



Rotary Screen

Technologies for solid/liquid separation



The rotary screen

For the separation of coarse particles

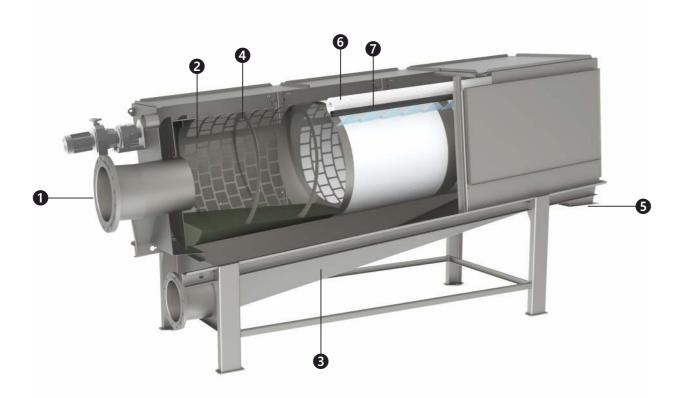
The rotary screen is a drum sieve loaded from inside for separating suspended solids, particles and fibres from liquids, process water and waste water.

The rotary drum can be equipped with different types of sieves or filters like perforated metal plates, wedge wire screens and fabrics. This leads to a wide range of applications for various types of mediums. So it is also possible, for example, to treat hot washing and process water. It can be used as a washing drum for the dewatering of special products as well.



Functional principle of the rotary screen

Technology made by Leiblein



Effective separation even at high throughputs

The feed stream is led into the sieve drum (2) via the inlet pipe (1) and is spread evenly on the drum surface.

The actual sieving process takes place inside the continuously rotating sieve drum. The untreated water flows from the inside outwards through the filter drum into the collector for the clear water (3). The solids are retained by the drum and carried to

the solid output (5) by a screw conveyer (4) where they fall into a sludge tank.

The rotating sieve drum is cleaned continuously by a brush roller (6). In addition, an outside of the drum mounted sprayer with nozzle assembly (7) is used for rinsing.

Areas of application of the rotary screen

Versatile application possibilities

Leiblein rotary screens are often used at large water throughputs with relatively low solids loading.

· Recycling industry

e.g. for coarse separation and as washing drum in plastic recycling; washing water with shreds of foil

· Glass fibre / mineral fibre

e.g. treatment of water that is used for the spinning process in glass fibre manufacturing; process water treatment in glass fibre mats manufacturing; treatment of rinsing water that is used in the manufacturing of mineral fibres ceiling panels

· Wood fibre

e.g. in the manufacturing of veneer wood and OSB boards

· Food processing industry

e.g. coarse cleaning of vegetable washing water with fibrous debris (fibrils) and leaves; coarse cleaning of washing water that is used for the cleaning of glass bottles; treatment of rinsing water from airline-caterings

· Animal parks and zoos

e.g. coarse treatment of water from basins with feed remains

The rotary screen is often combined with a lamella separator. While the former removes large particles and fibres, the lamella clarifier separates turbid substances. The advantage of the pre-separation is that the sludge, which was separated with the lamella separator, can be afterwards dewatered easily and under controlled process conditions.

High efficiency

Your benefits with our rotary screen

- High throughput in continuous operation
- Low operating costs because of low energy requirements
- Low maintenance costs because of a sturdy and high-quality stainless steel design
- Sieve and filter medium are easily replaceable
- Gentle separation of solids











Design

Types and materials

The rotary screen can be dimensioned up to a throughput of 3000 $\,\mathrm{m}^3/\mathrm{h}$. Optionally the drum can be equipped with an additional inlying nozzle assembly for washing the solids.

Material: stainless steel

Sieve types: perforated metal plate, wedge wire

screens, fabric

Alternative materials on request.

Every rotary screen is designed for your special application. Furthermore we provide pilot plants and rental units for all our products.





You have questions about the treatment of your medium? Do not hesitate and contact us!

We would be pleased to advise you.



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