



PAQUES

ASTRASAND[®]COMPAQT

Reliable and efficient sand filtration

With the lowest up-front investment costs and lowest operating costs, the most economic and compact choice compared to any conventional sand filter.

*Hi, I'm Sandy.
I polish your
wastewater!*



revitalizing resources

Continuous sand filtration

ASTRASAND®COMPAQT is a new and improved continuous sand filter, developed for different types of water, such as process, waste, surface, cooling and ground water. **ASTRASAND®COMPAQT** works as a continuous process, in which the filter bed is cleaned during the filtration operation. Interruptions are eliminated through this continuous self-cleaning process.



ASTRASAND®COMPAQT Sand filter technology is proven and recognised worldwide as the most efficient way to clean or polish municipal and industrial wastewater.

The **ASTRASAND®COMPAQT** is a new development in the **ASTRASAND** product line and is designed by Paques to meet today's customer needs. With the benefit of over 35 years of experience and more than 3,500 installations in sand filtration, Paques has the ability to provide every industry or municipality with a tailor made sand filter system to precisely meet requirements.

About **ASTRASAND®COMPAQT**

Lowest investment costs*

- 30% reduction in height
- Lower cost of ancillary materials
- Shortest lead time
- Flexible size range

Highly efficient, reliable system

- Better sand velocity distribution
- Low risk of plugging
- Worldwide proven filtration process
- Stable performance

Lowest operating costs*

- 20% lower energy consumption
- Reduced life cycle cost
- Chemical and corrosion resistant materials
- Lower maintenance costs
- Better carbon footprint

