



HUBER Pile Cloth Media Filter RotaFilt®

- ▶ Reliable separation of fine suspended solids (sludge flocs, microplastics)
- ▶ Ideal for phosphorus removal (flocculation filtration)
- ▶ Reliable retention of powdered activated carbon (PAC) for removal of trace substances
- ▶ Efficient pre filtration to protect ozonation and GAC adsorption systems for trace substance removal

More information,
downloads and
current news



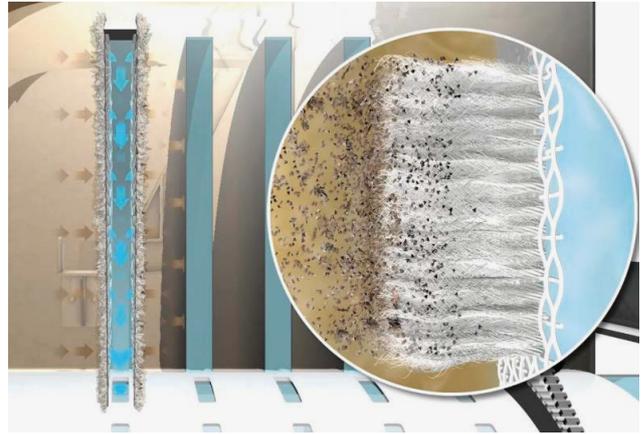
Design and function:

The HUBER Pile Cloth Media Filter RotaFilt® consists of several vertically aligned filter discs mounted along a horizontal, rotating drum shaft in parallel. Each filter disc is formed by a number of segments braced against each other around the drum's circumference. Each filter element has a supporting mesh and is covered with an innovative pile cloth material with a multi-dimensional structure.

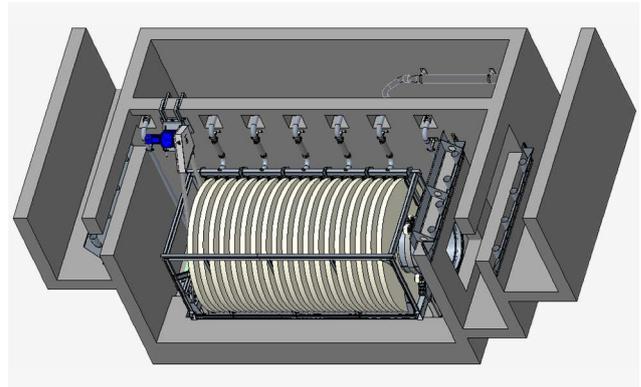
The wastewater that enters the filter chamber flows continuously through the filter discs from outside-to-in and filterable particles gather between fibre strands to form a sludge blanket on the outer face.

As the density of this sludge matrix increases, the filtration capacity reduces and the difference between the upstream wastewater level and downstream filtered effluent level rises. At a prescribed head loss, the cleaning of the filter discs begins. During this process, retained solids are removed from the rotating filter elements via suction bars located adjacent to each disc face.

