

# **Ecoprocess<sup>™</sup> SBR** Sequencing Batch Reactor

#### WASTEWATER TREATMENT SOLUTIONS

## **Advanced Technology**

Cost-effective advanced biological treatment providing 98% removal of  $BOD_5$  and TSS as well as nitrogen and phosphorus reduction in a single step.

## **Highly Flexible**

One program with two operating modes for flow control strategies – true batch and continuous feed. Process resilient to extraneous water infiltrations in the wastewater collection network that consistently meets effluent discharge limits and handles hydraulic and organic load variations.

### **Operator-Friendly**

Highly-developed, integrated control/monitoring PLCbased program designed to address all plant operating conditions with minimal intervention from the operator.

## **Best Life Cycle**

Advantageous initial capital investment and operational costs compared to conventional systems typically equipped with mechanized secondary clarifier and chemical assisted clarification.



## **Ecoprocess<sup>®</sup> SBR** One SBR Technology. Infinite Possibilities.

Built on research, experience and hundreds of successful Ecoprocess<sup>™</sup> SBR installations, Premier Tech Aqua (PTA) offers a wide range of SBR options that take into account all the technical aspects (i.e. hydraulic, biological, control, etc.) of specific applications – municipal, industrial or commercial.

Ecoprocess<sup>™</sup> SBR is an hybrid technology that combines the advantages of true batch and continuous flow approaches. The system is initially provided with a true batch flow control strategy with no-inflow steps (react, settle and decant) – an integral part of the treatment cycle and an optimal approach for high-strength wastewater. Then, beyond a specific set point and at very high flow (influent diluted by infiltration into the collection network), the operator can set the system to automatically shift to a Continuous Flow Intermittent Discharge control strategy, resulting in all available SBR tanks receiving the flow continuously. This results in no significant or sudden flow rate variations impacting or diminishing treatment efficiency.

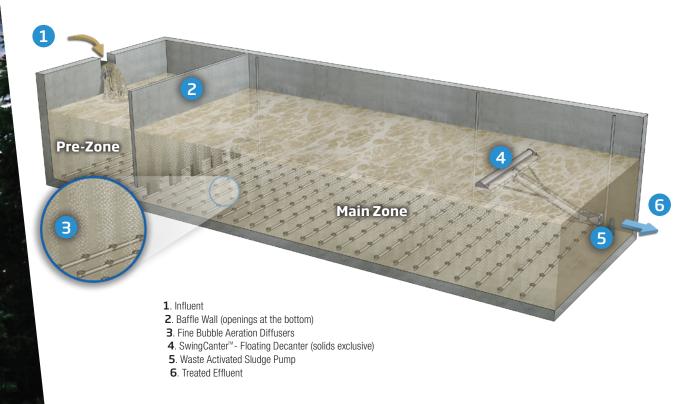
Ecoprocess<sup>™</sup> SBR takes full advantage of the above control strategies, making it possible to avoid system overdesign for occasional high-flow periods.

#### The Advantage of Premier Tech Aqua

- Team of experts with in-depth experience in biological treatment processes, hydraulics & controls.
- Meeting Effluent Requirements Under All Conditions.
- Custom designs developed, built, commissioned and serviced to suit your needs.

#### **A Distinctive Offer**

- Ecoprocess<sup>™</sup> SBR provided with smart sludge age controller for ease of operation.
- Advanced control and performance monitoring to ensure optimal process efficiency.
- Application-specific solutions for Municipal wastewater, Landfill-Leachate, Biomat transformation, Food and Beverage industry, Textile industry and Slaughter houses.
- Continuous controlled aeration meeting effluent requirements with low-energy consumption.



## **SwingCanter**<sup>™</sup> The Most Robust and Reliable Floating Decanter

Our Ecoprocess<sup>M</sup> SBR systems are equipped with our highly reliable SwingCanter<sup>M</sup> floating decanter – a design developed and improved by our R&D team over the last 30 years. The SwingCanter<sup>M</sup> has proven its reliability in numerous installations and been selected by many engineers for its superior construction and flexible operation.

- Non-mechanical (passive) surface floating design.
- · Heavy-duty stainless steel construction.
- Robust structural knee joint concept resistant to torsional and lateral forces while providing optimal angular operation.
- Solids exclusion system using a simple air cushion operation that eliminates the need for submerged mechanical valves.
- Standard design using a motorized valve located outside the reactors for ease of maintenance.
- No spring-loaded valves for solids exclusion to offer the possibility of full-depth decanting.
- · Highly reliable and maintenance-free equipment.



## Supervisory Control and Data Acquisition (SCADA)

Developed and supported by PTA's team of experts, our software programs are at the core of the Ecoprocess<sup>™</sup> SBR technology. Electrical concepts are established within a well-defined architecture to ensure an easy to service and upgrade high-quality product.

Mid to large-size Ecoprocess<sup>™</sup> SBR treatment plants are equipped with our SCADA system to monitor and edit all pre-programmed parameters of the treatment plant – an ideal communication and service platform to liaise with the PTA Service Team. Control panels and SBR software programs are duly tested prior to shipping thanks to our unique accelerated mode simulator. This extra quality control step ensures that only minor adjustments will be required at start-up.

Ecoprocess<sup>™</sup> SBR treatment plants are equipped with all the hardware and software necessary to enable reliable and hassle-free technical support via Internet.

PTA also offers a local/remote operating system option that includes an Ethernet modem that can connect to various networks (Wi-Fi, 3G, wired broadband) to improve work efficiency and save operator time while keeping a high level of security. This state-of-the-art control system guarantees full satisfaction regarding the operation of all Ecoprocess<sup>™</sup> SBR installations designed, supplied, commissioned and monitored by PTA.

All PTA control systems offer cross-platform compatibility with PC, Mac, Android and iOS smart phones and tablets through various remote access technologies.

A major asset for the client. A reliable tool the operator can trust.



## **Exceptional Technical Support**

PTA offers wastewater treatment professionals and their clients the singular advantage of having a multidisciplinary team of experts in civil and mechanical engineering, biology and automation dedicated to their project. With in-depth knowledge of process engineering and automation software, our specialists truly understand the hydraulic and microbiological requirements of wastewater treatment and have been trusted with the design of hundred systems.

Our solutions include a core biological treatment process , but are customized to meet all your needs – from initial design to commissioning, start-up and environmental follow-ups. Our systems are backed by an extensive technical support team ready to provide guidance and expert advice on any operation and system-related issues.

## The Strength of Premier Tech Aqua

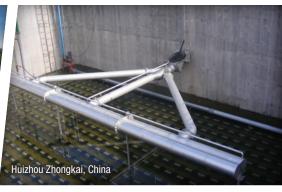
For over 30 years, the Environmental Technologies Group of Premier Tech – known around the world as Premier Tech Aqua (PTA) – has consolidated its position as an international leader of municipal and decentralized water and wastewater treatment solutions.

Offered as ready-to-use, mobile or built on site, PTA has designed, commissioned and continues to monitor hundreds of municipal and industrial installations across North America, Europe and Asia.

Strongly committed to environmental protection, our teams take great pride in their contribution to the preservation and improvement of the quality of water resources around the world.







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### **CONTACT OUR EXPERTS!**



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