

Septage receiving station

FSM ...

*Good Ideas
bring Success*





FSM – compact screening / septage receiving station

The compact screening / septage receiving station is a combination of the proven FSM filterscreen and the FSM screening washing press in one machine. This results in a compact machine with extremely high cleaning efficiency and throughput. The filter screen allows the passage of grit, which can be present in high quantities in septage, without malfunctioning.

The FSM compact screening / septage receiving station FRS-SPW provides high performance coupled with low operating costs.

Functional principle:

The waste water flows through perforated filter elements made of stainless steel, while contaminants are held back. Solid matter is picked up directly at the bottom of the channel, a base step being incorporated in the container. The filter elements form a continuous filter belt which is cleaned by a brush at the upper deflection point. The cleaning process is assisted by a series of jets working in proportion to the screenings load. Tines located on every 5th screening element prevent build-up of rolling matter in front of the screen and ensure that large matter is removed. The sheet steel side plates of the filter elements slide on plastic rails on the screen frame, thus forming a seal and preventing screenings from being washed past the screen at the sides.

As a result of the half-round shape of the filter elements and the arrangement of the cleaning brush at the upper deflection point, the distance between the brush and the filter element remains constant.

This constant distance ensures very effective cleaning combined with low wear of the brush.

At the turning points of the chain drive, the filter elements are in contact with one another via their sealing areas. The gap between the elements thus remains constant and small at all times during the rotation cycle, including at the upper and lower deflection points.

Official, independent tests have shown that FSM screens with a hole size of 6 mm approx. filter out double the amount of screenings as a stage screens with 6 mm gap size. The screenings retention figure of an FSM screen with 6 mm holes is of the order of 76%.

The efficiency of FSM filterscreens prevents build-up of screenings and clogging up in the clarification plant and thus avoids time-consuming and costly measures to deal with these disturbances.



