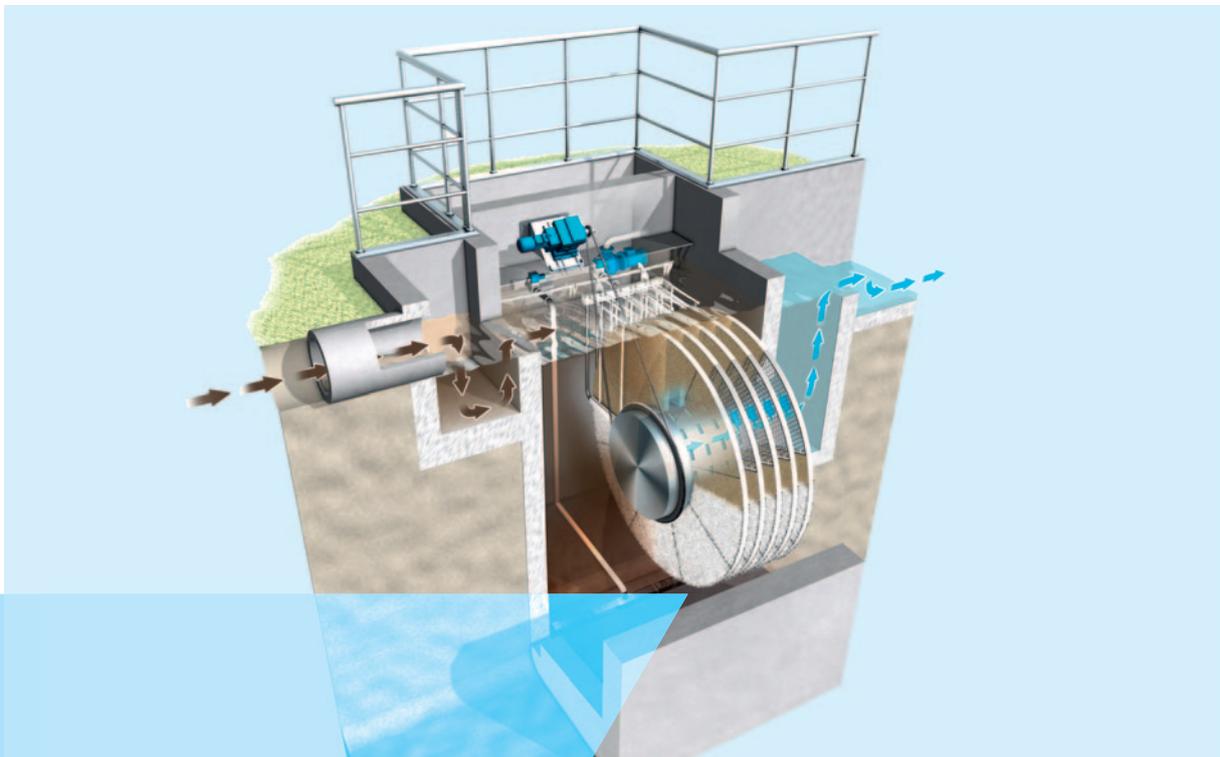


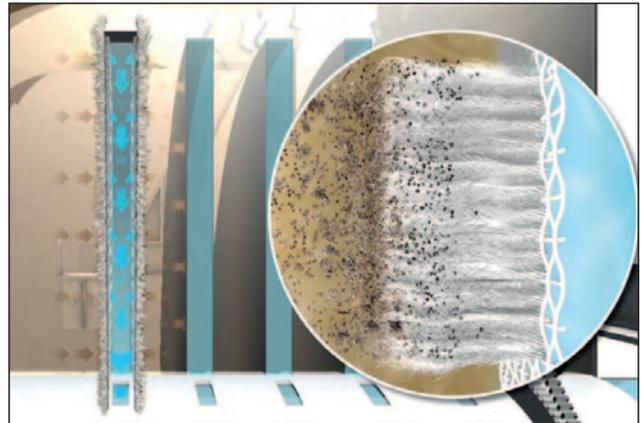
HUBER Disc Filter RotaFilt®



- Reliable phosphorus elimination and carbon retention in the tertiary treatment stage
- Reliable retention of powdered activated carbon (PAH) in the fourth treatment stage
- Efficient prefiltration for the fourth treatment stage

