A brand of Aqseptence Group

# Noggerath® Rotary Drum Screen RSI-DF

Double fine screening of wastewater in channel or tank with perforated or wegdewire screen including subsequent screenings conveyance, dewatering, compaction and discharge.



With the Noggerath® Rotary Drum Screen RSI-DF, Agseptence Group offers you a machine with two revolutionary concepts. With a patented double filter system it is possible to operate both a pre-filter and a fine sieve. Furthermore, contrary to the conventional technology, the sieve drum and the spiral conveyor are independently driven. This allows a drum design in the inlet area without a suspended rotary arm. The inlet zone is constantly free and offers great benefits not for the incoming solids only, but also for the head loss.

Noggerath® Rotary Drum Screen RSI-DF is a combined machine consisting of two screens, a spiral conveyor and compactor. The rotary drum is installed at an angle of 35° in a channel or tank. Solids in the incoming flow larger than the screen opening size collect 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 solids rotate upwards with the drum, where they drop gravitationally into a conveyor trough located in the center of the drum supported by a spray bar. There it is caught by the spiral and transported up to the press zone. During the rotation the spiral brushes removes the solids from the inner surface of drainage zone. In the press zone the screenings are conveyed, compacted and dewatered prior to disposal or further treatment.

#### **Benefits**

- Double filter system, fine sieve is protected for large solids
- Compact design requires less space
- · High capture rate of solids
- Easy and fast maintenance and thus low costs due to bolted main parts of the unit

### Unique features

- Double drive, the drum rotation is independent of the spiral rotation
- Drum without rotary arm, no entangling
- Drum seal is designed and tested up to 200µm
- Coarse filter with back wash system
- The screw conveyor brushes made in segments, bolted on the spiral, allowing an easy replacement of the worn pieces only.

#### Performance

Flowrate	up to 6.000 m <sup>3</sup> /h
Machine width	from 760 – 2.560 mm
Channel width	from 800 – 2.600 mm
Pre screen perforation	6 – 10 mm
Fine screen perforation	1 – 6 mm
Fine screen wedge-wire	0.25 – 6 mm
Dry matter content of discharged screenings	up to 35 %

#### **Materials**

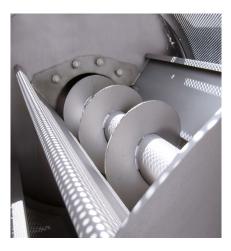
Casing, supports, drum	stainless steel AISI 304 or AISI 316L Others on request
Spirals	special Micro Alloy Steel St52 (in acc. with AS Group standard), alternatively stainless steel AISI 304 or AISI 316L
Drum seal	Urethane 90 S
Lower drum bearing	HPDE

# **Options**

- · Bagging unit for solids
- · Screenings washing system
- · Hygienic encapsulation
- · Protection cover for the channel version
- Tank version for pump feeding

# Applications & fields of operation

- · Fine screening in municipal water treatment
- · Pre-screening in water treat-
- ment plants or before MBR
- · Industrial wastewater treatment







#### **Agseptence Group GmbH Water Treatment Systems**

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