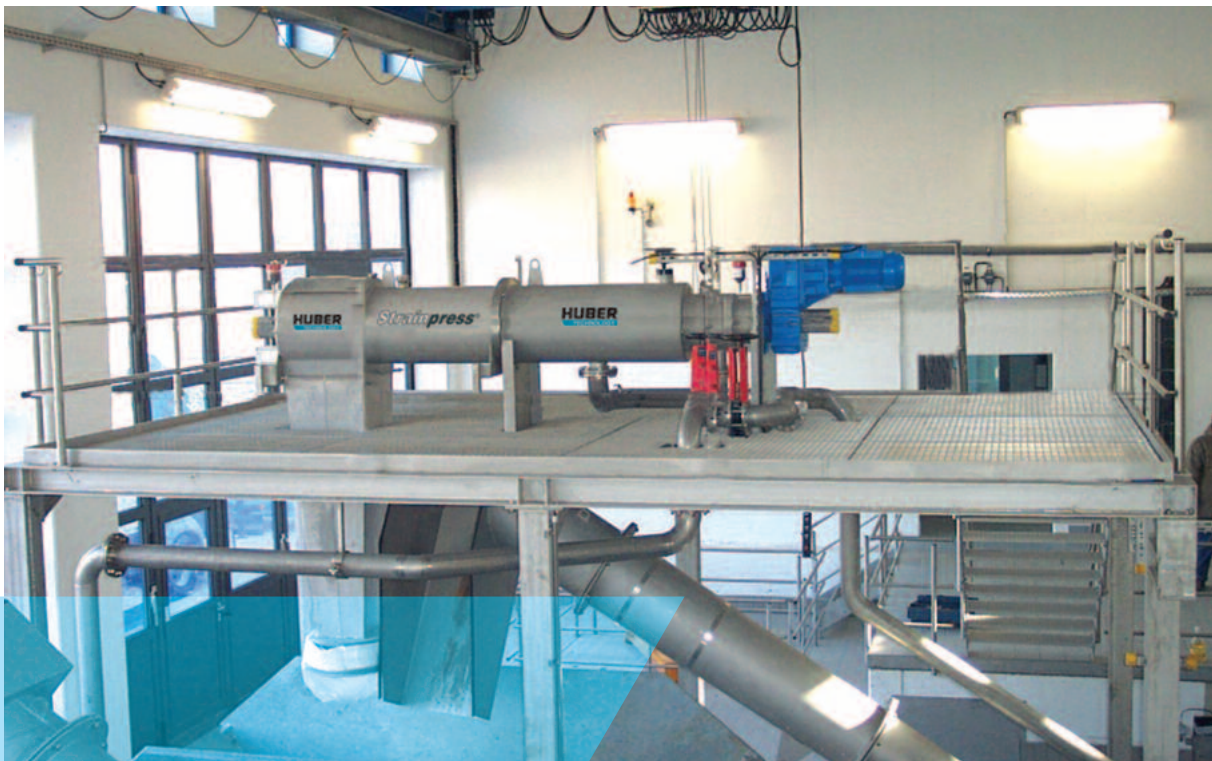


Strainpress® Sludgecleaner SP



- removal of coarse material from municipal and industrial sludge and from process water
- continuous screening, dewatering and transport of coarse material in one operation

►► Design and function

The STRAINPRESS® is a horizontal pipe-shaped coarse material separator which consists of inlet and screening zone, press zone, and a discharge section.

