BIO MICROBICS

MERINSA
TU ASESOR EN TRATAMIENTO DE AGUA

LIXOR®

SUBMERGED ARERATON SYSTEM

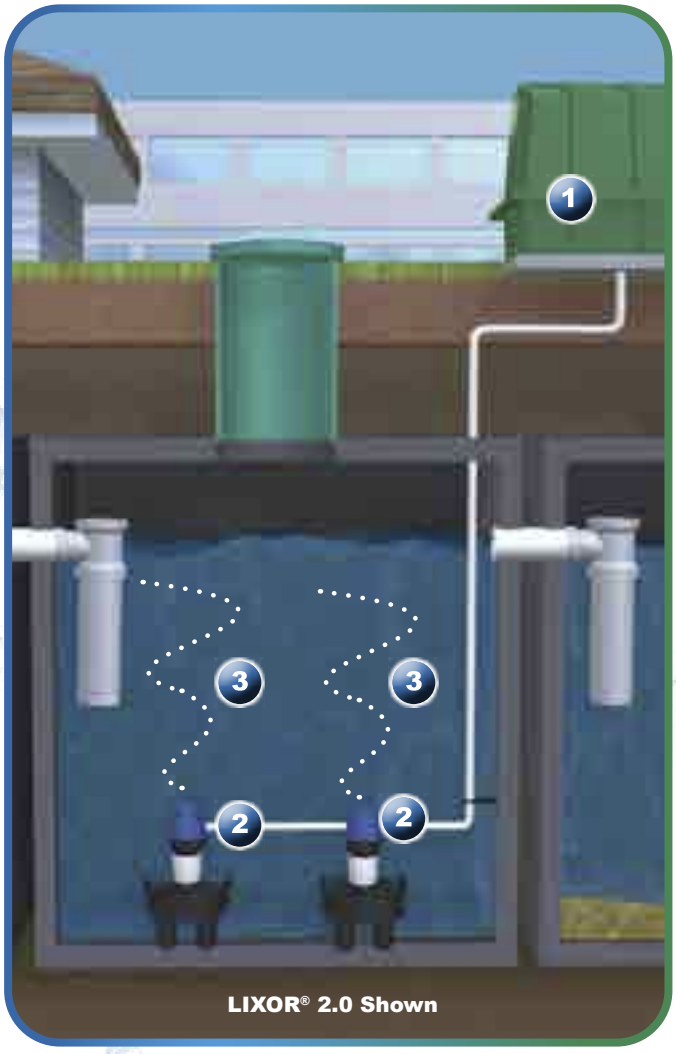
LIXOR® is a remarkably effective submerged aeration and mixing system. Extremely low-maintenance and surprisingly efficient.

The LIXOR's non-clogging, venturi-style chamberl, 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 incomig 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 horizonta and vertical mixing patterns.



LIXOR® 2.0 Shown

MERINSA
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LIXOR® Specifications

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

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

**ppd/kgal: 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.

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

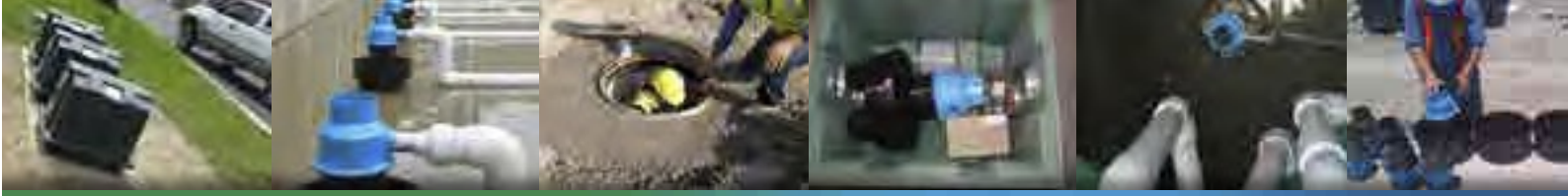
HOW IT WORKS!

