

ROTAMAT ® Ro9 Inlet Screen



Waste Water Combined Inlet screen for flows up to 220 l/sec

- Two dimension screening with washing and compaction
- Single low kW drive
- Suitable for channel or tank mounting
- Over 1100 UK installations

The Challenge – Our Solution

Both municipal wastewater treatment plants and industrial applications require mechanical treatment as a first treatment step to remove as much as possible of the floating, settling and suspended material.

The aim is to achieve the maximum separation efficiency under the prevailing hydraulic conditions.

Operating reliability, efficiency and hygienic operation are important factors for a mechanical separation plant.

The ROTAMAT® Ro9 inlet screen operation is based upon a unique system that allows combination of screening, washing, transport, compaction and dewatering in a single unit.

Depending on the screen bar spacing or perforation and screen size (up to 700 mm screen basket diameter), the throughput can be individually adjusted to specific site requirements.

The ROTAMAT® Ro9 Inlet Screen is completely made of stainless steel and acid treated in a pickling bath.

The screen can be installed either directly in the channel or in a separate tank.

Whilst the wastewater flows in through the open front end of the screen basket and through the screen bars or perforations, solids are retained by the screen basket, whereby the separation of floating, settling and suspended solids is dependent upon the screen bar spacing or perforation size.

Blinding of the screen surface generates an additional filtering effect so that solids can be retained that are smaller than the bar spacing or perforation.

The screen starts to operate when a pre-set upstream water level is exceeded due to screen surface blinding.

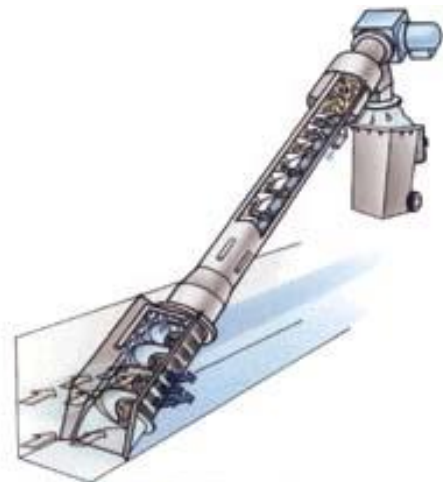
A robust stainless steel shafted screw removes the screenings from the screen basket surface.

Additional cleaning is achieved by wear-resistant brushes fitted to the screw flights. The screw conveyor transports the screenings through a closed and inclined pipe.

Whilst the screenings are transported, the screw conveyor dewateres and compacts them prior to discharging them into the skip, wheelie bin or conveyor

Key benefits

- Low Investment Costs
- Single low kW drive
- Screening washing and compaction in a single unit
- Full stainless steel construction
- Brush wear sensor to indicate brush replacement may be necessary
- Quick and easy installation even as a retrofit
- Low washwater consumption
- Can easily incorporate a bypass screen
- Control panels designed and built in the UK
- Frost protected for outdoor installation
- Intermediate bearing to prevent damage from potential lack of maintenance



Integrated Screenings Washing (ISW)

By using the combined benefits of the washwater system and the unique shafted stainless steel auger the integrated screenings washing system is designed to separate the organic matter from the screenings within the auger shaft.

This achieves a significantly cleaner end product and as it is achieved within the confines of the auger reduces odours and aerosols from the area around the screen

Frost protection of the screen is included as standard with quick access via velcroed covers for easy maintenance



Internal view of ISW



External view of ISW with frost protection

Intermediate Shell Bearing

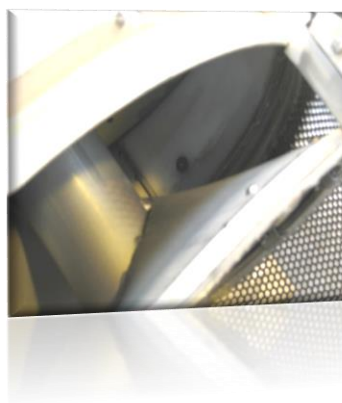
To further increase the life of the brush and to prevent damage caused to the screen by the potential failure to replace the brush on time an intermediate shell bearing is can be incorporated within the screen to support the auger to prevent damage to the basket and auger

In conjunction with the intermediate shell bearing it is also possible for a brush wear sensor to be incorporated.

This gives an indication that the brush may need to be replaced or is becoming worn, a signal can either be provided to the panel or via a signal for connection to telemetry.



Intermediate shell bearing to prevent damage to auger and basket



Brush wear sensor

Installation Examples

Below are examples of several types of Ro9 installation, please contact us to discuss your requirements



Tank mounted screen with access platform



Duty / Assist / Standby screening



Duty / Duty screening



Discharge chutes



Channel mounted screen



Bespoke tank design to incorporate bypass



Screen and control panel installed by Huber

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