



### **Description lamella separator**

The lamella separator removes solids/sludge from a upstream biological or chemical treatment. It is a non pressure system. The untreated water is pumped or flows by gravity into the inlet channel of the lamella clarifier where it is leaded by internal tubes downwards. Below the lamellae the waterflow is reversed and streams upwards through the lamellae. The solids settle in the meantime down countercurrently on the lamellae. The clarified water flows further upwards and via a special overflow weir through the outlet pipe. The solids slide down along the lamellae and accumulate in the sludge funnel/pumpsump. Depending on the subsequent process steps the sludge is continuously or discontinuously removed. In the near of the bottom on the tankside. The clearwater outlet is designed as teeth-barrier or a underwater tube collector over the length of the lamella body in order to get a laminar flow.

The lamella consists out of a plastic Inlet (seamless Polyethylen), which can be preinstalled in an ISO Container, or by client directly onsite in a suitable concrete chamber, according projectdesign.

Container with steel frame stiffened and planked according to the static requirement and approved by type static calculation.

## specification:

1 unit biomodule:	50% of HC Container	max. operation weight: [kg]	15.000 (water filled)
number of chambers:	1	inlet connection@height:	DN 100@2.40 m
measures: (l,w,h) / unit [m]	2.74 x 2.10 x 2.57	outlet connection@height:	DN 100@2.40 m
footprint: [m <sup>2</sup> ]	5.75	inlet aeration tube:	DN50@ 2.74
max. transport weight: [kg]	650 empty	roofopening:	60 cm x 60 cm
sludge outlet:	DN 50 inside thread for connection pump line		
Lamella clarifier	PPTV	Sedimentation area	8 – 11 m <sup>2</sup>

(*)nr. refers to the number of PE inlet tanks,	Max. flowrate		Sedimentation Area [m <sup>2</sup> ]
	chambers		
	1 (*)	2 (*)	
Clarifier behind high loaded biological <b>fixed film processes</b> ; flocculated water	18 m <sup>3</sup> /h		35 m <sup>2</sup>
		36 m <sup>3</sup> /h	70 m <sup>2</sup>
Clarifier behind biological fixed film processes, <b>aquaculture</b> , stormwater	25 m <sup>3</sup> /h		50 m <sup>2</sup>
		50 m <sup>3</sup> /h	100 m <sup>2</sup>