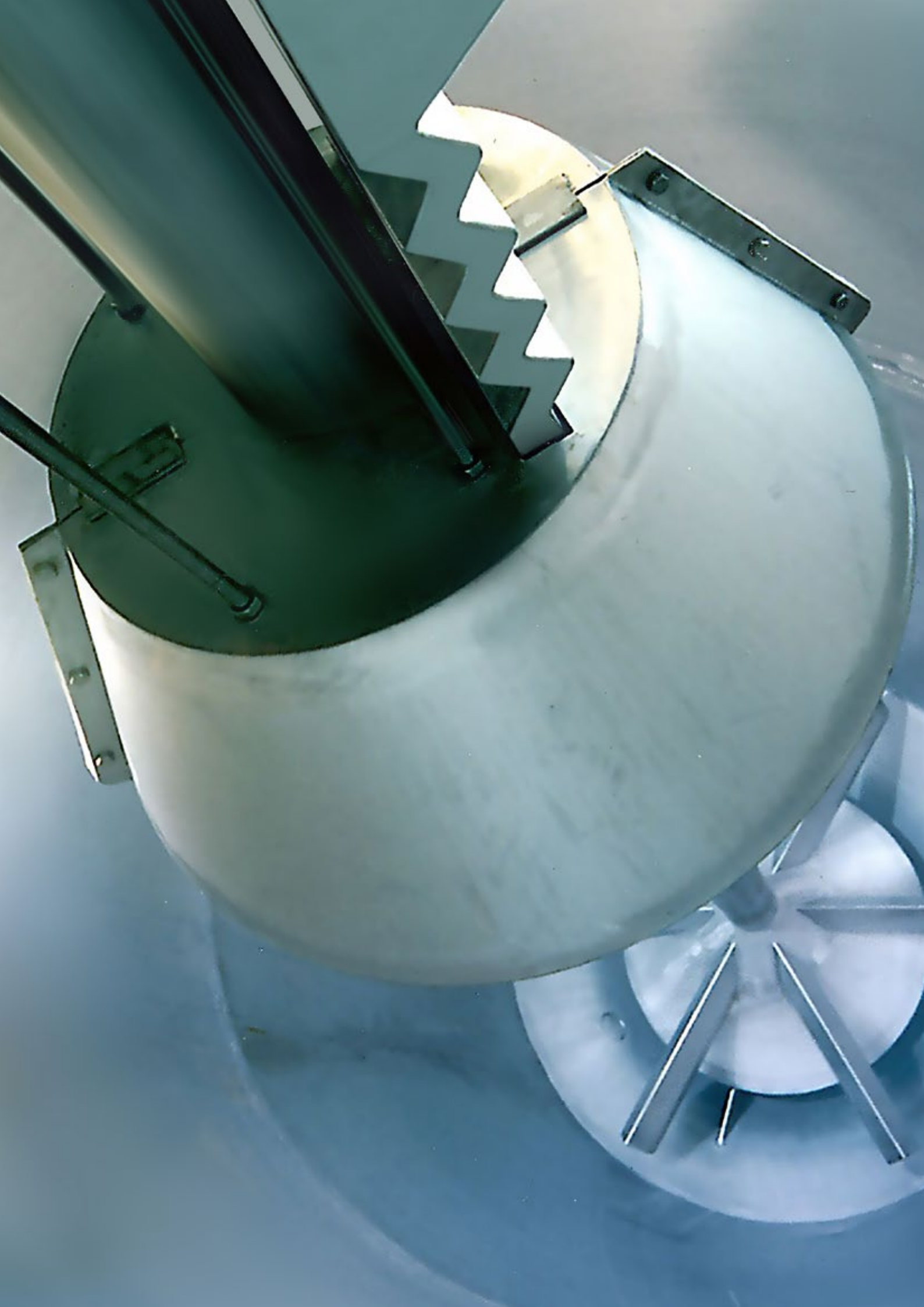



Hydrasand

Continuous sand filter
for efficient effluent cleaning



ASK YOUR
SEPARATION
SPECIALIST





Sand filtration is a well-known technology for separation of small suspended solids particles in water. The Hydrasand sand filter is an economical solution for continuous cleaning of sand to achieve efficient effluent cleaning.

