

Langenburg: pneumatic drain control

Defined outflow also under high primary pressure – thanks to pneumatic drain control

After several failures of the earlier throttle, the managers of the sewage treatment plant in Oberregenbach decided to install a dynamic drain control unit from STEBATEC. The decision was wise, the system now operates reliably.

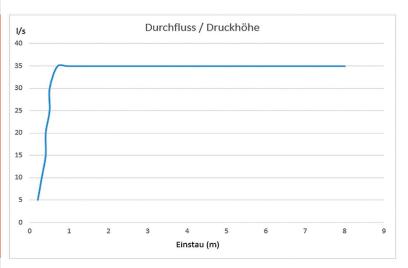


The Oberregenbach sewage treatment plant of the town of Langenburg (D) is located between Stuttgart and Nürnburg and treats the waste water of about 1,800 inhabitants. Located on the foot of a slope, the water from the storm-water basin runs down a steep canal. Before the STE-BATEC drain controller was installed, the waste water was slowed down by a mechanical scale throttle before it entered the sewage treatment plant.

The scale throttle was clogged regularly with the result that only eight liters a second entered the sewage treatment plant instead of the maximum possible inflow of 35 l/sec and the rest entered the main drain without treatment.

The ball got rolling at the IFAT

Dissatisfied with the unreliable operation of the mechanical throttle, those in responsibility in the city of Langenburg decided in November 2012 to look for a more reliable solution at the IFAT 2013, the world's leading trade fair for water, waste water, waste and raw materials industries. They found the pneumatic drain control of STEBATEC on display there. The advantage of that control unit is: It is equipped with a high-precision magnetic-inductive flow measurement module that controls the flow on the basis of the effective flow rate. The pneumatic drain control is one of the only regulating solutions in the market that can maintain a defined drain level at a low and as well as at a very high primary pressure.



STEBATEC AG I PROJECT REPORT I LANGENBURG: PNEUMATIC DRAIN CONTROL

Reliable solution that works

«The product met the requirements our engineers had on the throttling action, it also works at an impounding height of eight meters and the throttling action even continues during a power failure», Eduard Frick, responsible for sludge disposal of the Oberregenbach sewage treatment plant, says. «Besides, now the throttling is exact and controlled, which it was not before», the sewage treatment expert stresses. The action is remote controlled and the system is compatible with all common process control systems in the market – including that in the Oberregenbach sewage treatment plant.

The experience so far made with the pneumatic drain control from STEBATEC is good, Eduard Frick says. If solid material enters the unit, the pneumatic drain control has additional functions such as the surge flush, as a result of which unit cleans itself or the debris is flushed away: The hatch is closed for 15 seconds and then opened immediately. This can be repeated several times if necessary until the target control is restored – the material flushed is out of the line. The sewage treatment expert has come to know STEBATEC as a company with a distinct commitment to service:



«The time schedule was kept; the unit installed within one day without interruption of normal operations.» He was equally satisfied with the service after sale: «STEBATEC has been inquiring repeatedly how the throttle works». And if you want, you can get the boss on the phone personally. Based on that experience, the cooperation with STEBATEC will be intensified further in future, Eduard Frick adds.