

Advanced Wastewater Treatment Products



**BIO** **MICROBICS**<sup>®</sup>

# **FAST**<sup>®</sup> wastewater treatment systems with **SFR**<sup>®</sup>



*Our most popular onsite wastewater treatment system*



*NSF/ANSI 245 certified for nitrogen reduction*



*Reliable performance with easy maintenance*



**RESIDENTIAL • COMMERCIAL • COMMUNITY**

**BETTER WATER. BETTER WORLD.<sup>®</sup>**

**[www.biomicrobics.com](http://www.biomicrobics.com)**

# SIMPLE • LOW

## **FAST** wastewater treatment systems with SFR<sup>®</sup>

The BioMicrobics FAST<sup>®</sup> (Fixed Activated Sludge Technology) is a leading biological treatment process in the onsite wastewater field. In a FAST<sup>®</sup> system, the blower is the only moving part required for the treatment process, requiring no replacement parts over the life of its operation. The control panel powers the blower with SFR<sup>®</sup> (Sequencing Fixed Reactor), UV disinfection compatibility, and external alarm features.

The FAST<sup>®</sup> treatment modules contain attached growth media optimized for biological wastewater treatment and a patented airlift device for mixing and oxygen transfer. FAST<sup>®</sup> systems offer a simple, durable, and cost-effective biological solution for wastewater treatment.

### Advantages of the system:

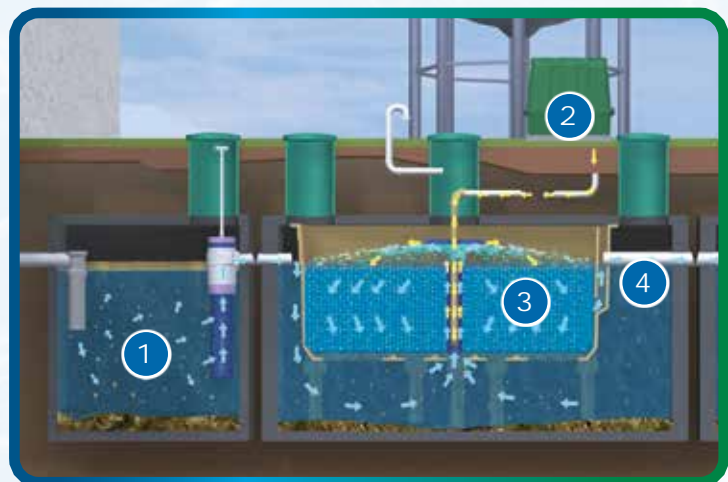
- Only one moving part
- Simplest maintenance procedure of any advanced system
- >90% reduction of BOD and TSS
- At least 50% reduction of TN
- Lessen the impact of harmful bacteria
- Residential, commercial, and retrofit applications

FAST<sup>®</sup> scales up or down, from single family homes to small towns. See opposite page for model sizes and special treatment options, including high strength, nitrification, and more.

The above-ground blower can be installed up to 100 ft [30 m] away.



## HOW IT WORKS!

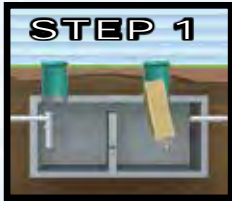


- 1 Settling Zone:** Settleable solids sink to the bottom of the tank and scum rises to the top. A SaniTEE<sup>®</sup> screen prevents trash from entering the treatment tank.
- 2 Aeration:** An above-ground blower introduces oxygen into the tank, facilitating a robust circulation of oxygenated wastewater through the media.
- 3 Submerged Media:** Abundant self-regulating microbes attached to the media decompose organic matter, nutrients, and pathogenic organisms in the wastewater.
- 4 Discharge:** Treated water exits the system after passing a built-in baffle.



# COST • ROBUST

## RetroFAST® A retrofit for traditional septic tanks that provides advanced treatment



UNIT	MAX HYDRAULIC LOADING		MAX ORGANIC LOADING* Pop. Equiv.
	GPD	LPD	
0.150	150	570	3
0.250	250	950	4
0.375	375	1420	5

For drain field remediation applications, please see the S.O.S. – Save Our Septic® Program.

## MicroFAST® Install-ready system for residential applications

### NitriFAST® Provides nitrification\*\* and occurs in sequence after MicroFAST®

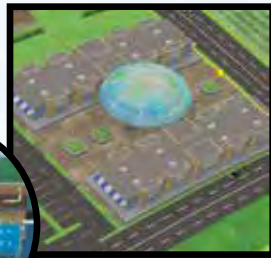


UNIT	MAX HYDRAULIC LOADING		MAX ORGANIC LOADING* Pop. Equiv.
	GPD	LPD	
0.4	400	1500	6
0.5	500	1890	8
0.625	625	2370	10
0.75	750	2840	12
0.9	900	3400	14
1.5	1500	5700	21
3.0	3000	11400	42
4.5	4500	17000	63
9.0	9000	34000	126

EPA/ETV verified

NSF certified to Standards 40 and 245

## HighStrengthFAST® Install-ready system for commercial applications

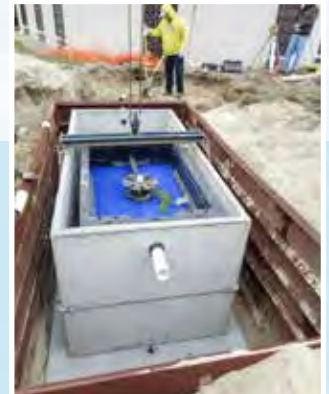


UNIT	MAX HYDRAULIC LOADING		MAX ORGANIC LOADING* Pop. Equiv.
	GPD	LPD	
1.0	1000	3800	CONSULT FACTORY
1.5	1500	5700	
3.0	3000	11400	
4.5	4500	17000	
9.0	9000	34000	

For applications >9000 GPD [34000 LPD], see separate brochure for MyFAST® and MacroFIT® systems. Consult factory for system sizing based on wastewater characteristics.

\***Treatment capacity:** Individual FAST® module capacities are based on organic loading, hydraulic loading, and other project-specific considerations. Actual capacity may vary with local conditions and performance goals.

\*\***NitriFAST®** sizing is based on hydraulic and nitrogen loading. Consult factory for guidance.







Established in 1996 to focus on water, BioMicrobics – and subsidiaries SeptiTech and Scienco/FAST – is at the forefront of sustainable design, with more than 80,000 systems in over 80 countries. Our systems meet the highest performance standards for treatment of water,

graywater, wastewater, and stormwater. BioMicrobics produces innovative systems dealing with wastewater treatment in decentralized settings. Our products are engineered to be simple, low-cost, and robust.

### RetroFAST wastewater treatment systems

Ideal for upgrading existing septic tanks or renovating a drain field. For more information, see our “S.O.S. – Save Our Septic®” warranty program.

### MicroFAST wastewater treatment systems

Versatile and robust, these systems are designed for individual homes, clustered homes, subdivisions, and other domestic-strength applications.

### NitriFAST wastewater treatment systems

For use as a second-stage treatment in series after a MicroFAST® system to provide additional nitrification, achieving even higher levels of nitrogen reduction than the MicroFAST® alone.

### HighStrengthFAST wastewater treatment systems

Meets the challenges of high-strength wastewater, providing treatment for higher BOD and TSS concentrations and higher influent FOG (grease) levels to achieve high quality effluent.

### MyFAST wastewater treatment systems

Ideal for small communities or larger commercial properties, this system maintains consistently high performance with minimal maintenance.



## BIO MICROBICS

BETTER WATER. BETTER WORLD.®

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