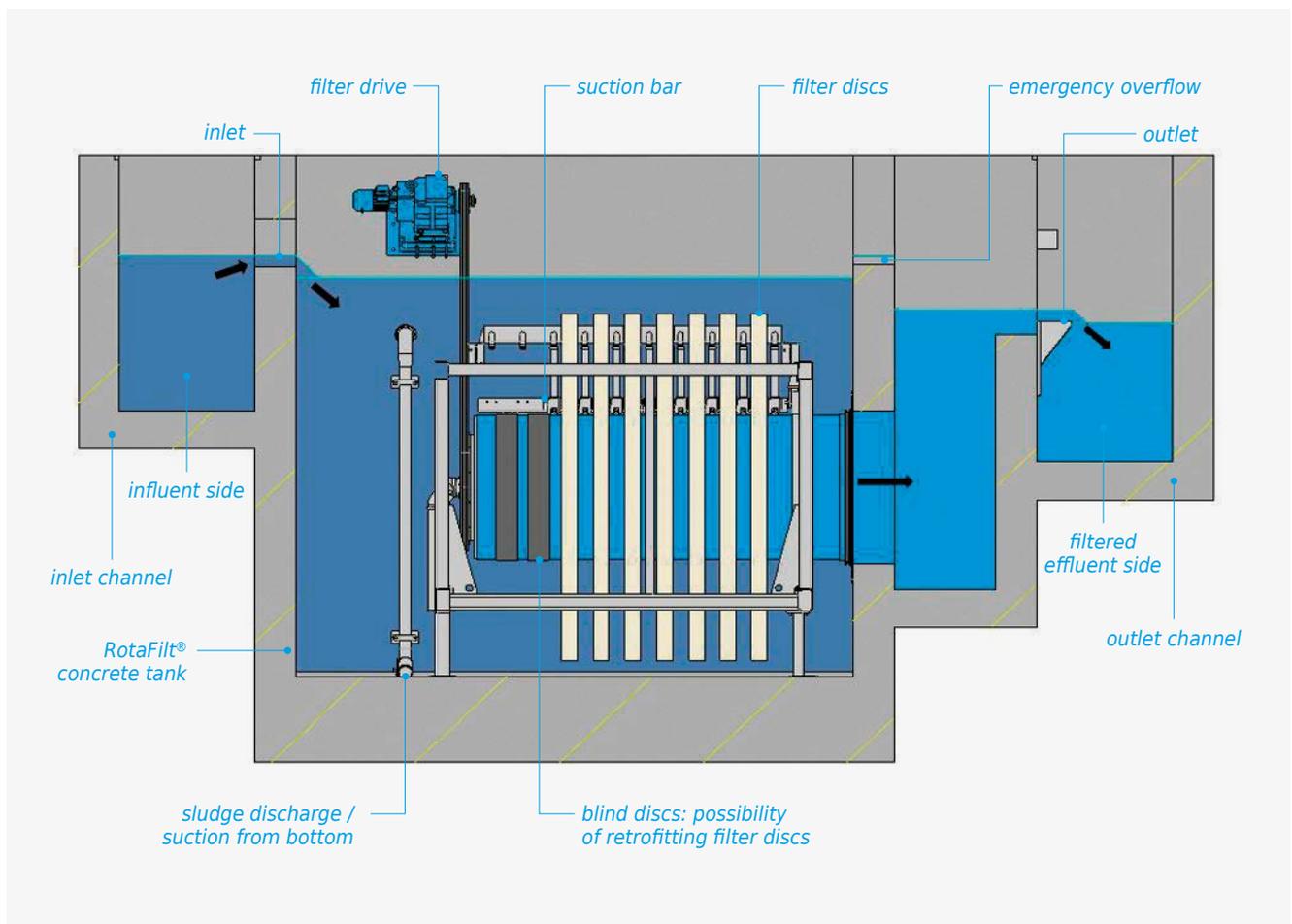
The circular filter discs ensure that no "dead zones" form during the cleaning process. In order to prevent the chamber floor from silting-up, any settled solids collected on the benching are also removed by the suction pump at regular intervals.



Filtration process on the pile fabric filter bags.



Filtration chamber with HUBER Pile Cloth Media Filter RotaFilt®.



Functional principle of the HUBER Pile Cloth Media Filter RotaFilt® chamber.

Customer benefits from HUBER Pile Cloth Media Filter RotaFilt®:

- ▶ Single, wet or dry installed, suction pump mounted outside of tank and low to ground for ease of maintenance – with option for additional pumps if required.
- ▶ Maximum effective filtration area due to circular arc geometry on inner and outer diameters.
- ▶ 100% of filter disc surface cleaned by suction bars – no “dead zones”
- ▶ Maximised free filtration area and light disc weight due to the innovative honeycomb structure of the filter elements
- ▶ Cost advantages due to optimised use of disc surfaces
- ▶ Quick and user-friendly installation and the same for filter elements & covers removal, if ever required
- ▶ Easy installation and removal of the suction modules



Filter element in a HUBER Pile Cloth Media Filter RotaFilt®.



Filter cleaning process in a HUBER Pile Cloth Media Filter RotaFilt®.



