

SCIENCO/FAST[®]
a subsidiary of BioMicrobics, Inc.

Marine **FAST**[®]

SEWAGE TREATMENT SYSTEMS



Reliable performance for the life of the vessel



*Tested with USCG protocol and certified to
USCG, IMO, MARPOL & ABS standards*



Complies with USEPA standards



**Advanced Marine Wastewater Treatment
WORKBOATS • OFFSHORE • SHIPS**

BETTER WATER. BETTER WORLD.[®]

www.SciencoFAST.com

SIMPLE • LOW

MarineFAST® SEWAGE TREATMENT SYSTEMS

MarineFAST® is a Type II Marine Sanitation Device (MSD) that treats wastewater generated by toilets, sinks, laundry, and galleys. MSDs allow a vessel to remain in compliance with environmental regulations regarding blackwater and greywater discharges.

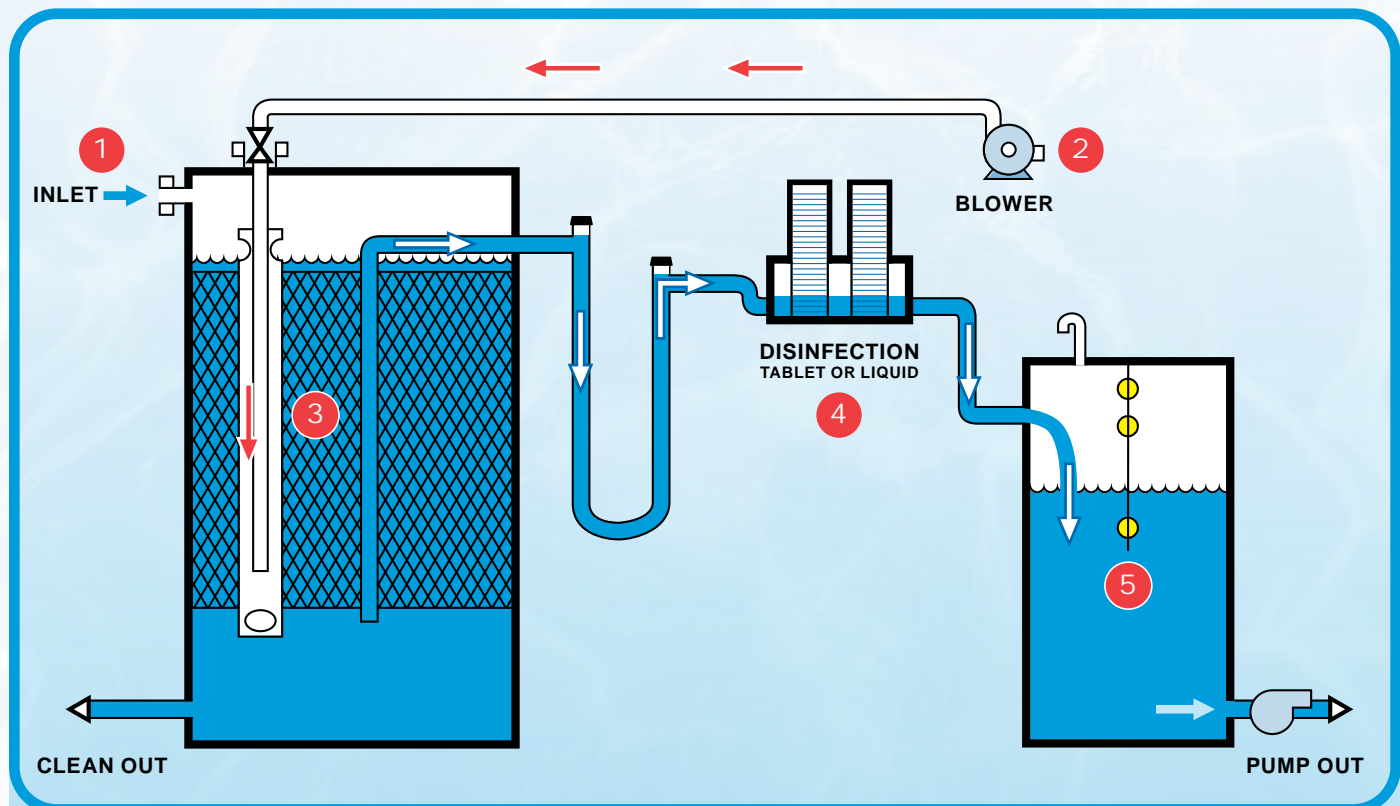
Certified to USCG and IMO effluent standards, these pre-engineered, automated wastewater treatment systems use proven FAST® attached growth technology. These systems can be used for new builds or retrofits of many types of vessels.

System Sizing

MarineFAST® units are sized according to crew size and wastewater flow. Our engineering staff will be happy to help you select the best treatment and transfer system for the vessel. Email solutions@sciencofast.com for assistance on model sizing

HOW IT WORKS!

- 1 Wastewater enters the system from vacuum systems, gravity collection systems or from an existing holding tank.
- 2 A blower provides air to the airlift inside the media tank.
- 3 The airlift circulates aerated wastewater throughout the tank. Aerobic microorganisms digest organic material in the tank, using the air for their respiration.
- 4 Treated effluent passes through the media tank spillover pipe into the wet well for disinfection.
- 5 In the wet well (aka chlorine contact tank), treated effluent rests until the chlorine has had enough time to kill lingering bacteria. Float switches (in yellow) automatically operate a discharge pump.



