

**BIO** **MICROBICS®**



**MyFAST** wastewater treatment systems

**MacroFITT** wastewater treatment systems

Designed for larger applications with a small foot print



A scaled up version of our most popular wastewater treatment technology



Reliable, proven, long-term performance with low maintenance



**AWARD-WINNING  
INTEGRATED WATER  
TECHNOLOGY**

**ADVANCED WASTEWATER TREATMENT PROCESS  
SMALL MUNICIPAL • COMMERCIAL • COMMUNITY**

**BETTER WATER. BETTER WORLD.®**

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

# SIMPLE & LOW

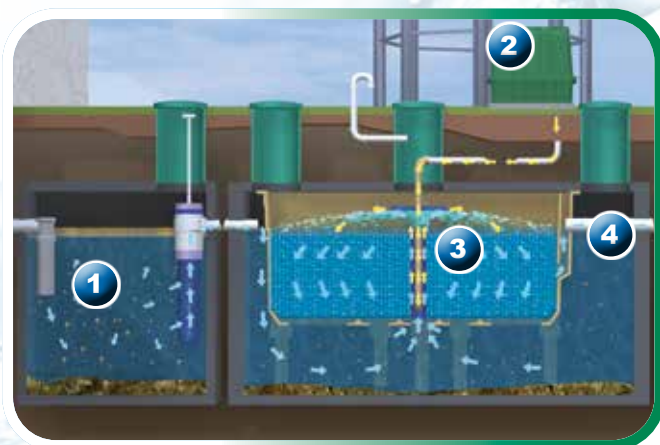
**MyFAST**® wastewater treatment systems

**MacroFITT**® wastewater treatment systems

BioMicrobics FAST® (Fixed Activated Sludge Treatment) is the leading wastewater treatment process with SFR® (sequencing fixed reactor) to provide significant improvement over traditional sewer systems for residential and commercial applications. Produces effluent to meet water quality goals, these scaled up versions enable cost-effective treatment with less oversight and maintenance. The MyFAST® and MacroFITT® “High Strength Sewage Treatment Plant” (HS-STP®) systems can be expected to process from 10,000 GPD [38 m<sup>3</sup>/d] to 2,000,000 GPD [7400 m<sup>3</sup>/d] with an expected effluent quality of BOD and TSS averaging less than 30 mg/L with domestic wastewater and consistently reduce Nitrogen levels by 50%, depending on wastewater characteristics.

The MyFAST® and MacroFITT® wastewater treatment systems include other components, such as an Aeration Management System (AMS) and BioSolids Management System (BMS) to help the system run at optimal operation, see table for sizes and consult factory for more information.

## HOW IT WORKS!



*Install directly in below or above ground locally-sourced, water-tight tanks; the blower can be installed up to 100 ft [30.5 m] away!*

FITT®-for-the-purpose-intended, our popular FAST® wastewater treatment systems deliver consistent high performance in a simple, pre-engineered, modular design for easy shipment around the globe. The FAST® process is used successfully in municipal, industrial, marine, commercial and residential type applications to achieve better treatment with the most proven, effective process for removing pollutants from wastewater flows with long-term performance!

### Ideal for:

- **Larger decentralized commercial/community applications**
- **Processing 10000 GPD [35 m<sup>3</sup>/d] to 2MGD [7570 m<sup>3</sup>/d]**
- **Retrofit for WWTP or “sewer mining” opportunities**

- 1 Settling Zone:** Sedimentation occurs to prevent large solids from entering the treatment zone. SaniTEE® effluent filter screenig device deffects 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.

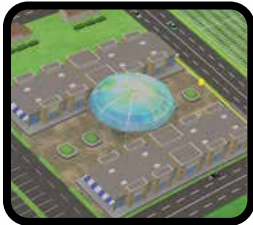
# COST ○ ROBUST

## MyFAST wastewater treatment systems

Consult factory for more information

UNIT	Maximum Treatment Capacity*		Aeration Management System	BioSolids Management System	Optional MyTEE® Grit Control
	Volume/Module**	~People per Module**	Optional LIXOR® Package	Optional Manifold grid & LIXOR®	
1.0	10000 GPD [38 m³/d]	~200	-	-	-
2.0	20000 GPD [76 m³/d]	~400	AMS 2.0/3.0	BMS 2.0/3.0	MyTEE® 2.0/3.0
3.0	30000 GPD [114 m³/d]	~500	AMS 2.0/3.0	BMS 2.0/3.0	MyTEE® 2.0/3.0
4.0	40000 GPD [150 m³/d]	~600	AMS 4.0	BMS 4.0	MyTEE® 4.0
6.0	60000 GPD [225 m³/d]	~900	AMS 6.0	BMS 6.0	MyTEE® 6.0
8.0	80000 GPD [300 m³/d]	~1200	AMS 8.0	BMS 8.0	MyTEE® 8.0
12.0	120000 GPD [450 m³/d]	~1900	AMS 12.0	BMS 12.0	MyTEE® 12.0
16.0	160000 GPD [600 m³/d]	~2500	AMS 16.0	BMS 16.0	MyTEE® 16.0

For more options, multiple FAST® units can be used in parallel/series for additional flow or desired treatment levels.



