LSM GRP (Lamella Settler Module Glass-Reinforced Plastic)
is a lamellar pack obtained from the assembly of corrugated parallel sheets
in fiberglass fixed on a specially designed frame that can be made in
stainless steel, SS 304 or SS 316L.

Design
The product has been studied to maximize the projected surface
without limiting the free passage of the sewage to be treated.

Refill-Tech has designed an innovative and efficient system of containment
and anti-collapse support specific for the single plate.
The achievable pitch values between the clarification plates range from 30 to 55 mm.
The LSM GRP laminar pack can be made with specific dimensions and inclinations at the customer’s request, for both
sedimentation and oil separator treatments.
It is possible to provide an optional metal structurework including the support system, anti-floating beams, separating
bulkhead for waste/clarified water, buffer plate and the relative fixing bolts.

Principal applications
The particular technical characteristics of fiberglass, in particular the high chemical resistance to acids and bases, the
excellent resistance to high temperatures of wastewater, the resistance to hydrocarbons, the stability to more than 1,200
inorganic and organic chemical compounds, including the chloride (Cl⁻), the lightness associated with a high mechanical
resistance, the low thermal and electrical conductivity and the high durability, allow the use of this product in cases where
there is the need to treat a particularly conditioned wastewater from chemical contaminants and in extremely critical
operating conditions.

Here below we have listed some of possible applications:

- primary and secondary clarifiers in civil and industrial wastewater treatment plants
- compact settler plant
- settler downstream of tertiary treatments
- clariflocculation process
- settler for drinkable water plant
- oil separator tank
Available sizes

The LSM GRP lamella pack can be made in standard or customized plate depending on the size of the tanks.
The sheet are assembled with the special frame by mechanical fixing, which guarantees the total solidity, integrity and
durability of the final product.
The LSM GRP lamella packs are made by parallel plates wich reduce the potential risk of clogging in case of malfunction of
the upstream depurative process line.

<table>
<thead>
<tr>
<th>Use</th>
<th>Width [mm]</th>
<th>Inclination</th>
<th>Lenght [mm]</th>
<th>Height [mm]</th>
<th>Pitch [mm]</th>
<th>Projected surface [m²/m³]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarifier</td>
<td>500 ÷ 1.200</td>
<td>60°</td>
<td>max 3.000</td>
<td>500 ÷ 1.500</td>
<td>30÷55</td>
<td>8,0 ÷13,0 ca.</td>
</tr>
<tr>
<td>Oil separator</td>
<td>500 ÷ 1.200</td>
<td>45°</td>
<td>max 2.000</td>
<td>500 ÷ 1.500</td>
<td>30÷55</td>
<td>12,0÷20,0 ca.</td>
</tr>
</tbody>
</table>

FIGURE N.1: ILLUSTRATIVE IMAGE LAMELLAR PACK LSM GRP

FIGURE N.2: SIDE VIEW CLARIFIER LSM GRP

FIGURE N.3: PLANT VIEW CLARIFIER LSM GRP