

FSM[®] Filterscreen

Perforated Plate Belt Filter Screen

FRSIII



Dalton, Georgia

The FSM Filterscreen has the highest Screenings Capture Ratio (SCR) at 85% using 6 mm perforated plate of all 59 screens independently tested at the Thompson RPM facility in the UK.



Enviro-Care
A WAMGROUP[®] Company

Enviro-Care Company is the exclusive licensee for the sale of FSM Frankenberger GmbH & Co. KG equipment in North America.



FSM® Filterscreen - FRSIII

Perforated Plate Belt Filter Screen

Highest Capture Perforated Plate Belt Filter Screen 85% Capture at 6 mm – Independently Tested and Verified.

FSM is the #1 supplier of perforated plate, belt screens in the world with 2000 installations worldwide since 1987.

A continuous screen belt of perforated plate panels traps solid material on the surface of the screen and moves it to the upper deflection point where a brush cleans the debris from the plate. Depending on the length of the screen, a number of strategically placed lifting tines are located on certain plate panels. These tines are designed to capture gross solids and dislodge and remove rolling matter that accumulates in front of the screen at the base of the channel.



Kenosha Wisconsin

Features

- Verified 85% screen capture ratio.
- Self-adjusting brush maintains constant contact with the screen panels. (Patent Pending).
- Brush is primary cleaning mechanism.
- Minimal water usage for cleaning.
- No upstream coarse screening required.
- Handles large quantities of grease in the flow.
- Lifting tines capture coarse solids.
- Many CSO and Combined Flow plant installations.
- Channel recess not required.
- Suitable for outdoor operation in cold climates.
- Low maintenance costs.
- Screen is completely enclosed for odor control.
- Self-adjusting brush can be retrofit to older FSM screens.

Technical Data

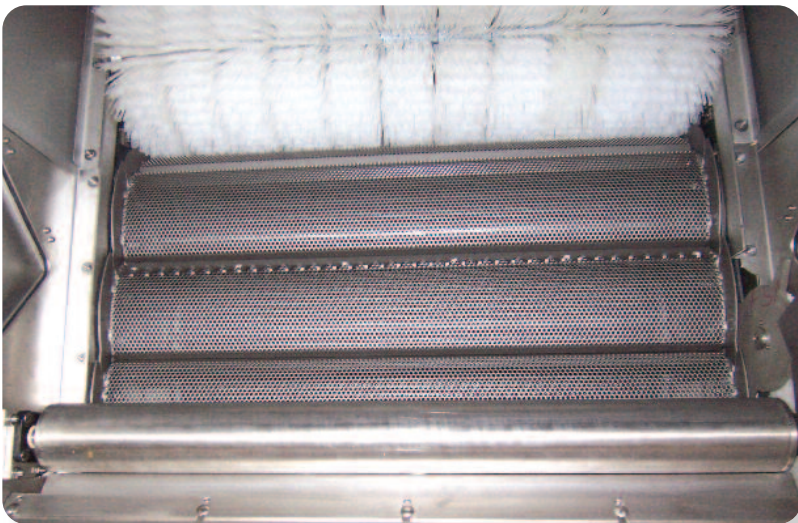
- Inclination: Inclination: 85°, 80°, 75°, 70°, 60°, 50°, and 45°.
- Perforations: 2 to 12 mm.
- Channel widths: to 10 feet.
- Discharge height: Up to 36 feet (standard) – larger sizes available.
- Chain life: 7 – 8 years.
- Brush life: +3 years (replaceable in sections)
- Lifting tines: Every 10th panel.
- Space between panels: <1 mm
- 304 SS construction (316 SS optional)

Municipal and Industrial Pre-Treatment of Wastewater



Advanced design features for reliable screening.

The FSM® Filterscreen with 6 mm openings scored an 85% capture ratio during Thompson RPM – UK testing. Due to the self-adjusting brush, that 85% capture is maintained for the life of the brush.



Self-Adjusting Brush Makes Perfect Contact With Screen Panel

The “III” after FRS in the product code is no mistake. This is the third generation of the FSM Filterscreen and each generation initiated design improvements. The self-adjusting brush automatically maintains optimal cleaning position to the screen surface. This is a result of the half curved shape of the screen panels and the location of the cleaning brush. This constant distance guarantees very effective cleaning and low brush wear. By making the brush the primary cleaning device, the water requirement is kept to a minimum. The extremely small gap between the screen panels (<1mm) remains constant during the rotation cycle even at the upper and lower deflection points.



FSM® Filterscreen - FRSIII αβ

Perforated Plate Belt Filter Screen



FRSIII αβ 800 x 30 x75/6 – Beaver Dam Wisconsin

Multi-Angle Screen Design

No need to increase the size of the channel to handle increased flow. The FRSIII αβ multi-angle screen design increases the flow capacity of the screen without increasing the screen footprint.

Water usage is kept to a minimum because the proprietary, self-adjusting brush acts as the primary cleaning mechanism. The self-adjusting brush maintains the exact cleaning position with the curved perforated plates and requires no manual adjustment. By maintaining optimal cleaning position, 85% capture is guaranteed for the life of the brush



Technical Data

- Multi-angle: 30/75° α β
- Self-adjusting cleaning brush
- Perforations: 2 to 12 mm
- Space between panels: < 1 mm
- 304 SS construction (316 SS optional)
- Multi-angle design patent pending.

