Benefits of a BioBarrier® HSMBR® winery wastewater system:

- Produces unmatched, high quality effluent creating new opportunities for water reuse.
- Strong and durable components provide long lasting performance of your winery wastewater system.
- Shipment readiness making it easier to install, operate, and maintain than other types of treatment systems.
- Advanced features, pre-engineered, and modular design allow work together to bring superior technology at an affordable price.
- Immersed membrane technology utilized in the BioBarrier® HSMBR® System allows for installation into a smaller footprint with both above or below ground tank options.
- Best in class performance from an industry leader. The BioBarrier® MBR is the first system ever to receive NSF/ANSI Standard 350 certification for water reuse!

Wastewater management associated with wine processing is a critical subject due to potential contamination of soil, groundwater or surface water. Regulations for environmental discharges and for recycling or reuse schemes are also becoming increasingly stringent.

All Winery Wastewater Treatment in One System

BioBarrier® HSMBR® Wastewater Treatment System designed to treat your winery process wastewater exclusively or in combination with sanitary wastewater from your tasting rooms, hospitality facilities, including from kitchens, sinks, and toilets wastewater – all in one single treatment system with efficient exceeding typical local regulatory requirements! Providing a sustainable, water-saving winery wastewater treatment system based on the FITT®-for-Purpose Approach.

Available in Canada, South America, Europe, and Asia.

www.biomicrobics.com • sales@biomicrobics.com

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Benefits of a BioBarrier® HSMBR® winery wastewater system:

• Produces unmatched, high quality effluent creating new opportunities for water reuse.

• Strong and durable components provide long lasting performance of your winery wastewater system.

• Ships installation ready making it easier to install, operate, and maintain than other types of treatment systems.

• Advanced features, pre-engineered, and modular design all work together to bring superior technology at an affordable price.

• Immersed membrane technology utilized in the BioBarrier® HSMBR® System allows for installation into a smaller footprint with both above or below ground tank options.

• Best in class performance from an industry leader. The BioBarrier® MBR is the first system ever to receive NSF/ANSI Standard 350 certification for water reuse!

“Wastewater management associated with wine processing is a critical subject due to potential contamination of soil, groundwater or surface water. Regulations for environmental discharges and for recycling or reuse schemes are the result of decades of experience, research & development and real-world operating history.”

Awards, Technology Approvals, and Certifications

With more 60 installations in many (more than 30) countries our Safe Industrial Treatment Technologies (SITT™) are the result of decades of experience, research & developpment and real world operating history.

BioBarrier® HSMBR®

Winery Wastewater Treatment Systems

Reclaim • Reuse • Conserve


www.biomicrobicswinery.com

“Creating Better Water Treatment Solutions for a Better World…” article.

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How to properly treat and dispose of wastewater is an issue for any production facility. The type of wastewater treatment in a winery will depend on the quality required for the treated water, which itself will depend on whether it is discharged into the public sewer network, into a natural waterway or whether it is to be reused in the process or to irrigate the vineyard.

The BioBarrier® HSMBR® (High Strength Membrane BioReactor) System utilizes industry-leading, immersed membrane technology for the treatment of winery wastewater. The resulting highly treated effluent can be used for vineyard irrigation, landscape area, water features/fountains, dust control, and a variety of other water reuse applications to:

- Help conserve natural resources
- Protect ground/surface water
- Meet all worldwide, electrical specifications (volt/phase/frequency).

BioAeration Grid System

- Effective at removing harmful pathogens, such as Fecal Coliform, E. Coli, and other harmful bacteria from wastewater
- Meets the most stringent State Regulatory requirements
- Effective at removing harmful pathogens, such as Fecal Coliform, E. Coli, and other harmful bacteria from wastewater
- Ideal for water reuse applications
- Make even the most difficult sites usable

BioBarrier® HSMBR®

- The BioBarrier® HSMBR® is specifically designed for your winery wastewater package. BioAeration Grid System includes air grids, blowers, blowers vents and control panel for optimal aeration performance of your BioBarrier® HSMBR® Winery Wastewater System.
- SaniTEE® Effluent Screening Device(s) ready for installation into your settling tank(s).
- Filtrate Pump to extract your ultra-filtered, treated wastewater from the membrane modules.
- Timer and High Level Alarm floats to ensure proper operating levels and immediate notification via the control panel of any abnormalities in normal operating water levels.
- Easy-to-operate Control Panel with maximum/minimum settings for the proper operation and monitoring of your BioBarrier® HSMBR® Winery Wastewater System.
- Installation Kit including necessary connectors and parts with easy to understand installation instructions.

