

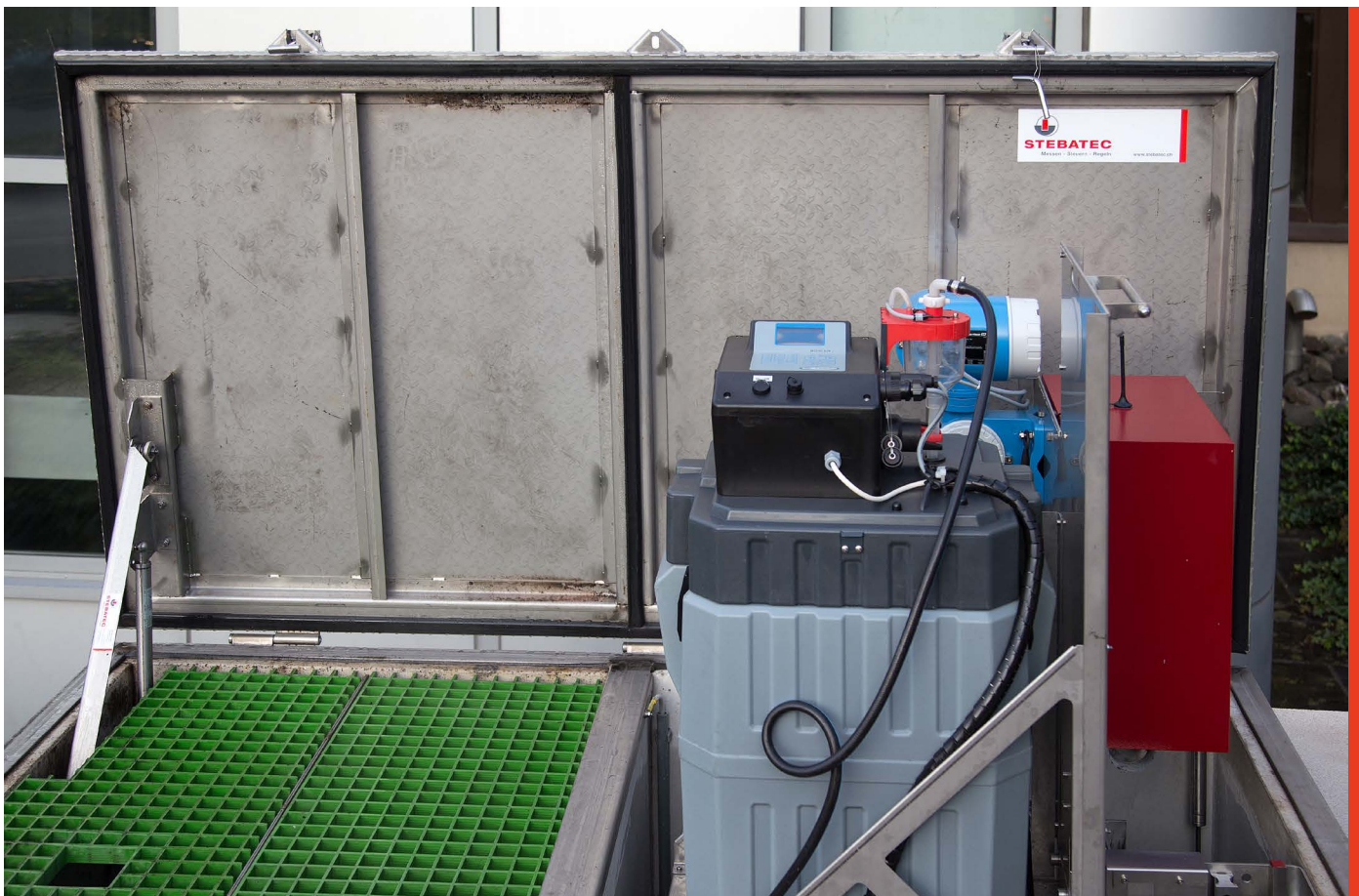


**STEBATEC**<sup>®</sup>  
Measure - Control - Regulate

Municipal association ARA Meilen-Herrliberg-Uetikon am See

## Waste water measuring station with buried control

- Industrial waste water measuring points for cost accounting
- Data communication with waste water treatment plant via GMS network
- Control equipment can completely be buried in the ground
- Optimization of the plants as required by the owners



Open measuring point with installation moving up on a lift. Grates are placed over the left, wet, flow metering section.

## SITUATION

The waste water treatment plant in Rorguet treats the waste water of the association of the three municipalities Meilen, Herrliberg and Uetikon am See. The 24,500 connected inhabitants, plus the industrial dischargers add up to a population equivalent of totally 52,500. One of the dischargers measured the firm's polluting load with a sampler installed in the hygiene zone of production. This made access difficult and limited the possibilities of control and maintenance. For the continuous measurement of the COD and CIS values and the flow rates, the association decided in 2013 that directly accessible measuring points should be installed outside the buildings and future samples should be analyzed in the association's laboratory. The planning and execution of the project were awarded to Unimon GmbH and to STEBATEC AG.

- Constant measurement of water flow rates and pollution loads
- One firm responsible for the delivery of the shaft, the measurement and the data transfer
- Direct transfer of the measuring data in the process control system of the waste water treatment plant
- Measuring points around the clock and easily accessible
- User friendly installations

One measuring point each was constructed by STEBATEC AG at the two inflow points in the sewer system. In a concrete box buried in the ground, the waste water flows through a flow meter in one half of the box; samples are taken regularly. The samples are transferred through a hose to the other – dry – half of the box in which a collection container and the control box are installed. These can be lifted easily from the concrete box by means of counterweights (link to the video) and are thus easy to use. Other details make the use even easier: The grating on the wet half of the box serves as storage area, a socket outlet at the control cabinet supplies power to electrical tools and implements and the door in the ground can also be opened without special tool.

Measuring data has been transferred via GSM network to the process control system of the waste water treatment plant since January 2015 and ensure that the operating state is viewed there at a glance. Even the water samples can now be analyzed in the association lab, which reduces the customer's workload further.



Access to the control cabinet is unobstructed.



Sewage treatment foreman Thomas Zimmerli is very satisfied with the new measuring points.



The ground door is simple to open and close.



The waste water flows through the flow meter. The water samples are transferred into the collecting vessel by the hose.



Lifting mechanism with counterweights (bottom) and locking lever (right).



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