



Improve your existing EGSB installation

BIOPAQ® revisions up to IC performance

Increase the capacity and life span of your EGSB by completing and upgrading your present high rate anaerobe reactor with Paques' separators and distribution systems.

In the field of high-rate reactor technology, the BIOPAQ®IC design is the only that impresses with high VLRs and healthy biomass growth. This is due to Paques extensive knowledge about particle separation, granular sludge biology and reactor detailing. Today, Paques has prepared the BIOPAQ® philosophy for dedicated use in aftermarket revisions of a range of EGSB designs.

Different solutions are available for the improvement and upgrading of your existing EGSB installation. A Paques EGSB upgrading is the solution for your challenge.

The challenge

- Worn out water/biomass separators
- Continuous sludge loss
- Repeated clogging
- Lowered water discharge capacity
- Demand for increased hydraulic capacity
- Demand for higher COD capacity

The solution

- Exchange of existing upper separators to BIOPAQ® UASBplus design
- Exchanging of distribution system to BIOPAQ® design
- Expansion to BIOPAQ®ICX separation system (2-state)

The benefit

- Increased reactor life span
- Re-use of existing tank and periphery equipment
- Savings on biomass purchasing
- Revenues from biomass sales
- Lower operational attention
- Lower cleaning costs and safety risks
- Increased hydraulic capacity
- Increased COD capacity
- Increased biogas revenues

Facts and figures

BIOPAQ® modular systems produced since 1985 | Paques rebuilt and improved over 30 UASBs and EGSBs BIOPAQ® high-rate reactor technology since 1990 (IC) | More than 1000 references of BIOPAQ®IC reactors worldwide



How to perform an EGSB upgrade

Paques' cost effective EGSB upgrade packages extend the reactor life span and add operational improvement to your waste water treatment plant. These benefits, a quick realisation and the fact that it does not interfere with the existing plant lay-out, characterise the EGSB upgrade as an exciting and profitable solution.

EGSB upgrade actions in practice:

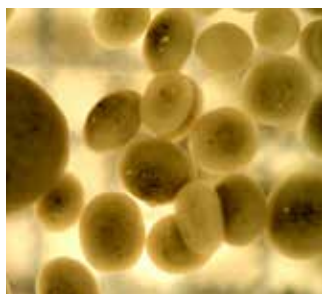
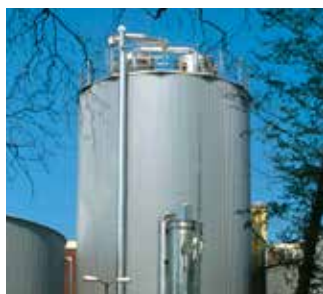
- define the upgrade configuration on the basis of your needs
- prepare tank/roof work for settlers exchange and wall inserts
- take the reactor off-line and make safe
- remove all biomass and store if quality is suitable
- remove tank roof or make temporary door
- exchange separators and mount extra internals
- perform water test and make adjustments
- close reactor tank and roof
- take into operation

The upgrade overhaul is an excellent moment for a thorough cleaning and inspection of the reactor body!

Your EGSB reactor, in a functional new state, with the following features:

- reliable water and biogas discharge
- good biomass retention and structural biomass growth
- operational stability
- increased COD and hydraulic capacities

Over 30 UASBs and EGSBs, upgraded, rebuild or improved with the Paques upgrade packages, now operate at a steady efficiency and reliability for years to come.



More information

Europe(HQ), The Netherlands
t +31 (0)5142 60 85 00
e services@paques.nl

China
t +86 (0)21 3825 6088
e info@paques.com.cn

South America
t +55 (19) 3429 0600
e info@paques.com.br

India
t +91 44 28 11 37 81
e info@paques.in

North America
t + 1 (412) 932 3540
e s.gorur@paques-inc.com

www.paques.nl