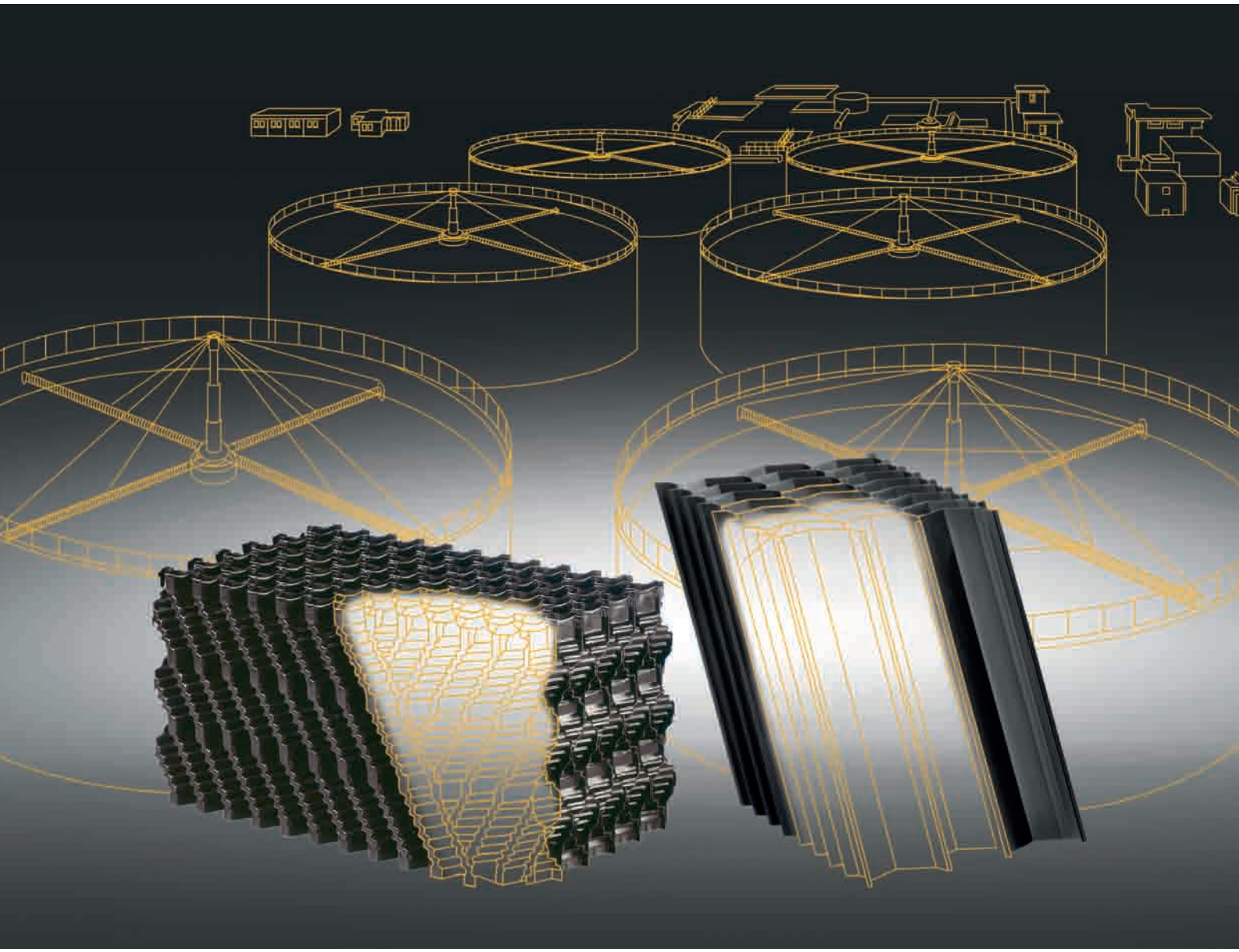


Sedimentation and Biological Treatment with HX-Factor

GEA Fills and Lamella Clarifiers for Water and Sewage Treatment

GEA 2H TUBEdek® Lamella Separators for Sedimentation

Robust and economical





Our products have got the HX-Factor. It is our promise and stands for our unique competence in water and waste water treatement and heat exchange (**HX** = **H**EAT E**X**CHANGE).