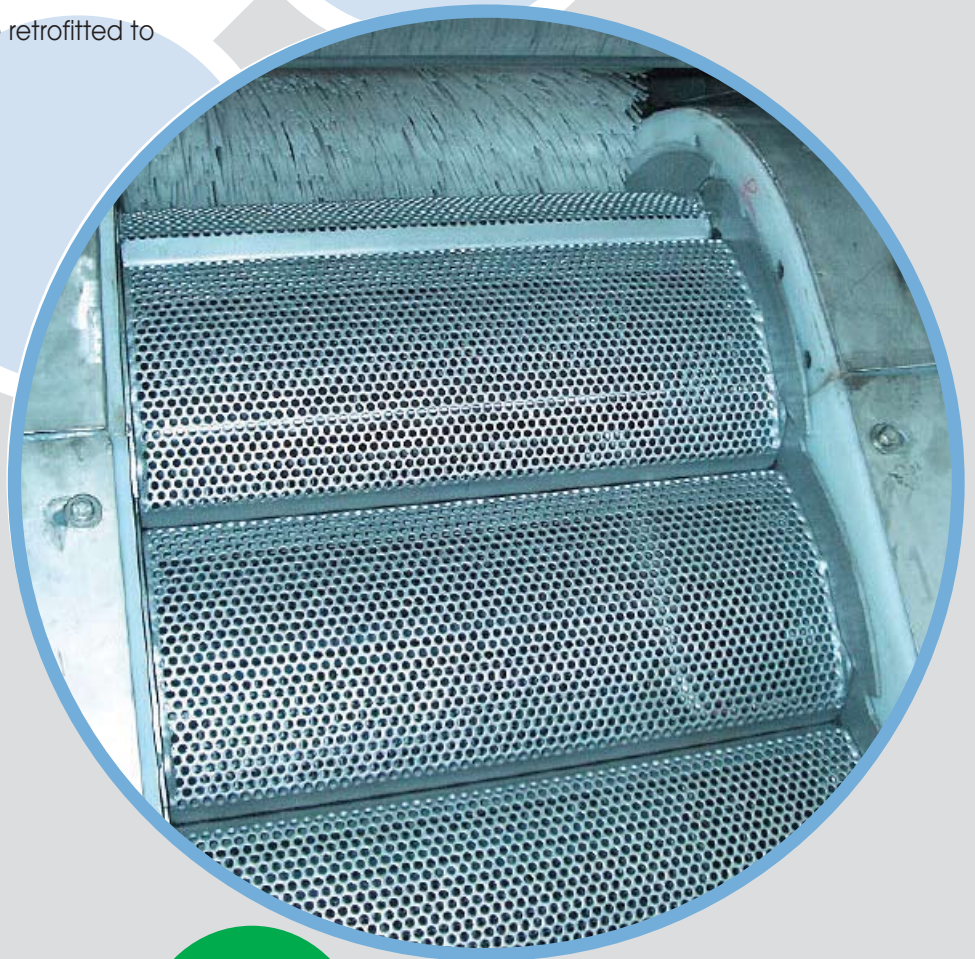


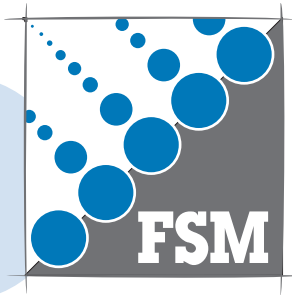


The screenings which are brushed off the filter elements drop into the screening washing press which is incorporated into the container. The screenings are conveyed within the wash compactor from the inlet zone to the washing zone. In the washing zone, service water is added and organic matter washed out. The wash water, which is rich in carbon, is released to the flume. The conveyor screw delivers the washed screenings to the pressing zone. The screenings are discharged via a discharge pipe to a container or conveyor.

As a septage receiving station, the machine can be directly charged from a suction vehicle. Magnetic cards or key switches can be used to reference the delivery to the appropriate supplier and to record quantities. The septage reception station can be extended to include a grit channel to deal with material containing large quantities of grit. This ensures that additional sand does not find its way into the sewage plant.

The compact screen unit can be retrofitted to existing compact installations





Technical Data:

- dimensions sizes on request
- hole size of filter elements 2, 3, 5, 6, 8, 10, 12 mm, other sizes on request
- diameter of conveyor screw 200 mm / 300 mm
- throughput on request
- solid matter > 35 %
- elutriation of fecal matter > 90 %
- volume reduction 60 - 80%
- weight reduction 60 - 80%

Materials / makes

- machine housing stainless steel 1.4301 or 1.4571, other materials on request
- filter element stainless steel 1.4301 or 1.4571, other materials on request
- discharge pipe stainless steel 1.4301 or 1.4571, other materials on request
- sack filling device stainless steel 1.4301 or 1.4571, other materials on request
- conveyor screw extremely wear resisting steel
- wear strips extremely wear resisting steel
- drives worm geared motors, make SEW



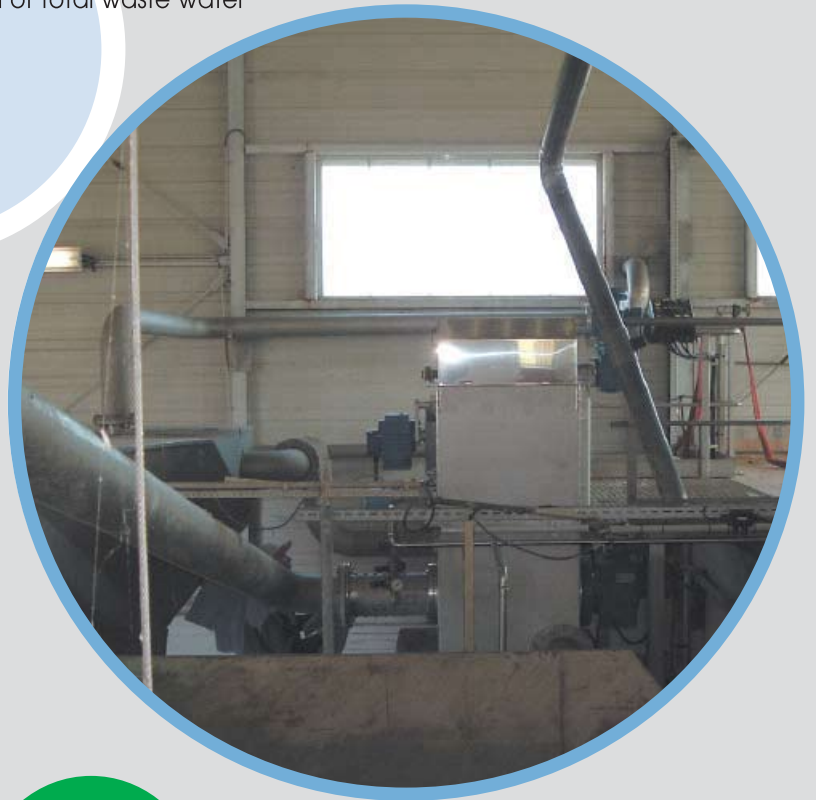


Applications in municipal and industrial clarification plant

- waste water pre-treatment / fine screening
- sludge screening / secondary sludge
- sludge screening / primary sludge
- septage reception and treatment
- screen in container for pumped feeds to clarification plants

Industrial applications

- meat, fish and poultry processing / slaughterhouses – preliminary clarification of total waste water
- composting installations, waste product and disposal engineering, seepage water treatment
- fruit and vegetable processing – preliminary clarification of total waste water
- fruit and vegetables – preliminary clarification of total waste water
- breweries– preliminary clarification of total waste water
- animal processing – preliminary clarification of total waste water
- disposal of wet debris and kitchen waste
- disposal of foodstuffs and food waste





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