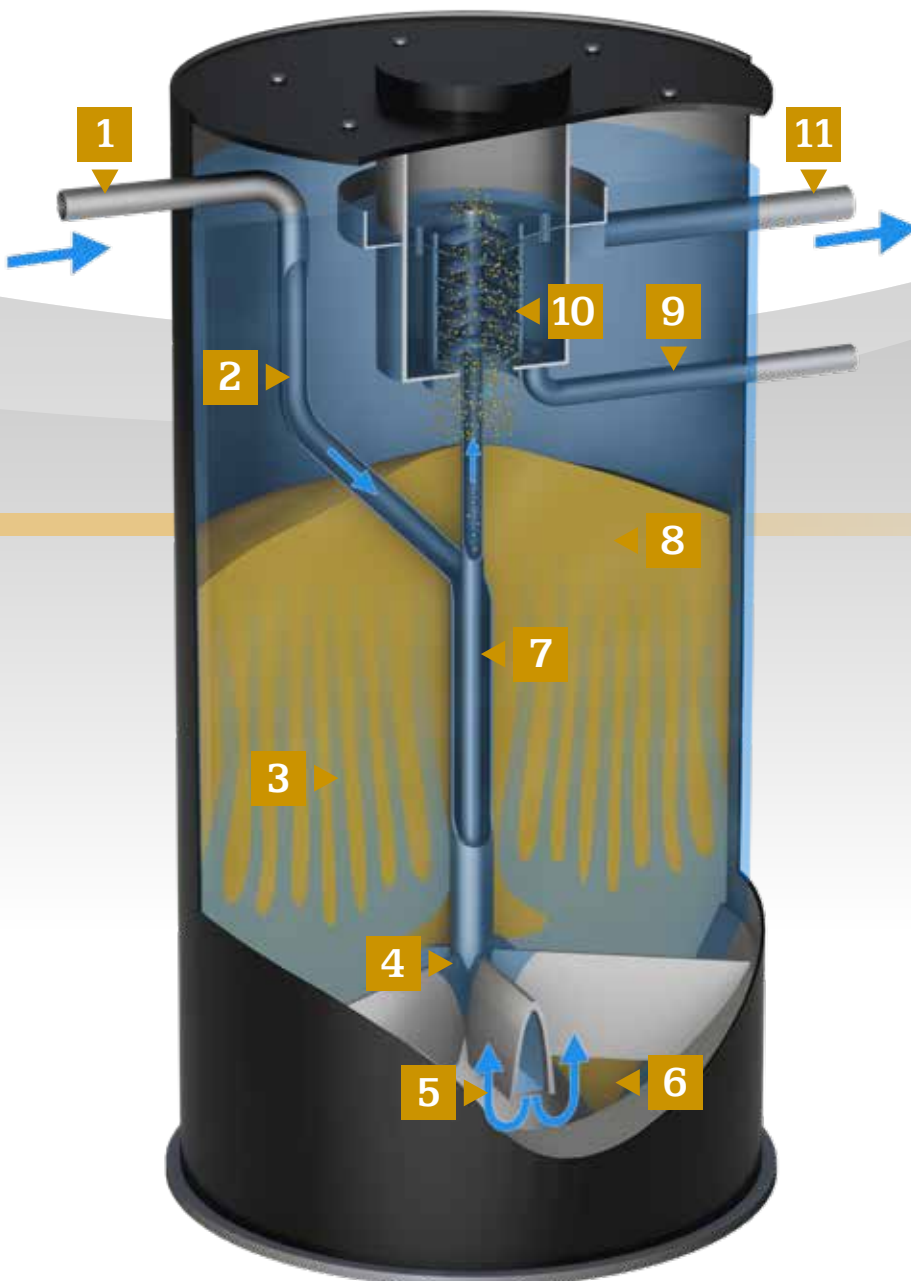
ASTRASAND®COMPAQT

Operation principle

ASTRASAND®COMPAQT Sand filtration is a proven filtration process that can be utilised for many types of wastewater, with unit capacity varying from only a few to several thousand m³/hour. It is a highly efficient and reliable system, which offers a short lead time and a better sand velocity distribution than conventional sand filters. With a non-metal tank and use of materials that are resistant to chemicals and corrosion it also offers lower operational and maintenance costs.

Characteristics of the **ASTRASAND®COMPAQT**

- Small footprint – easy to install in larger treatment systems
- Polishing of municipal and industrial waste water
- Reuse of water, in combination with polishing, membrane filtration and disinfection
- Direct filtration of surface water with in-line flocculation
- Aerobic biological purification of water, e.g. for MAC and PAC degradation
- Wash water treatment in drinking and process water production processes
- (Biological) side stream filtration of cooling water



ASTRASAND®COMPAQT, how it works

- 1** Dirty water feed pipe
- 2** Dirty water supply pipe
Dirty water enters the filter bed
- 3** Sand filter bed
Dirty water is purified as it flows through the filter in an upward direction
- 4** Multi pump distribution system
controlled sand distribution and circulation
- 5** Dirty water release
controlled dirty water release
- 6** Dirty sand extraction
Continued dirty sand extraction from the sand bed
- 7** Central circulation pipe
Airlift principle: forcing a mixture of dirty sand and water moving upward
- 8** Sand filter bed
The filter bed moves downward and washed sand is released back on top of the sand bed
- 9** Washwater discharge pipe
Washwater leaves the system
- 10** Sand washer
Final traces of pollutant are washed with small amount of filtrate
- 11** Clean water discharge pipe
Filtrate is discharged from upper part of the filter



Paques: leading in biological wastewater and gas treatment

For more than 35 years, Paques has been one of the world's leading companies in the field of development and construction of cost-effective purification systems for water, wastewater and gases, based on innovative biotechnology. With over 2,550 reference installations worldwide, Paques has helped companies and municipalities to contribute to one of the major challenges of today: to reduce their water and carbon footprints and reclaim valuable resources.

The biogas produced by the wastewater treatment plants can be used as green energy in boilers or gas engines. Besides the headquarters in The Netherlands, Paques has subsidiaries and/or production locations in Russia, China, Brazil, Argentina, Colombia, United States of America, India, Malaysia, Thailand and Vietnam. In many other countries, Paques is represented by licensed partners. This ensures local presence and the best service for our clients worldwide.

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