



*Making a positive impact on  
our environment for today  
and future generations.*

*BIO Series*



# BIO Series

## Biological Recycle Systems/Clarifier



A CLARIFIER ALLOWS FOR GREATER SETTLING AND REMOVAL OF ACCUMULATED SOLIDS IN WASTEWATER BEFORE TREATMENT. THIS PRETREATMENT MAKES IT EASIER FOR WATER TREATMENT SYSTEMS TO OPERATE EFFECTIVELY.

BIO-15-0M10 shown with ozone option, WX-0020

### FEATURES

- Cone-shaped tank for easy handling of accumulated solids
- Quality recycled wash water without common odor problems
- Easy operation and maintenance
- Easily accessible pumps
- ETL listed control panel
- Heavy-duty, corrosive-resistant and UV-resistant poly-skid

### APPLICATIONS

- Golf Courses – Designed to handle equipment wash water for various golf course configurations
- Solid-Waste Haulers – Able to effectively treat vehicle wash water, like that from garbage trucks
- Food Processing Plants – Pretreatment of a broad range of food processing wastewater before discharging
- Petro-Chemical – Capable of treating waste streams containing multiple, organic particulate matter
- Anything with organic compounds in wastewater

### CERTIFICATION

- ETL Certified – US and Canada



Peristaltic pump is self priming for passive automatic liquid microbe injection



Mazzei® venturi air injection system sustains beneficial aerobic microbes while preventing bacteria from turning odorous and anaerobic



ETL listed NEMA-4 rated corrosion-proof control panel for safe and reliable operation

| MODEL NUMBER | FLOW RATE | CLARIFIER TANK | MEDIA         | SUMP PUMP (INCLUDED) | TRANSFER PUMP | POWER REQUIREMENTS | DIMENSIONS (LxWxH) | SHIP WT. |
|--------------|-----------|----------------|---------------|----------------------|---------------|--------------------|--------------------|----------|
| BIO-15-0M10* | 0-15 GPM  | 600 gallons    | 1,300 sq. ft. | 1.0 HP               | 3/4 HP        | 230V, 10, 20.0A    | 5x8x9.16ft.        | 1250 lb. |
| BIO-15-0M30* | 0-15 GPM  | 600 gallons    | 1,300 sq. ft. | 1.0 HP               | 1/2 HP        | 230V, 30, 15.0A    | 5x8x9.16ft.        | 1250 lb. |

\*Includes sump pump and peristaltic pump.  
230/208/460V 3Ø available on all models as options.