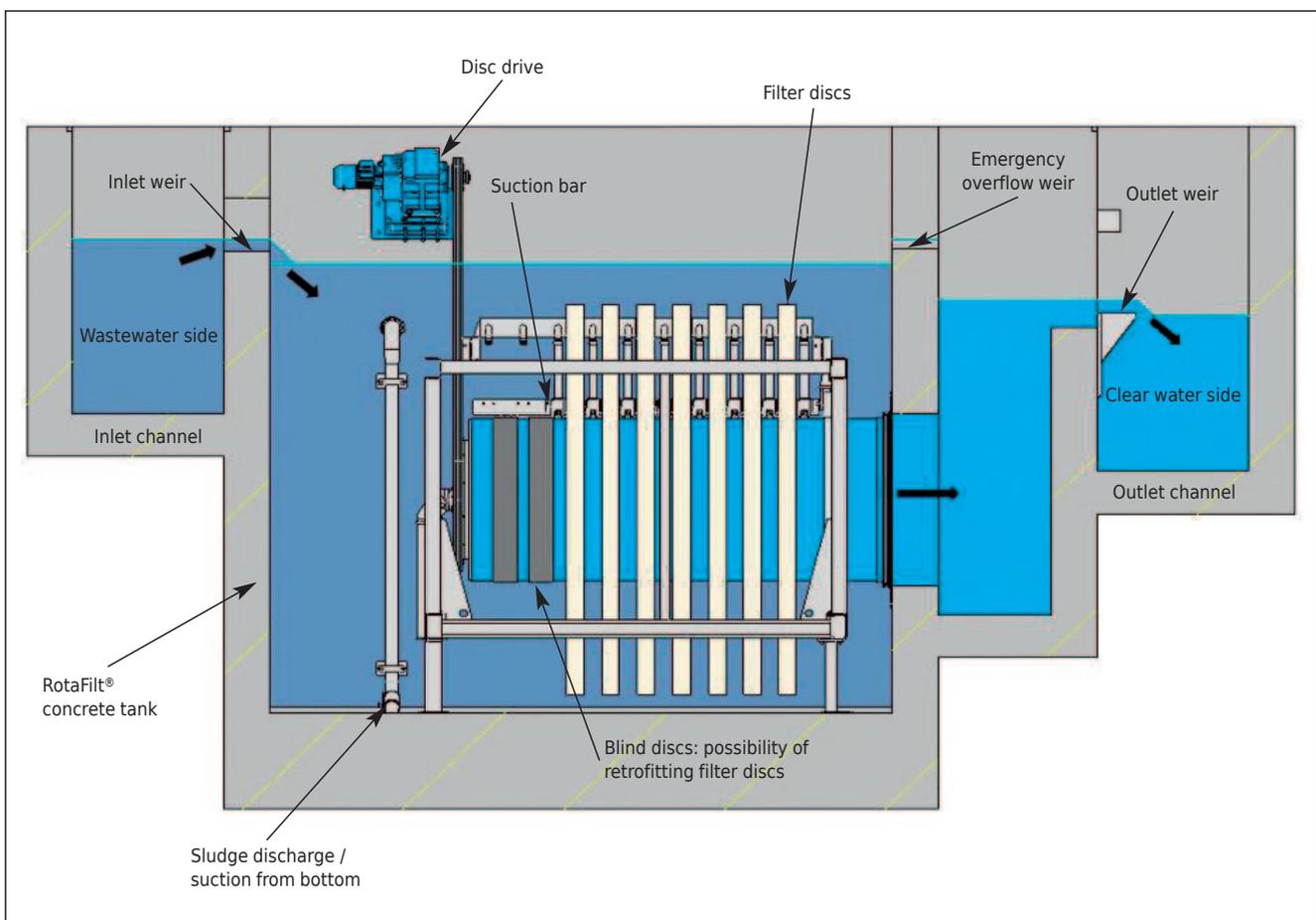
➤ Design and function

The wastewater is fed into the basin of the filtration stage either by gravity or via pumps. The filtration direction of the process is from the outside to the inside. In the basin, the water flows onto the filter discs. Each individual disc consists of several segments with a pile fabric filter bag pulled over each segment and fixed to it. A pile fabric is a fabric in which pile yarns are firmly bound onto a base fabric, creating a three-dimensional structure. The solids are retained by this pile fabric, while the cleaned water enters the interior of the filtration system and is led via a weir to the next stage or into the receiving water. The retention of solids increases the resistance through the filter material, i.e. the difference between the water levels on the wastewater and clear water side increases. Once a certain pressure loss has been reached, the cleaning of the pile fabric begins. A pump and several suction bars suck off the filter material, which reduces the pressure difference again. During the suction process, the filter discs rotate and are thus cleaned step by step. The design of the central shaft and the filter discs ensures that no dead zones are created during the cleaning process, so that the filter medium can be used permanently.



