

Established in 1996, BioMicrobics celebrates water treatment innovation through three companies, BioMicrobics, SeptiTech, and Scienco/FAST. The group operates in over 80 countries through more than 80,000 installed systems and facilities. At the forefront of sustainable design, BioMicrobics systems meet the highest performance standards for treatment of water, wastewater, storm water, and more! BioMicrobics has developed a number of innovative products dealing with the treatment of water where infrastructure and drainage are not available. Our systems are designed and engineered with sustainability and user practicality in mind.

LIXOR Submerged Aeration System

BioRobic Submerged Aeration System

WHY USE SUPPLEMENTAL AERATION SYSTEMS?

Mixing is required to dampen the fluctuations of both hydraulic and BOD loadings, to maintain uniform dispersion of the microorganisms, and to maintain uniform dissolved oxygen concentration in the contents of the aeration basin. Failure to provide proper mixing can result in the failure of the biological system. The efficiency of oxygen transfer is reflected in both initial and operating costs. The more efficient the aerator is, the lower the total power required to operate it, and, generally, the lower the initial equipment cost and operating cost.

Installed in new or existing tanks, 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.



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INNOVATIVE ONSITE WASTEWATER PRODUCTS

WWW.BIOMICROBICS.COM

BIO MICROBICS®

BioRobic Submerged Aeration System

LIXOR Submerged Aeration System

- Reliable, Proven Performance with Low Maintenance
- Delivers Highly Effective Levels of Dissolved Oxygen
- Non-Clogging for Complete Mixed Activated Treatment

AWARD-WINNING INTEGRATED WATER TECHNOLOGY

SUPPLEMENTAL AERATION • EXTENDED AERATION

AERATION MANAGEMENT SYSTEMS

BETTER WATER. BETTER WORLD.®

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SIMPLE • LOW COST • ROBUST

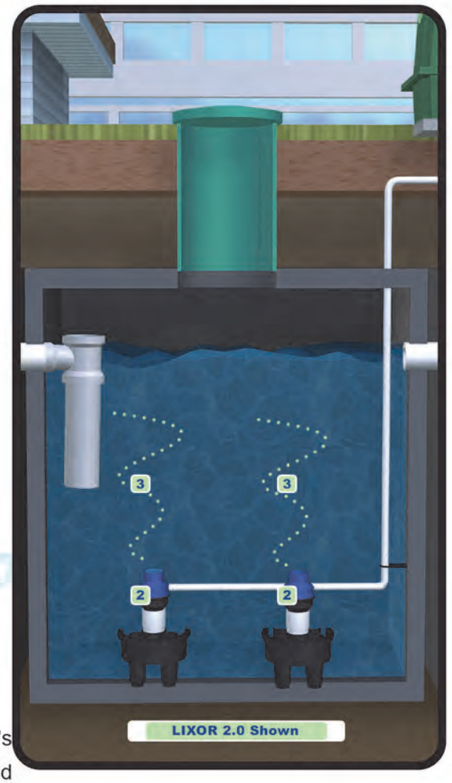
LIXOR

Submerged Aeration System

LIXOR is a remarkably effective submerged aeration and 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.



How Does it Work?

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® Specifications

Max. BOD loading per tank volume: 6.7 ppd/kgal (0.80Kg/d/m³)

Model	Minimum Water Depth	Maximum Water Depth	Maximum Air Release Depth	Max. Tank Volume	Hydraulic Retention Time (in Hours)	Max BOD Loading Pounds per Day (kg/d/unit)
Lixor® 0.5	4 ft. (122 cm)	5.5 ft. (168 cm)	4.5 ft. (137 cm)	2000 gal. (7.5 m³)	10	6 (2.7)
Lixor® 1.0	5 ft. (152 cm)	7 ft. (213 cm)	6 ft. (183 cm)	3000 gal. (11.3 m³)	10	14 (6.3)
Lixor® 2.0	5 ft. (152 cm)	9 ft. (274 cm)	8 ft. (244 cm)	6000 gal. (22.7 m³)	10	30 (13.6)
Lixor® 3.0	5 ft. (152 cm)	9 ft. (274 cm)	8 ft. (244 cm)	9000 gal. (34 m³)	10	44 (20)
Lixor® 4.0	5 ft. (152 cm)	9 ft. (274 cm)	8 ft. (244 cm)	12000 gal. (45.4 m³)	10	58 (26.3)
Lixor® 4.0XD	5 ft. (152 cm)	12 ft. (366 cm)	11 ft. (335 cm)	12000 gal. (45.4 m³)	10	58 (26.3)
Lixor® 6.0	5 ft. (152 cm)	9 ft. (274 cm)	8 ft. (244 cm)	15000 gal. (56.7 m³)	10	90 (40.8)
Lixor® 6.0XD	5 ft. (152 cm)	12 ft. (366 cm)	11 ft. (335 cm)	15000 gal. (56.7 m³)	10	90 (40.8)
Lixor® 8.0	5 ft. (152 cm)	9 ft. (274 cm)	8 ft. (244 cm)	24000 gal. (90 m³)	10	120 (54.4)
Lixor® 8.0XD	5 ft. (152 cm)	12 ft. (366 cm)	11 ft. (335 cm)	24000 gal. (90 m³)	10	120 (54.4)

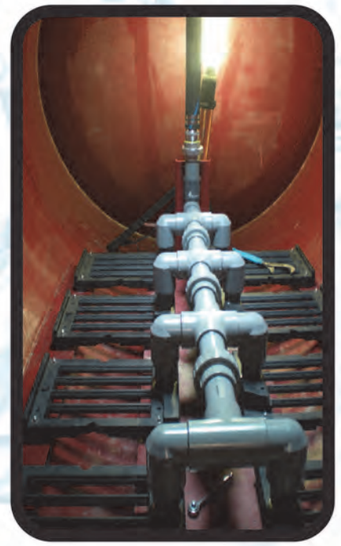
1 pound per day per 1000 gallons = 0.12 kilograms per day per cubic meters

In the interest of technological progress, all LIXOR® submerged aeration systems are subject to design and/or materials change without notice.

BioRobic

Submerged Aeration System

Ideal for high strength wastewater treatment applications, such as wineries, the BioRobic™ is a submerged aeration system that provides optimal levels of Dissolved Oxygen (DO) for pretreatment. Dissolved oxygen enables aerobic bacteria and other microorganisms to quickly biodegrade and digest incoming organic matter. for both types. Whether installed in new or existing tanks, multiple BioRobic's may be used to help achieve desired treatment goals.





BioRobic™ 4.0 Shown

How Does it Work?

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. The 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



BioRobic™ Specifications

Model	Minimum Water Depth	Maximum Water Depth	Maximum Air Release Depth	BoD Load
BioRobic ™ 1.5	5 ft. (152 cm)	8 ft. (244 cm)	8 ft. (244 cm)	7.5 lbs
BioRobic ™ 3.0	5 ft. (152 cm)	8 ft. (244 cm)	8 ft. (244 cm)	15.0 lbs
BioRobic ™ 4.5	5 ft. (152 cm)	8 ft. (244 cm)	8 ft. (244 cm)	22.5 lbs
BioRobic ™ 6.0	5 ft. (152 cm)	8 ft. (244 cm)	8 ft. (244 cm)	33.0 lbs
BioRobic ™ 8.0	5 ft. (152 cm)	8 ft. (244 cm)	8 ft. (244 cm)	49.5 lbs

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

See Product Drawings and/or Manual(s) for further details & Technical Specifications

For a distributor/approved tank manufacturers in your area or more information, please contact sales@biomicrobics.com.