HUBER Fine Screen ROTAMAT® Ro1



RELIABLE AND EFFICIENT MECHANICAL SOLIDS SEPARATION WITH WELL-PROVEN TECHNOLOGY

- with integrated screenings press
- with integrated screenings washing
- compact design

The HUBER Fine Screen ROTAMAT® Ro1 operation is based upon a unique patented system that allows combination of screening, washing, transport, compaction and dewatering in a single unit.

Depending on the screen bar spacing (6 or 10 mm) and screen size (screen basket diameter of up to 3000 mm), the throughput can be individually adjusted to specific site requirements.

The HUBER Fine Screen ROTAMAT® Ro1 is completely made of stainless steel and acid treated in a pickling bath. These screens are either installed directly into the channels, or are supplied as tank-mounted units, with an inclination of 35°. The wastewater flows into the open end of the inclined screen basket and then through the screen. Floating and suspended materials are retained by the bars of the screen basket. Blinding of the screen surface generates an additional filtering effect so that solids can be retained that are smaller than the bar spacing.

At a certain difference of the water levels up- and downstream of the screen, which is caused by screen surface blinding, the rake arm situated on the axle centre starts to rotate. Its tines, extending completely through the screen bars, cleans the basket, removes all the screenings, and lifts them to a 12 o'clock position. The screenings drop into the centrally positioned trough with integrated screw conveyor. The rake is then returned back through its 12 o'clock position. During this return movement a hinged comb pushes the screenings off the rake so that the tines are additionally cleaned. With the rotational movement of the conveying screw the screenings are transported out of the trough and conveyed through the rising pipe.

As the screenings are conveyed and compressed within the inclined pipe, they are dewatered and compacted without any odour annoyance prior to being discharged into the customer's container or a subsequent conveying unit.

THE ADVANTAGES OF THE HUBER FINE SCREEN ROTAMAT® RO1

a) Low headloss – High separation efficiency

Due to the screen basket shape and 35° installation the screen area is much larger than that of a vertical or steeply inclined screen, which results in a low headloss, high separation efficiency and maximum throughput.

b) Completely made of stainless steel

The machine is completely made of stainless steel and pickled in an acid bath which eliminates corrosion and thus reduces maintenance.

c) Reliable, self-cleansing operation

Positive cleaning of the complete screen area is guaranteed due to full engagement of the rake's tines. The screen is unimpaired even by high pollution loads. Additionally, a single flow path guarantees that the screenings remain constantly inside the basket (in front of the screen area), i.e. screenings are not taken out of the wastewater and transported into the already cleaned downstream flow during the cleaning process.

d) Several functions combined in one system

The ROTAMAT® Screen performs the functions of screenings removal, transport, washing, dewatering and compaction in a single spacesaving unit. An additional bagging unit guarantees operation of the entire system without odour nuisance.

e) Outdoor installation

For outdoor installations, the ROTAMAT® Ro1 can be supplied with a frost protection, combined with an additional insulation, if required.

f) Retrofitting

The design of the ROTAMAT® Screens allows for later modification so that the systems can be adapted to changing requirements. Both the heating and integrated screenings washing system for example can be retrofitted.

g) Low maintenance

No lubrication. Regular checking and visual inspection are sufficient.

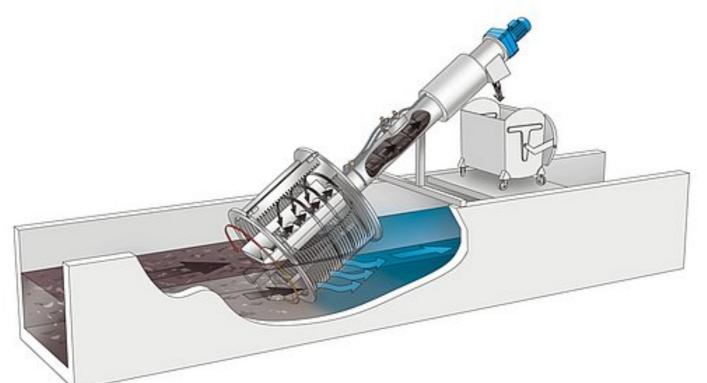
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Brochure: HUBER Fine Screen ROTAMAT® Ro1 [pdf, 290 KB]

Case Studies

Twelve 2.6 diameter Ro 1 screens in China's boom town

Design Sketch



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Media





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- HUBER Rotary Drum Fine Screen / Perforated Plate Screen ROTAMAT® Ro2 / RPPS / STAR
- HUBER Micro Strainer ROTAMAT® Ro9
- HUBER Complete Plant ROTAMAT® Ro5
- HUBER Complete Plant Hydro Duct ROTAMAT® Ro5 HD
- HUBER Coanda Complete Plant ROTAMAT® Ro5 C
- HUBER Membrane Screen ROTAMAT® RoMem
- HUBER Pumping Stations Screen ROTAMAT® RoK4