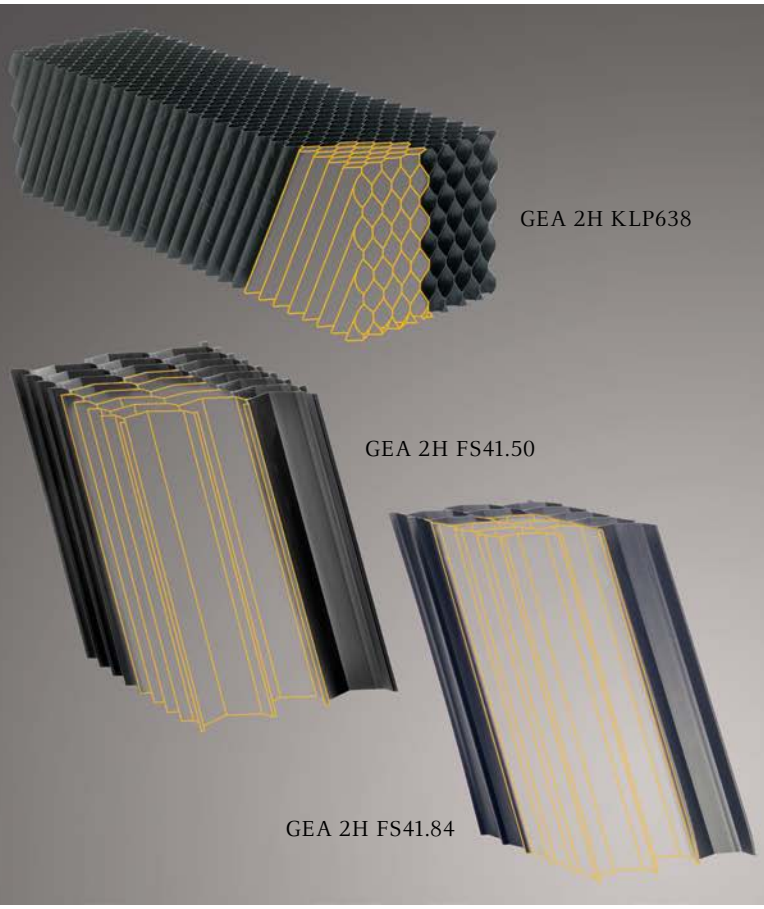
GEA 2H TUBEdek® Tube Settlers with HX-Factor

For efficient sedimentation processes



Design and stability of the GEA 2H TUBEdek® lamellas focus on high customer benefit. The variable size of the modules permits the utilization of any settling tank to 100 percent. Even round clarifiers can be equipped without dead zones. The tongue and grove system achieves a strong connection of the modules – especially important for maintenance purposes – and enables cutting and cutouts. TUBEdek® fulfills all customers' requirements for the equipment of settling basins with lamella clarifiers in a convincing manner.

The equidistant settling areas of GEA 2H TUBEdek® clearly define the length of the settling path and allow to reliably determine the settling performance. Chevron-shaped channels facilitate the sludge removal. As TUBEdek® does not require obstructive frames and massive supports, there is no need to use metallic material, a great advantage for corrosive applications like for example sea water.
Our customers profit from our experience gained by equipping hundreds of plants. Our aim is the optimum design of the tanks connected to an economic concept of the support structure and the launders. Those are made of GRP or stainless steel and fulfill various requirements with regard to temperature and corrosion.
References even in remote regions of the world confirm the process advantages of GEA 2H TUBEdek®. Delivered as profile, it just needs a tenth of the transport volume of a module. These are easily and trouble-free assembled on site.

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

HX-Factors of 2H TUBEdek® lamella clarifiers

- Optimal process features by free selection of shape, inclination, channel length and module dimensions
- Made from PP it fulfills all drinking water requirements like e.g. NSF, KTW, ACS
- Stable and persistent due to tongue and grove system
- Made from premium material meeting high quality requirements
- Worldwide delivery thanks to easy and reliable on-site module-assembly
- Robust in operation and maintenance

GEA 2H TUBEdek® Tube settlers

Technical Data

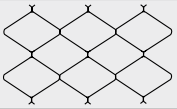
	PP	PVC
Continuous operation temperature	70 °C	55 °C
Max. operation temperature (short term)	80 °C	60 °C

Material: **PP** ▸ UV stabilized, reinforced by talc (PPTV), blue color on request
PVC ▸ UV stabilized

Max. tolerances: On all dimensions +/- 20 mm or 2 %, whichever is the greater. Tighter tolerances by prior agreement.

High temperature version on request.

Types

		TUBEdek® FS41.84	TUBEdek® FS41.62	TUBEdek® FS41.50	TUBEdek® FS42.50	TUBEdek® KLP 638
Material		PVC PP	PP	PVC PP	PP	PP
Structure						
Applications Potable and process water		• Filter backwash water	• Surface water • Groundwater • Filter backwash water	• Surface water • Groundwater • Filter backwash water		• Low solids load polishing
Applications Waste Water		• Primary sedimentation • Stormwater • Activated sludge with low sludge volumes • Humus tanks behind fixed film processes	• Stormwater • Humus tanks behind fixed film processes	• Aqua culture • Humus tanks behind fixed film processes • Flocculated water • Stormwater		• Aquaculture • Polishing
Sedimentation area [m²/m³]	Slope 60°	6.25	8	11	12	15
	Slope 55°	7	9	13	13,5	-
Module height [mm]	Vertical	700 – 2 000	500 – 2 000	500 – 2 000	500 – 1 000	610
	Standard	1 000 / 1 500	1 000	1 000	1 000	610
Lamella pitch [mm]		83 (+/- 1)	64 (+/- 1)	45 (+/- 1)	43 (+/- 1)	33 (on average)
Hydraulic radius [cm]		2.5	2.2	1.7	1.6	1,7

Sedimentation area: Defined as horizontal projection of the TUBEdek® surface per m³. To be multiplied by the module height to get the sedimentation area per m² of footprint area.

Module-Design: Standard form is rhomboid. For heights larger than 2 m please contact us. Cutting for circular tank and cut-outs depend on locally available type of cutting equipment. Please contact us. Standard KLP modules are cut vertically. The height can be halved.

Anti-flotation restraints: Tube settlers made of Polypropylene must have restraints against flotation, available from GEA.

Support: For the equipment of large tanks, GEA can supply special GRP or stainless steel supports for optimized module dimensions and support layouts.

Load to supports: When designing the supports the operational load has to be added to the product weight (Recommendation: min 50 kg/m³, for waste water up to 200 kg/m³).



GRP Support

This information has been put together with greatest care. However, any performance data given in this leaflet is subject to compliance with certain surrounding conditions and hence may vary from case to case. Further, we reserve the right to make changes at any time without notice. We strongly recommend (i) reconfirmation with GEA 2H whether this information is still fully valid, before using it for final designs and (ii) to verify performance data taking into account the actual surrounding conditions. GEA 2H takes no responsibility for any consequences due to non-compliance with these recommendations.

GEA Heat Exchangers

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GEA 2H Water Technologies, Germany, is ISO 9001:2008 certified.

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