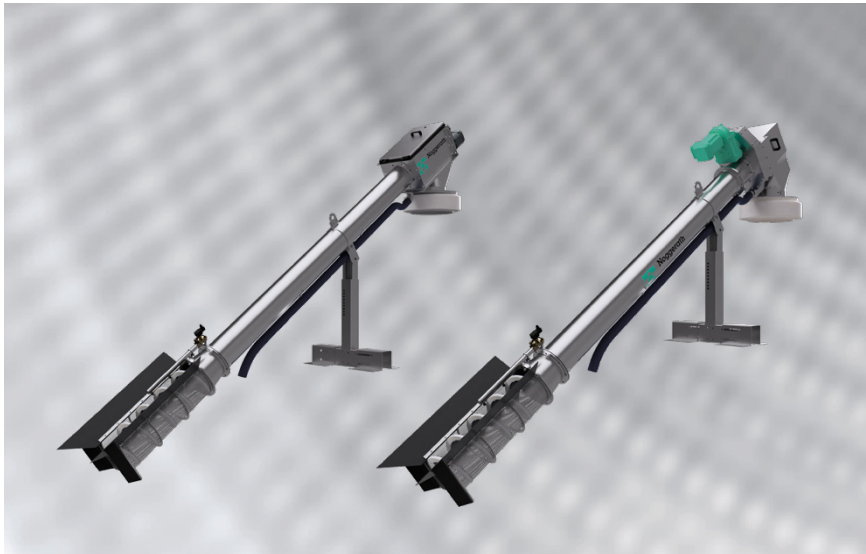




A brand of  
Aqseptence Group

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

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



Equipment for the fine screening of wastewater in inlet has been part of the standard range of the brand Noggerath® of Passavant-Geiger since 1988. Our compact and robust spiral sieves are available integrated in a stainless steel receiving tank with and without dewatering 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 solid retained in the screen basket are then conveyed by the spiral to

the discharge area, whereby in the version NSI/D and NSI-RED the solids are additionally compacted in the pressing zone. The dewatered solids are then automatically discharged. In the version NSI-RED, the Noggerath® Radial Eco Drive enables an axially free discharge area without drive elements. This secures a blockage-free discharge of the machine. 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°, for example, and the brush, which is divided into identical individually exchangeable elements, ensures fast and cost-effective maintenance.

### Benefits

- Axial clogging free discharge (NSI-RED)
- 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

## Design sizes & performance

NSI, NSI/D, NSI-RED	200	300	400	500	600	700
Sieve basket diameter [mm]	200	300	400	500	600	700
Drive [kW] (400V/50Hz)	0.55	0.55	0.55	0.55	1.10	1.10
for NSI-RED	0.75	0.75	0.75	0.75	1.50	1.50
Flow rate [l/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° (optional up to 45°)					

## 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 Passavant-Geiger standard), alternatively stainless steel AISI 304 or AISI 316L
Brush	Plastics, alternatively AISI 304
Pinion, gear segments (NSI-RED)	Nylon (Polyamide)

## Options

- Discharge box (NSI-RED)
- Discharge extension (NSI-RED)
- 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 wash water



### Passavant-Geiger GmbH Water Processing Solutions

Passavant-Geiger-Strasse 1  
65326 Aarbergen · Germany  
Phone +49 6120 280  
info@passavant-geiger.com

### Aqseptence Group Carpi Srl, Soliera Water Processing Solutions

Via Pitagora 30  
41010 Soliera, MO · Italy  
Phone +39 0595 257 20  
info.watertreatment.it@passavant-geiger.com

