



HYDROTECH

Beltfilter

The Beltfilter (left) used in combination with chemical flocculation (right)



Typical applications

- ▶ Wastewater treatment plants
- ▶ Treating thickening sludge at waterworks and sewage treatment plants
- ▶ Treating sludge concentration in fish farms
- ▶ Food processing
- ▶ Slaughter houses
- ▶ Paper mills
- ▶ Laundries
- ▶ Plastic recycling

Flow capacity

- ▶ Up to 30 m³/h per filter with a belt opening of 100 µm or larger

New unique drive system

- ▶ The drive system is robust and user friendly. The belt is driven by a drum motor (a gear motor mounted inside a stainless steel pipe).

Hydrotech Beltfilter

Hydrotech Beltfilter is made for efficient filtration of sludge and wastewater. It is an automatic, self-cleaning filter specially designed to achieve optimal performance in systems where high solids content in the dewatered sludge is essential.

Technology you can trust

Hydrotech's innovative design enables belts to be easily changed (for filter cloth opening, etc). The reliable drive system uses a support grating made of non-corrosive materials that guarantees long life.

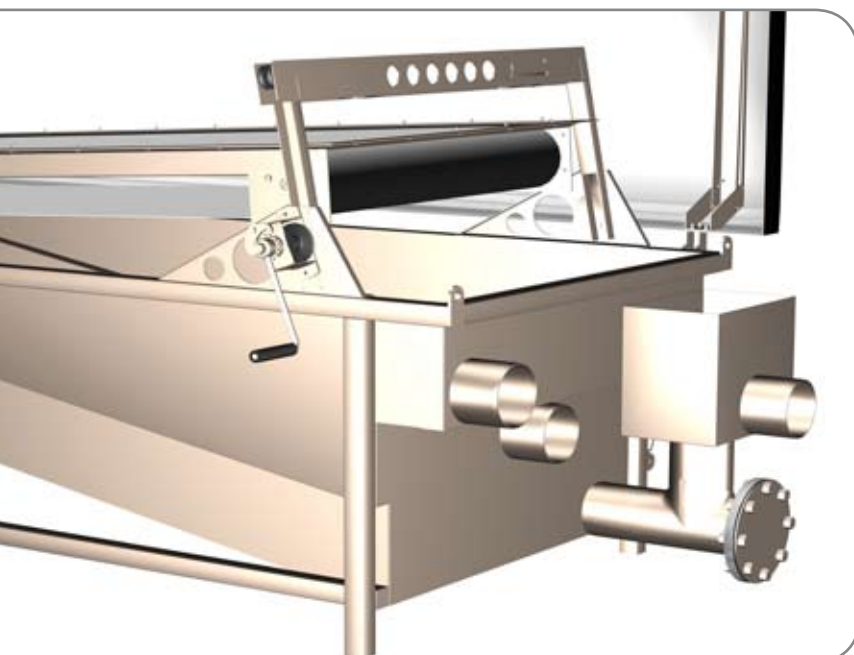
A number of benefits

- ▶ Minimizes maintenance
- ▶ Low operational costs
- ▶ Ensures a long filter service life



A commitment to quality

All wetted drive and support parts are made of stainless steel (according to AISI304 or AISI316L). All other wetted parts are made of non-corrosive materials.



The drum motor, which drives the belt

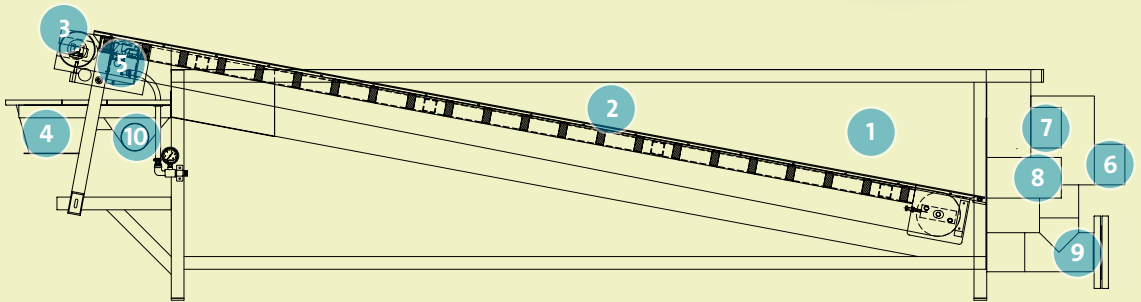
Easy cleaning and maintenance through the innovative design of the Beltfilter. The belt frame can be lifted with a manual lifting device (optional) for easy access to the tank

