

Innovative Sludge Thickening

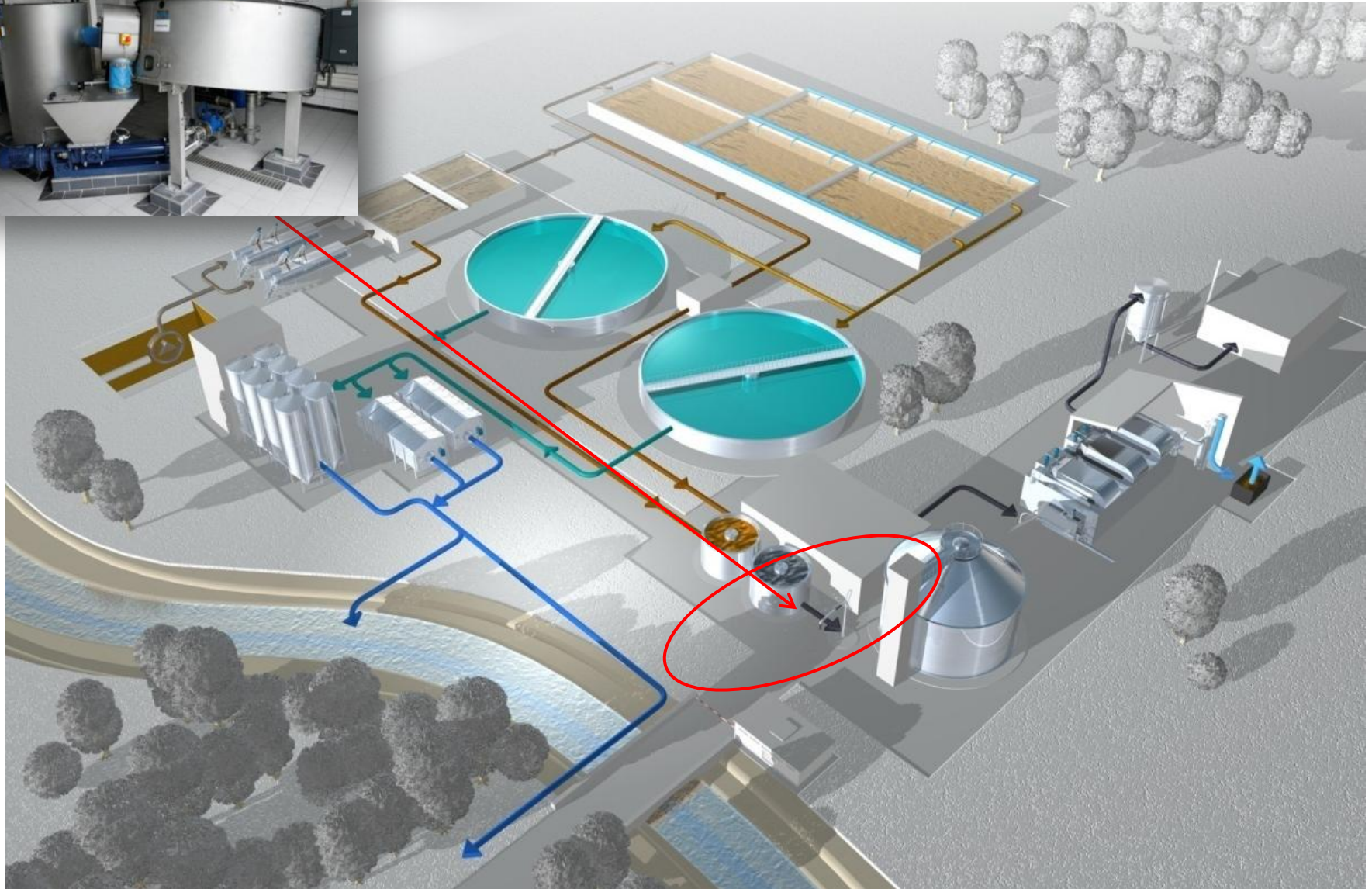


RoS2S

Disc Thickener

13th Annual Midwest Water & Wastewater Operator Expo

RoS2S Disk Thickener – Where is it applied?