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 SIZES	MINIMUM WATER DEPTH	MAXIMUM WATER DEPTH	MAXIMUM AIR RELEASE DEPTH	BOD L OAD Pounds per Day [kg/d/unit]
Bio Robic 1.0	5 ft. [1.5 m]	8 ft. [2.4 m]	8 ft. [2.4 m]	5 lbs [2.7 kg]
Bio Robic 2.0	5 ft. [1.5 m]	8 ft. [2.4 m]	8 ft. [2.4 m]	10 lbs [4.5 kg]
Bio Robic 3.0	5 ft. [1.5 m]	8 ft. [2.4 m]	8 ft. [2.4 m]	15 lbs [6.8 kg]
Bio Robic 4.0	5 ft. [1.5 m]	8 ft. [2.4 m]	8 ft. [2.4 m]	20 lbs [9.1 kg]
Bio Robic 6.0	5 ft. [1.5 m]	8 ft. [2.4 m]	8 ft. [2.4 m]	30 lbs [13.6 kg]
Bio Robic 8.0	5 ft. [1.5 m]	8 ft. [2.4 m]	8 ft. [2.4 m]	40 lbs [18.1 kg]

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



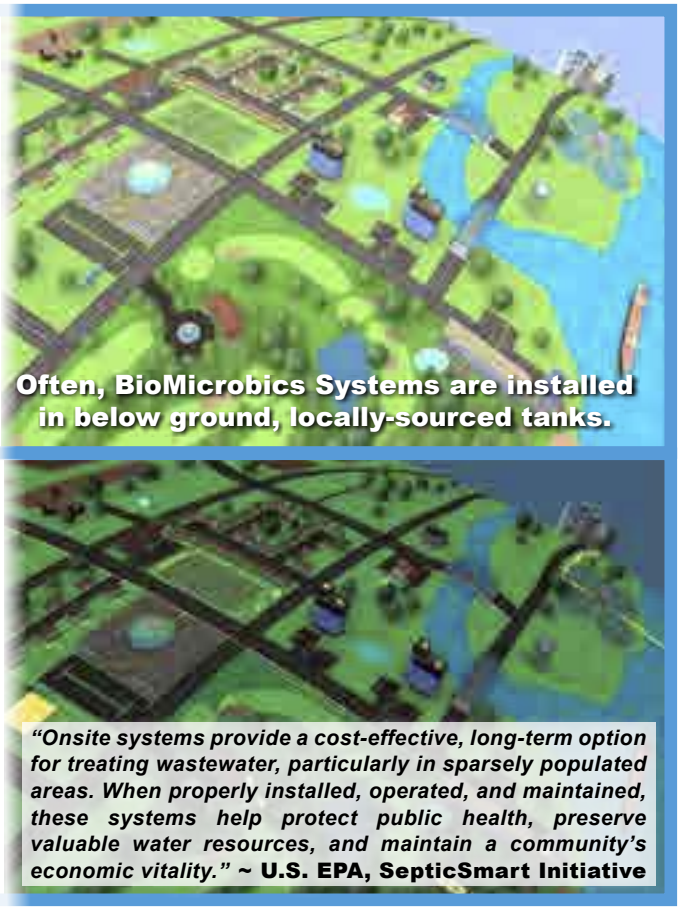
Established in 1996 to focus on water ecology and technology innovation through three companies, BioMicrobics, SeptiTech, and Scienco/FAST are at the forefront of sustainable design and with more than 80,000 installed systems in over 80 countries. Our systems meet the highest performance standards for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

LIXOR SUBMERGED AERATION SYSTEM

BioRobic SUBMERGED AERATION SYSTEM

WHY USE SUPPLEMENTAL AERATION SYSTEM?

- Maintain uniform dispersion of microorganisms.
- Provide proper mixing of both hydraulic and BOD loadings
- Efficiency of oxygen transfer to lower power and operating costs.
- Provide the right environment for aerobic bacteria to help achieve desired treatment goals.



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**