

# Perforated Plate Screen EscaMax®



EscaMax® screens combine several benefits:

- Excellent capture rate
- Compact design
- Suitable for deep channels
- Easy retrofit into existing channels

## ➤ Function

The EscaMax® complements the well-known HUBER program for municipal and industrial wastewater screening, as it is particularly well suited in situations where excellent separation efficiency is required in deep channels with high water levels.

Perforated screening elements provide superior separation efficiency in comparison with slotted screening elements. It has been proven that two-dimensional perforations are better than one-dimensional slits.

Screenings roll back is prevented by rake bars extending over the full width of the screen in combination with the screen's installation angle. Even cans and bottles are lifted by the rakes.

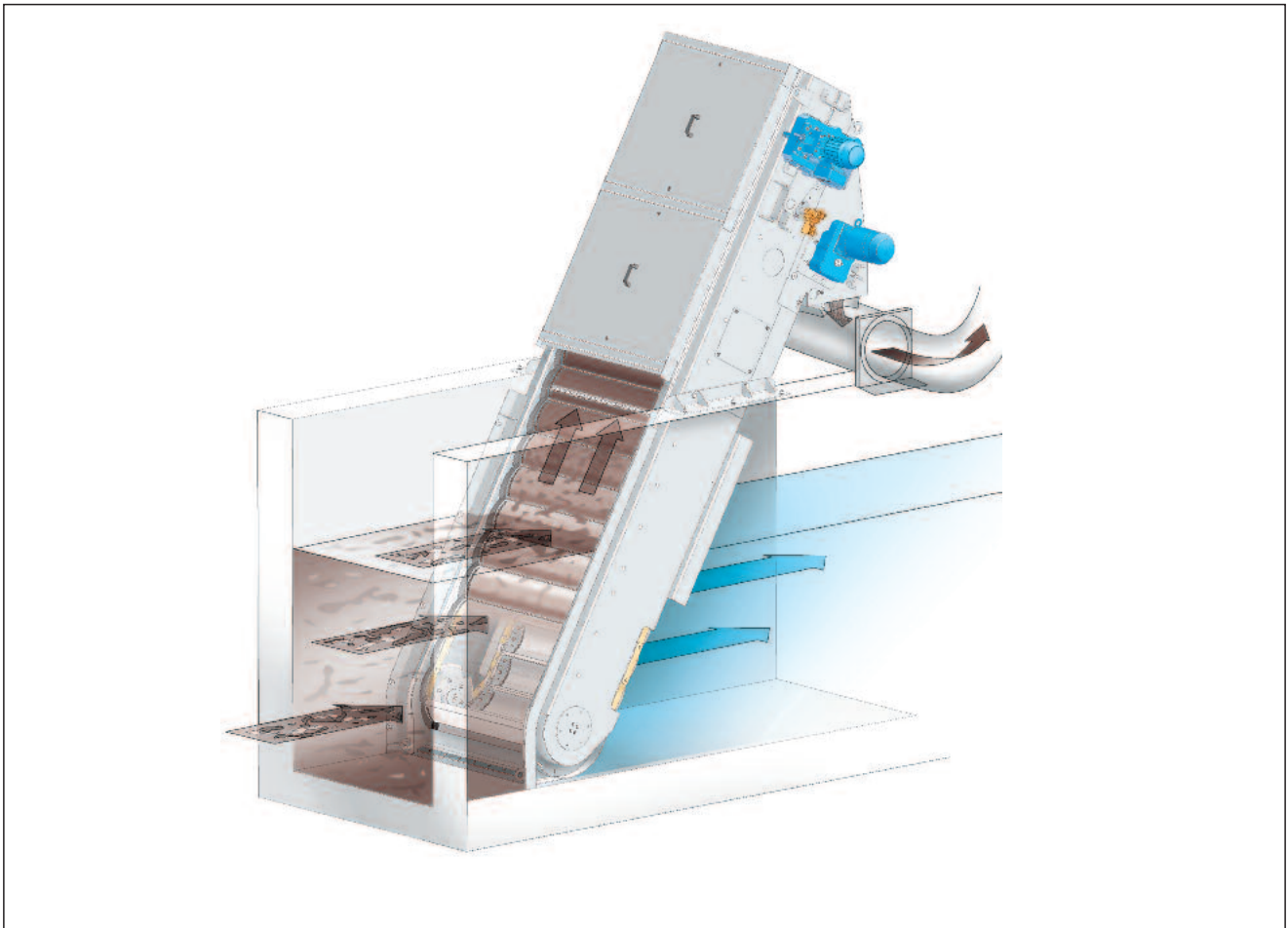
Each end of the perforated plates is connected with a drive chain. Each chain is driven by a cog wheel on a common shaft and a flange mounted gear motor.

At their upper turning point the perforated plates are continuously cleaned by a fast rotating brush. Further cleaning is accomplished by an integrated spray bar. The screenings are discharged into a subsequent wash press.

