Noggerath

A brand of
Aqseptence Group

Noggerath®
Rotary Drum Screen RSI-DD

Fine screening of wastewater in channels or tanks with a perforated or wedge wire screen – including subsequent screenings conveyance, dewatering, compaction and discharge.

With the Noggerath® Rotary Drum Screen Double Drive RSI-DD Aqseptence Group offers a compact system with a proven double drive concept. Contrary to the conventional technology, the screen drum and the screenings conveying system are driven independently. This allows a drum design in the inlet area without a suspended rotary arm. The screening area is totally free with significant advantages for operation and maintenance.
Noggerath® Rotary Drum Screen RSI-DD is a combined machine consisting of a screen, a conveyor and a compactor. The machine is installed in the channel at an angle of 35°.
Screenings in the incoming flow larger than the screen opening size are collected on the inner surface of the drum, causing a gradual blinding. At a predetermined upstream level the screen drum and screw conveyor starts rotating independently.
The sedimented screenings rotate upwards with the drum, where they drop gravitationally, supported by a spray bar, into a conveyor trough located in the center of the drum. The screenings are caught by the screw and conveyed up to the press zone. During the rotation the screw brushes removes the screenings from the inner surface of the drainage zone. In the press zone the screenings are compacted and dewatered prior to disposal or further treatment.
The RSI-DD-T is the tank version and is typically used for pump feeding.

Benefits

- Rotation of the drum is independent of the rotation of the screw/spiral
- Free inflow of the screenings due to inlet area without a rotary arm
- Ease of maintenance, best accessibility to drive motors
- High separation efficiency
- Compact construction requires less space
- Cleaning brushes fixed on the bottom part of spiral for cleaning the trough

Unique features

- Without drive arm at drum inlet zone: no entangling of long particles and lower head loss
- Double Drive: drum drive stops, but screenings can be run empty in the hopper of the conveyor trough
- Drum sealing is designed and tested up to 200 microns

Design sizes & performance

Flowrate	up to 6.000 m^3/h
Screen drum diameter	from 760 – 2.560 mm
Channel width	from 800 – 2.600 mm
Perforation	1 – 10 mm
Wedge-wire	0.25 – 6 mm
Dry matter content of discharged screenings	up to 35 %

Materials

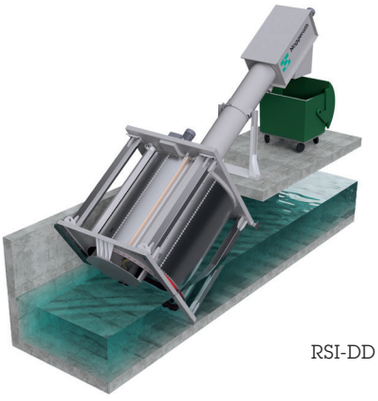
Screen drum, frame, casing, supports	Stainless steel AISI 304 (DIN 1.4301) or AISI 316 L (DIN 1.4404) Others on request
Screw / Spiral	Special Micro Alloy Steel St 52 (carbon steel in acc. with AS Group standard), alternatively stainless steel AISI 304 (DIN 1.4301) or AISI 316 L (DIN 1.4404)
Gears	PA6G
Drum seal	Urethane 90 S

Options

- Hygienic bagging of screenings
- Screenings washing system
- Heating / frost protection
- Protection cover for the channel version
- Tank version

Applications & fields of operation

- Fine screening in municipal and industrial wastewater treatment
- Pre-screening in water treatment plants
- As a fine screen, upstream of membrane bioreactors (MBR processes)



RSI-DD

RSI-DD-T

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Version 1.2