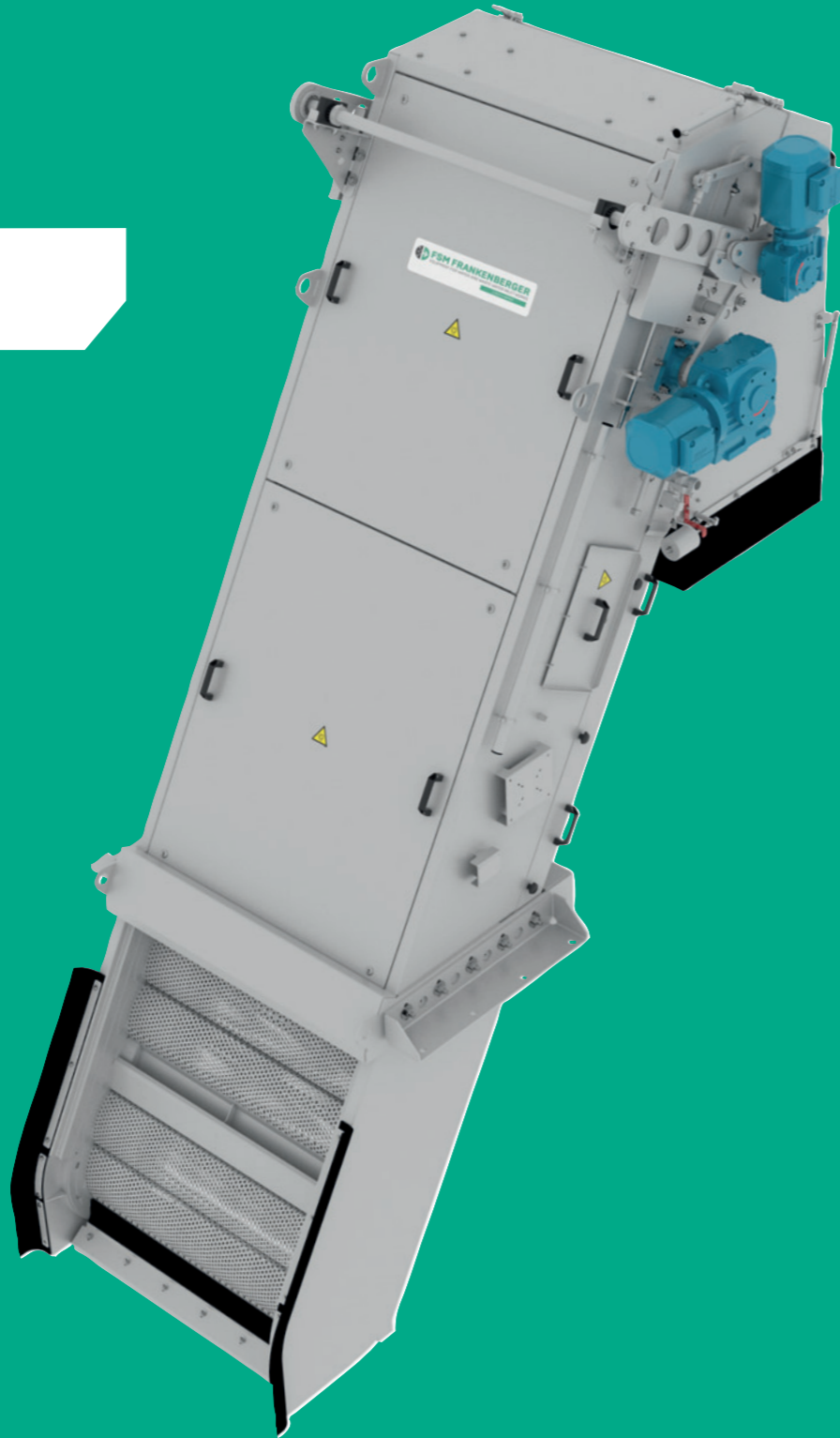


Filterscreen



Specialized in environment
Technology since **1970**

Functionality of the Filterscreen:

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.

Advantages:

- 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

The FSM filterscreen was developed to deal with particular problems associated with sewage pre-treatment plant.

Following successful trials, the first installation was equipped with this product in 1987.

Parallel to the increasing demands of users, FSM introduced modifications to the basic design. These have resulted in an optimum product for the preliminary treatment of waste water – providing high performance coupled with low operating costs. Thus, cleaning by brushes has been continually developed so as to keep the demand for service water to a minimum. Over 1500 machines have been supplied worldwide.

Applications in clarification plant

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

Applications in the paper and cellulose industry

- wash water, unbarking installations
- coarse matter runoff, channel water

Applications in power stations

- cooling and service water screening
- 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



FRS III Filterscreen



FRS III αβ Filterscreen

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 |

Machines for water and waste water treatment

Excellent innovative capacity combined with many years of experience and a highly motivated team providing advice, assembly and service are your guarantee of outstanding products "Made in Germany", expert contract management through to commissioning and, of course, thereafter.

Get to know us, perhaps in the near future at a Trade Fair in your locality.

