



BIO **MICROBICS®**

LIXOR®

Submerged Aeration System

BioRobic®
Submerged Aeration System



Non-clogging, permanently installed



Low maintenance, reliable performance



Highly effective oxygenation and mixing



ADVANCED WASTEWATER TREATMENT

SIMPLE • LOW

LIXOR® Submerged Aeration System



LIXOR® is a remarkably effective submerged aeration mixing system. Extremely low-maintenance and surprisingly efficient.

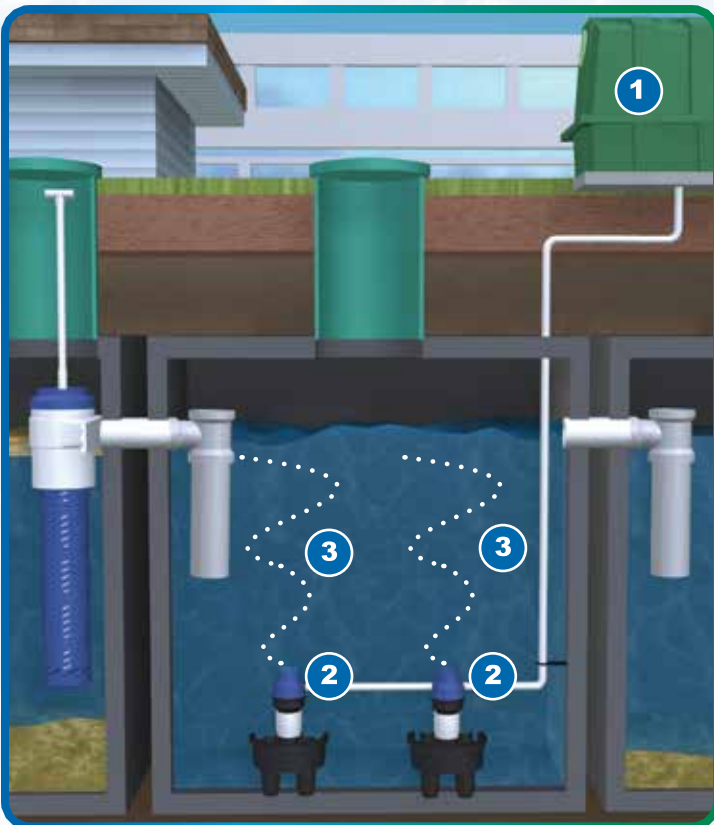


The **LIXOR's** non-clogging, venturi-style chamber, creates the environment for high levels of oxygen transfer efficiency with proper mixing to promote aerobic bacteria and other microorganisms that quickly biodegrade and digest incoming organic matter.

Installed in new or existing tanks, multiple Lixor's may be used to help achieve desired treatment goals. These submerged aeration systems provide the right environment for aerobic bacteria and other microorganisms to quickly biodegrade and digest incoming organic matter as a standalone "Activated Sludge" system (see **RollsAIR®**) or in various pre- or post- phases of a wastewater treatment system to help achieve desired treatment goals.

HOW IT WORKS!

- 1 Equipped with an above-ground, regenerative blower - the system's only moving part, a continuous large volume of air is piped down to the submerged **LIXOR®** device(s).
- 2 The velocity of air and water increase substantially inside the **LIXOR's** venturi chamber creating a vacuum that pulls in surrounding liquid and breaks the incoming air stream into smaller size bubbles.
- 3 The result is a turbulent plume of water and bubbles that travel up through the water, transferring oxygen for biological activity and creating horizontal and vertical mixing patterns.