The sturdy EscaMax® screen reliably copes even with high rates of gravel and grit. Its two-dimensional screening elements prevent even fibres from passing through the screen and achieves a high capture rate.



*Screenings mat improving capture*



*Flow Diagram of the HUBER EscaMax® Screen*

## ►► Your challenge – Our solution

We have been challenged to provide screens for deep channels that combine ever improving capture with reliability. The EscaMax® Screen is our answer to this challenge.

Designing a perforated plate screen, guaranteeing highest efficiency, low maintenance and long life requires attention to every detail, e.g.:

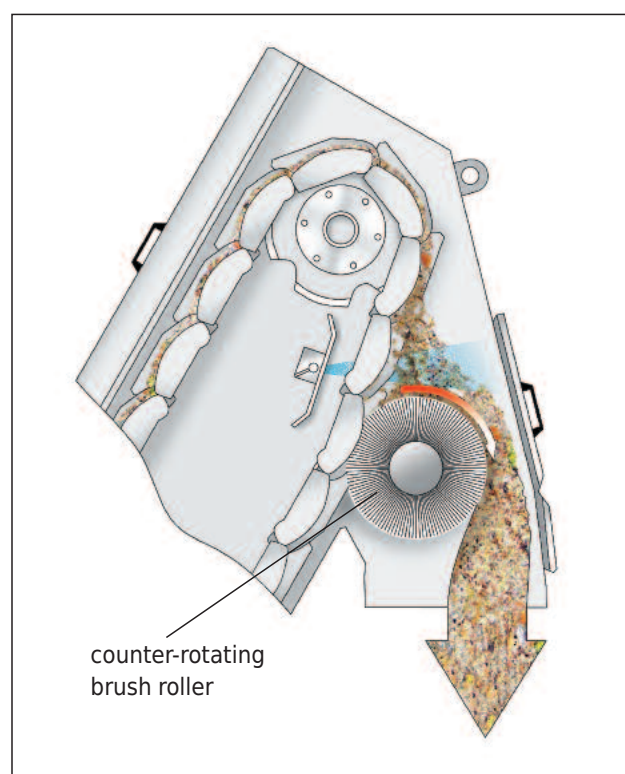
- Effective cleansing of the perforated plates
- Tight seals between travelling perforated plates and screen's frame
- Maintenance free submerged chain wheel bearings

Several innovative features of our Perforated Plate Screen EscaMax® set new industry standards.

### **Cleansing with a single rotating brush**

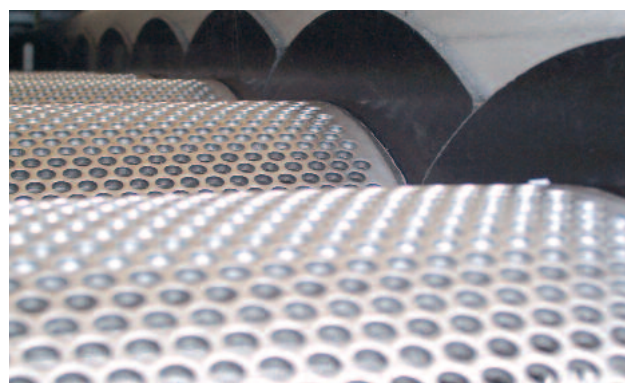
Comparable screens of our competitors require an additional rotative scraper to remove screenings from the casing.

Our counter rotating brush eliminates the need for such an additional mechanical element. We optimized the material, dimensions, arrangement and speed of our brush in order to achieve excellent cleansing with a single driven element with the addition of a spray bar, reliable cleaning of perforated plate is assured.



### **Sealing with plastic elements**

Wear-resistant plastic elements ensure tight sealing between travelling perforated plates and screen frame. Replacement of the sealing elements is easy and quick.



### **Submerged chain wheel bearing**

We use the same wear-resistant and maintenance-free ceramic bearing that have proven their reliability for many years in our grit chambers and washers.

The drive chain is made of hardened wear-resistant steel. Chains and chain wheels are electro galvanized and chromated for durable corrosion protection. They are also available in stainless steel.

## ►► Benefits

- Excellent capture rate
- Reliable cleansing with a single rotating brush
- No need for additional drive cleansing elements
- Maintenance-free bearings. Submerged bearings are made out of wear-resistant ceramic
- Compact design and small height above operating floor
- Completely enclosed screen with easily removeable covers
- No odor nuisance
- Easy retrofitting into existing channels, no need for recesses in their walls and bottom
- Self-supporting and liftable stainless steel frame
- No impairment by gravel or grit
- Simple and easily accessible chain tensioning system
- All wetted components are made of stainless steel and passivated in a pickling bath (except chains, drives, bearings).
- Chains and cog wheels are also available in stainless steel

## ►► Installation examples



Rear view of an EscaMax® with Wash Press WAP



Fully enclosed for odor control

## ►► Dimensional Data

- Discharge height: up to 26'
- Channel width: up to 7'- 2"
- Perforation: 3,6, or 10 mm
- Installation angle: 60° (75°)

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