Winery Wastewater System Includes:

- Durability, pre-engineered, BioBarrier® Membrane BioReactor modules ready for placement into the treatment tank.
- SaniTEE® Effluent Screening Device(s) ready for installation into your settling tank(s).
- Filtrate Pump to extract your ultra-filtered, treated wastewater from the membrane modules.
- Timer and High Level Alarm floats to ensure proper operating levels and immediate notification via the control panel of any abnormalities in normal operating water levels.
- Easy-to-operate Control Panel with maximum/minimum settings for the proper operation and monitoring of your BioBarrier® HSMBR® Winery Wastewater System.
- Installation Kit including necessary connectors and parts with easy to understand installation instructions.

How does the system work?

1. Pretreatment & neutralization: Wastewater enters a settling tank where solids are separated and screened in the tank via the SaniTEE® screening device.
2. Primary treatment: Once inside the treatment tank, suspended treatment occurs. With the additional BioAeration Grid System, specifically designed for the high BOD concentrations of the winery wastewater, the system provides ample oxygen transfer necessary for optimum biological treatment. This active aeration is critical in the treatment process.
3. Advanced treatment: Immersed in the treatment tank, the submerged Membrane Bioreactor units with air grids create upward flow between the membrane plates providing vigorous scouring action to reduce clogging. This ensures superior robust performance.
4. Filtrate Pump (not shown) to extract resulting in clear, odorless, treated water; ready for standard dispersal or various innovative water reuse applications.
How to properly treat and dispose of wastewater is an issue for any production facility. The type of wastewater treatment in a winery will depend on the quality required for the treated water, which itself will depend on whether it is discharged into the public sewer network, into a natural waterway or whether it is to be reused in the process or to irrigate the vineyard.

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- help conserve natural resources
- protect ground/surface water
- overcome land constraints
- make even the most difficult sites usable

The BioBarrier® HSMBR®'s versatile design can be used in parallel for additional flow and treatment levels.

Low Cost, Long Lasting Solution

The pre-engineered, modular system ships installation ready and comes complete with the BioBarrier® HSMBR® membrane units, BioAeration Grid System, control panel, blower, filtrate pump and SaniTEE® effluent screen.

- Meets the most stringent State Regulatory requirements
- Effective at removing harmful pathogens, such as E. Coli, and other harmful bacteria from wastewater
- Ideal for water reuse applications
- Make even the most difficult sites usable

Winery Wastewater System Includes:

- Durable, pre-engineered, BioBarrier® Membrane BioReactor modules ready for placement into the treatment tank.
- SaniTEE® Effluent Screening Device(s) ready for installation into your settling tank(s).
- Filtrate Pump to extract your ultra-filtered, treated wastewater from the membrane modules.
- Timer and High Level Alarm floats to assure proper operating levels and immediate notification via the control panel of any abnormalities in normal operating water levels.
- Easy-to-operate Control Panel with maximum/minimum settings for the proper operation and monitoring of your BioBarrier® HSMBR® Winery Wastewater System.
- Installation Kit including necessary connectors and parts with easy to understand installation instructions.

NOTE: Use only tanks that are locally approved and manufactured using watertight materials. Electrical options are available to meet all worldwide specifications (volt/phase/frequency).

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1. Pretreatment & neutralization: Wastewater enters a settling tank where solids are separated and screened via the SaniTEE® screening device.
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BioBarrier® HSMBR® Wastewater Treatment System designed to treat your winery process wastewater exclusively or in combination with sanitary wastewater from your tasting rooms, hospitality facilities; including from kitchens, sinks, and toilets wastewater – all in one single treatment system with efficient executing typical local regulatory requirements. Thus, providing a sustainable, water-recycling winery wastewater treatment system based on the FITT®-for-Purpose Approach.

Benefits of a BioBarrier® HSMBR® winery wastewater system:

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- Strong and durable components provide long lasting performance of your winery wastewater system.
- Ships installation ready making it easier to install, operate, and maintain than other types of treatment systems.
- Advanced features, pre-engineered, and modular design all work together to bring superior technology at an affordable price.
- Immerged membrane technology utilized in the BioBarrier® HSMBR® System allows for installation into a smaller footprint with both above or below ground tank options.
- Best in class performance from an industry leader. The BioBarrier® MBR is the first system ever to receive NSF/ANSI Standard 300 certification for water reuse!

“Wastewater management associated with wine processing is a critical subject due to potential contamination of soil, groundwater or surface water. Regulations for environmental discharges and for recycling or reuse schemes are also becoming increasingly stringent.” — Australian Grape & Wine Authority

With over 50,000 installations worldwide, our BioBarrier® HSMBR® wastewater treatment systems reclaim, reuse & conserve.

BioBarrier® HSMBR®
Winery Wastewater Treatment Systems

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