COST • ROBUST

STANDARD MODELS



LX

LX-Series: Non-metallic *modular* systems for smaller vessels

Model Number - all except MEPC	L-1X	L-2X	L-3X	L-4X	L-5X	L-6X
Model Number - MEPC units only	L-1XM	L-2XM	L-3XM	L-4XM	L-5XM	L-6XM
Rated capacity people						
blackwater only	6	8	12	16	14	28
above plus showers & hand sinks	5	6	9	12	11	21
above plus dishwashing & laundry	2	3	5	6	6	11
above plus ground food waste	2	2	3	5	4	8
Rated capacity gpd [m ³ /d]	130 [0.5]	190 [0.7]	250 [0.9]	380 [1.4]	400 [1.5]	780 [3.0]
Recommended max gpd [m ³ /d]	110 [0.4]	160 [0.6]	230 [0.9]	320 [1.2]	280 [1.1]	570 [2.2]
Number of Media Treatment Tanks	1	1	2	2	1	2



MX

MX Series: Complete steel *pre-piped* system; larger than LX Series

Model Number - all except MEPC	MX-1	MX-2	MX-3	MX-4	MX-5
Model Number - MEPC units only	MX-1M	MX-2M	MX-3M	MX-4M	MX-5M
Rated capacity people					
blackwater only	13	20	29	43	65
above plus showers & hand sinks	10	15	22	33	49
above plus dishwashing & laundry	5	8	12	17	26
above plus ground food waste	4	6	8	12	18
Rated capacity gpd [m ³ /d]	340 [1.3]	510 [1.9]	720 [2.7]	1100 [4.2]	1700 [6.4]
Recommended max gpd [m ³ /d]	270 [1.0]	400 [1.5]	570 [2.2]	870 [3.3]	1300 [4.9]
Number of Media Treatment Tanks	1	1	1	2	2

Custom designs
available!

Systems come with the
following components:

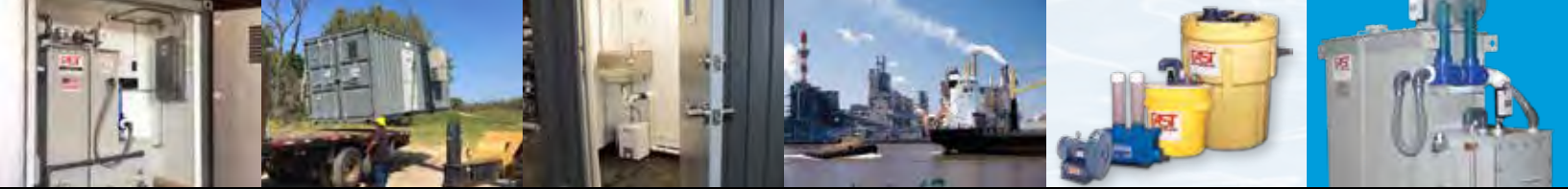
- Media Tank and Wetwell
- Aeration Blower
- Automatic controls

M Series: Complete steel *modular* system; size equivalent to MX Series

Model Number - all except MEPC	M-1	M-2	M-3	M-4	M-5
Model Number - MEPC units only	M-1M	M-2M	M-3M	M-4M	M-5M
Rated capacity people					
blackwater only	13	20	30	40	61
above plus showers & hand sinks	10	15	23	30	46
above plus dishwashing & laundry	5	8	12	16	25
above plus ground food waste	4	6	8	11	17
Rated capacity gpd [m ³ /d]	340 [1.3]	510 [1.9]	720 [2.7]	1100 [4.2]	1700 [6.4]
Recommended max gpd [m ³ /d]	270 [1.0]	400 [1.5]	610 [2.3]	810 [3.1]	1200 [4.5]
Number of Media Treatment Tanks	1	1	1	2	2

Systems from any of the series can be customized if necessary. Please consult factory for assistance.





With decades of history unlike any other, the origins of SCIENTO® & FAST® can be traced back to the 1940s in St. Louis, MO for water and salt management systems. In 1981, Scienco and FAST combined as Scienco/FAST® to produce internationally recognizable water, wastewater,

and maintenance products focused on marine, commercial food and beverage, and agricultural market treatments with top-notch field services. Scienco/FAST®'s current commercial product lines combine proven performance with long-term reliability and many low-cost options.



from 100 m³ gpd



to 1200 m³ gpd

SciencoFAST® Type-II MSDs

Certified to USCG and IMO effluent standards.

BIO MICROBICS

BETTER WATER. BETTER WORLD.™

16002 West 110th St. • Lenexa, KS 66219 USA
1-800-753-3278 • ph: 1-913-422-0707 • f: 1-913-422-0808
www.biomicrobics.com • sales@biomicrobics.com

SCIENTO/FAST
a subsidiary of BioMicrobics, Inc.

200 Sun Valley Circle • Fenton, MO 63026 USA
1-800-652-4539 • ph: 1-314-756-9300 • f: 1-314-756-9306
www.sciencofast.com • solutions@sciencofast.com

SeptiTech®
a subsidiary of BioMicrobics, Inc.

69 Holland Street • Lewiston, ME 04240 USA
1-800-318-7967 • ph: 1-207-333-6940 • f: 1-207-333-6944
www.septitech.com • info@septitech.com

SCIENTO InTank BWTS
Ballast Water Treatment System

30525 First Street Suite A • Fulshear TX 77441 USA
ph : 1-832-640-9221 • f: 1-314-756-9306
www.intankballast.com • intank@sciencofast.com