



MERINSA
TU ASESOR EN TRATAMIENTO DE AGUA

BIO MICROBICS®



FAST wastewater
treatment
systems
with **SFR®**

Most popular onsite, decentralized
wastewater treatment system



NSF/ANSI 245 certified for
nitrogen reduction



Reliable, proven, long-term
performance with low maintenance



AWARD-WINNING
INTEGRATED WATER
TECHNOLOGY

ADVANCED WASTEWATER TREATMENT PROCESS
RESIDENTIAL • COMMERCIAL • COMMUNITY

BETTER WATER. BETTER WORLD.

FAST[®] wastewater treatment systems with SFR[®]

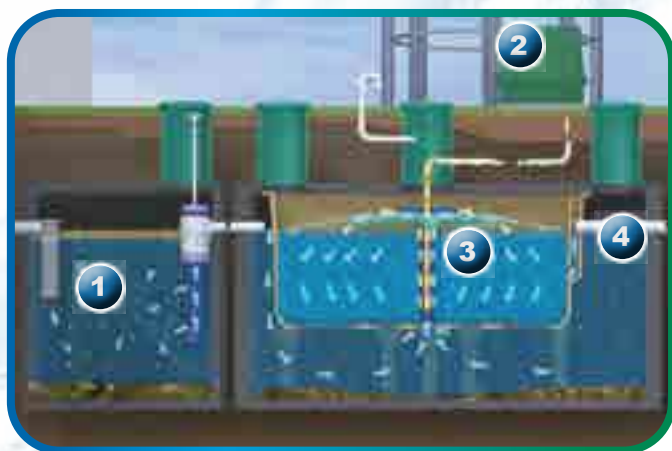
BioMicrobics FAST[®] is the leading, Integrated Fixed-film Activated Sludge (IFAS) Treatment process with SFR[®] (sequencing fixed reactor), providing significant improvement over traditional systems. Ideal in environmentally sensitive areas, the FAST treatment process exceeds effluent quality requirements for protection of groundwater and water reuse..

FAST[®] removes more than 90% of total suspended solids (TSS) and reduces the biochemical oxygen demand (BOD) to offer the most cost-effective treatment with little maintenance. FAST[®] biologically removes Nitrogen for areas impacted by Nutrient pollution.

FAST[®] systems can be used for new construction or retrofit in existing tanks especially for environmentally sensitive areas or limitations with distance to groundwater and/or smaller dispersal field size requirements:

- **Performs in a wide variety of applications.**
- **Increases settleability and eliminates sludge bulking.**
- **Easy to maintain and extraordinarily reliable.**
- **Exceeds minimum Nitrogen Reduction Standards.**

HOW IT WORKS!



Install FAST[®] systems in locally-sourced, tanks; the above ground blower can be installed up to 100 ft [30.5 m] away!

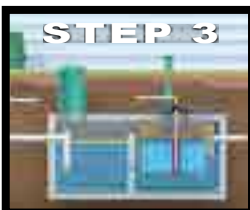
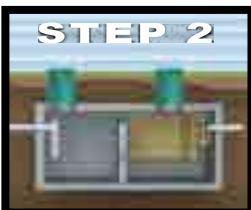
- **Lessen the impact of harmful bacteria and viruses.**
- **Cost effective for retrofits and upgrades and to reduce operation and maintenance costs.**
- **Complete new builds or expansions of WWTPs.**
- **No replacement filters or cleaning of the media required.**

FITT[®]-for-the-purpose-intended, the FAST[®] systems are engineered to fit most residential and commercial applications. FAST[®] technology easily scales up from smaller to larger capacities with the same performance and low maintenance, and will achieve making it by far the most effective process for removing pollutants from the wastewater!

- 1 Settling Zone:** Sedimentation occurs to prevent large solids from entering the treatment zone. SaniTEE[®] effluent filter screenig device defeects bulky particles.
- 2 Aeration:** Above-ground, regenerative blower introduces oxygen into the tank to facilitate a robust circulation through the FAST[®] treatment media's channeled flow path using a uqnique airlift.
- 3 Submerged Filter Media Tank:** Adsorption of organics, nutrients, and pathogenic organisms by the abundant, self-regulating, microbes attached to the media.
- 4 Discharge:** Treated water exits for dispersal or reuse by gravity after passing under a built-in baffle.



RetroFAST[®] wastewater treatment systems



UNIT	MAXIMUM TREATMENT Volume/Module**	CAPACITY* People/Module**
0.150	150 GPD [567 LPD]	1 – 3
0.250	250 GPD [947 LPD]	1 – 4
0.375	375 GPD [1420 LPD]	1 – 5

For drainfield remediation applications, please see the S.O.S.-Save Our Septic[®] Program and a "S.O.S. Site Evaluation/Registration" Report.
www.biomicrobics.com/resources/sos/s-o-s-save-Our-septic-program/

MicroFAST[®] wastewater treatment systems NitriFAST[®]

Used with **SaniTEE** & **ABC**. Consult factory for more information.

