

### Upgrade to Advanced Treatment and Enhanced Nitrification...FAST®

LagoonFAST™ by Bio-Microbics, Inc. takes the remarkable FAST® treatment technology and packages it for aeration pond and lagoon installations. LagoonFAST modules install very quickly, instantly upgrading the aeration pond or lagoon with the patented, proven, fixed film FAST process. Advanced treatment, clarification and enhanced nitrification can be achieved almost immediately with the use of the efficient, dependable, easy to install and very user-friendly LagoonFAST wastewater treatment system.

### How Does It Work?

LagoonFAST is specifically designed to provide advanced treatment and enhanced nitrification. Wastewater is pulled into the airlift of the patented fixed film process and circulated downward through the media, which provides the surface area for biological growth. A blower is installed on the nearest bank of the lagoon, which facilitates the circulation of oxygen in the system. This constant, robust circulation increases the overall treatment performance of the aeration pond or lagoon. Additionally, due to LagoonFAST's enhanced treatment levels, aeration pond and lagoon odor issues can be minimized or even eliminated depending upon the process load. LagoonFAST can be used side-by-side with existing equipment or as a replacement system.

## LagoonFAST wastewater treatment systems Benefits

Rapid installation instantly upgrades lagoon to robust FAST process.

System provides advanced biological aerobic treatment, including BOD, TSS and Ammonia Nitrogen reduction.

Versatile modular system can be used side-by-side with existing equipment or as a replacement system.

Enhanced treatment levels can minimize or even eliminate odor issues.



## Typical Applications

- Municipal & Community Lagoons
- Aquaculture & Fish Farming
- Animal & Food Waste Lagoons
- Wineries

## Technical Specifications

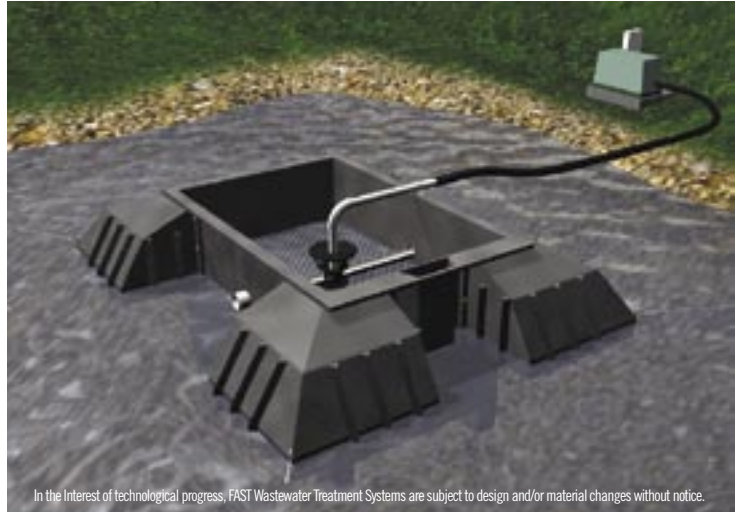
**Materials of construction:** Made with 100% corrosion resistant materials and contains post-consumer recycled materials.

**FAST® Installation:** LagoonFAST™ systems come equipped with 4 floats to provide easy installation into a new or existing aeration pond or lagoon. When desired location has been specified, simply anchor the LagoonFAST module in place. The system blower is usually secured on the nearest bank (up to 100ft away). A flexible airline connects the blower to the treatment module's airline piping.

**Capacity:** LagoonFAST modules are available in four model sizes. The size of the aeration pond or lagoon and level of BOD removal, nitrification levels, or clarification desired will determine which model size and how many units are required. LagoonFAST is also available in three different treatment configurations. Each configuration has been specifically engineered for certain types of waste or effluent requirements, including: high strength waste, normal sanitary wastewater or increased nitrogen reduction. Please contact Bio-Microbics or a dealer near you for more information on the FAST system that's right for your application.

**Power required:** Electrical components are available to meet all worldwide electrical specifications (volt/phase/frequency).

**Maintenance Requirements:** Once installed, FAST systems are virtually maintenance free. The only moving part in the system is an above ground blower placed up to 100 feet (33 m) away. Periodic review of electronic components recommended.



In the Interest of technological progress, FAST Wastewater Treatment Systems are subject to design and/or material changes without notice.

## LagoonFAST<sup>®</sup> wastewater treatment systems Specifications

LagoonFAST™ Treatment Modules	Maximum Treatment Capacity*	Blower Capacity	Module Dimensions**	Weight** (Metric)
LagoonFAST™ 1.5	Consult Factory	Consult Factory	82" L (208.3 cm) x 55" W (139.7 cm) x 58" H (147.3 cm)	281.23 kg
LagoonFAST™ 3.0	Consult Factory	Consult Factory	71" L (180.3 cm) x 59" W (149.9 cm) x 81" H (205.7 cm)	351.53 kg
LagoonFAST™ 4.5	Consult Factory	Consult Factory	145" L (368.3 cm) x 73" W (185.4 cm) x 51" H (129.5 cm)	800.59 kg
LagoonFAST™ 9.0	Consult Factory	Consult Factory	145" L (368.3 cm) x 73" W (185.4 cm) x 76" H (193 cm)	1118.1 kg
Larger Applications	Multiple FAST® treatment modules can be used in parallel and/or series			

\*Treatment capacity: Individual FAST module capacities are rated based on biological (BOD), hydraulic and other project-specific considerations. All rated capacities are given as guidelines for suggested use. Actual capacity may vary with local conditions and performance goals.

\*\*Module dimensions/weight: provided for shipping specifications only. Please see design specifications for recommended exterior tankage sizing. Treatment modules shall be installed inside tanks that are locally approved and manufactured using watertight materials.

Electrical Options: Electrical components are available to meet all worldwide electrical specifications (volt/phase/frequency).



### FAST Certifications Include:

U.S. Coast Guard • Canadian Great Lakes • UK Department of Trade • NSF Standard 40, Class I • International Maritime Organization (IMO) • Royal Australian Navy SASSO-Saudi Arabian Standards Organization • USEPA-Environmental Technology Verification (ETV) • C.S.A.-Canadian Standards Association • Underwriters Laboratories (UL) C.E.-European Electrical Systems



**Better Water. Better World.**

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