



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.

- ISO 20“ HC Container stiffened according to static requirements with a steel frame
 - According to container standards ISO 668, ISO 830, ISO 1161, ISO 1496-1, ISO 6346, C.S.C. Certification, T.C.T. Certification
 - l*w*h, 6,05 x 2,44 x 2,89 m
 - required space: 15 m²
 - max. transport weight about 6,0 to
 - in- outlet connection, DN100
 - Domeshaft accesses
 - PE Inlettanks
 - jointless PE sealing tub
 - Volume with about 13 m³
 - Water depth about 2,35 m

- Lamella clarifier
 - Material: PPTV
 - Slope: 60°
 - Sedimentation area: 8 – 11 m²

Equipment parts:

Equipment parts:	1/2 x 20ft HC Container (1xPE inlet)	1 x 20ft HC Container (2xPE inlet)
Chamber:	1	2
Measures: (l,w,h) for installation in container[m]	6,05 x 2,44 x 2,89	6,05 x 2,44 x 2,89
Measures: (l,w,h) for a 1 or 2 PE inlet tanks [m] in concrete by client	2.75x 2.10+2.54	5.50x 2.10+2.54
Required space:	15 m ²	15 m ²
Max. transport weight:	5.500 kg	7.500 kg
Max. operation weight:	1 x 18.500 kg (with water filling)	2 x 33.500 kg (with water filling)
Inlet connection:	DN 100@2.40m	DN 100@2.40m
Outlet connection:	DN 100@2.40m	DN 100@2.40m
sludge outlet	DN 50 inside thread for connection pump line	DN 50 inside thread for connection pump line
Feed pump secondary sludge: (optional)	Sludge water pump with 2” connection	Sludge water pump with 2” connection
Entry:	Dome-shaft accesses 550x550 mm Door to technic room	Dome-shaft accesses 2pc 550x550 mm Door to technic room

specification:

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