

MPS-DF

Meva Perforated Screen - Dual Flow in Stainless Steel



Main areas of use and features

- Perforated plate screen with 2-12 mm openings
- Mesh size 0.5-3mm
- Brush with high-pressure flushing
- Long life-time and low maintenance costs
- Separated clean and dirty sides
- Fully capsulated design
- Handles flows with large contents of sand and grease
- Allows large filter area & low head loss

MPS-DF MEVA PERFORATED SCREEN - DUAL FLOW

Area of use

Meva MPS-DF is a fine screen for water and waste water treatment with requirements on very high separation degree of solids, for example membrane plants. Great progress has been reached with the screen type, resulting in a robust construction with a seamless merged belt, without unwanted gaps between the panels, a weakness in other perforated plate screens on the market.

Meva MPS-DF typically achieves the perforation-opening over the entire screening surface.

Function

The waste water flows through the screen elements which consists 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 sizes below 3 mm the horizontal space between the adjoining panels are sealed. The unscreened water enters the screen inlets which are the outer sides of the filter, and is effectively screened as it flows from the outside to the inside through both sides of the screen filter belt.



The filter elements form a continuous filter belt which is cleaned by a spray bar at the upper deflection point. The cleaning process can be assisted by an optional brush depending on the screenings load. The screenings can be discharged into containers, screening washing press, screw conveyors, launder trough etc. The screen element and screen frame are sealed at the sides to prevent solids from circumventing the screen. The filter elements can be individually and quickly exchanged for easy maintenance.

Automatic Control

Meva MPS-DF operates intermittently. Thus the operation can be adjusted to the incoming flow. A level sensor is installed in the channel upstream of the screen. The screen starts when a pre-set water level is reached and operates until the water level is below the pre-set value. The cycle is repeated when the level is reached again.

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Robust, proven design - all in stainless steel

Technical Specification



DESIGN

Machine frame	Stainless steel SS304 or SS316
Filter elements	Stainless steel SS304 or SS316
Chains	Roller chain of 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
Side sealing	HDPE
Drives	Worm geared motors, SEW
Use with sea/brackish water	Sea water resistant material for screen frame, filter panels, chains, sprockets

DIMENSIONS

Filter width	300 to 500 mm (1 feet to 16 feet)
Shaft center distance	up to 15000 mm (50 feet) larger sizes on request
Filter element mesh size	0,5 to 3 mm (35 mesh to 50 mesh)
Filter element perforation	2 to 12 mm (1/12" to 1/2")
Mounting angle	90°