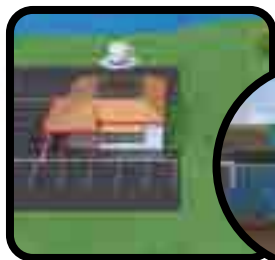


UNIT	MAXIMUM TREATMENT Volume/Module**	CAPACITY* People/Module**
0.5	500 GPD [1893 LPD]	1 – 8
0.625	625 GPD [2366 LPD]	1 – 10
0.75	750 GPD [1893 LPD]	1 – 11
0.9	900 GPD [2839 LPD]	1 – 14
1.5	1500 GPD [3407 LPD]	6 – 21
3.0	3000 GPD [11356 LPD]	10 – 42
4.5	4500 GPD [17034 LPD]	18 – 63
9.0	9000 GPD [34068 LPD]	30 – 126

Applications >9000 GPD [34 m³/d]: Multiple FAST[®] treatment modules can be used in parallel and/or series for larger applications. Consider MyFAST[®] & MacroFITT[®] Wastewater Treatment Systems.

HighStrengthFAST[®] wastewater treatment systems

Used with **SaniTEE** & **FOGHOG**. Consult factory for more information.



UNIT	MAXIMUM TREATMENT Volume/Module**	CAPACITY* People/Module**
1.0	900 GPD [3407 LPD]	CONSULT FACTORY
1.5	1500 GPD [5678 LPD]	CONSULT FACTORY
3.0	3000 GPD [11356 LPD]	CONSULT FACTORY
4.5	4500 GPD [17034 LPD]	CONSULT FACTORY
9.0	9000 GPD [34068 LPD]	CONSULT FACTORY

Consult factory for system sizing based on wastewater characteristics.

***Treatment capacity:** As a "guideline" for suggested use, the individual FAST[®] module capacities are rated based on biological oxygen demand (BOD), hydraulic and other project-specific considerations. Actual capacity may vary with local conditions and performance goals.

****Volume/People per module:** Please note, only residential domestic strength applications may be designed as total number of people per module. Actual capacity may vary with local requirements, conditions and performance goals.

Electrical Options: Electrical components are available to meet all worldwide electrical specifications (volt/phase/frequency). See product drawing(s) for options and more information.



BioMicrobics FAST[®] Systems are a popular alternative for the rural/urban environment. Award-winning "integrated water strategy" and innovative environmental technology, FAST[®] has passed the rigorous 3rd-party certification programs. The simple, robust design allows long-term performance with easy low-cost operation and maintenance.



Established in 1996 to focus on water ecology and technology innovation through three companies, BioMicrobics, SeptiTech, and Scienco/FAST are at the forefront of sustainable design and with more than 80,000 installed systems in over 80 countries. Our systems meet the highest performance standards for

treatment of water, greywater, wastewater, stormwater, and more! BioMicrobics has developed a number of innovative products dealing with the treatment of water where centralized infrastructure and drainage are not desired. Our systems are designed and engineered with sustainability and user practicality in mind.

RetroFAST

Ideal for existing tanks or upgrading the septic system to enhance/renovate a drain field; see our S.O.S.-Save Our Septic® Warranty Program.

MicroFAST

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

NitriFAST

For use as a second-stage treatment train with a MicroFAST® system to provide additional nitrification to achieve even higher levels of nitrogen reduction.

HighStrengthFAST

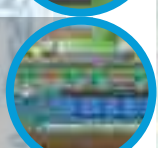
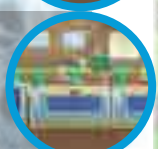
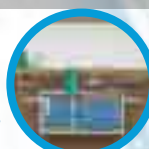
Meets the challenges of high-strength applications and properties with higher strength loading and dealing with FOG (grease) issues to provide simple, robust, low-maintenance treatment systems.

MyFAST

Ideal for small communities or large commercial properties to maintain consistent high performance, low maintenance, and sludge management all in one tank.

MarineFAST

For use on inspected vessels and offshore platforms to keep in compliance with total blackwater and greywater treatment and reliable wastewater treatment performance on vessels of all types.



Often, BioMicrobics Systems are installed in below ground, locally-sourced tanks.



"Onsite systems provide a cost-effective, long-term option for treating wastewater, particularly in sparsely populated areas. When properly installed, operated, and maintained, these systems help protect public health, preserve valuable water resources, and maintain a community's economic vitality." ~ U.S. EPA, SepticSmart Initiative