Primary and secondary clarification in municipal and industrial waste water treatment plants, stormwater treatment, cooling tower and river water treatment: All these applications use lamella clarifiers for the separation of solids by sedimentation.

Lamella separators save cost and space. With TUBEdek® lamella clarifiers GEA is able to offer a wide variety of technical solutions. The material, the spacing between the plates, the inclination and the height of the parallel plate separators can each be varied. The materials PP and PVC, a plate spacing of 43, 62 or 84 mm, a module height of between 500 and over 2,000 mm with angles between 0 and 90° can all be provided.

In addition to the core components, where desired, GEA supplies suitable sludge scrapers, the support structure and launders.

The standard programme of ready-made sedimentation tanks (SKR) is suitable for small, compact plants.

TUBEdek® offers a significant savings potential in terms of the transport costs for major export projects. TUBEdek® consists of individual profiles which can be shipped in a space-saving manner. On-site they are easily assembled to the required modules by local workers. Thus transport costs can be cut by almost 90 % compared to complete modules.

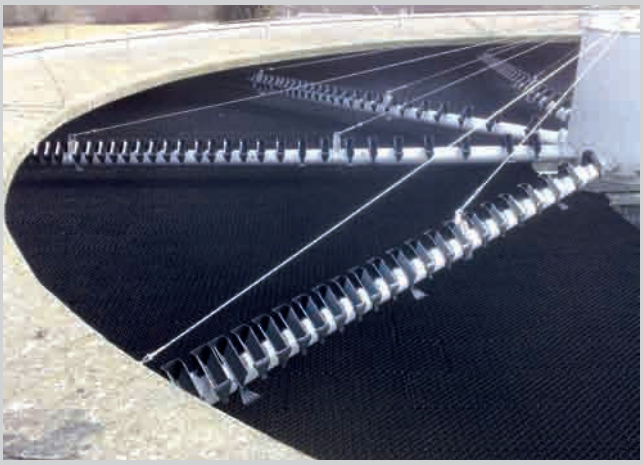
In addition to advising the best technical solution for a high plant performance, easy maintenance and safe removal of sludge, GEA services also include the supervision of the installation or the complete installation.

Hundreds of customers worldwide have been satisfied with the high performance of the sturdy and durable TUBEdek® lamella separators for many years now.

GEA 2H BIOdek® Fills for Biofilm Processes

A large selection for a wide range of tasks





BIOdek® fills act as a carrier material for micro-organisms in biological waste water treatment. Whether organic carbon reduction of municipal waste water, biological degradation of special ingredients within industrial waste water, nitrification or de-nitrification; the process solutions are as varied as the range of tasks demanded. Yet everything depends on selecting the right fill for the right process. The GEA experts understand what is needed, irrespective of whether thick or thin biofilms are expected, the energy requirement has to be reduced to lowest values or the degree of purification has to meet the highest demands.

GEA's expertise is based on decades of experience with biofilm processes and especially the low-energy trickling filters. Our references include plants for millions of population equivalents or special industrial waste water treatment. As well we continuously work on research and development. For example, GEA is currently involved in the BMBF (German Federal Ministry of Education and Research) Expoval project.

The GEA range includes all common types of fills, those with a tubular structure in a vertical or alternating direction, cross-fluted fills, splash/trickle fills and random media.

These are available with surfaces from below 100 m^2/m^3 up to over 300 m^2/m^3 or, for moving beds, of up to 884 m^2/m^3. Besides our high quality fills made of particularly environmentally-friendly PP, fills made of PVC are also available. By targeted material selection, GEA fills achieve a high static strength and thus large filling heights.

GEA gives advice on the design of the process and the construction and supplies additional components which are perfectly matched to the overall solution, such as rotary distributors, aeration equipment or the support structure. The unique GEA welding method applicable on most fills assures a high quality level for any on-site assembly in an environmentally-friendly, cost-saving manner. Satisfied customers in all parts of the world have benefited from these advantages.

We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA Group is a global mechanical engineering company with multi-billion euro sales and operations in more than 50 countries. Founded in 1881 the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX Europe 600 Index.

GEA Heat Exchangers

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