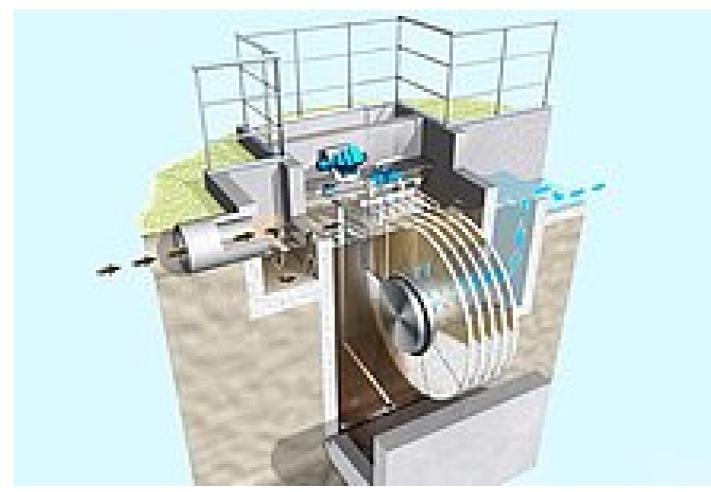


Home ■ Products ■ Micro Screening / Filtration ■ Pile Fabric Filtration ■ HUBER Pile Cloth Media Filter RotaFilt® HUBER Pile Cloth Media Filter RotaFilt®



- 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

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.

Design and function

The wastewater is fed into the basin of the filtration stage either by gravity or via pumps. Throughput rates up to 3,200 m³/h per machine are possible, dependant on size (disc numbers). 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.

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. 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.

All metallic parts made of stainless steel (stainless steel parts acid treated in a pickling bath). Disc support segments made of highquality plastic with optimised free surface; uncomplicated replacement of segments and pile fabric bags. There is the right type of pile fabric for every application.

Benefits

- 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 water pump(s), thus good accessibility
- Minimal footprint due to compact design up to 35 discs per machine
- Installation of blind discs possible
 \rightarrow 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)

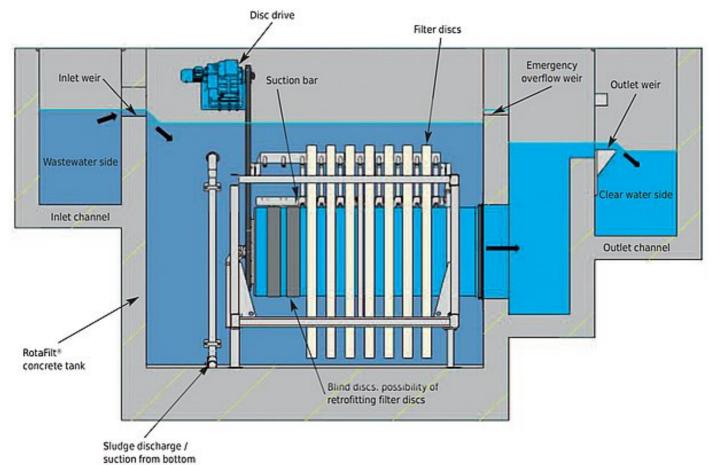
Downloads

Brochure: HUBER Disc Filter RotaFilt® [pdf, 657 KB]

Case Studies

- Two HUBER lighthouse projects of the fourth treatment stage: construction of the micropollutant removal plants in Bickenbach and Uhldingen is progressing rapidly
- Trade fair novelty for advanced wastewater treatment: The advantages of the new HUBER Pile Cloth Media Filter RotaFilt®
- Bickenbach Wastewater Treatment Plant: HUBER supplies technologies for Hesse's first plant for elimination of trace substances
- HUBER offers convincing key components for a tailor-made 4th treatment stage

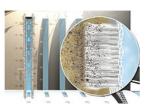
Design Sketch



Functional principle of the HUBER Disc Filter RotaFilt®

Media





HUBER Disc Filter RotaFilt® in operation

Filtration process at the pile fabric filter bags



Fourth treatment stage: Typical process with HUBER Disc Filter RotaFilt® as downstream polishing filter: (1) PAC dosing, (2) Contact basin, (3) Sedimentation tank, (4) Polishing filter with HUBER Disc Filter RotaFilt®



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