

Focused on the future

Expansion and modernization of the Basel wastewater treatment plant



ProRhenon AG has been treating the wastewater from households, businesses and industry in the Basel region since 1982. As part of its mission to protect the environment, ProRhenon AG offers corresponding services for public organizations and companies, with safety serving as an important topic. ProRhenon seeks ongoing dialog with the public while making its know-how available to solve environmental issues.

„Many factors contributed to the decision to select Endress+Hauser, including openness, regional proximity and reliability. Collaboration with the staff is excellent, even when something doesn't run quite so smoothly.“

Roberto Frei
Project Manager
ProRhenon AG



Industry experts in discussion: Joscha Giambonini, HOLINGER and Marc Bircher, Endress+Hauser



Roberto Frei, Project Manager
ProRhenon AG

The Basel Wastewater Treatment Facility (ARA) has been in operation since 1982. After 40 years, the plant is reaching its limits in terms of age and capacity. In addition, the requirements and stipulations outlined in the water protection act have changed significantly with respect to microcontaminants. As operator of the ARA, ProRhenon AG aims to meet these future requirements with the expansion and modernization of the facility. The large-scale project will be carried out with an extensive number of partners, including Endress+Hauser.

Customer challenge

The successful implementation of a large-scale project like this is a difficult task and requires forward-looking planning with the right partners. From the very beginning, the project should be implemented in such a way that the operation of the plant is not disturbed.

Project

The tender offer for the project stipulated that the instrumentation supplier also cover installation, commissioning, training and documentation. As a complete provider, Endress+Hauser fulfills these requirements and offers a solid foundation for successful collaboration.

Implementation

All areas of the wastewater treatment system were modernized, from water intake and mechanical/biological purification, to water discharge. Instrumentation and know-how from Endress+Hauser are incorporated into all of the relevant processes. The whole plant is roofed over or enclosed to avoid odorous emissions as much as possible. The exhaust is purified and released into the atmosphere. An important step in the area of biological purification was the conversion from conventional activation basins to sequence batch reactors (SBR).

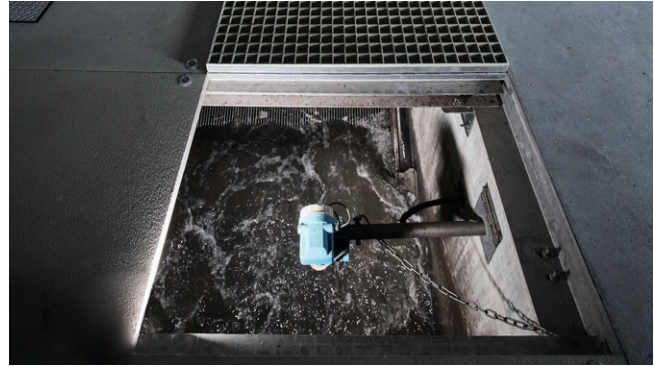
The purified water is currently discharged into the Rhine under continuous control until the fourth purification stage is expanded as part of the next modernization phase. Another important step in the expansion involves the sludge treatment, digestion and gas treatment processes.

Advantages

- Reliable adherence to current regulatory threshold values
- Ease-of-implementation in response to strengthening of the water protection act, thus eliminating the need for new modifications
- Improved environmental and water protection
- Increased sustainability



View of the sequence batch reactors at the ARA Basel wastewater treatment plant.



Coarse rake screening with control via Prosonic FMU40 ultrasonic sensors.



Proline Promag W 400 DN 700 flowmeters measure the volume flow of the purified water on its way to the Rhine.



Project managers in their element: Roberto Frei (Project Manager, ProReno, middle), Joscha Giambonini (Project Manager, HOLINGER, right) and Marc Bircher (Project Manager, Endress+Hauser, left) review the current status of the project.

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