

A brand of Agseptence Group

Passavant® Rotating Bar Screen RBS

Separation of solids or contraries from a liquid phase, including screening transport, compaction and discharge for further disposal.



With the Passavant® Rotating Bar Screen RBS the Aqseptence Group offers a compact system for automatic waste water treatment.

The process- or waste water enters the fixed bar rack drum frontally, which is set at an angle of 35°. The solids in the waste water are blinding the inner surface of the drum cylinder. The resulting headloss is detected by a differential level control sensor and the cleaning cycle starts. During the cleaning cycle the rotating rake lifts the collected solids to the upper vertex and drops it into the centrically arranged spiral press. This is supported by a spray bar, which flushes off captured solids. An additional cleaning comb installed in the discharge area removes all remaining residues.

The screenings are transported, washed, drained and compacted, wherein a volume reduction of up to 70% and a degree of dryness of about 35-40% or more can be achieved (depends on the screenings).

An additional washing device can be installed in the pressing zone in accordance with the requirements for organic washout. The Passavant® Rotating Bar Screen RBS can be mounted in open concrete channel (gravity flow feed) or integrated into a hygienically encapsulated stainless steel container with flange connection (e.g. septage receiving station).

Benefits

- Bar Rack Drum with flow favourable bar profile (form factor 0.92) to reduce the hydraulic losses and maximize the flow.
- Electrically monitored pressing zone with an inspection flap for maintenance and inspection
- · Adjustable support feet for easy mounting
- Vertical discharge into a container, conveyor system or bagging device for hygienic disposal
- · No bottom step required
- Low height above the floor resp. larger discharge heights possible in case of limited room height

Applications & fields of operation

- · Municipal waste water treatment
- · Pre-screening in water treatment plants
- · Treatment of industrial wastewater

Design sizes & performance

Channel Width W _{min} (mm)	800	1,000	1,200	1,400	1,600	1,800	2,000
Drum Diameter D1 (mm)	670	870	1,070	1,270	1,470	1,670	1,870

other dimensions on request

Flow rate	Up to 9,000 m³/h
Drum diameter	670 – 1,870 mm
Channel width	800 – 2,000 mm
Gap size	6 / 10 mm Papro
Inclination	35°
TS content of the screened prod	Up to 40%

Options

- · Optional wash nozzles in case of high requirements for the washing out of the organics (up to 90%) in addition to the comb cleaning, alternatively for manual and automatic operation.
- · Stainless steel container for compact installation with inlet and outlet flange as well as safety-monitored maintenance openings.
- Bagging device for solids

Design Features



The rotating cleaning device is mounted on a solid support arm and is driven via the extended central tube of the spiral press

- The cleaning of the rake is done by a cleaning comb and additional spray nozzles, which are distinguished by a high efficiency and low water consumption
- The trough of the spiral conveyor/ press in massive stainless steel.
- Spiral with easily exchangeable cleaning brushes.
- Reliable discharge of the screenings in funnel due to stainless steel discharge comb

Materials

Casing, supports, stainless steel 1.4301 (AISI 304), 1.4404 drum, spiral (316 L)Others on request

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