Filtration process at the pile fabric filter bags

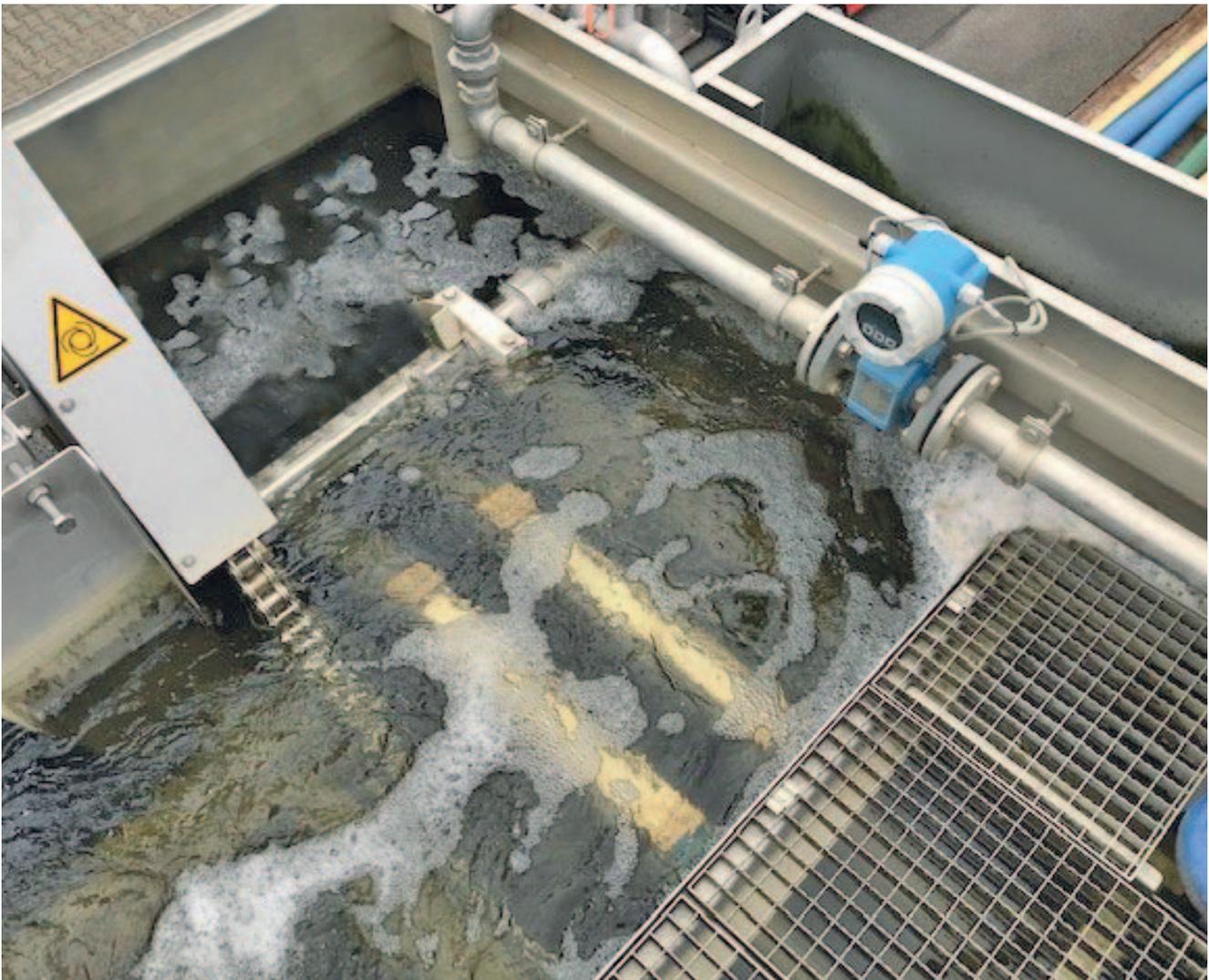
In order to prevent the basin from silting up, the settled sludge at the bottom of the basin is sucked out at regular intervals by suction lances.



Functional principle of the HUBER Disc Filter RotaFilt®

➤ Advantages of the HUBER Disc Filter RotaFilt®

- Easy modular retrofitting of additional filter discs possible
- Very high separation efficiencies; filterable solids in the effluent of ≤ 3 mg/l possible without problems
- No dead zones during the treatment process → complete filter surface is available for wastewater purification
- Low pressure loss during operation of the system
- Dry installation of the wash water pump(s), thus good accessibility
- Minimal footprint due to compact design – up to 35 discs per machine
- Installation of blind discs possible → flexible adaptation to higher flow rates
- Disc segments with increased free surface due to innovative honeycomb structure
- No deep hopper bottom necessary for sludge and impurities removal
- Simple, user-friendly filter bag and module replacement
- Optimal price-performance ratio due to large disc diameter (2,700 mm)



