



# LSM 80 PLUS

## LSM 80 PLUS (Lamella Settler Module 85 mm)

is a lamella pack obtained by the assembly of PS or PVC thermoformed sheets with a parallel channel design.

### Design

The product has been studied to maximize the projected surface without limiting the wastewater free passage.

The channels have an arrow shape in order to allow the best solid flow.

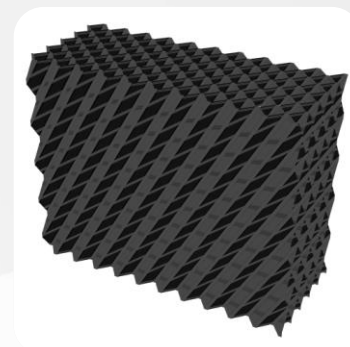
LSM 80 PLUS lamella pack can be made of different sizes.

Furthermore it is possible to cut them to size, all these customization possibilities make the product easy to adapt to any kind of plant or basin, including circular ones.

All these customization possibilities make this product easily adaptable to any type of plant or basin, including the older Dortmund clarifiers.

These LSM 80 PLUS modules can be mounted in a stainless steel support frame, specially designed by Refill-Tech Solutions for this type of application complete with lifting hooks.

This format and method greatly simplifies and rationalizes the support structure required for the tube settler modules. The further notable advantages of this execution of module supply are the greater protection of the finished modules during storage and installation in the basins and ease and safety of both installation and removal of the modules for inspection and maintenance cleaning, providing a related benefit of operating cost savings for the end-user.



### Principal applications

The channels sizes and the considerable projected surface allow this product to find a wide use in many applications in wastewater treatment, among with:

- ❖ primary and secondary clarifiers in civil and industrial wastewater treatment plants
- ❖ compact settler plant
- ❖ settler downstream of tertiary treatments
- ❖ clariflocculation process

### Polymers characteristics

The PS and PVC used to make this lamella settler module comply with the most restrictive standards, presenting many advantages:

- ❖ lightness, which allows an easy handling
- ❖ high mechanical resistance
- ❖ resistance to the majority of chemicals and to the biological aggression
- ❖ on demand the product can be supplied in polymers that are compatible with drinking water applications

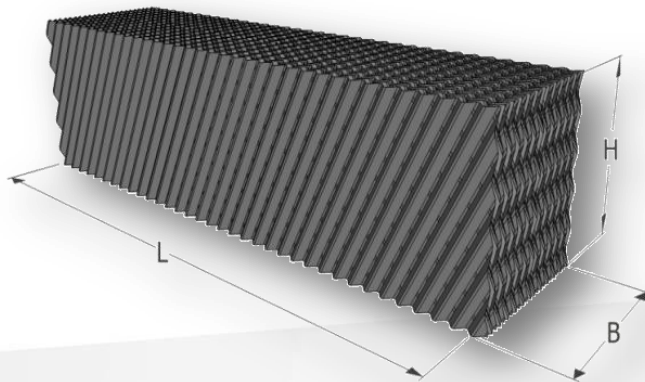
Material	Color	Standard thickness	Working temperature	Standards compliance
Standard PS	carbon black	max 1,0 mm	-5°C ÷ 77°C	
PS for drinking water (food grade)	grey		-5°C ÷ 77°C	1935/2004/CE1895/2005 /CE 10/2011/UE
Standard PVC	carbon black		-5°C ÷ 60°C	CTI 136 ASTM E-84
PVC for drinking water (food grade)	blue		-5°C ÷ 60°C	1935/2004/CE1895/2005 /CE 10/2011/UE



### Available sizes

Sheets sizes depend on the mould size and from the possibilities given by our thermoforming machines. On request we can supply cut to size blocks. LSM 80 PLUS can be supplied both in pre-assembled blocks and sheets to be assembled on site. The latter option allow to optimize the freight volume and consequently to reduce the transport costs. The assembly process can be chemical, using a solvent glue, which doesn't leave any residual in the finished product or thermal, by welding. Refill -Tech can supply the suitable machines to make these operations.

Standard Blocks Sizes				
Width (B)	Inclination	Length (L) (without projection)	Height(H) (min ÷ max)	Projected surface to 60°
Depending on the sheet. Number pitch 85 mm	60°	1.200 mm	500 ÷ 1.000 mm	12,5 m <sup>2</sup> /m <sup>3</sup>



Hydraulic data			
Hydraulic radius	Hydraulic diameter	Flute sizes	Flute shape
2,5 cm	10,0 cm	125 x 150 mm	Irregular Hexagon