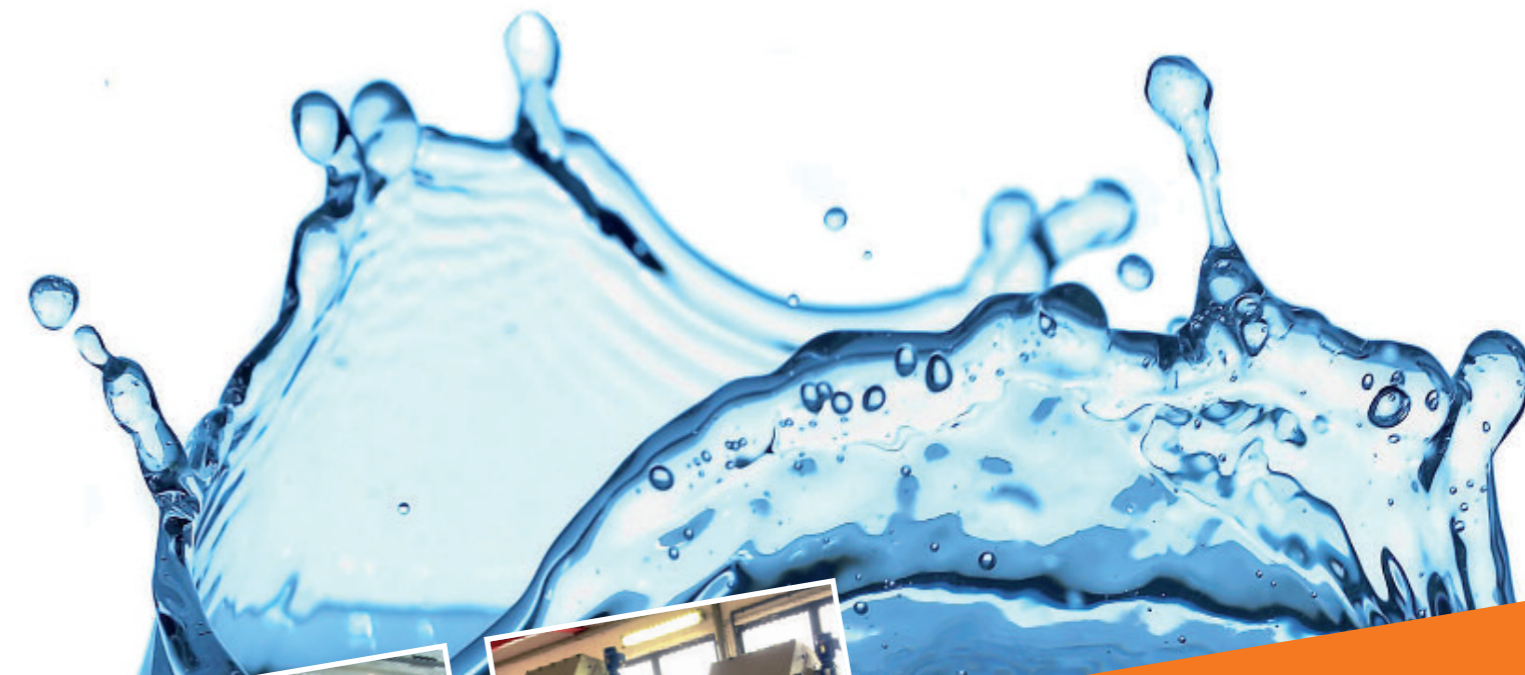
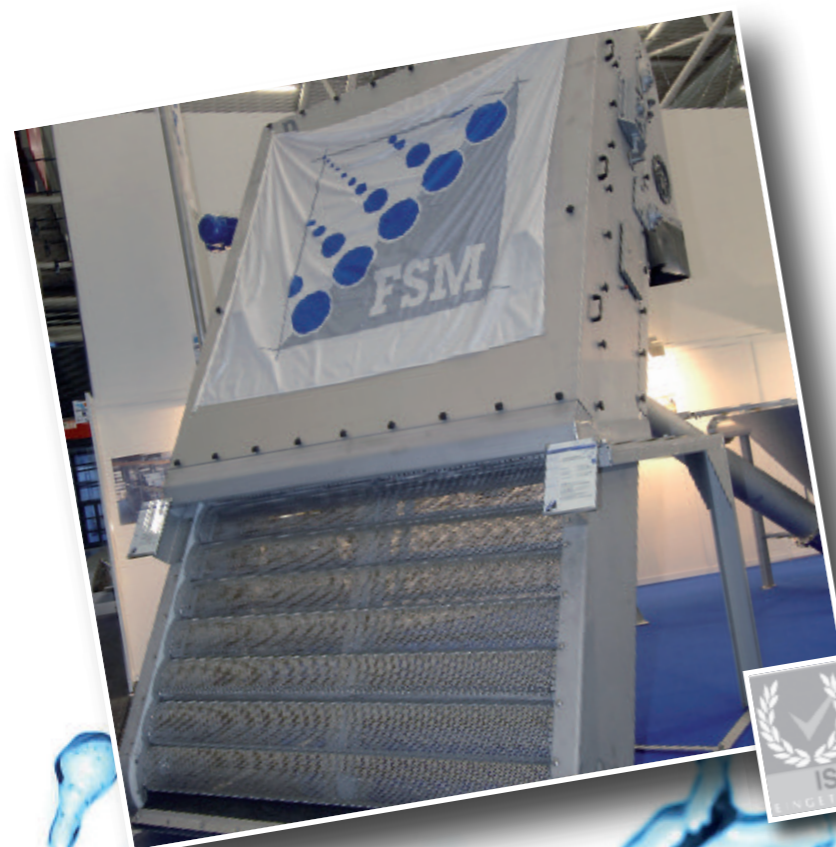




