

# FSM<sup>®</sup> Filterscreen

Perforated Media Belt Filter Screen

FRSIII



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



# FSM® Filterscreen - FRSIII

Perforated Media Belt Filter Screen

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

FSM is the #1 supplier of perforated media band screens in the world with 1500 installations worldwide since 1987.

A continuous screen belt of perforated media panels traps solid material on the surface of the screen and moves it to the upper deflection point where a brush cleans the solids from the media. Depending on the length of the screen, a number of strategically placed lifting tines are located on certain filter 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.

### Years of design improvements have solved the problems often associated with belt screens:

- High cleaning water usage
- Brush wear
- Gaps between screening belts.



85% Capture

## Features

- No need for upstream coarse screening.
- Grit passes through the screen without damage to the screen.
- Filterscreen handles large quantities of grease in the flow.
- Verified 85% screen capture ratio.
- Self-adjusting brush maintains constant contact with the screen panels. (Patent Pending)
- Minimal water usage for cleaning.
- Lifting tines capture coarse solids.
- Circular perforations are easily cleaned.
- Low maintenance costs.
- Suitable for outdoor sites and operation in winter.
- Adapts to changing operating conditions.
- Screen is completely enclosed for odor control.
- 1500 installations worldwide.
- A multi-angle version of the Filterscreen, the  $\alpha\beta$  design, is available. This design increases the flow capacity of the screen without increasing the screen footprint.

## 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 UK-WIR 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 round shape of the screen panels and the arrangement 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 remains constant during the rotation cycle even at the upper and lower deflection points.

## Indoor and Outdoor Applications

Cold weather does not affect the operation of an FSM® Filterscreen.



Durable, Robust Construction - suitable for indoor installations



and outdoor installations.

### Industrial Applications

- P & P wash water debarking.
- Power plant cooling tower water – river intake.
- Sea water screening.
- Textile.
- Meat, fish and poultry processing.
- Fruit and vegetable processing.
- Sugar processing.
- Breweries.
- Algae removal.

### Technical Data

- Self-adjusting brush for consistent capture.
- 304 SS construction [316 SS optional].
- Inclination: 85°, 75°, 60°, 50° and 45°
- Multi-angle: 30/75°  $\alpha\beta$
- Perforations: 2 to 12 mm
- Channel widths: to 10 feet.
- Discharge Height: Up to 36 feet for standard design.  
Larger sizes available.