

Wastewater Treatment Plant Regensdorf

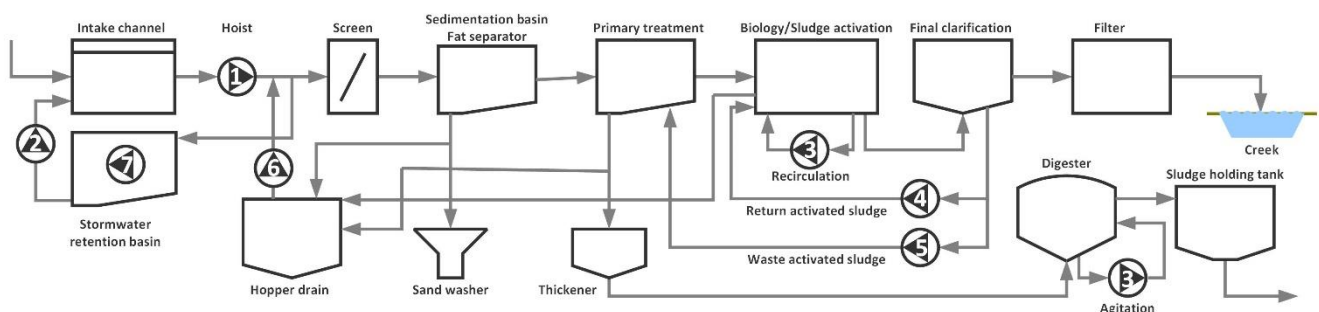
Application market	Wastewater
Market segment	Wastewater Treatment
Pumped medium	Wastewater and sludge in different process stages
Pump product	Submersible, Immersible and Bearing Frame
Country	Switzerland



Challenge

The Wüeri wastewater treatment plant in Regensdorf is one of the most modern wastewater treatment plants in Switzerland. It is capable of processing wastewater from approx. 30,000 people. Approximately 5,000 m³ of wastewater is accumulated per day. In dry weather, this amounts to an average of 250 litres per second, in rainy weather an additional almost 400 litres per second. The treated water is discharged into the Furtbach creek.

Solution The **Hidrostaal Screw Centrifugal Pump** is used for all process stages. The numbers in the various process stages in the following diagram indicate the individual pumps, which in turn are described in the table below.



Benefits

Pump solutions for the entire plant from a single source. Reliable, safe, and low-maintenance operation across all process stages for more than a quarter of a century. The requirements for wastewater treatment processes, which have meanwhile increased further, continue to be met satisfactorily. The Wüeri wastewater treatment plant has become a showpiece when it comes to demonstrating and proving the almost unlimited possibilities offered by the **Hidrostaal Screw Centrifugal Pump** in wastewater treatment.

No.	Process stage	Qty. of units	Pump type	Motor data	Duty point	
					Flow [l/s]	Head [m]
1.1	Hoist dry weather Submersible	2	E05K-H+EEXW4	11 kW / 6 pole	42.5	8.0
1.2	Hoist rainy weather Submersible	2	I16K-SS+ IE7C9	55 kW / 10 pole	260	8.0
2	Storm water basin drain Submersible	2	D04Q-R+DK3A4	4 kW / 4 pole	26	6.5
3	Recirculation Bearing frame	2	E08Q-SL+ECM1F	18.5 kW / 4 pole	82	14.0
4	Return activated sludge Bearing frame	3	E08Q-HL+ECM1F	15 kW / 4 pole VFD	25-60	0.8-3.6
5	Waste activated sludge Bearing frame	2	D080-MH+DEM1B	1.5 kW / 4 pole VFD	5	2.0
6	Hopper drain	1	D0DQ-R+DNYK4	3 kW / 4 pole	17	7.5
7	Storm water basin Air Jet	2	E05K-M+ENYT4	7 kW / 4 pole	70	7.0

Material combination Cast iron pump body and wear parts with nodular iron impeller

In operation since 1993