Moving Bed Biofilm Reactor

Compact and ready-to-use treatment systems designed for a host of commercial, institutional and community applications.

Ideal for reducing high organic loads and to optimize or upgrade existing treatment systems.

Modular design
Perfect for projects developed in multiple phases where the available space is very limited. Makes it easier to increase treatment capacity.

Efficient and robust
Resistant to hydraulic fluctuations and organic load variations. Provides compliance with strict standards when combined with a Premier Tech Aqua biofilter.

Fully integrated system
Available in prefabricated and integrated systems that are simple to operate and durable thanks to PTA’s unique expertise. Choice of rotomolded polyethylene, concrete and steel tanks. At the heart of the treatment process is the media developed by Entex Technologies, which provides proven and reliable performance levels.

Strategic investment
Possibility of reusing existing infrastructures or optimizing their capacity, thereby reducing the investments required for system upgrades.
The Premier Tech Aqua Advantage: a team of experts fully devoted to your project

A world leader in decentralized wastewater treatment solutions, Premier Tech Aqua (PTA) specializes in the design and manufacturing of high-performance technologies that meet the most stringent environmental standards. Our team provides you with exceptional support before, during and after the start-up of your wastewater treatment project.

Integrated into rotomolded polyethylene, concrete or steel tanks

Typical installation

1. **Primary treatment**
   Captures the coarsest suspended solids. A grease trap must be installed upstream for food processing applications.

2. **Equalization tank**
   (when required)
   Regularizes the flow before it enters the system.

3. Ecoprocess™ MBBR
   An aeration system ensures the fluidization of the media. Aeration brings in the oxygen required by the biological treatment process and ensures sufficient mixing intensity to self-clean the bacterial support. The biomass thus detached from the media’s surface is directed to a system that separates the solids from the liquids.

4. **Secondary decanter**
   (when required)
   Separates the solids from the liquids in the sludge and foam resulting from the biological treatment process. The sludge and foam are then pumped and stored in a sludge storage tank.

5. **Final effluent**
   The effluent may be released directly to a municipal system or to a secondary and advanced secondary treatment system. To achieve compliance with the strictest standards, a PTA biofiltration unit may be added.

Phosphorus removal and disinfection options available.

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Ecoprocess™ MBBR
Moving Bed Biofilm Reactor

PTA’S KNOW-HOW COMBINED WITH THE EXCEPTIONAL EFFICIENCY OF ENTEX TECHNOLOGIES’ MEDIA

Typical flow range: 1,300 to 5.3 M gpd (5 to 20 000 m³/d)
Organic load reduction

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<thead>
<tr>
<th>Soluble BDO₅C</th>
<th>NH₃-N</th>
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<td>90 to &gt; 99%</td>
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