Concentrated sludge after filtration with the Hydrotech Beltfilter



The Technology

- ▶ Sludge inlet chamber
- ▶ Filter belt
- ▶ Dewatered sludge
- ▶ Solids hopper
- ▶ Backwash system
- ▶ Outlet
- ▶ By-pass
- ▶ Inlet
- ▶ Tank drain
- ▶ Backwash reject outlet

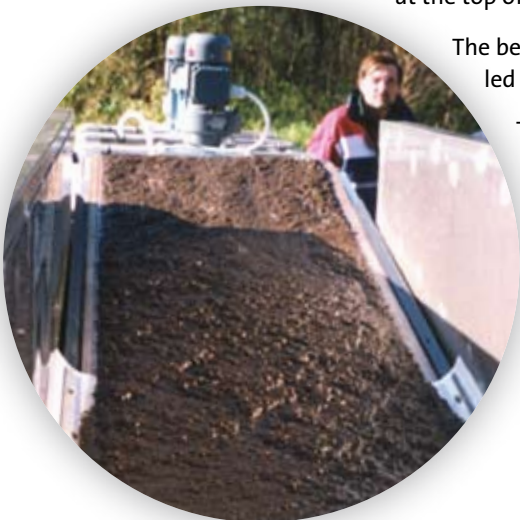


Sludge or wastewater is led into the filter **1** and passes by gravity through the filter belt **2**.

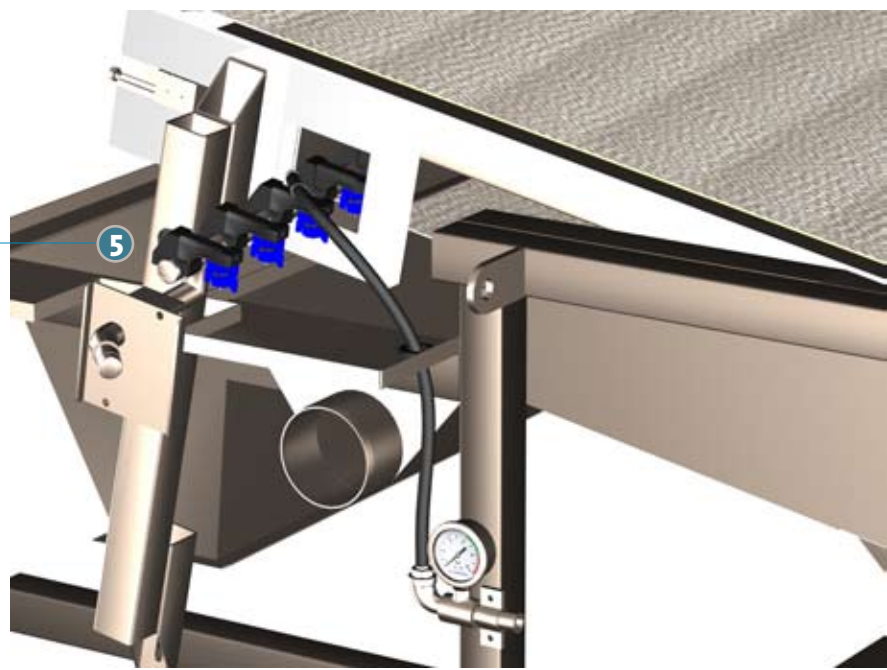
The belt is designed as a slowly moving conveyer installed in a stainless steel tank. As the water passes through the filter, the filtering process ensures the efficient removal of particles. These particles are drained on the belt to a high dry matter content. The dewatered sludge is removed at the top of the filter **3** and discharged through a hopper **4** for final treatment.

