

PAQUES



Hi, I'm Andy.
I generate your
Bioenergy!



BIOPAQ[®]ICX

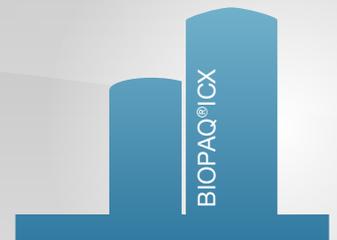
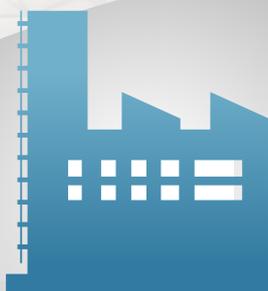
Advanced anaerobic industrial effluent treatment

Flexible anaerobic wastewater treatment based
on BIOPAQ[®]IC technology and implementable
in existing assets.

revitalizing resources

Flexible anaerobic solutions

BIOPAQ®ICX combines the excellent properties of the BIOPAQ®IC reactor with a high flexibility with regard to tank design. The compact system is even implementable in existing tanks. Due to high overall biomass levels and concentration, the system can deal with high volumetric loading rates. The 2-stage biomass retention prevents wash-out of biomass, while high liquid velocities provide excellent mixing properties enabling its application for a wide range of industrial wastewater.



The BIOPAQ®IC technology is proven technology which is worldwide recognised as the most efficient way to clean industrial wastewater and produce biogas at the same time. BIOPAQ®ICX, a new development in the BIOPAQ® product line, was designed by Paques in order to meet today's customer's requirements. Having over 40 years of experience, more than 1500 references in wastewater treatment plants and more than 290 references in biogas purification systems, Paques is able to provide every industry/municipality with a tailor made wastewater treatment system that meets the customer's requirements.

About BIOPAQ®ICX

- Based on proven BIOPAQ® technology with > 30 years operational experience
- Five years experience in full-size units in several industries.
- Available for lower as well as high volumetric loading rates
- Upgrade of existing systems in wastewater treatment plants
- An economical option in case of expansion or upgrading current system
- Small footprint, suitable for urban area
- Production of 'green' energy-rich biogas
- Modular system – tailor made solution
- Worldwide availability and services

BIOPAQ®ICX

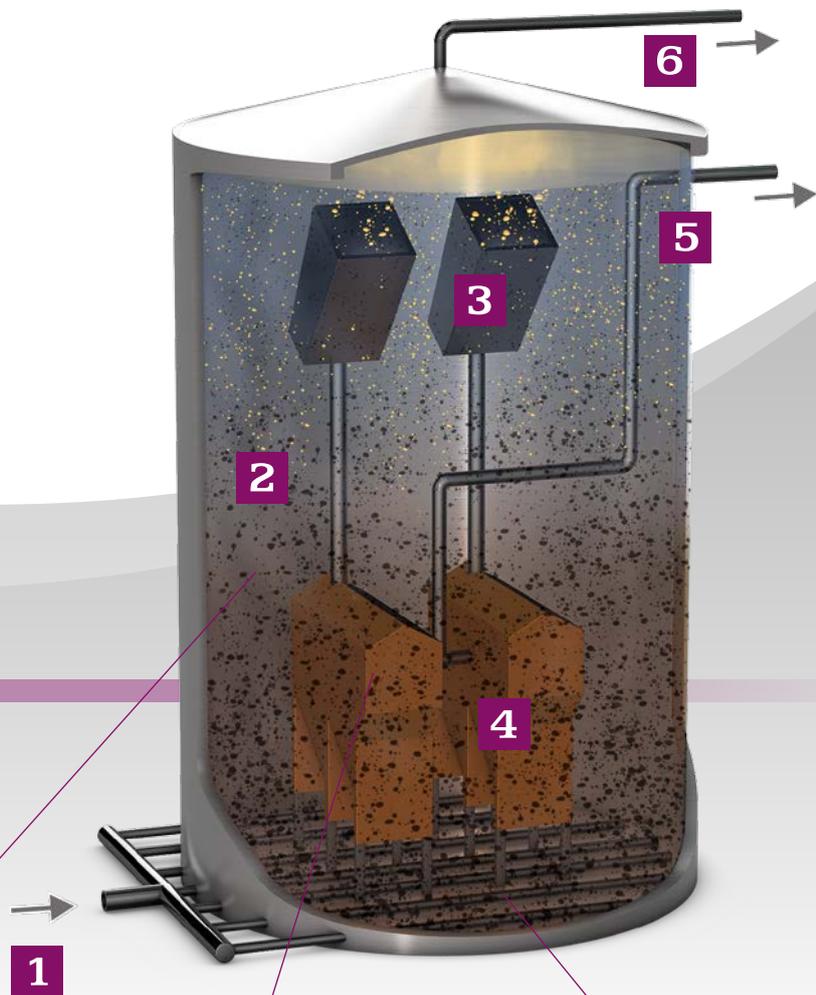
The BIOPAQ®ICX is an excellent solution for your wastewater treatment system (new or existing) as it was developed to tackle frequent operational issues like high energy consumption, unstable performance, loss of biomass and accumulation of calcified biomass. The modular design of the BIOPAQ®ICX reactor enables the reuse of existing assets like tanks and peripheral equipment, ensuring savings on investment costs.

Characteristics of the BIOPAQ®ICX

- Modular design which fits in a wide range of tank sizes
- High volumetric loading rates are possible due to high overall biomass concentration and biomass level in the reactor
- Due to completely closed design no odour emissions: suitable for urban areas
- Excellent 2-stage biomass retention, so no wash-out of biomass
- Cleaning nozzles in the settling unit (CIP): low maintenance requirements and no clogging risk
- Capable of handling high calcium levels due to proper mixing conditions in the reactor

BIOPAQ®ICX, how it works

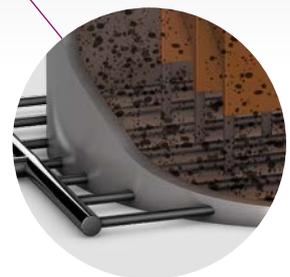
- 1** Wastewater enters the anaerobic digestion zone through the feeding/distribution system
- 2** Organic components are converted into methane (biogas), which leaves the reactor via the top of the reactor (6)
- 3** After the biological process is completed, the treated wastewater enters the degassing unit
- 4** In the lower unit the biomass is separated from the treated wastewater
- 5** Effluent leaves the reactor
- 6** Biogas leaves the reactor



- Superior biomass retention
- 2-stage separator design



- High quality reactor internals
- In-house manufacturing and quality control



- Proven design influent distribution system
- Ideal for mixing of the granular biomass bed and harvesting of the surplus biomass



Paques: leading in biological wastewater and gas treatment

For more than 40 years, Paques has been the world's leading company in the field of development and construction of cost-effective purification systems for water, wastewater and gases, based on innovative biotechnology. With over 3,000 reference installations worldwide, Paques has helped companies and municipalities succeed at to one of the major challenges of today: to reduce their water and carbon footprints and reclaim valuable resources.

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

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