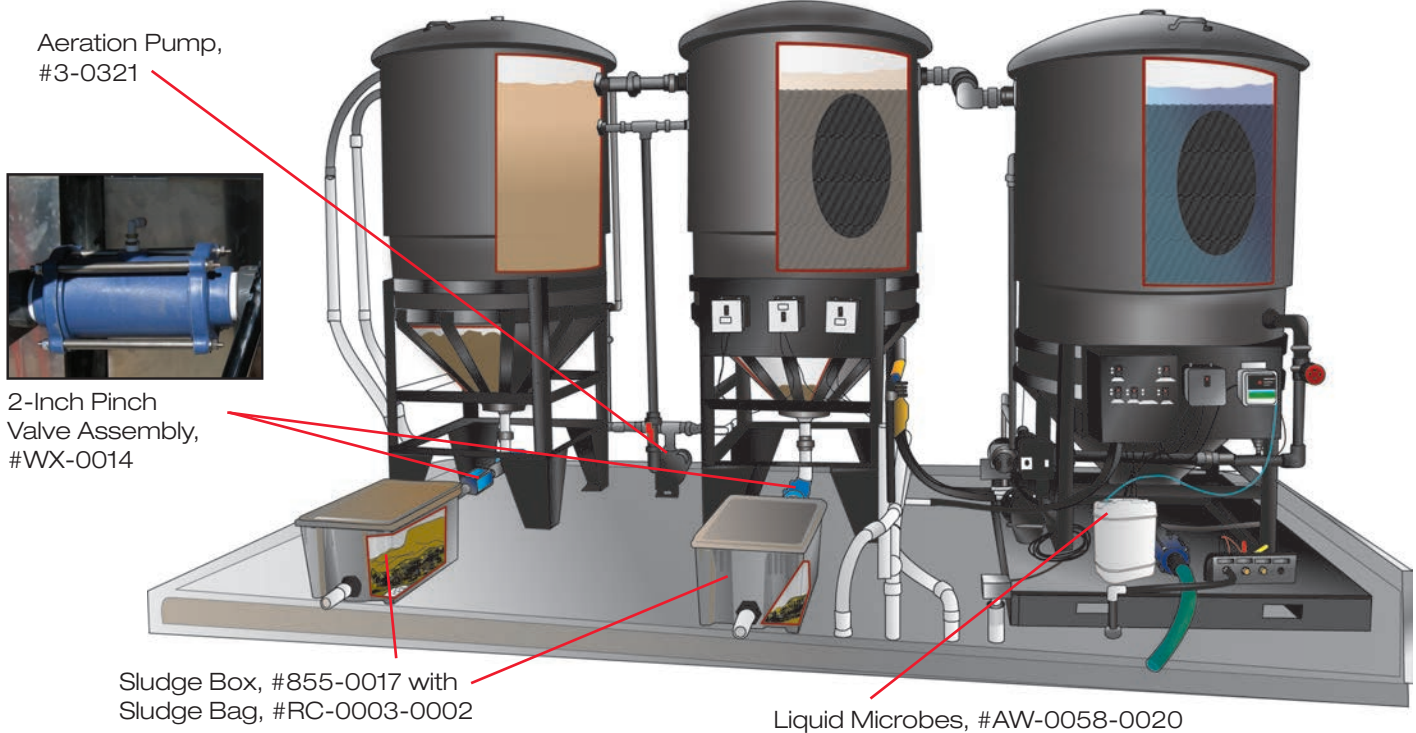
# BIO Series

## Example of a Custom Biological Combination System

Optional Settling Tank  
Model #WTA-600-0M11:  
Shown with optional tank stand  
extension legs

Optional Tank Includes Coalescing  
Aeration Media and Peristaltic Pump  
Model #WTA-600SA-0M11:  
Shown with optional tank stand extension legs

Model #BIO-15-0M10



**Biological water treatment systems are customizable for your specific application.  
Contact your dealer for more information.**

### ACCESSORIES:

| PART NUMBER  | DESCRIPTION   | FITS MODELS   |
|--------------|---|---------------|
| 55-0033      | Air fine-bubble injector, 1½-inch – Mazzei used for aeration  | BIO-15 models |
| 55-1887      | Check valve, 2-inch – Holds prime in suction line   | BIO-15 models |
| 855-0017     | Sludge box – Plastic box designed to hold the sludge bags; includes a 10-foot x 2-inch diameter PVC hose    | BIO-15 models |
| RC-0003-0002 | Biodegradable sludge bags – Designed to capture the sludge while allowing the water to flow through, 5 qty. | BIO-15 models |
| RC-0016-0001 | Replacement media, 600-gallons – Replacement coalescing media   | BIO-15 models |
| RC-0016-0002 | Replacement high solids media, 600-gallons – Replacement coalescing media                                   | BIO-15 models |

