

Installation of small scale treatment systems in abroad

Small scale treatment systems, installations for hotels and communities and industrial wastewater treatment plants

Because of stricter legislation in the last years we developed our **BioTopp**-system based on our experiences of many years in the field of biological treatment processes. Especially for this new development the application possibilities in foreign countries have been taken in account.

The different treatment systems, especially of applied systems for the wastewater treatment in Germany, were compared in a research under special remark of the new *water management act*. The *water management act* instructs that the best available technology has to be applied if practically and economically justifiable.

The result of this research has shown that the best results for the purifications degree as well as economical criteria could be achieved with our developed **BioTopp**- System as modified SBR-procedure (Sequencing Batch Reactor).

The significant advantages of the **BioTopp**-Systems are:

1. integrated buffer inside the installation that wastewater can be feeded to the biological treatment without a hydraulic overload of the final sedimentation
2. automatic adaptation of the aeration to the loading of the installation without complex and maintenance intensive electronic devices.
3. because of the installation construction without the mechanical pre-treatment only biological stabilized excess sludge is produced

Especially in foreign countries the disposal of faecal sludge from the mechanical pre-treatment there are big problems. Quite often there is no further treatment on communal treatment plants possible because of non-existing infrastructure on-site.

In contrast **stabilized sludge** can be **disposed** without any problems **in agriculture**. Hereby the direct application of thin sludge on agricultural areas or the sludge degradation are possible.

During drying the sludge the biological rotting process takes place comparable with the composting process. The final product of drying sludge is absolutely odourless sludge soil which does not contain any more pathogen germs because of its long storage time (ca. 1 year) on the drying beds.

The dried sludge can be used as mineral fertilizer e.g. for purposes like agriculture, gardening and landscaping. Because there is no further product which has to be disposed afterwards we also call it the "principle of an waste less treatment plant".

The small-scale treatment plants can be mounted completely in plastic tanks as well as in concrete tanks. There is also the possibility to integrate an add-on kit in already existing septic tanks.

Remote maintenance

Especially interesting for the application of our treatment systems in foreign countries is that our systems can be provided with remote maintenance. These installations can be monitored/controlled from our company and if necessary can be influenced with wireless that the function is optimized.

Biological treatment of grease in our wastewater treatment plants

The remote maintenance is that interesting because in abroad quite often no qualified personnel for the service/maintenance of wastewater treatment plants is not yet available. Especially this applies for the use in hotels, vacation areas etc..

We also want to mention that the treatment of fat/grease inside the biological treatment is possible. Grease can be degraded extensively biologically without causing unpleasant odour. Thus the normal grease separator can be abandoned.

For this reason there are no high costs for disposal of the regular emptying.

Industrial wastewater treatment

Another focus of our product range is the biological treatment of organic loaded industrial wastewater, e.g. from the food industry. Our experiences also include highly loaded industrial wastewater with an inlet of COD of ca. 100 000 mg/l.

Optimizing of overloaded treatment plants

Another field of working of our company is the process optimizing of overloaded existing communal treatment plants whereby cost-intensive and complex extensions can be avoided.

For further questions to our product range do not hesitate to contact us.