

Effective life span extension of your wastewater plant

BIOPAQ®UASB Retrofit

Improve the reliability, life span and safety of your used UASB installation with the proven modification of the Paques Services product range.

The splendid BIOPAQ®UASB modules of the 1980's and 1990's are composed of polypropylene settlers placed in a frame of high quality hardwood beams. This frame guaranteed resistance against the severe corrosive conditions.

However, after decennia of continuous exposure to an unfriendly environment, the wood connections in many older UASB reactors show loss of strength. The weakened frames are subject to the relentless biogas up-thrust, which ultimately leads to problems with the discharge of water and biogas, endangering the continuity. A BIOPAQ®UASB Retrofit is the solution for your challenge.

The challenge

- Displaced reactor deck
- Decay of upper wood and connections
- Uneven water discharge
- Biogas leakage
- Disruption of connections
- Unsafe accessibility

The solution

- Module frame revision
- Use of high quality plastics (PP) and stainless steel
- Unaltered dimensions
- Details on the basis of original Paques drawings
- Re-use of excellent settler part

The benefit

- No interference with current plant lay-out
- (Re)use of the SMC inspection covers
- Short down-time
- High accessibility and serviceability
- Enhanced operational stability
- Improvement of personnel safety
- Doubling of life span

Facts and figures

BIOPAQ®UASB modules produced from 1985 through 1996 | More than 400 modules retrofitted | More than 25 years of BIOPAQ®UASB experience | Thousands of BIOPAQ®UASB modules in operation worldwide | More than 2.000.000 m³ of effluent per day.



How to perform a BIOPAQ®UASB Retrofit

The cost effective BIOPAQ®UASB Retrofit extends the life span and enhances the operational 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 UASB Retrofit as a profitable and sustainable solution.

BIOPAQ®UASB Retrofit actions in practice:

- take the reactor off-line and make safe
- remove all biomass and store
- clean-out settlers and tank thoroughly
- setup a scaffold inside reactor
- disconnect internal piping
- disconnect settler modules
- hoist out the modules
- dismantle old wooden frames
- install the Retrofit revision set
- re-mount modules and adjust
- perform water test
- take into operation

The Retrofit overhaul is also an excellent moment for a thorough cleaning and inspection of the internals and civil parts of the existing reactor!

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

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

Over 400 Paques BIOPAQ®UASB modules, fitted with this Retrofit package, now operate at the same steady efficiency and reliability, for years to come.



More information

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