*More accessories listed on pages 6- 7.*

### OPTIONS:

| PART NUMBER | DESCRIPTION  | FITS MODELS                |
|-------------|--|----------------------------|
| WX-0014     | Pinch valve assembly – Pinch valve, bladder style (used on cone bottom tanks), 2-inch, 230V, 1Ø  | BIO models                 |
| WX-0020     | Ozone – For specialized applications where sterilization of the waste stream is desired  | BIO-15-0M10                |
| WX-0024     | Recirculation option for floats – If used along with the #WX-0042, product tank overflow, water will recirculate from product tank back to pit | BIO-15-0M10                |
| WX-0030     | BIO sump pump conversion – Customized option, converts surface-mount sump pump to submersible sump pump, 230V, 1Ø                              | BIO-15-0M10                |
| WX-0041     | 165-gallon water tank upgrade – For when a larger volume of usable water is needed   | BIO-15 models              |
| WX-0042     | Product tank overflow – Allows water to cycle back to collection pit   | BIO-15 models              |
| WX-0043     | 460V, 3Ø – Upgrades 230V model to operate at 460V, 3Ø  | BIO-15 models              |
| WX-0044     | Ozone – For specialized applications where sterilization of the waste stream is desired  | BIO-15 208/230V, 3Ø models |
| WX-0045     | Ozone – For specialized applications where sterilization of the waste stream is desired  | BIO-15 460V, 3Ø models     |
| WX-0064     | Magnetic drive pump – 230V, 1Ø, seal-less  | BIO-15-0M10                |
| WX-0065     | Magnetic drive pump – 208-230V, 3Ø, seal-less  | BIO-15-0M30                |
| WX-0066     | Magnetic drive pump – 460V, 3Ø, seal-less  | BIO-15-0M30                |
| WX-0101     | BIO sump pump conversion – Customized option, converts surface-mount sump pump to submersible sump pump, 230V, 1Ø                              | BIO-15-0M30                |
| WX-0119     | High solids media – Allows for debris to travel easily through media with vertical design  | BIO-15 models              |
| WX-0128     | Hour meter – Displays the number of hours unit has been in operation   | BIO-15 models              |

*More options listed on pages 7-8.*

# BIO Series

## Biological Recycle/Discharge Systems



THE POPULAR BIO SERIES SYSTEM UTILIZES FIXED-FILM BACTERIA IN CONJUNCTION WITH COALESCING MEDIA TO TREAT WASTEWATER. OXYGEN IS ADDED TO THE BACTERIA IN THE WASTE STREAM BY VENTURI INJECTION SYSTEM.

BIO-20R-0M11

### BENEFITS

- Low maintenance
- Low operating costs
- Simple equipment operation

### CERTIFICATION

- ETL Certified – US and Canada



Hose connectors are designed for easy accessibility and quick installation



Mazzei® venturi air injection system, 55-0126, sustains beneficial aerobic microbes while preventing bacteria from turning odorous and anaerobic



Pressure manifold set-up is standard on BIO-20R-0M11 and BIO-20R-1M11



Durable "True Union" valve



ETL listed NEMA-4 rated corrosion-proof control panel for safe and reliable operation



Slope bottom tanks are standard on all BIO-20, BIO-25 and BIO-35 models



Aeration pump, 3-0397



Transfer pump, 3-0399

# BIO Series

## Biological Recycle/Discharge Systems



BIO-25R shown with optional waterfall filter, RC-0008-0002, towable grass cart, RC-0004-0002 and peristaltic pump assembly, RC-0021-0001