Gravity Belt Thickener



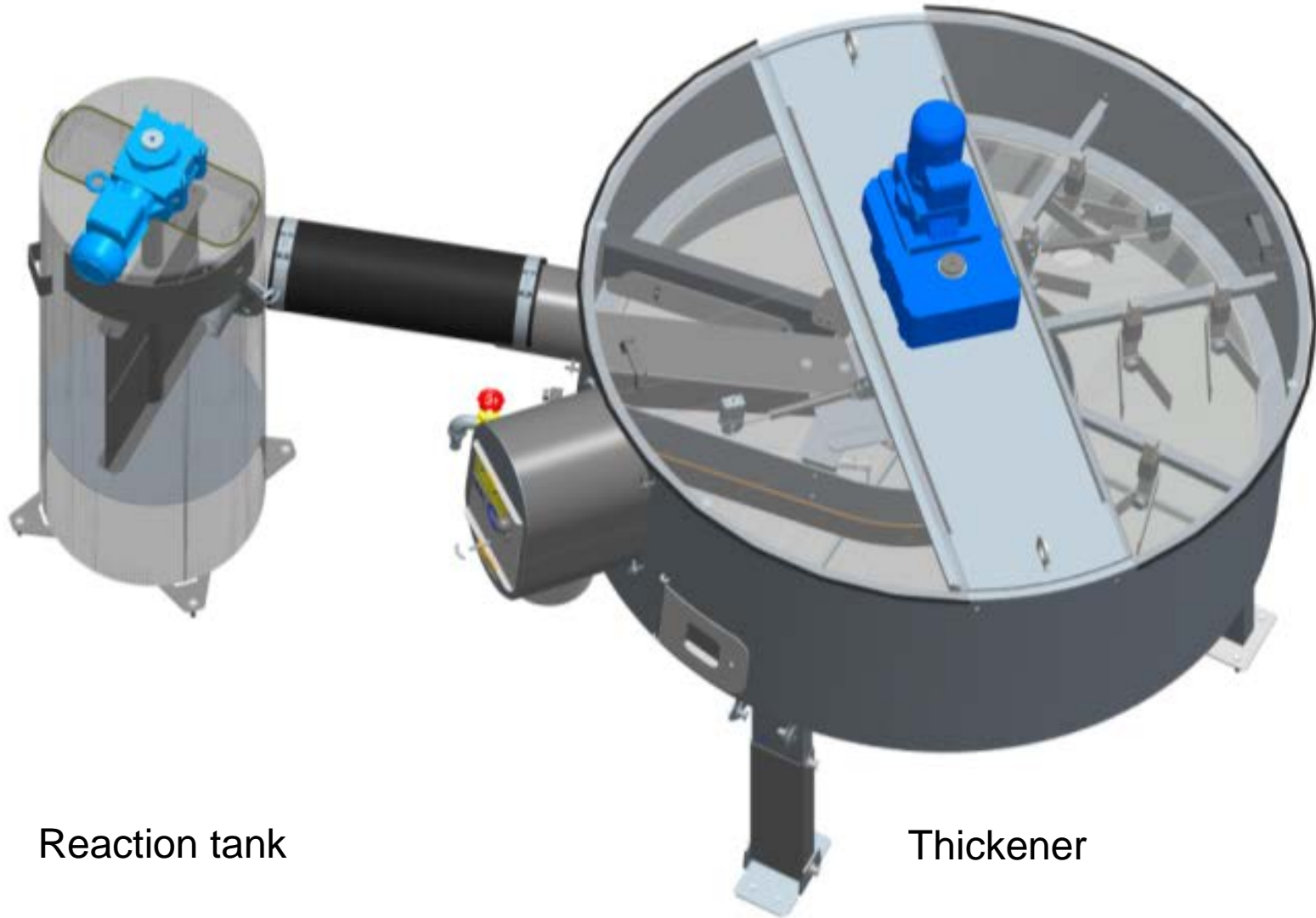
Rotary Drum Thickener



Disk Thickener



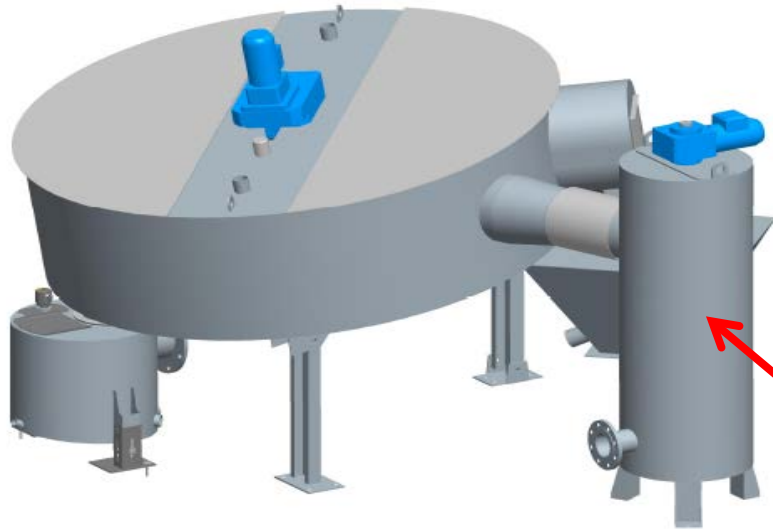
RoS2S Disk Thickener – How does it work?



Reaction tank

Thickener