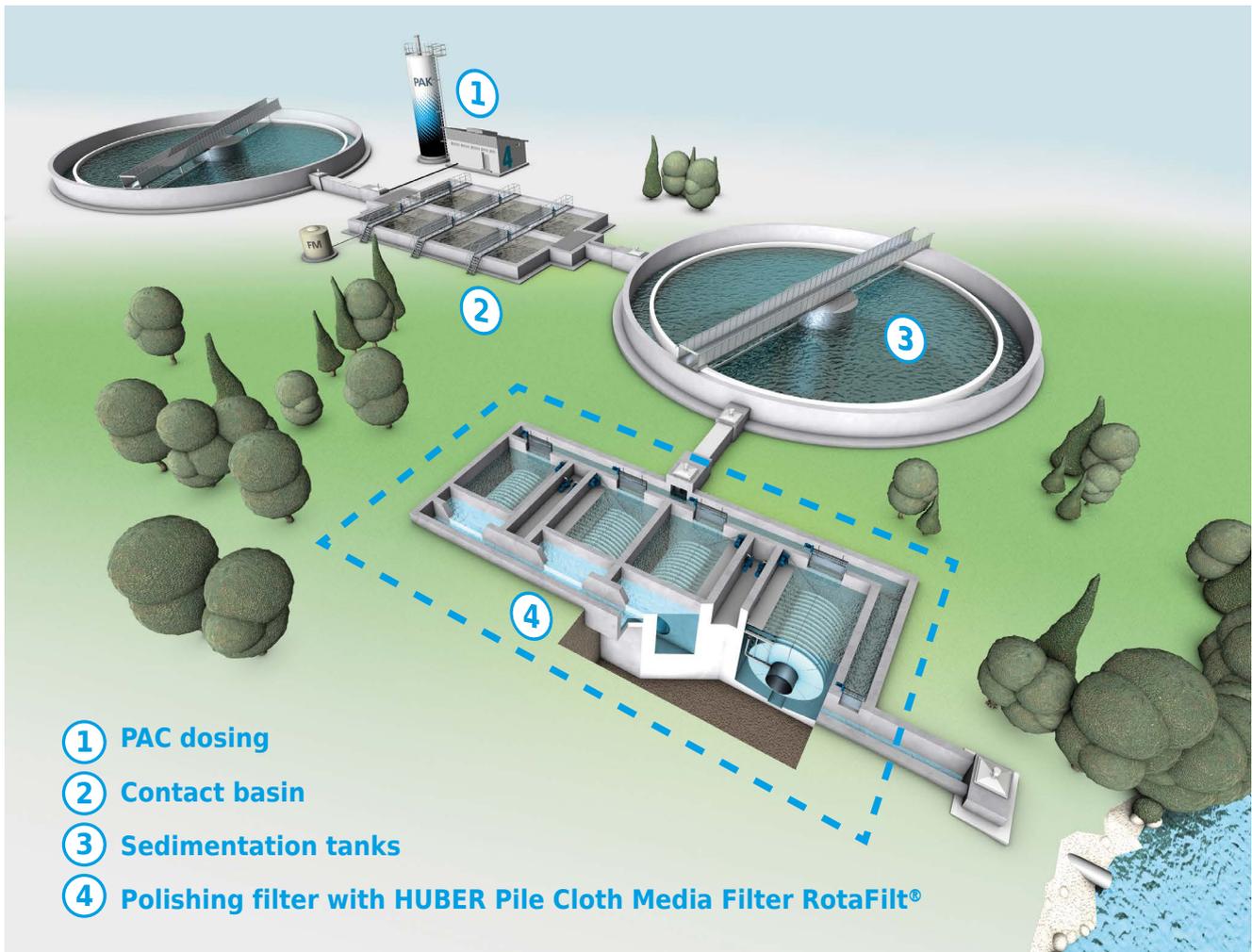
HUBER Pile Cloth Media Filter RotaFilt® in operation.

Microfiltration with pile cloth offers many advantages:

- ▶ High separation efficiency combined with high hydraulic capacity
- ▶ Resilient against sudden peak loads
- ▶ High operational reliability, even under overload
- ▶ The automatic wash cycles do not require a separate water source
- ▶ Continued operation during wash cycles and floor clearances
- ▶ Low head loss during operation
- ▶ Minimal system footprint
- ▶ Minimised operating and energy costs

Technical data:

- ▶ Available disc diameters: 2,200 mm and 2,700 mm
- ▶ RotaFilt® 2.200 is available as a stainless steel tank or concrete chamber version
- ▶ All metallic parts made of stainless steel are acid treated in a pickling bath
- ▶ Disc support segments made of high-quality plastic with optimised filtration area; simple replacement of disc segments and pile cloth covers if ever required
- ▶ Several fibre types available – the right type of pile cloth media for every application
- ▶ Chemical cleaning should not be required
- ▶ Fully controllable suction pump speed and run time relative to the head loss across the discs ensures liquor volumes are minimised



PAC process ("Ulm process") with downstream HUBER Pile Cloth Media Filter RotaFilt® as polishing filter.

HUBER Technology

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