expertise, our international network of experts, and constant feedback from our clients form the basis for our success. Products and services from AERZEN are setting standards when it comes to reliability, lasting value, and efficiency. Go ahead: challenge us!



AERZEN
EXPECT PERFORMANCE