RoS 2S Disk Thickener – How does it work?



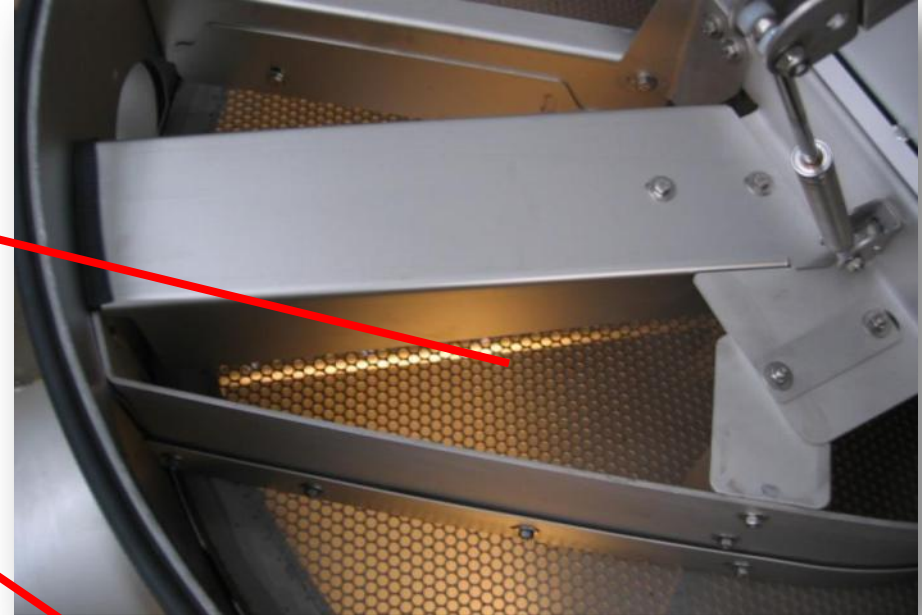
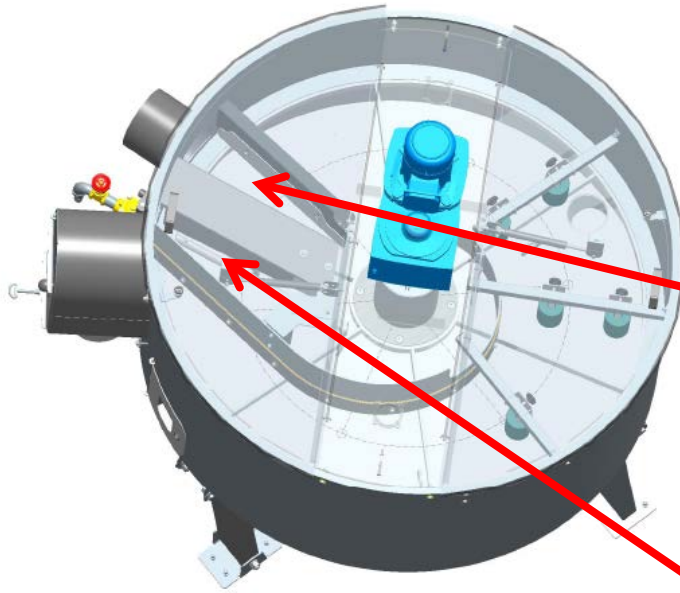
A clearly visible phase separation should take place in the reactor. The flocks should have a minimum diameter of 5 to 10 mm.