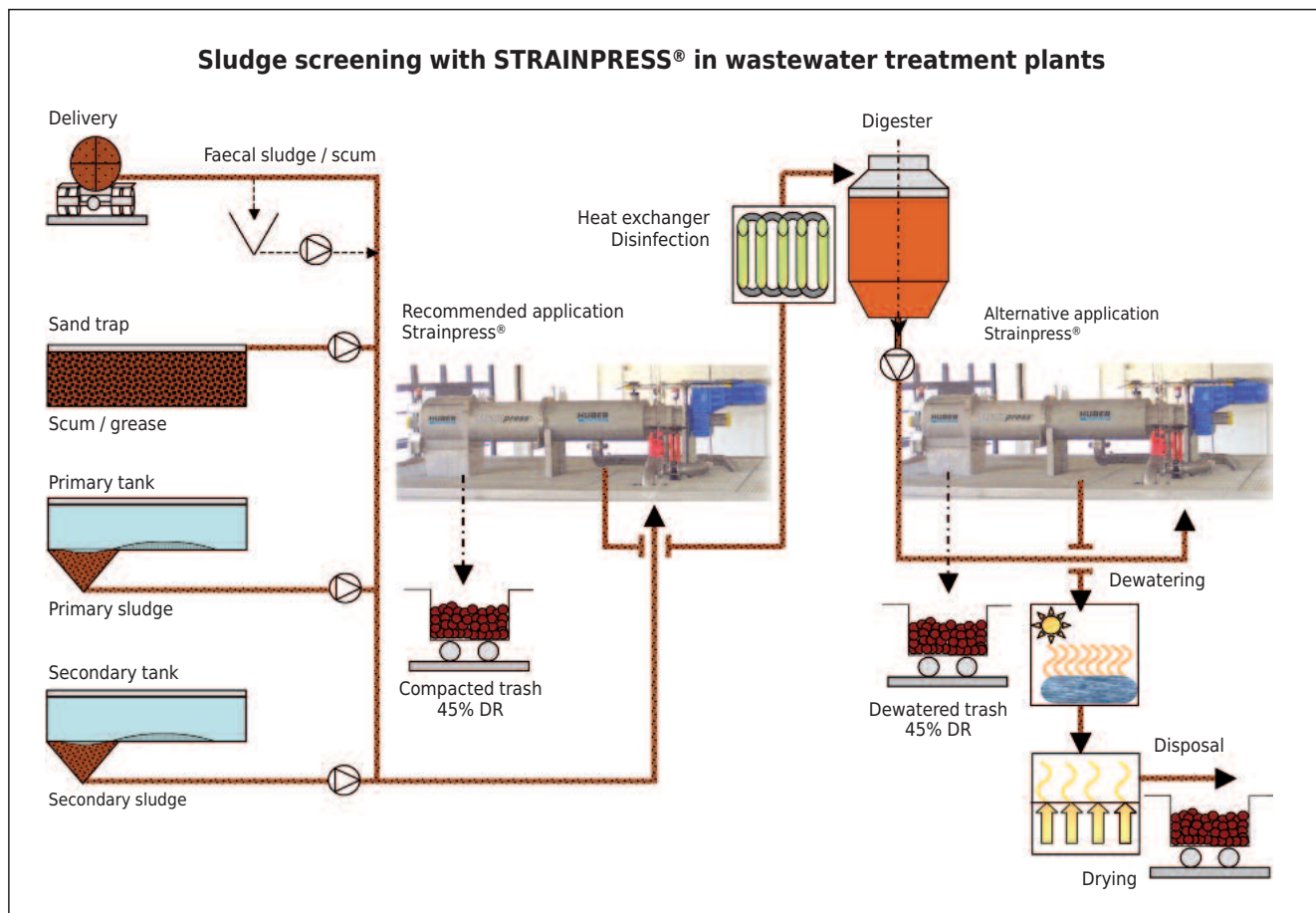
A pump presses the liquid through the screening zone and delivers it to further process steps or utilisation. The liquid is under pressure. The coarse material which is retained on the screen surface is stripped off by a coaxial screw and pushed through the press zone where the material is extensively dewatered and compacted. The compacted material is pressed through a gap around a hydraulically operated pressure cone which closes part of the pipe end and builds up counterpressure.

