

### FSM Frankenberger GmbH & Co. KG

Equipment for Water and Waste Water Inlet Works



### FSM Center Flow Screen

### For waste water and raw water



The FSM Center Flow Screen was developed to deal with particular problems associated with waste water pre-treatment and raw water intake.

FSM is working in this field since 1973. The first machines are used to generate cooling water for power plants from rivers.

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 or river (sea) water - providing high performance coupled with low operating costs.

## Functional principle:

The unscreened water enters the screen inlet which is in the middle of the screen frame and is effectively screened as it flows from the inside to the outside through both sides of the screen filter elements. The filter elements form a continuous filter belt which is cleaned by a spray bar at the upper deflection point.

The water flows through the screen elements which are covered either by a woven wire mesh made of stainless steel with up to 3 mm openings or with perforated plates from 2 up to 12 mm openings which create a barrier to the passage of suspended contaminants and removes them for disposal. With mesh smaller 3 mm the horizontal space between the adjoining panels is positively sealed to prevent solids escaping thru the gap as would be the case if it was not sealed. The cleaning process can be assisted by an optional brush in dependence on the screenings load, if perforated plates are used.

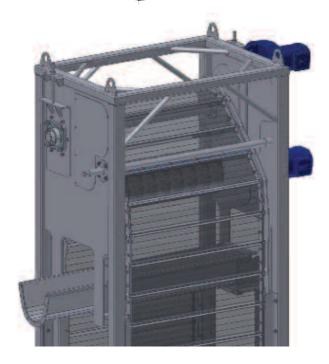
The screenings can be discharged into containers, screening washing press, screw conveyors, etc. The screen element and

screen frame are sealed at the sides to prevent solids from circumventing the filter. The filter elements can be individually and quickly exchanged for ease of maintenance.

For a save removal of fishs etc. we can install optional fish bags.

#### **Features:**

- High reliability and ensured continuity of operation resulting from robust construction
- Design caused no carry over effect of screenings to the downstream
- Filter elements optimally cleaned by a spray bar and optional by a brush
- 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 enclosed for optimum odor control



# Applications in municipal and industrial clarification plant

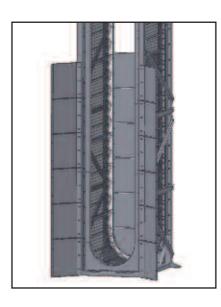
- Waste water pre-treatment / fine screening
- Membrane treatment plant

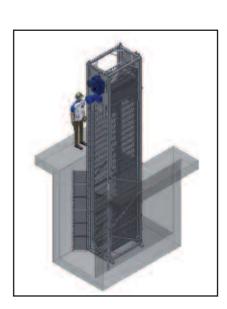
#### **Applications in power stations**

• River or sea water screening

# Applications in potable water treatment plants

• River or sea water screening





#### **Dimensions:**

filter width	300 to 5000 mm
shaft center distance	up to 15000 mm, larger sizes on request
filter element mesh size	0,5 to 3 mm, larger sizes on request
filter element perforation	2 to 12 mm, larger sizes on request
mounting angle	90°

### Materials/makes:

machine frame	stainless steel SS304 or SS316, other materials on request
filter element	stainless steel SS304 or SS316, other materials on request
chains	wear resistant steel or wear resistant stainless steel
rollers	PA, wear resistant steel or wear resistant stainless steel
chain sprockets	wear resistant steel or wear resistant stainless steel
chain supports	stainless steel SS304 or SS316, other materials on request
side sealing	HDPE
drives	geared motors, make SEW
use with sea/brackish water	sea water resistant material for screen frame, filter panels, chains and sprockets