If separated flocks can't be seen, either the polymer is unsuitable, the dose is too low, or the stirrer speed or polymer mix-in energy is not correct.

If clear flock structures are seen but the watery phase is milky, the polymer dose is too high.



RoS 2S Disk Thickener – How does it work?

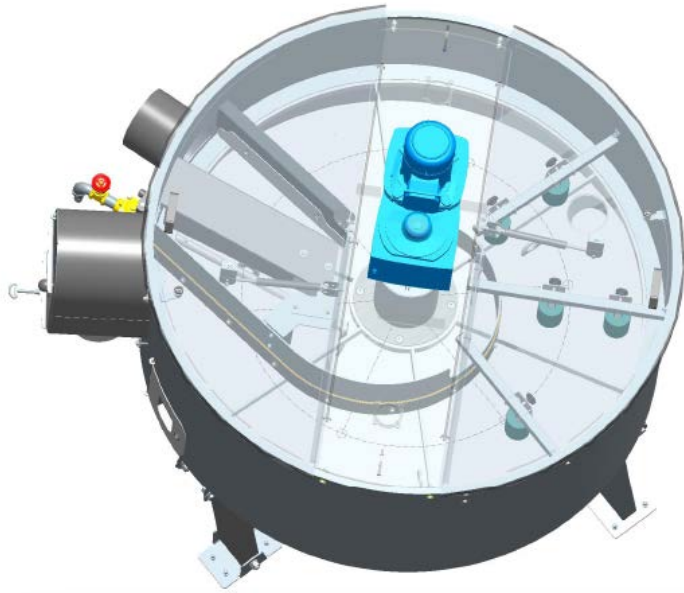


Filter Disk:
200 micron stainless mesh on
perforated plate support

Cleaned by a single spray bar

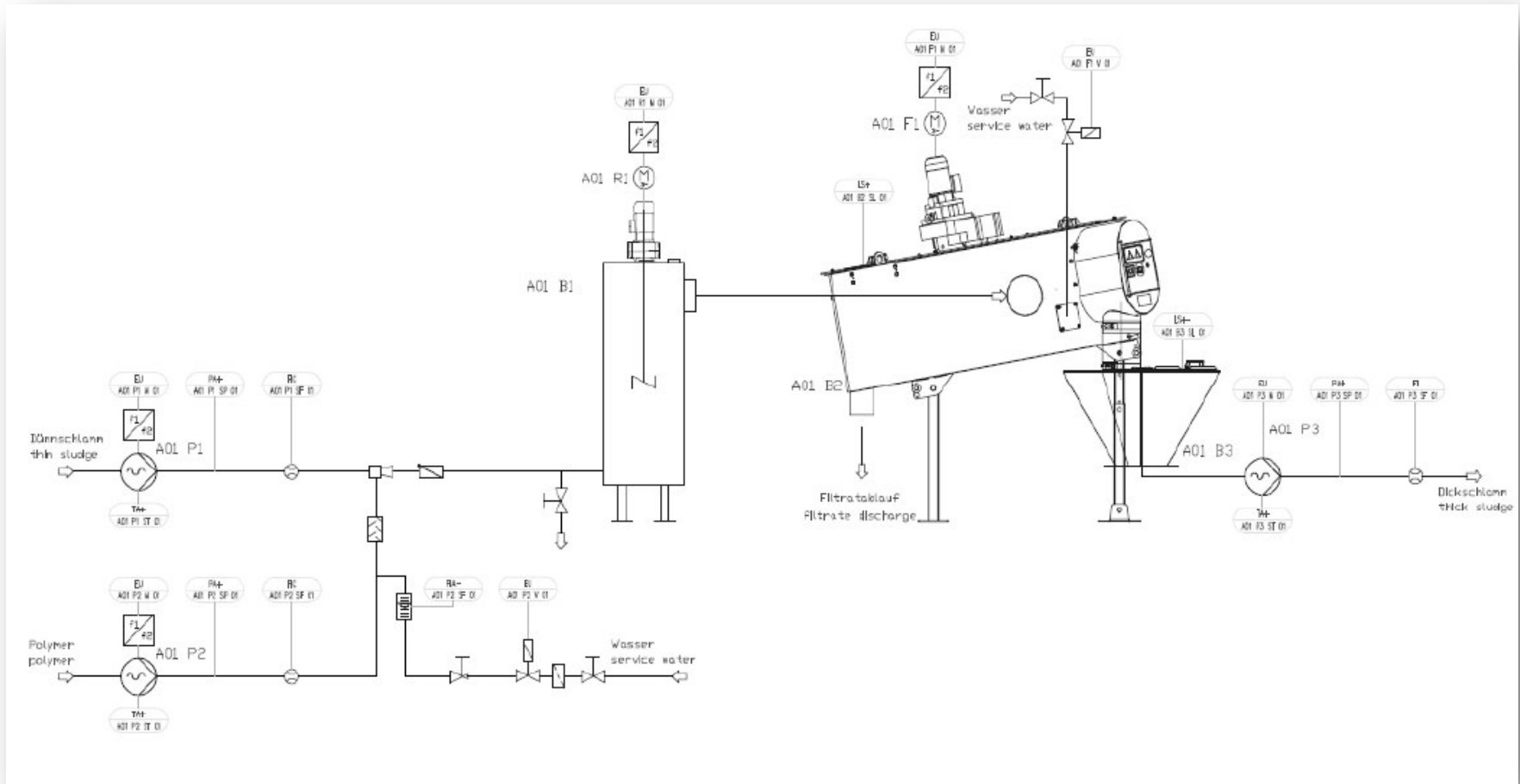


RoS 2S Disk Thickener – How does it work?

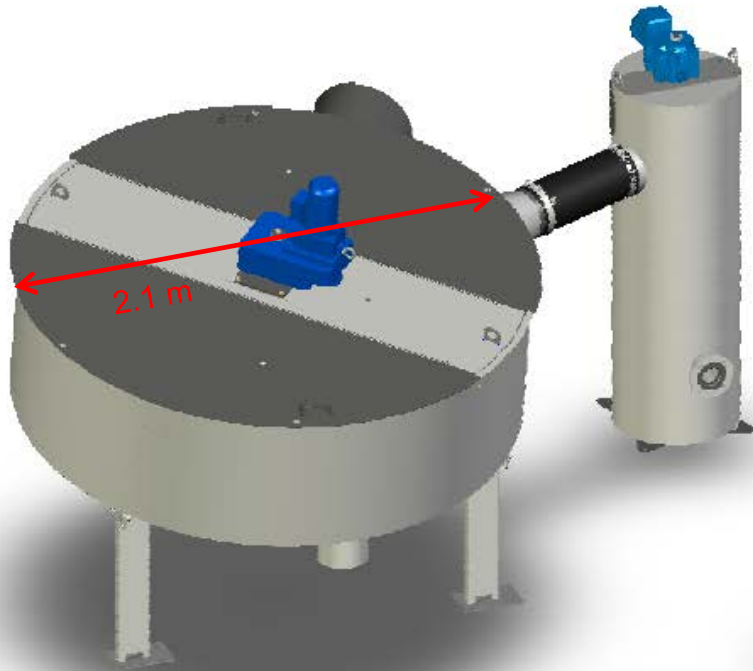


RoS 2S Disk Thickener – How does it work?

