

Segflo™

Recirculating Biotower



High Performance

Ideal technology to reduce the organic load and ensure the secondary treatment of domestic wastewater.

Compact

Minimum footprint required, maximizing land value. Pre-assembled concrete sections available for on-site delivery and quick installation.

Flexible

Modular system ideal for multi-phase projects. "Kit option" available for local assembly.

Easy to operate

System fully controlled and monitored by an automatic control system for easy operation and maintenance.

Economical

Pre-assembled system for minimum on-site work. Low electrical energy consumption and maintenance costs.

Reliable

Robust and permanent system that performs consistently, even in peak periods.

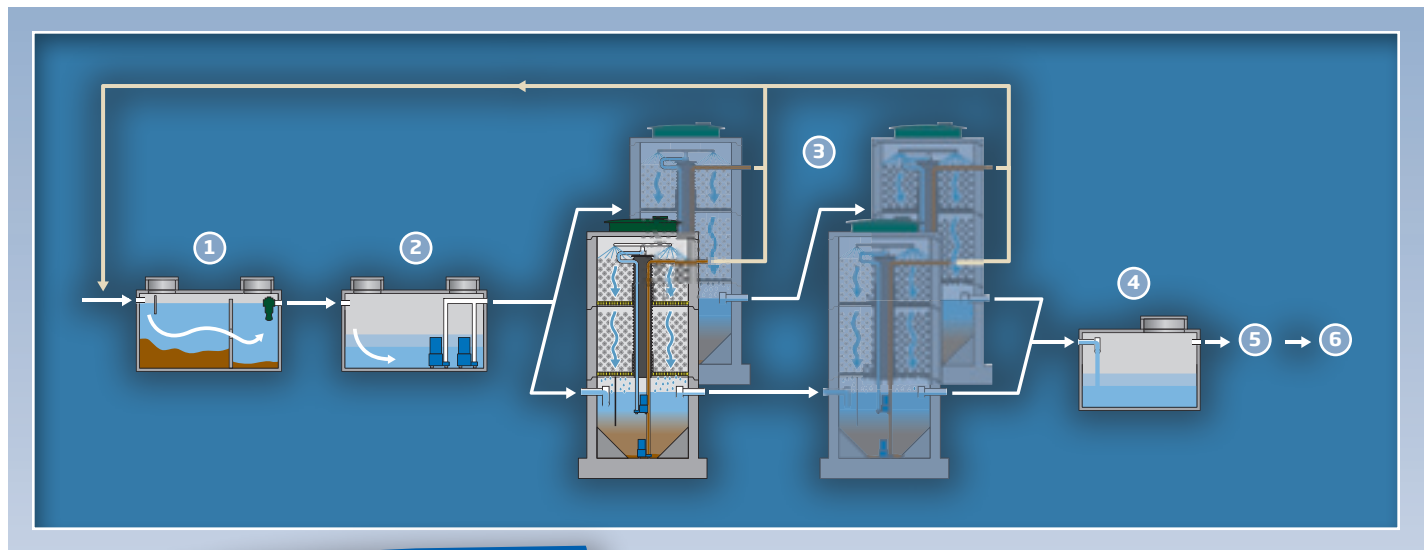
Superior High Strength Wastewater Treatment

The Segflo™ Recirculating Biotower is a simple, reliable and proven process. It relies on the principle of bacterial segregation which, combined with efficient oxygenation, provides excellent performance results, reducing BOD₅, TSS and fats, oils and grease (FOG) to within or below regulatory standards.

A combination of PVC plastic media and natural oxygenation (Recirculation)

The patented *snowflake* shape of the recycled PVC plastic media offers a large surface contact area designed to ensure the binding of a biological film necessary for the treatment and evacuation of the excess biomass. The media design and tower configuration provide passive and natural oxygenation through water trickling and recirculating from one media to another on the entire height of the media. The recirculation ensures high oxygenation and efficient odor control.

The design of the base section of the tower allows the sedimentation of biological solids having detached from the media. The sludge accumulated at the bottom of each tower is then periodically pumped back into the septic tank or to a sludge storage tank. The performance is also further optimized by the addition of a clarifier after the towers.



Circular format available for more flexible local assembly

1 Primary Treatment

This usually consists of a septic tank providing a minimal hydraulic retention time (HRT) of 24 to 36 hours depending on the application. For projects involving food processing, a grease trap must be installed upstream of the septic tank.

2 Equalization Tank

It must provide a HRT of 12 hours for commercial projects, based on the design flow. The basin is equipped with submersible pumps monitored by a control panel, providing optimum dosing of the wastewater to the treatment unit.

