

FSM Frankenberger GmbH & Co. KG

Equipment for Water and Waste Water Inlet Works



FSM Sludge screen

Screening · Compression · Dewatering · Discharge



Functional principal:

The FSM sludge screen consists of a cylindrical, enclosed tube inside which a screen with screw inside it is installed.

Via an inlet flange, the liquid to be screened is added into the screen under pressure. The machine may thus also be integrated into the pipework.

The machine is subdivided into the functional areas of screening, compression/dewatering and discharge.

Material held back by the screen is conveyed through a screw conveyor into the compression and dewatering zone. Washing water or re-rinsing for cleaning the screen is not reauired.

At the end of the compression and dewatering zone, a cone reduces the size of the outlet cross-section. Through the cone, the counterpressure for the compression and dewatering of the material is achieved. The cone can be displaced axially and is run pneumatically.

The counterpressure and/or the cross section through which the material can get into the discharge region is therefore variable.

The perforation of the screen and the design of the discharge area may be adapted individually to the needs and conditions that our customers are faced with.

Feature:

- High throughputs due to
- Can also be used for highlyviscous sludges or those containing grease
- High level of dewatering of the screening by counterpressure
- robust construction
- If the screw has become worn, this can be readjusted
- Reinforced coils reduce wear, particularly when used with abrasive media
- Increase in operational safety and reduction of maintenance required in the subsequent sludge treatment, such as inspissation, disinfection, stabilisation, dewatering and drying
- Low maintenance of the machine required
- Reliable cleaning of the screening surface without additional industrial water



- pressurised screening
- High operational safety due to

- Machine completely hygienic with odour encapsulation







Dimensions:

Can be used in public utility

Process water screening

Can be used in the paper

Process water screening

Can be used in industry

screening

• Textile and textile-finishing

industry - Process water

and cellulose industry

• Sludge screening /

Sludge screening /

primary sludge

secondary sludge

and industrial sewage plants

Throughput power	up to 110 m³/h sludge and 150 m³/h process water
Perforation	1-10 mm, other perforations on request
Angle of installation	Horizontal
Dewatering	Dewatering the screening to up to 45% DS

Material/makes:

Machine frame	Stainless steel 1.4301 or 1.4404, other materials on request
Screen element	Stainless steel 1.4301 or 1.4404, other materials on request
Drives	Geared motor, make: SEW

