

TASK

Transport, pressing and dewatering of sievings and screenings in wastewater treatment plants, and waste, residue and recyclable matter in industrial processes.

SOLUTION

The NOGGERATH® Spiral Press SPR with its centrepiece, the shaftless spiral, reliably transports, dewaters and compacts even problematic materials — e.g. containing fibres or sand — without clogging. Sizes, lengths and installation angles can optimally be tailored to meet individual site requirements.

FUNCTION

The NOGGERATH® Spiral Press SPR consists of a spiral conveyor which leads into a compacting and dewatering zone. The solids are fed via a hopper into a U-shaped conveyor trough, where they are taken up by a conveyor spiral and transported further. The spiral leads to a wedge-wire cylinder with a gap widths of 1 mm, which serves as a dewatering screen. Supported by a spring-loaded back-pressure flap mounted at the outlet, the solids are formed into a friction plug and simultaneously compacted and dewatered.

DESIGN SIZES

The NOGGERATH® Spiral Press SPR is available in the following sizes, whereby the figures represent the outer diameter of the spiral in each case:

- SPR 160
- SPR 215
- SPR 280
- SPR 350
- SPR 420
- SPR 500

PERFORMANCE

- Max. trough length: < 10 m
- Throughput rate: up to 16 m³/h (depending on material)
- Dry matter content of discharged material: up to 35 %
- Installation angle: 1°-20°

BILFINGER WATER TECHNOLOGIES

NOGGERATH[®] Spiral Press SPR

BENEFITS

- Economic and compact: conveyance and dewatering in one system
- Simple fast maintenance due to single conveying element
- Direct drive with low energy consumption
- Flexible installation and ease of integration into existing plants:
 - length customisable by adapting trough length between 1.5 m to 10 m
 - customisable installation angle between0° and 20°



WATER TECHNOLOGIES

MATERIALS

Conveyor trough, cover, wedge-wire cylinder,

hopper, supports: stainless steel EN 1.4301 (AISI 304) or

stainless steel EN 1.4571 (AISI 316Ti)

Spiral: special steel in accordance with NOGGERATH® Standard,

alternatively stainless steel EN 1.4571 (AISI 316 Ti)

Wear lining: PE-UHMW 1000

OPTIONS

- Automatic compacting zone flushing
- Alternative gap width in the wedge-wire cylinder of the compacting zone
- Vertical discharge with bagging device
- Spiral made of stainless steel
- Lateral direct injection from spiral conveyor to minimise design height
- Support feet/ceiling suspension
- Manually adjustable spiral length to optimise the compacting results (retractable shaft)
- Alternative material as wear lining
- Heating for outdoor installation (or frost protection)

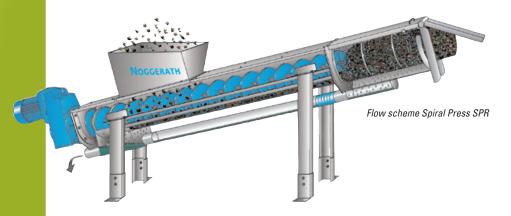
FIELDS OF OPERATION

- Waste disposal and wastewater treatment plants
- Beverage industry, catering, canteens
- Fish and meat processing
- Abattoirs and tanneries
- Chemical and paper industry
- Food industry
- Fruit and vegetable industry

UNIQUE FEATURES

The NOGGERATH® Spiral Press SPR has a particularly simple and robust design which combines operating reliability with distinct application advantages:

- Standard spiral with inset from size 215
- Fully encapsulated system, therefore no problems with dust, splashes and odours
- Shaftless spiral design without additional bearings in the conveying path reliably prevents pigtail forming and blockages and provides more space for larger or bulky parts
- The spiral has one support point only, which is located in the drive area
- The spiral forms a uniform linear load, distributed over the entire length of the trough, and thus ensures even wear on the wear lining unlike spirals with a central shaft/tube
- Drainage at the drive end by means of brush-cleaned perforated screen for discharge of the transported water
- Standard drive unit with stuffing box



Water Technologies

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