The Hydrasand is a self-washing, cylindro-conical, continuous filter with sand bed without any shutdown for backwash. It is designed for optimum clarification of low-concentration effluent and used as a final stage before discharge or recycling.

Hydrasand

A well-known technology

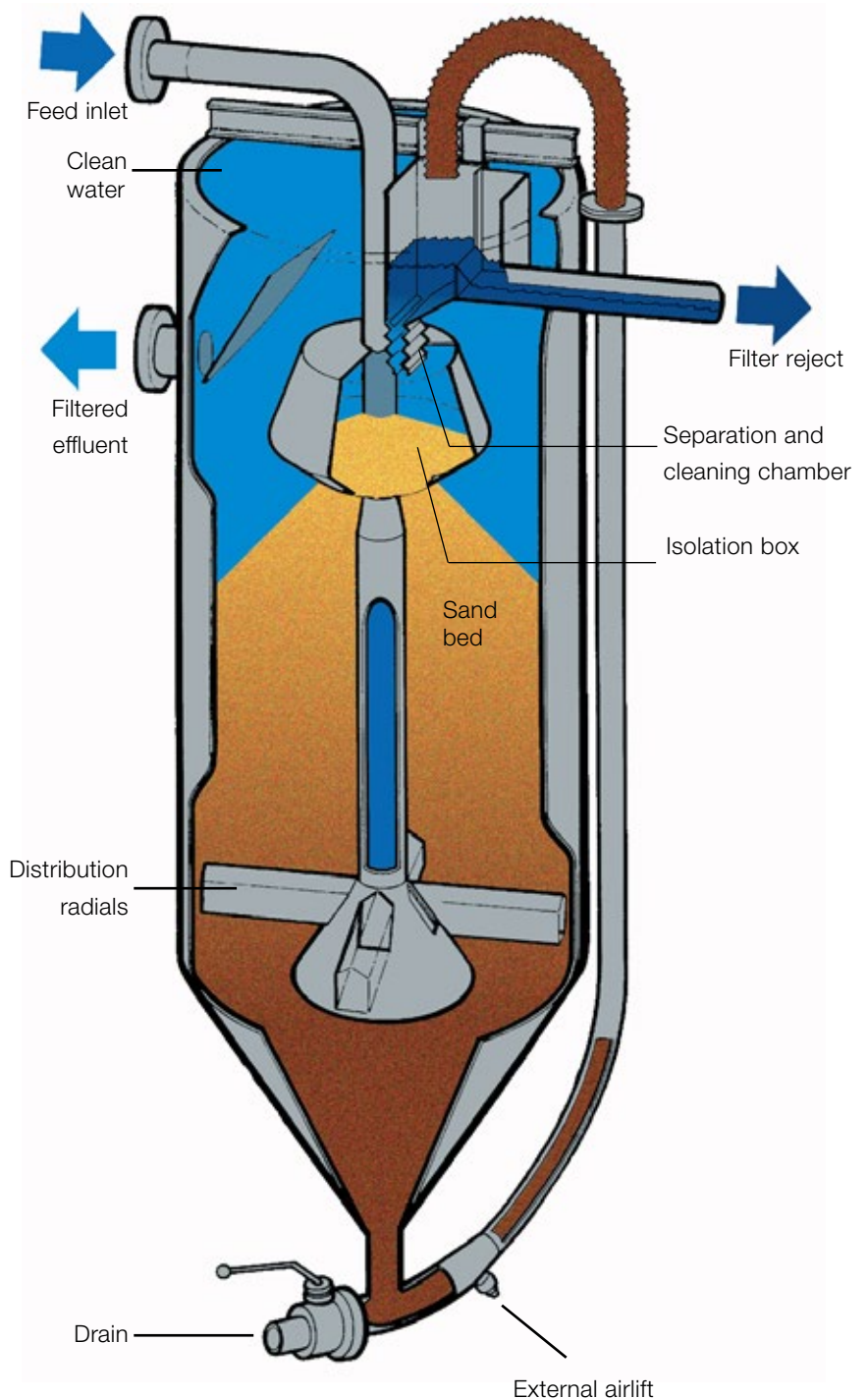
Operating principle

Raw influent is fed into the base of the sand-filled, conical-bottom filter. The flow then rises through the sand so that clean effluent is discharged over the upper weir. The rising flow of the effluent is distributed evenly over the entire cross-section of the filter by means of a radial grating arrangement. The contaminated sand falls continuously to the bottom cone outlet from where it is transferred by an external airlift to the wash chamber at the top of the unit. Final backwashing of the sand is then performed by a counter current of clean water before returning to the sand bed in the isolation box. The dirty wash water is discharged over the lower weir for disposal.

Economical technology for optimum clarification

Available in stainless (standard) or in concrete versions with stainless steel insert (offered to keep transport costs down or for high flow rates), the Hydrasand has the following features:

- Continuous operation and cleaning
- Superior lifting and scouring of sand
- Adaptable sand bed depth for capture rate adjustment





ANDRITZ
Separation

Hydrasand

Technical data and benefits



▲ Inside sand wash box of stainless steel version



▲ Concrete version

Your benefits

- High filtration efficiency
- External airlift for better accessibility
- No possible contamination of clean water by returning sand
- Efficient final sand rinsing in the isolation box
- Manageable reject stream
- Minimum maintenance cost
- Minimum energy requirements
- No shutdown for backwashing
- No moving parts
- No backwash material required

Range

Model	Filtration area (m ²)	Diameter (m)	Air consumption (Nm ³ /hr at bars)
HDS 07	0.70	0.95	1.5
HDS 16	1.60	1.45	2
HDS 30	2.90	1.95	5.5
HDS 50	5.10	2.55	10

Washwater flow: approx. 5%

Applications

- Tertiary treatment
- Pre-treatment on membrane filter
- Phosphorous removal