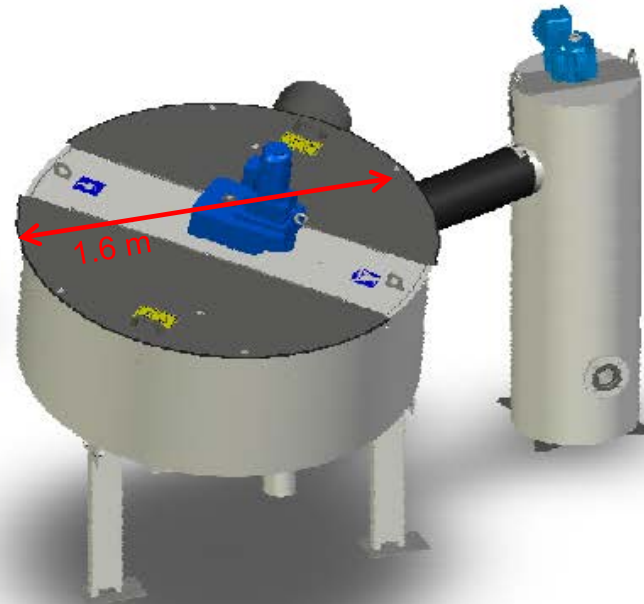
Process & Instrumentation Diagram



RoS2S Disk Thickener – available sizes



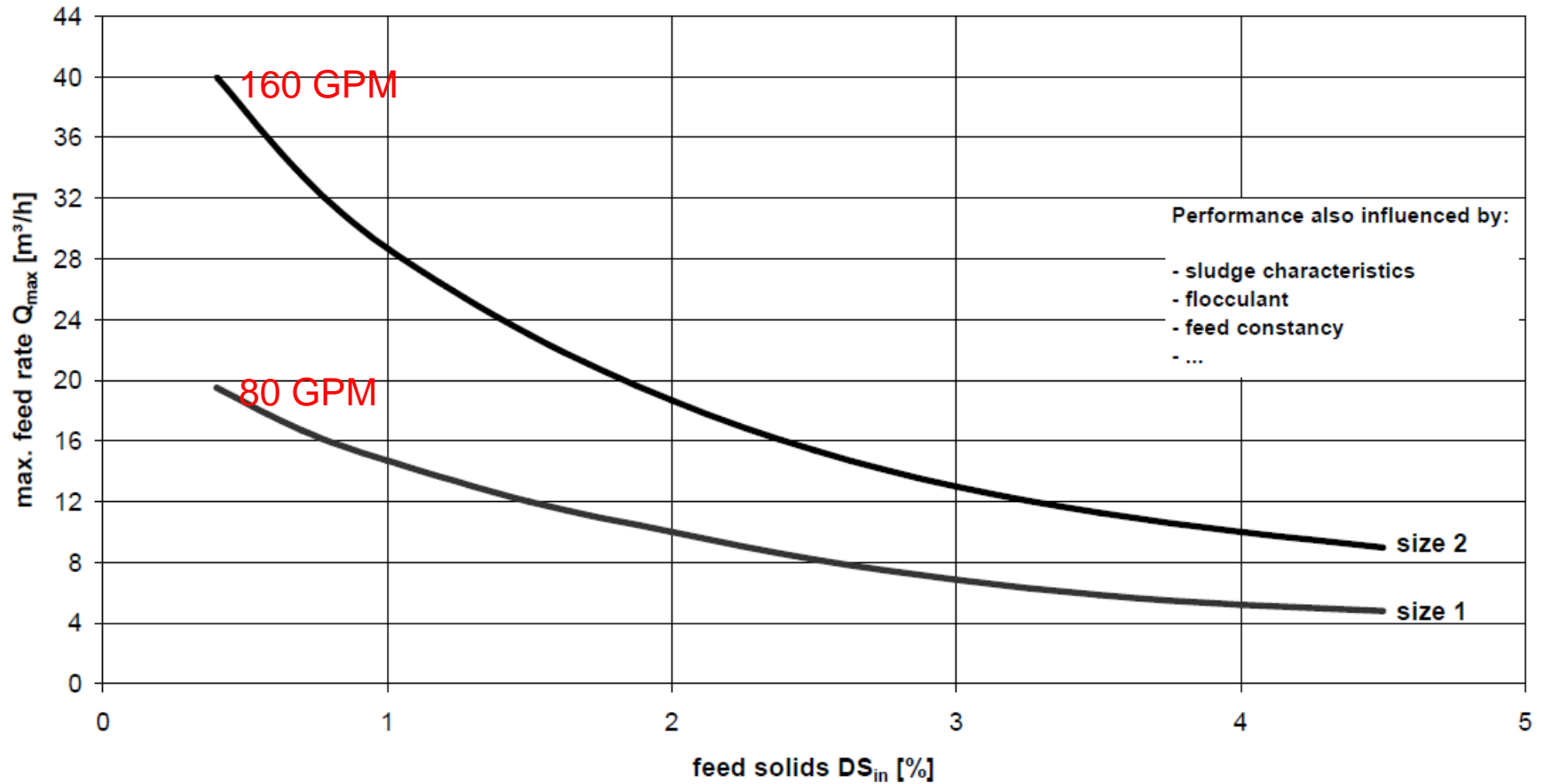
➤ RoS 2S size 2



➤ RoS 2S size 1

RoS 2S Disk Thickener – throughput

Throughput Chart

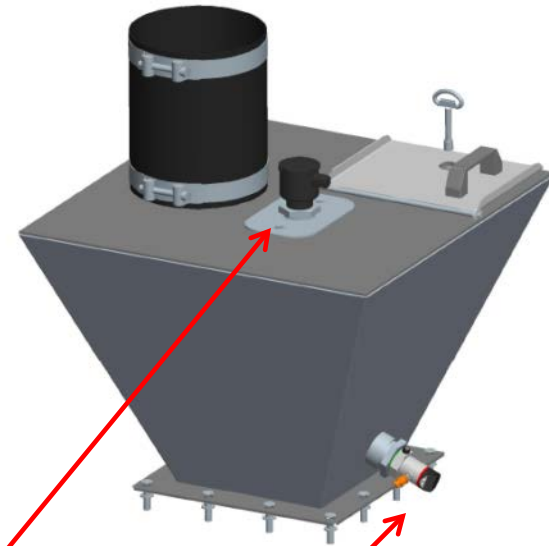




- flocc tank / thick sludge tank for parallel installations
- RoS 2S mirrored versions

RoS 2S Disk Thickener – options

- thickened sludge tank



pump control:

- conductive level probe
- hydrostatic pressure probe

Very Low Maintenance

One moving part.

Up to now, the RoS 2S unit installed on **WWTP Meldorf (Germany)** is running without any replacement of wear parts.