3 Segflo™ Recirculating Biotower

The Segflo™ treatment system is composed of one or more towers containing patented media. Several models are available depending

on daily flow and wastewater characteristics. A basin with two pumps installed directly under the media section not only allows the wastewater to recirculate through the plastic media, but also favors sludge draw-off toward the septic tank or sludge storage tank. This system can be installed outdoors (completely or partly underground) or, if needed, inside a temperature-controlled building. It is also possible to combine more than one biotower with a common recirculating and sedimentation basin. Please inquire with our Applied Engineering team for more details.

4 Clarifier

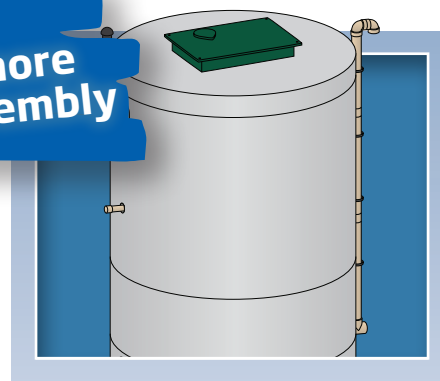
A clarifier is required after the Segflo™ for all types of projects. It captures any suspended matter that managed to escape from the recirculating biotowers to ensure constant effluent quality.

5 Polishing Unit

An Ecoflo®, Ecoflex® or any other type of compact filter (foam, peat, coco, etc.), a sand filter or a conventional system can be integrated after the clarifier to obtain an effluent with very low BOD₅ and TSS concentrations, if required. For more information, please visit our website or contact our Applied Engineering team.

6 Discharge

The final disposal of the wastewater is done according to local regulations (infiltration, surface discharge, watercourse discharge or tertiary treatment unit with disinfection).



Your projects require:

- The reduction of organic load in a commercial business involved in food preparation?
- A flexible solution that allows for timely deployment without affecting the treatment performance?
- A limited amount of land to install a wastewater treatment system?



- Restaurants
- Inns and hotels



- Health spas
- Nursing homes



- Retirement homes
- Shopping malls
- Truck stops

You are looking for a solution that can:

- Efficiently reduce heavy organic loads but still have a small footprint
- Minimize energy consumption
- Achieve stable and reliable treatment performance
- Ensure easy operation and maintenance

Segflo™ Recirculating Biotower

High performance, compact, easy to operate and ideal for high organic load reduction

Building block design – Easy to install



Treatment Performance

Parameters	Total Suspended Solids (TSS)	Biological Oxygen Demand (BOD ₅)	Fats, Oils and Grease (FOG)
Septic tank effluent (high strength, 1 stage)	50%	70%	65%
Septic tank effluent (high strength, 2 stages)	75%	90%	90%

The Strength of Premier Tech Aqua

Since 1923, Premier Tech has been building its know-how and reputation on the diversity and technological expertise of its 2 000 team members located all around the world. As one of Premier Tech's business units for over 20 years, Premier Tech Aqua (PTA) has become an international leader in the field of onsite and decentralized wastewater treatment technologies for the residential, commercial, community, and industrial sectors. With over 50,000 installations, each coupled with a rigorous inspection, maintenance and documented follow-up program performed by a large network of partners, PTA is undoubtedly one of the leaders of its industry. Active in North America, Europe and Asia, PTA is proud of the quality, performance, and reliability of the solutions it offers.

- Over 50,000 Ecoflo® installations
- Over 100,000 peripheral products sold
- Over 950 commercial, community, institutional, municipal and industrial installations
- Documented system traceability, inspection, maintenance, and follow-up
- More than 2,500 partners
- Team of 25 experts entirely dedicated to IR&D
- Offices in North America, Europe and Asia
- Treatment performance surpassing regulatory requirements



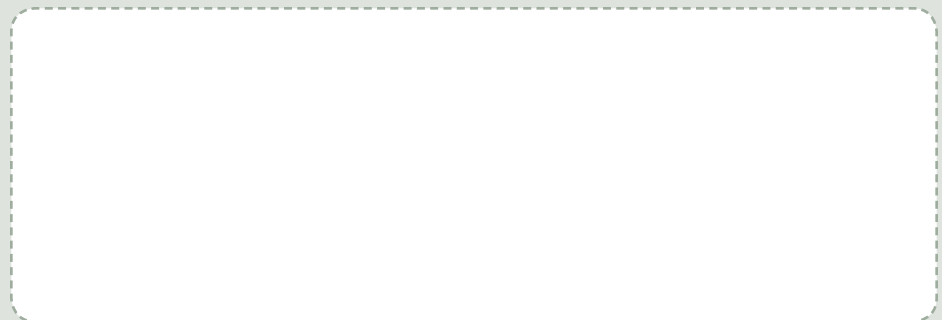
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The toolbox for wastewater professionals

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