LIXOR® 2.0

COST • ROBUST

LIXOR® Specifications

Max. BOD loading per tank volume: 6.7 ppd/kgal* [0.80 kg/d/m³]

MODEL SIZE	MINIMUM WATER DEPTH ft m	MAXIMUM WATER DEPTH ft m	MAXIMUM AIR RELEASE DEPTH ft m	MAXIMUM TANK VOLUME gal m³	MINIMUM HYDRAULIC RETENTION TIME	BOD LOAD Pounds per Day [kg/d/unit] lbs kg
LIXOR® 0.5	4 ft 1.2 m	5.5 1.7	4.5 1.4	2000 7.5	10 hours	4.0 0.5
LIXOR® 1.0		7.0 2.1	6.0 1.8	3000 11.3		6.5 0.8
LIXOR® 2.0		9.0 2.7	8.0 2.4	6000 22.7		13.0 1.6
LIXOR® 3.0		9.0 2.7	8.0 2.4	9000 34.0		19.5 2.3
LIXOR® 4.0		9.0 2.7	8.0 2.4	12000 45.4		26.0 3.1
LIXOR® 4.0XD		12.0 3.7	11.0 3.3	12000 45.4		26.0 3.1
LIXOR® 6.0		9.0 2.7	8.0 2.4	18000 68.0		39.0 4.7
LIXOR® 6.0XD		12.0 3.7	11.0 3.3	18000 68.0		39.0 4.7
LIXOR® 8.0		9.0 2.7	8.0 2.4	24000 91.0		52.0 6.2
LIXOR® 8.0XD		12.0 3.7	11.0 3.3	24000 91.0		52.0 6.2
LIXOR® 10.0	5 ft 1.5 m	9.0 2.7	8.0 2.4	30000 114.0		65.0 7.8
LIXOR® 10.0XD		12.0 3.7	11.0 3.3	30000 114.0		65.0 7.8
LIXOR® 12.0		9.0 2.7	8.0 2.4	36000 136.0		78.0 9.4
LIXOR® 12.0XD		12.0 3.7	11.0 3.3	36000 136.0		78.0 9.4
LIXOR® 16.0		9.0 2.7	8.0 2.4	48000 182.0		104.0 12.5
LIXOR® 16.0XD		12.0 3.7	11.0 3.3	48000 182.0		104.0 12.5
LIXOR® 20.0		9.0 2.7	8.0 2.4	60000 227.0		130.0 15.6
LIXOR® 20.0XD		12.0 3.7	11.0 3.3	60000 227.0		130.0 15.6
LIXOR® 24.0		9.0 2.7	8.0 2.4	72000 273.0		156.0 18.7
LIXOR® 24.0XD		12.0 3.7	11.0 3.3	72000 273.0		156.0 18.7
LIXOR® 32.0		9.0 2.7	8.0 2.4	96000 364.0		208.0 25.0
LIXOR® 32.0XD		12.0 3.7	11.0 3.3	96000 364.0		208.0 25.0

*Tank volume is determined by the greater at hydraulic retention time or volume per BOD load.



Ideal for use with BioBarrier® HSMBR® system such as Winery Wastewater Treatment Applications

HOW IT WORKS!

- 1 Equipped with an above-ground, regenerative blower - the system's only moving part, a continuous large volume of air is piped down to the submerged BioRobic® device(s).
- 2 This air stream from the blower travels through the orifices of the BioRobic®. The results in the breaking of the incoming air stream into smaller size bubbles.
- 3 The result is a turbulent plume of water and bubbles that travel up through the water, transferring oxygen for biological activity and creating horizontal and vertical mixing patterns.

BioRobic® Submerged Aeration System Specifications

MODEL SIZE	MINIMUM WATER DEPTH ft m	MAXIMUM WATER DEPTH ft m	MAXIMUM AIR RELEASE DEPTH ft m	BOD LOAD Pounds per Day [kg/d/unit] lbs kg
BioRobic® 1.0	5 1.5	8 2.4	8 2.4	5 2.3
BioRobic® 2.0	5 1.5	8 2.4	8 2.4	10 4.5
BioRobic® 3.0	5 1.5	8 2.4	8 2.4	15 6.8
BioRobic® 4.0	5 1.5	8 2.4	8 2.4	20 9.1
BioRobic® 6.0	5 1.5	8 2.4	8 2.4	30 13.6
BioRobic® 8.0	5 1.5	8 2.4	8 2.4	40 18.1

In the interest of technological progress, all BioRobic® Submerged Aeration Devices are subject to design and/or materials change without notice.



BioRobic® 4.0



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.

LIXOR®

BioRobic®

Submerged Aeration System



BIO MICROBICS

BETTER WATER. BETTER WORLD.®

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