**FSM Frankenberger
GmbH & Co. KG**

Equipment for Water
and Waste Water
Inlet Works



Filterscreen



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FSM Filterscreen



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 without necessarily requiring a base step. 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 85%.

The efficiency of FSM filterscreens prevents build-up of screenings and

clogging up in the WWTP and thus avoids time-consuming and costly measures to deal with these disturbances.

Features:

- High reliability through robust construction – no need for upstream coarse screening
- The filterscreen allows the passage of grit without malfunctioning.
- Discharge of grease in large quantities presents no problem.
- Highest possible cleaning effect via perforated filter elements.
- Discharge of coarse matter through tines on the filter elements.
- Filter elements optimally cleaned as result of their shape (segment of circle).
- Screenings conveyed positively to the discharge point.
- Excellent cost/performance ratio
- Low maintenance costs
- Suitable for outdoor sites/operation in winter
- Easily adapted to suit changed operating conditions
- Machine completely hygienically encapsulated
- The FSM filterscreen has proved itself in hundreds of applications at home and abroad



Applications in municipal and industrial clarification plant

- waste water pre-treatment / fine screening
- pumping stations
- pre-screening before diaphragm installation
- sludge screening / secondary sludge
- sludge screening / primary sludge
- sea water treatment
- rainwater tank overflow and storage channel screening
- septage reception and treatment

Applications in the paper and cellulose industry

- wash water, unbarbing installations

- coarse matter runoff, channel water

Applications in power stations

- cooling and service water screening (river intake etc.)
- sea water screening

Industrial applications

- cooling and waste water screening (river intake etc.)
- sea water screening
- textile and textile finishing industry – preliminary clarification of total waste water
- meat, fish and poultry processing / slaughterhouses – preliminary clarification of total waste water
- sugar industry – 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
- breweries – preliminary clarification of total waste water
- animal processing – preliminary clarification of total waste water removal of algae

Dimensions:

filter width	300 to 3000 mm
shaft center distance	up to 11000 mm, larger sizes on request
filter element hole size	2 - 12 mm, other sizes on request
water level difference	up to 2000 mm possible, larger differentials on request
mounting angle	75°, 60° or 50°, other angles on request

Materials/makes:

machine frame	stainless steel SS304 or SS316L, other materials on request
filter element	stainless steel SS304 or SS316L, other materials on request
chains	bush conveyor chain of wear resistant steel or wear resistant stainless steel
chainwheels	wear resistant steel or wear resistant stainless steel
chain supports	HDPE
base sealing	double brush sealing
side sealing	HDPE
filter belt cleaning	rotary brush segments of PP or nylon
drives	geared motors, make SEW