| MODEL NUMBER | FLOW RATE | BIOLOGICAL MEDIA | TANK CAPACITY | MATERIAL OF CONSTRUCTION | SUMP PUMP | TRANSFER PUMP | POWER REQUIREMENTS | DIMENSIONS (LxWxH)        | SHIP WT. |
|--------------|-----------|------------------|---------------|--------------------------|-----------|---------------|--------------------|---------------------------|----------|
| BIO-20D-0M10 | 0-20 GPM  | 2,304 sq. ft.    | 890 gallons   | Marine aluminum          | 1/2 HP    | –             | 230V, 1Ø, 15.0A    | 8x5x4ft.                  | 950 lb.  |
| BIO-20D-1M10 | 0-20 GPM  | 2,304 sq. ft.    | 890 gallons   | Stainless-steel          | 1/2 HP    | –             | 230V, 1Ø, 15.0A    | 8x5x4ft.                  | 950 lb.  |
| BIO-20D-0M30 | 0-20 GPM  | 2,304 sq. ft.    | 890 gallons   | Marine aluminum          | 1/2 HP    | –             | 230V, 3Ø, 10.0A    | 8x5x4ft.                  | 950 lb.  |
| BIO-20D-1M30 | 0-20 GPM  | 2,304 sq. ft.    | 890 gallons   | Stainless-steel          | 1/2 HP    | –             | 230V, 3Ø, 10.0A    | 8x5x4ft.                  | 950 lb.  |
| BIO-20R-0M10 | 0-20 GPM  | 2,304 sq. ft.    | 890 gallons   | Marine aluminum          | 1/2 HP    | 1.5 HP        | 230V, 1Ø, 25.0A    | 8x5x4ft. with 3x3ft. skid | 1092 lb. |
| BIO-20R-1M10 | 0-20 GPM  | 2,304 sq. ft.    | 890 gallons   | Stainless-steel          | 1/2 HP    | 1.5 HP        | 230V, 1Ø, 25.0A    | 8x5x4ft. with 3x3ft. skid | 1092 lb. |
| BIO-20R-0M30 | 0-20 GPM  | 2,304 sq. ft.    | 890 gallons   | Marine aluminum          | 1/2 HP    | 1.5 HP        | 230V, 3Ø, 15.0A    | 8x5x4ft. with 3x3ft. skid | 1092 lb. |
| BIO-20R-1M30 | 0-20 GPM  | 2,304 sq. ft.    | 890 gallons   | Stainless-steel          | 1/2 HP    | 1.5 HP        | 230V, 3Ø, 15.0A    | 8x5x4ft. with 3x3ft. skid | 1092 lb. |
| BIO-20R-0M11 | 0-20 GPM  | 2,304 sq. ft.    | 890 gallons   | Marine aluminum          | 1/2 HP    | 1.5 HP        | 230V, 1Ø, 25.0A    | 8x6x4ft.                  | 1092 lb. |
| BIO-20R-1M11 | 0-20 GPM  | 2,304 sq. ft.    | 890 gallons   | Stainless-steel          | 1/2 HP    | 1.5 HP        | 230V, 1Ø, 25.0A    | 8x6x4ft.                  | 1092 lb. |
| BIO-20R-0M31 | 0-20 GPM  | 2,304 sq. ft.    | 890 gallons   | Marine aluminum          | 1/2 HP    | 1.5 HP        | 230V, 3Ø, 15.0A    | 8x6x4ft.                  | 1092 lb. |
| BIO-20R-1M31 | 0-20 GPM  | 2,304 sq. ft.    | 890 gallons   | Stainless-steel          | 1/2 HP    | 1.5 HP        | 230V, 3Ø, 15.0A    | 8x6x4ft.                  | 1092 lb. |
| BIO-25R-0M10 | 0-25 GPM  | 3,456 sq. ft.    | 1,434 gallons | Marine aluminum          | 1/2 HP    | 2.0 HP        | 230V, 1Ø, 25.0A    | 12x6x4ft.                 | 1680 lb. |
| BIO-25R-1M10 | 0-25 GPM  | 3,456 sq. ft.    | 1,434 gallons | Stainless-steel          | 1/2 HP    | 2.0 HP        | 230V, 1Ø, 25.0A    | 12x6x4ft.                 | 1680 lb. |
| BIO-25R-0M30 | 0-25 GPM  | 3,456 sq. ft.    | 1,434 gallons | Marine aluminum          | 1/2 HP    | 2.0 HP        | 230V, 3Ø, 15.0A    | 12x6x4ft.                 | 1680 lb. |
| BIO-25R-1M30 | 0-25 GPM  | 3,456 sq. ft.    | 1,434 gallons | Stainless-steel          | 1/2 HP    | 2.0 HP        | 230V, 3Ø, 15.0A    | 12x6x4ft.                 | 1680 lb. |
| BIO-35R-0M10 | 0-35 GPM  | 6,480 sq. ft.    | 2,244 gallons | Marine aluminum          | 1/2 HP    | 2.0 HP        | 230V, 1Ø, 25.0A    | 12x7x5ft.                 | 1900 lb. |
| BIO-35R-1M10 | 0-35 GPM  | 6,480 sq. ft.    | 2,244 gallons | Stainless-steel          | 1/2 HP    | 2.0 HP        | 230V, 1Ø, 25.0A    | 12x7x5ft.                 | 1900 lb. |
| BIO-35R-0M30 | 0-35 GPM  | 6,480 sq. ft.    | 2,244 gallons | Marine aluminum          | 1/2 HP    | 2.0 HP        | 230V, 3Ø, 15.0A    | 12x7x5ft.                 | 1900 lb. |
| BIO-35R-1M30 | 0-35 GPM  | 6,480 sq. ft.    | 2,244 gallons | Stainless-steel          | 1/2 HP    | 2.0 HP        | 230V, 3Ø, 15.0A    | 12x7x5ft.                 | 1900 lb. |

