



## Description lamella separator

The lamella separator is a non pressure system. Main application is behind biological treatment in order to remove the secondary sludge. But also water with solids after chemical treatment could be treated. The water (with solids) is pumped or flows by gravity or as pumped feeding line into the inlet channel of the lamella clarifier where it flows downwards. Below the lamella package the flow is guided to be reversed and streams upwards through the lamellas. The solids (heavier as water) settle down countercurrently on the lamellae. The clarified water flows further upwards and via a special overflow weir to the outlet. The solids slide down along the lamellae and accumulate in the sludge funnel (ending in a pump sump). Depending on the subsequent process steps the sludge can continuously or discontinuously removed. Complete installed in a plastic tank with required size. The inletpart also consists of a seamless PE sump. The sludge will removed with a sludge pump (optional) from there, which can be by a submersible pump ( hanging on a lifting rope /liner directly in the sludge sump) or by connecting a sludge pump dry installation outside the tank to a sludge outlet opening (thread connection on tankside near bottom to a soaking liner) . We offer 3 different sizes and lamella packages depending on application and/or flowrate.

- optional with a – **outside horizontal around** - steel frame for **onfloor** installation of the tank in steel bar 80 mm x 40 mm (underground **inside** reinforcement is standard)
- optional domeshaft access to adapt the accesshole to the top of terrain/surface when tank is installed underground
- optional **sludge outlet** connection (welded thread DN 25 to connect a liner for dry installation pump)
- optional **with pump** (submersible or dry installation) flowrate circa. 0.5 l/s – 1.0 l/s
- in-/ outlet connection, DN100 @ 140 cm from floor
- Water depth 140 cm
  
- Lamella clarifier
  - Material: PPTV
  - Slope: 60°
  - Sedimentation area: 8 – 11 m<sup>2</sup>/m<sup>3</sup>

## Equipment parts:

Tank:	1250 l Tank	2250 l Tank	3500 l Tank
Measures: (l,w,h) in cm (with outside frame)	90/122/171 (106/138/171)	154/122/171 (170/138/171)	243/122/171 (259/138/171)
Required space:	1,25 m <sup>3</sup>	2,25 m <sup>3</sup>	3,5 m <sup>3</sup>
Transport weight:	130 kg	200 kg	250 kg
Max. operation weight:	1300 kg (with water filling)	2300 kg (with water filling)	3550 kg (with water filling)
Inlet connection by gravity or feed pump pressure line:	DN 100	DN 100	DN 100
Outlet connection by gravity:	DN 100	DN 100	DN 100
Feed pump secondary sludge: (optional)	Sludge water pump with 1" connection	Sludge water pump with 1" connection	Sludge water pump with 1" connection
access:	Lid (60 cm diameter)	Lid (60 cm diameter)	Lid (60 cm diameter)

## Application:

Clarifier behind biological fixed film processes, aquaculture, stormwater

size	1250 l	2250 l	3500 l
flowrate (m <sup>3</sup> /h)	1,0	2,5	5,0
sedimentation area (m <sup>2</sup> )	2,6	6,87	13,46

Clarifier behind high loaded biological fixed film processes; flocculated water

size	1250 l	2250 l	3500 l
flowrate (m <sup>3</sup> /h)	0,5	1,0	1,5
sedimentation area (m <sup>2</sup> )	1,82	4,81	9,4

## Benefits:

fast startup, cost saving in installation, small footprint	predesigned acc. ATV/DWA guidelines ww treatment
modular system, adaptable at every application	industrial as well as municipal wastewater clarifying
high performance with high quality, Made in Germany	tanksystem approved by EN 12566 and ISO 9001/3