- Algae removal
- Paper mill wastewater
- Metal finishing

A world of service

Put our 150 years of OEM experience to work for you

With ANDRITZ SEPARATION, you gain access to one of the world's largest OEM manufacturers for solid/liquid separation systems, including such well-known names as Bird, KHD, Guinard, and more. From initial consulting through to service agreements, plant optimization, automation, and training programs, we are always looking for ways to minimize downtime and increase predictability in operations while raising your overall production efficiency. Wherever you operate, our network of 550 service specialists and global service centers ensures that we are always there to support you for many life cycles to come. Let's sit down and see how we could take your operations to the next level.



Local support

Responsive local service centers and field service technicians



OEM spare parts

Wear and spare parts from OEMs or in OEM quality in local inventories



Repairs & upgrades

Optimization of machine and process performance, repair work, retrofitting, and modernization



Service agreements

Preventive maintenance, from contracts for spare parts, maintenance, inspections, and repairs to upgrades and operation



Second-hand and rentals

Certified second-hand and rental machines



Process optimization

Automation tools and process expertise to boost your profit



Training

Operator training and tailored seminars for operating and maintenance personnel

What's your biggest separation challenge?



ANDRITZ SEPARATION is the world's leading separation specialist with the broadest technology portfolio and more than 2,000 specialists in 40 countries. For more than 150 years we have been a driving force in the evolution of separation solutions and services for industries ranging from environment to food, chemicals, and mining & minerals.

As the OEM for many of the world's leading brands, we have the solutions and services to transform your business to meet tomorrow's changing demands – wherever you are and whatever your separation challenge.

Ask your separation specialist

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