*D = Discharge / R = Recycle  
230V/208V/460V 3Ø available on all models as options.*

# BIO Series Accessories



Submersible sump pump, 3-0216



Replacement sump pump, 3-0460



Towable grass cart, RC-0004-0002



Aluminum round sump pit, 56-0069 and aluminum sump grating, 56-0070



Peristaltic pump assembly, RC-0021-0001

## ACCESSORIES:

| PART NUMBER  | DESCRIPTION   | FITS MODELS                    |
|--------------|---|--------------------------------|
| 21-0152      | Tank-mount bracket – Used to mount #RC-0008-0002, waterfall filter, to BIO-tank, stainless-steel, for stainless-steel tanks   | BIO-20, BIO-25 & BIO-35 models |
| 21-0153      | Wall-mount bracket – Used to mount #RC-0008-0002, waterfall filter, to wall   | BIO-20, BIO-25 & BIO-35 models |
| 21-0213      | Tank-mount bracket – Used to mount #RC-0008-0002, waterfall filter, to BIO-tank, stainless-steel, for aluminum tanks  | BIO-20, BIO-25 & BIO-35 models |
| 3-0216       | Submersible sump pump – Stainless-steel replacement, 1/2 HP, 230V, 1Ø, 5.0A   | BIO-20, BIO-25 & BIO-35 models |
| 3-0397       | Aeration pump – 1.5 HP, 115V/230V, 1Ø   | BIO-25 & BIO-35 models         |
| 3-0398       | Aeration pump – 1.5 HP, 208-230V/460V, 3Ø   | BIO-25 & BIO-35 models         |
| 3-0399       | Transfer pump – 2.0 HP, 115V/230V, 1Ø   | BIO-25 & BIO-35 models         |
| 3-0400       | Transfer pump – 2.0 HP, 208-230V/460V, 3Ø   | BIO-25 & BIO-35 models         |
| 3-0401       | Transfer pump – 1.5 HP, 115V/230V, 1Ø   | All BIO models                 |
| 3-0402       | Transfer pump – 1.5 HP, 208-230V/460V, 3Ø   | All BIO models                 |
| 3-0460       | Replacement sump pump – Surface-mount, 1.0 HP, 230V, 8.0A   | All BIO models                 |
| 32-0918      | Buck booster – Adjusts voltage on equipment, mounted on unit  | All BIO models                 |
| 33-0661      | Trap and basket – Used on #3-0460, replacement sump pump  | All BIO models                 |
| 5-0200A18    | Cone bottom tank bracket, 300-gallons – Powder coated bracket to mount #RC-0008-0002, waterfall filter  | Consult factory                |
| 55-0068      | Mazzei injector, 2-inch – Used for aeration   | BIO-20, BIO-25 & BIO-35 models |
| 55-0126      | Mazzei venturi air injection system, 2-inch   | All BIO models                 |
| 56-0069      | Aluminum round sump pit – Lightweight aluminum design; 4-inch NPT inlet; 2-inch x 2-inch NPT and 1-inch x ¾-inch NPT outlets; 52-gallon capacity  | Consult dealer                 |
| 56-0070      | Aluminum sump grating – Lightweight aluminum cover for #56-0069, aluminum round sump pit  | Consult dealer                 |
| 855-0062     | Replacement peristaltic metering pump – For replacement of an existing pump in the field; includes wall mount plug  | All BIO models                 |
| RC-0004-0001 | Grass cart – Grass from #RC-0008-0002, waterfall filter, is collected and de-watered and can be easily transported for disposal   | All BIO models                 |
| RC-0004-0002 | Towable grass cart – Grass from #RC-0008-0002, waterfall filter, is collected and de-watered and can be easily transported for disposal   | All BIO models                 |
| RC-0008-0002 | Waterfall filter – Water flows from the system while grass and debris are separated and dropped into the grass cart, marine aluminum  | All BIO models                 |
| RC-0009-0001 | Single filter housing – Holds any 20-inch filter  | All BIO models                 |
| RC-0009-0002 | Double filter housing – Holds any combination of 2 – 20-inch filters  | All BIO models                 |
| RC-0009-0003 | Triple filter housing – Holds any combination of 3 – 20-inch filters  | All BIO models                 |
| RC-0021-0001 | Peristaltic pump assembly – Single metering pump wired into BIO unit, control box for automatic liquid microbe injection  | All BIO models                 |
| RC-0021-0002 | Dual peristaltic pump assembly – Two metering pumps in one set-up for dual liquid injection   | All BIO models                 |
| RC-0021-0120 | Plug-in single peristaltic pump assembly – Single metering pump with 120V plug and 54-inch power cord for liquid microbe injection. Ideal for injections into pits and tank. Requires outlet. | All BIO models                 |

