A brand of Agseptence Group

# Noggerath® Spiral Sieve NSI-T / NSI/D-T

Fine screening of wastewater in a tank with a perforated or wedgewire screen, including conveyance of screenings, dewatering, compacting (NSI/D-T) and discharge.



Equipment for the fine screening of wastewater in inlet has been part of the standard range of the brand Noggerath® of Aqseptence Group since 1988. Our compact and robust spiral sieves are available integrated in a stainless steel receiving tank with and without dewatering / compacting zone.

The liquid flows into the sieve basket, which is open on the inlet side. Solids with a larger

diameter than the hole / gap width are retained. A continuous layer of solids is thus formed on the surface of the screen, reducing free passage through it and causing the level of the liquid upstream of the screen basket to rise. A level measuring device, installed upstream of the spiral screen, monitors the respective level of the liquid. When the preset maximum level is reached or exceeded, the drive of

the spiral screen is automatically activated. The deposits of solids retained in the screen basket are then conveyed by the spiral to the discharge area, whereby in the version NSI/D the solids are additionally compacted in the pressing zone. The dewatered solids are then automatically discharged. During the discharge procedure, the sieve basket surface is cleaned by means of a spiral brush mounted on the spiral. As a result of the cleaning and discharging processes, the level of the liquid upstream of the sieve basket drops. When this level reaches or falls below the set level, the spiral drive switches off automatically.

Our spiral sieve solutions are suitable for both indoor and outdoor installation and have proven to be particularly economical in operation. No service water is needed with an installation angle of 35°. The brush, which is divided into identical individually exchangeable elements, ensures fast and cost-effective maintenance.

#### **Benefits**

- · Fine screening and dewatering in one unit
- · Simple retrofitting
- · No bed drop required
- Complete hygienic stainless steel encapsulation
- · High operational reliability:
  - · no blockages or pigtailing
  - no pressing of screenings through the sieve surface
- No service water required in the pressing zone

### Design sizes & performance

NSI-T / NSI/D-T	200	300	400	500	600	700
Sieve basket diameter [mm]	200	300	400	500	600	700
Discharge height [mm]	1,500					
Total length [mm]	3,790	3,790	3,790	3,800	4,200	5,070
Drive [kW] (400V/50Hz)	0.55	0.55	0.55	0.55	1.10	1.10
Flow rate [1/s]	5 – 50	10 – 55	15 – 90	30 – 130	55 – 185	80 - 295
Gap size [mm] (perforation)	2 – 10					
Gap width [mm] (wedge-wire)	0.25 – 6					
Installation angle	35°					

### **Materials**

Casing, supports, wear rails	stainless steel AISI 304 or AISI 316L Others on request
Spiral	special Micro Alloy Steel St 52 (carbon steel in acc. with AS Group standard), alter- natively stainless steel AISI 304 or AISI 316L
Brush	Plastics, alternatively AISI 304

## **Options**

- · Hygienic bagging of screenings
- Automatic flushing of pressing
- zone with solenoid valve
- · Screenings washing bar Heating / frost protection

## **Applications &** fields of operation

· Sludge and septic sludge screening

· Municipal and industrial wastewater treatment

Screening of organics from





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