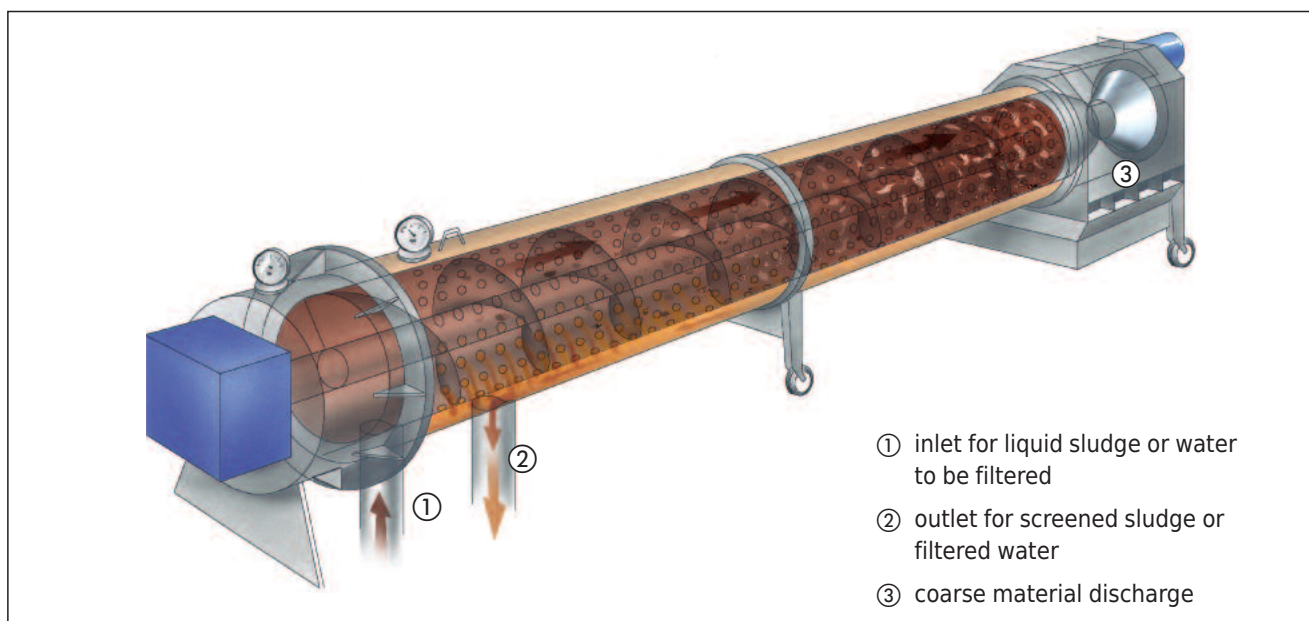
The system does not need any wash water as backwashing of the screen is unnecessary.

The perforation and design of the discharge section are individually adjusted to optimally suit specific requirements. The below diagram shows the installation of the STRAINPRESS® within the wastewater treatment plant. The flow is under pressure as it streams through the STRAINPRESS®, it is therefore easily possible to integrate the STRAINPRESS® into the existing pipeline and automatic system.

►► Features and benefits

- Pressure-fed (inline) system for process water and any type of sludge including highly viscous and grease containing sludge
- Increases the operating reliability of downstream sludge treatment systems, such as thickening, disinfection, stabilisation, dewatering, drying, and reduces maintenance requirements
- Perforations of 0.15 to 10 mm are available for solids/liquid separation in industrial applications
- Used as a filter screen for the treatment of process water the STRAINPRESS® saves water due to water reuse in a circulation process
- Throughput capacity of up to 110 m³/h sludge and up to 150 m³/h process water
- Reliable perforated plate cleaning without the need for any water
- Automatic pressure cone system for maximum dewatering efficiency and compaction of the separated material
- Coarse material filtering or screening and dewatering to approx. 45% DS
- More than 1000 successful installations worldwide





►► Easy maintenance

The complete casing and perforated plate of the STRAINPRESS® are made of 1.4307 (AISI 304L) stainless steel.

The opposite picture shows an open STRAINPRESS®, the press zone can be seen on the left, the screening zone on the right. The quick-opening and closure device makes control and inspection easy. The screen section is fixed, the press zone has castor swivel wheels and is therefore easy to shift.



►► Examples



Sludge screening on WWTP Athens, Greece



Screening of mashed organic waste

►► STRAINPRESS® applications

The STRAINPRESS® is used for liquid sludge screening or filtration of service or process water under pressure.

Examples for coarse material separation from:

- primary sludge
- secondary sludge
- mixed sludge
- septic sludge
- floating sludge
- grease sludge
- digested sludge
- production wastewater and industrial sludges
- circulation and process water



Discharge of the separated compacted material



Separated material: paper, wood, plastic, tinfoil, rubber, textiles, etc.