# BIO Series

## Accessories & Options

### WATERFALL FILTER, RC-0008-0002

DESIGNED TO SEPARATE GRASS CLIPPINGS, LEAVES AND OTHER VEGETATION FROM WASTEWATER.

#### APPLICATIONS

- Golf courses
- Equipment wash pads
- Municipalities
- Rental yards

The grass clippings and water are pumped from wash catch pits to the waterfall filter. The filter is equipped with a wedge wire screen that separates the grass and debris and drops it into a grass cart below while the filtered water is directed to the biological water treatment system for further treatment.



| PART NUMBER  | MATERIAL OF CONSTRUCTION | WIRE SCREEN                               | DIMENSIONS (LxWxH) | SHIP WT. |
|--------------|--------------------------|---|--------------------|----------|
| RC-0008-0002 | Marine aluminum          | 304L stainless-steel, rated to 40-45 mesh | 36x20.5x25in.      | 100 lb.  |

### pH CONTROL SYSTEM

**WX-0037 230V**

**WX-0102 120V**

A desired pH set point is selected by the user and a pH adjustment chemical is metered into the wastewater by a peristaltic pump. The pH set point is achieved by either lowering or raising the pH level.

### DUAL CONTROL pH CONTROL SYSTEM

**WX-0134 230V**

**WX-0135 120V**

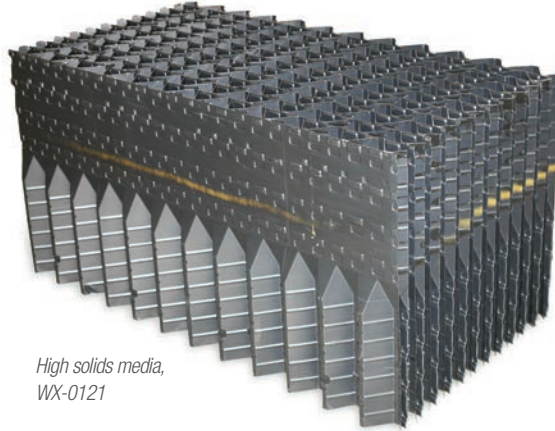
The dual control pH control system has two set points where pH can be adjusted either up or down.



