

## JASH MAHR MASCHINENBAU™ “PER-SCALATOR” FILTER BAND SCREEN

*JASH Mahr Maschinenbau 'Per-scalator' Filter band Screen are manufactured in technical collaboration with Mahr Maschinenbau GmbH, Austria, a company with history of over 87 years.*

### APPLICATION:

JASH Mahr Maschinenbau 'Per-scalator' screens are mechanically operated self cleaning fine screening equipment used to prevent fine sized floating wastes from travelling further into the water and waste water treatment plants, especially, in waste water treatment plants based on MBR application.

### CONSTRUCTION:

'Per-scalator' screens comprise of screen frame of rugged construction, filter elements, discharge chute, set of high pressure nozzles, a pair of chain and high efficiency drive unit. The screen can also be provided with a rotating brush as an option. The filter elements are made of step-type perforated plates covering the entire width of the screen field and are linked to a continuous chain thus forming an endless band.

### WORKING:

The waste coming with the water while gets retained on the face of the perforated filter, the water passes through. As the endless band of filter elements escalates upward, they carry the deposited waste along with it till the waste reaches to the top of screen. At the turning point where the filter element is about to start its downward journey, wastes are dislodged from the filter elements by a series of high pressure water jets. The waste along with the used water falls on to the in-built chute. From the chute the waste can either be collected in to a launder or screw conveyor for separation of waste and wash water and for further disposal.

### SALIENT FEATURES:

- High reliability due to rugged construction - ensures continuity of operation even at higher than specified water depths.
- Unique shape of filter elements - step type perforated plate profile can carry large sized solids and avoids formation of sausage. This is superior to provision of protruding tines.
- Superior water spray system - use of 2 high pressure nozzle spray system. Primary system above discharge level ejecting entrapped screenings and secondary wash system bringing any remaining residue through drain pipe back in to upstream of the channel. Rotating brush has the tendency of wearing fast and then clogging the perforation resulting in to reduced efficiency of the screen. Taking cognizance of this problem we do not recommend usage of brush for all cases.
- Superior sprockets and chains - heavy duty sprockets and chains made of stainless steel and chain pin made of hardened stainless steel material of special grade.
- Special grade ceramic bushes - provided in lower sprockets to ensure very long operative life.
- Minimum welding - avoids distortion during manufacturing there by offering high functional reliability. Where welding is involved, it is continuous and preventing fissure corrosion.
- Self-carrying design - its own weight is sufficient to keep the screen securely in position.
- Factory assembled and pre shipment tested - ensures effectivity of movement.
- Easy and faster erection - the screen to be just lowered in to ready made channel for installation.
- Very high cleaning effect due to round opening.
- Grease presence in the wastewater poses no problem.
- Hygienically encapsulated covers can be provided on request.

### SPECIFICATION:

Perforation diameter	2 mm to 10 mm (0.08” to 0.4”), other sizes on request
Suitable for channel width	600 mm to 3,000 mm (24” to 120”)
Suitable for channel depth	up to 11,000 mm (440”)
Material of construction	Stainless steel 304, 316, other materials on request



“Per-Scalator” Screen with 4 mm Peforation