The belt is further cleaned by a high-pressure backwash system **5** and the rinse water is led either back to the process or to further treatment.

The Beltfilter is normally operated intermittently (demand) controlled by a level switch.



Backwash System
Dewatered sludge is scraped off the belt which is then cleaned by a high-pressure water rinse system. (backwash unit retracted for visibility)





Beltfilter

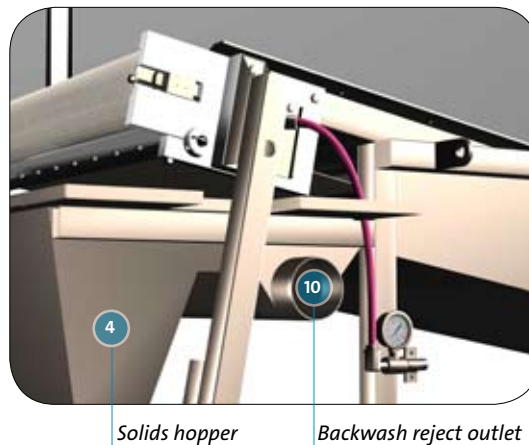
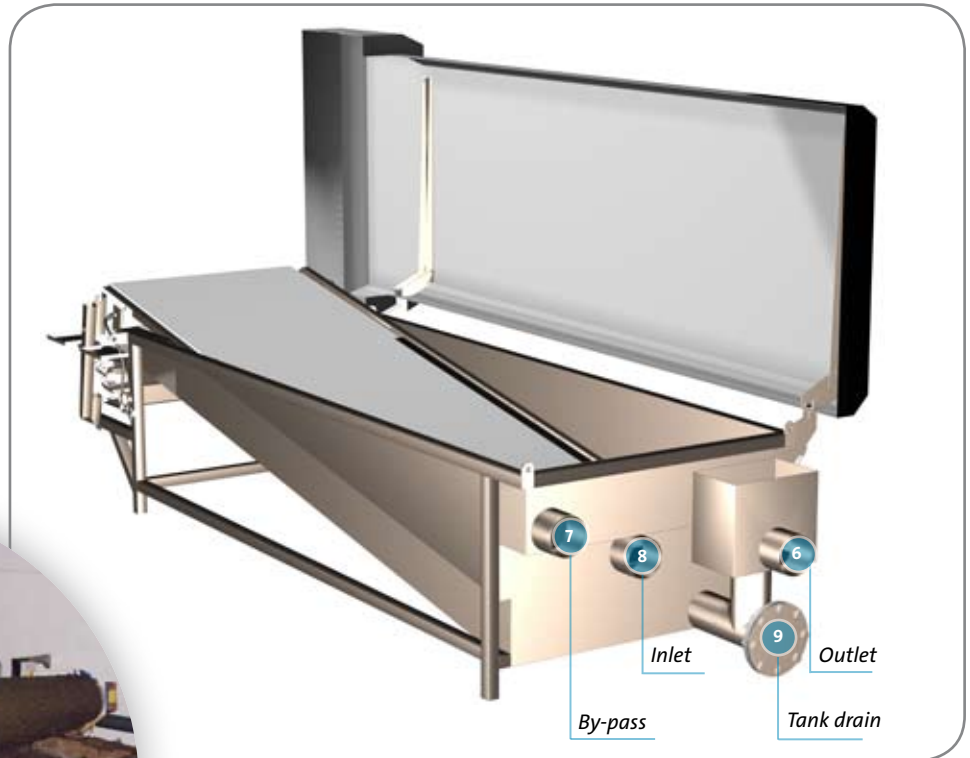
Efficient filtration of wastewater and sludge containing high solids

Delivered with the following connections

- ▶ Inlet/Outlet/By-pass: \varnothing 160 mm,
- ▶ Tank drain: DN150 PN10
- ▶ Solids hopper: Flanged 988x204 mm
- ▶ Backwash reject outlet: \varnothing 110 mm



Two or more Beltfilters can be used in parallel when a higher filtration capacity is required.



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