## MacroFITT wastewater treatment systems

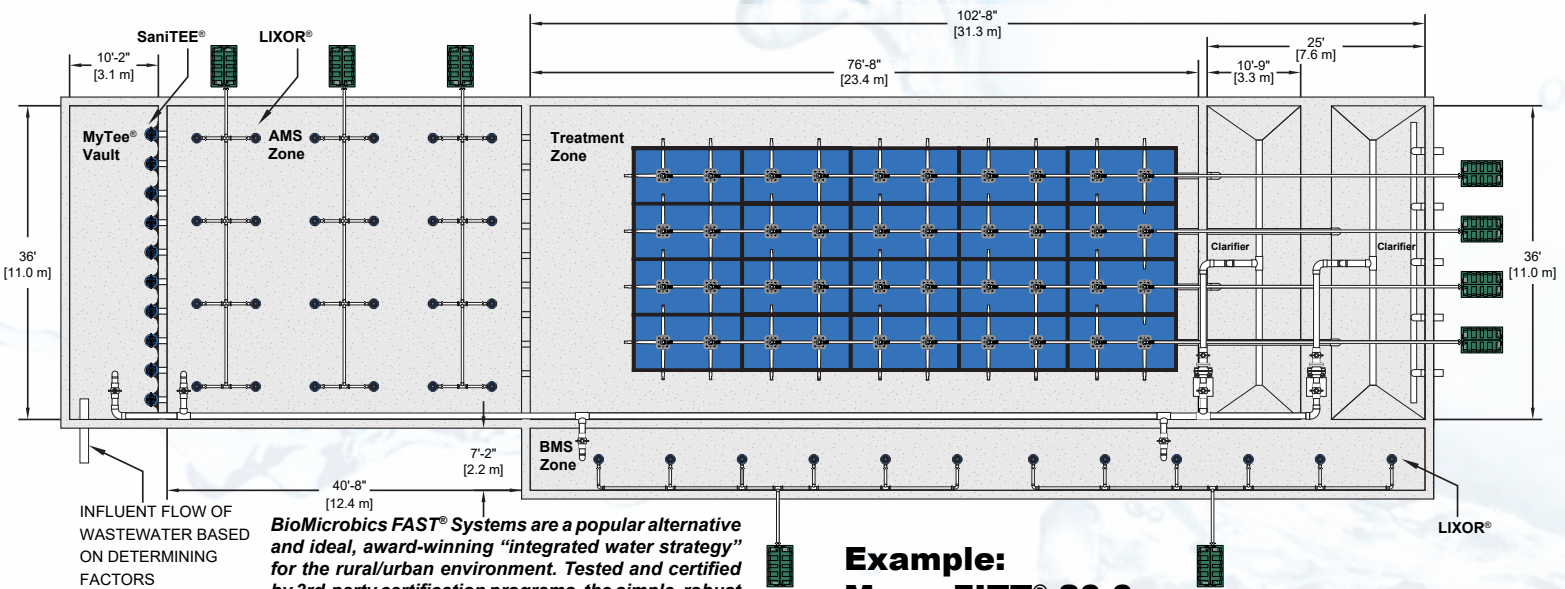
Recommended MyTEE®, AMS and BMS Systems for optimal operation  
Optional SciCHLOR® System available for disinfection

UNIT	Maximum Treatment Capacity*		Aeration Management System	BioSolids Management System
	Volume/Module**	~People per Module**	Optional LIXOR® Package	Optional Manifold Grid & LIXOR®
20.0	200000 GPD [757 m³/d]	~3000	AMS 20	BMS 20
30.0	300000 GPD [1135 m³/d]	~4500	AMS 30	BMS 30
40.0	400000 GPD [1514 m³/d]	~6000	AMS 40	BMS 40
50.0	500000 GPD [1893 m³/d]	~7500	AMS 50	BMS 50
60.0	600000 GPD [2271 m³/d]	~9000	AMS 60	BMS 60
70.0	700000 GPD [2650 m³/d]	~10500	AMS 70	BMS 70
XL 80.0	800000 GPD [3028 m³/d]	~12000	AMS 80	BMS 80
XL 90.0	900000 GPD [3407 m³/d]	~13500	AMS 90	BMS 90
XL100.0	1000000 GPD [3785 m³/d]	~15000	AMS 100	BMS 100
XL120.0	1200000 GPD [4542 m³/d]	~18000	AMS 120	BMS 120
XL140.0	1400000 GPD [5300 m³/d]	~21000	AMS 140	BMS 140
XL160.0	1600000 GPD [6057 m³/d]	~24000	AMS 160	BMS 160
XL180.0	1800000 GPD [6814 m³/d]	~27000	AMS 180	BMS 180
XL200.0	2000000 GPD [7570 m³/d]	~30000	AMS 200	BMS 200

\*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 and ideal, award-winning "integrated water strategy" for the rural/urban environment. Tested and certified by 3rd-party certification programs, the simple, robust design allows long-term operational performance with easy and low-cost maintenance.*

**Example:  
MacroFITT® 20.0**



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 wastewater treatment systems **RetroFITT<sup>ee</sup>**

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



### MicroFAST wastewater treatment systems **MicroFITT<sup>ee</sup>**

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



### NitriFAST wastewater treatment systems

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



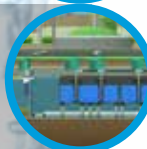
### HighStrengthFAST wastewater treatment systems

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 wastewater treatment systems **MacroFITT**

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**

## BIO MICROBICS

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

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## SCIENCO InTank<sup>®</sup> BWTS

Ballast Water Treatment System

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