



# More satisfaction from your used anaerobic reactor

## UASB Rebuild in BIOPAQ® design

Improving the reliability, life span and safety of your used anaerobic by means of the rebuild designs chosen from the Paques' BIOPAQ® product range.

The low-rate UASB reactor concept still has many clients concerned with the daily operation of their reactor. Over the years, Paques rebuilt many designs and removed typical shortcomings in the used materials, the 3-phase separation and/or the influent distribution. Improvements were made to Biothane, Biotim, Degremont and Seghers UASBs.

A UASB® Rebuild in BIOPAQ® design can enhance the operational stability and increase the life span of your installation. A Paques UASB® Rebuild is the solution for your challenge.

### The challenge

- Displaced reactor deck
- Corroded settlers
- Leaking gutters
- Uneven water discharge
- Odor
- Biogas leakage
- Disruption of connections
- Unsafe accessibility

### The solution

- Exchange for BIOPAQ® Mk2 settler modules and supports
- Exchange for BIOPAQ® distribution system
- SMC hatch covers
- PP piping
- Short down-time during rebuild

### The benefit

- Better biomass retention
- Up to date gas safety
- Even influent/biomass distribution over footprint
- Improved accessibility and serviceability
- Easy cleaning distribution system during operation
- Operational stability
- Increased life span
- Decreased odour emission

### Facts and figures

BIOPAQ® modules tailored to fit the existing reactor shape | Paques rebuilt and improved over 25 UASB's | More than 25 years of BIOPAQ® modular UASB experience | Thousands of BIOPAQ®UASB modules in operation worldwide | More than 2.000.000 m<sup>3</sup> of effluent per day treated



## How to perform a BIOPAQ®UASB Rebuild

The cost effective BIOPAQ®UASB Rebuild packages extends the life span and enhances the operational smoothness and safety of your waste water treatment plant. These benefits, a quick realisation and the fact that it does not interfere with the existing plant lay-out, characterize the BIOPAQ®UASB Rebuild as a profitable and sustainable solution.

### BIOPAQ®UASB Rebuild actions in practice:

- order parts for new configuration on the basis of original tank drawings and maximum effluent/biogas flows
- take the reactor off-line and make safe
- remove all biomass and store
- remove existing internals and make civil repairs
- setup a scaffold inside reactor
- mount new modules and distribution system
- perform water test and make adjustments
- take into operation

The rebuild overhaul is an excellent moment to have a thorough cleaning and inspection of the tank structure of the existing reactor!

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

- perfect quality and smooth reactor deck
- stable water and biogas discharge
- absence of odours
- unhampered serviceability

A growing number of aged UASB's, fitted with a Paques BIOPAQ®UASB Rebuild package, now operate at an improved reliability for years to come. Recently 20 clients performed a partial or complete rebuild.



## More information

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