Start-up date: June 2004

Sludge type: excess sludge

Throughput: 5 m³/h; RoS 2S 1

Operating hours: 53 650

Operational performance: approx. 38 000 km

Demand for wear parts: /

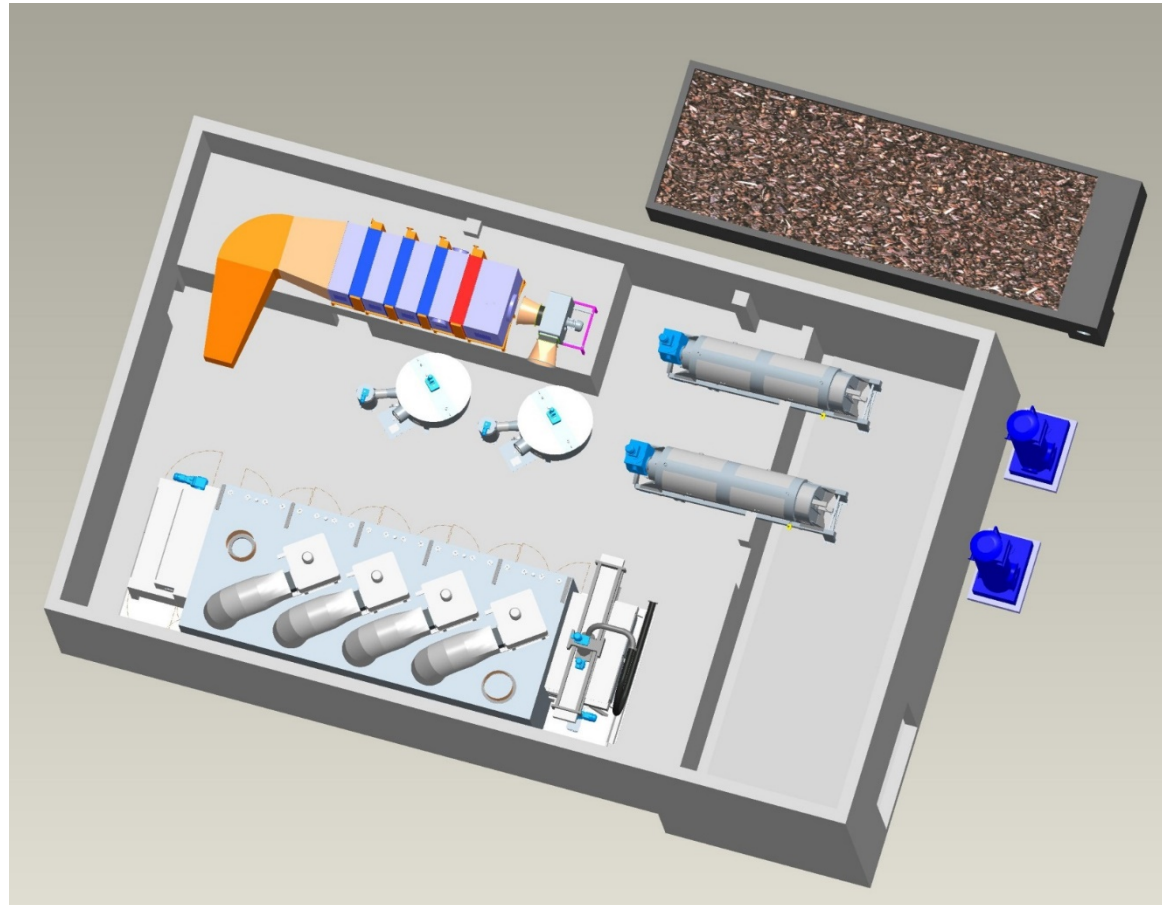
Almost unbelievable 50,000 running hours without replacement of wear parts have been achieved even under quite difficult conditions. The unit is an outdoor installation without special protection and has been operated virtually without any interruption for six and a half years.

The low demand for wear parts gives proof of reliability and safety but also of other, clearly measurable advantages, such as low operating and repair costs.



Small foot print

Ease of Design- no external water collection, no platform.





- patented design
- low investment costs
- low operating costs (polymer, power, parts, water)
- encapsulated design; option for ventilation
- small footprint
- no lubrication points
- slowly rotating, low wear stainless steel filter disc
- easy access to all moving parts
- lowest operator attention required
- lowest manpower requirements (O&M)
- noise level < 70 dB(A)
- no vibrations
- easy set up of mobile installations



Thank you

Huber Technology, Inc.
9735 NorthCross Center, Suite A
Huntersville, NC 28078
www.huber-technology.com