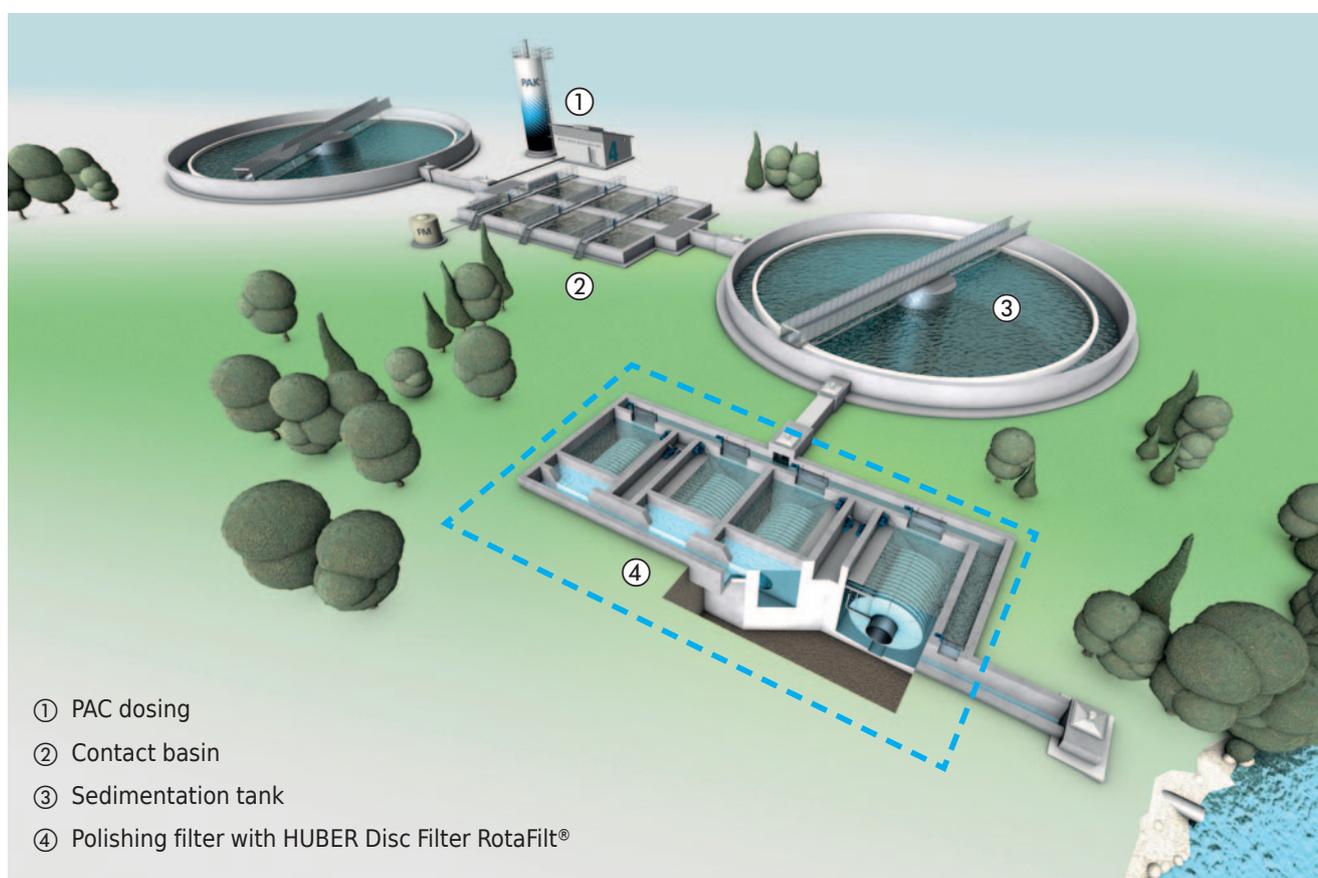
HUBER Disc Filter RotaFilt® in operation

►► Technical data of the HUBER Disc Filter RotaFilt®

- Available sizes: 2 – 35 (number of discs)
- Throughput rates up to 3,200 m³/h per machine
- Feeding either by gravity or via pump

►► Materials

- All metallic parts made of stainless steel (stainless steel parts acid treated in a pickling bath)
- Disc support segments made of high-quality plastic with optimised free surface; uncomplicated replacement of segments and pile fabric bags
- The right type of pile fabric for every application



Fourth treatment stage: Typical process with HUBER Disc Filter RotaFilt® as downstream polishing filter

HUBER SE

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HUBER Disc Filter RotaFilt®