# BIO Series Options



Magnetic drive pump, WX-0069



High solids media,  
WX-0121



Epoxy-lined tank, WX-0124

## OPTIONS:

| PART NUMBER | DESCRIPTION  | FITS MODELS                       |
|-------------|--|-----------------------------------|
| WX-0005     | Ozone – For specialized applications where sterilization of the waste stream is desired                | BIO-25R-0M10                      |
| WX-0014     | Pinch valve assembly – Pinch valve, bladder style (used on cone bottom tanks), 2-inch, 230V, 1Ø        | All BIO models                    |
| WX-0015     | Ozone – For specialized applications where sterilization of the waste stream is desired                | BIO-35R-1M10                      |
| WX-0029     | 550-gallon product tank expansion – For when larger volume of usable water is needed                   | All BIO models                    |
| WX-0037     | pH control system, 230V – For when pH adjustment is needed   | All BIO models                    |
| WX-0039     | Pinch valve assembly – Pinch valve, bladder style (used on cone bottom tanks), 2-inch, 120V, 1Ø        | All BIO models                    |
| WX-0040     | Ozone – For specialized applications where sterilization of the waste stream is desired                | BIO-20D-1M10                      |
| WX-0067     | Magnetic drive pump – 230V, 1Ø, seal-less  | BIO-20D models                    |
| WX-0068     | Magnetic drive pump – 208-230V, 3Ø, seal-less  | BIO-20D models                    |
| WX-0069     | Magnetic drive pump – 460V, 3Ø, seal-less  | BIO-20D models                    |
| WX-0070     | Magnetic drive pump – 230V, 1Ø, seal-less  | BIO-20R models                    |
| WX-0071     | Magnetic drive pump – 208-230V, 3Ø, seal-less  | BIO-20R models                    |
| WX-0072     | Magnetic drive pump – 460V, 3Ø, seal-less  | BIO-20R models                    |
| WX-0073     | Magnetic drive pump – 230V, 1Ø, seal-less  | BIO-25 & BIO-35 models            |
| WX-0074     | Magnetic drive pump – 208-230V, 3Ø, seal-less  | BIO-25 & BIO-35 models            |
| WX-0075     | Magnetic drive pump – 460V, 3Ø, seal-less  | BIO-25 & BIO-35 models            |
| WX-0089     | Ozone – For specialized applications where sterilization of the waste stream is desired                | BIO-20R-1M10 & BIO-20R-1M11       |
| WX-0100     | BIO sump pump conversion – Customized option, converts submersible pump to surface-mount sump pump     | BIO-20R, BIO-25R & BIO-35R models |
| WX-0102     | pH control system, 120V – For when pH adjustment is needed   | All BIO models                    |
| WX-0120     | High solids media – Allows for debris to travel easily through media with vertical design              | BIO-20 models                     |
| WX-0121     | High solids media – Allows for debris to travel easily through media with vertical design              | BIO-25 models                     |
| WX-0122     | High solids media – Allows for debris to travel easily through media with vertical design              | BIO-35 models                     |
| WX-0124     | Epoxy-lined tank – High solid polyamide epoxy-lined tank is chemical and corrosion-resistant           | BIO-20D aluminum models           |
| WX-0125     | Epoxy-lined tank – High solid polyamide epoxy-lined tank is chemical and corrosion-resistant           | BIO-20R aluminum models           |
| WX-0126     | Epoxy-lined tank – High solid polyamide epoxy-lined tank is chemical and corrosion-resistant           | BIO-25R aluminum models           |
| WX-0127     | Epoxy-lined tank – High solid polyamide epoxy-lined tank is chemical and corrosion-resistant           | BIO-35R aluminum models           |
| WX-0128     | Hour meter – Displays the number of hours unit has been in operation                                   | All BIO models                    |
| WX-0133     | Coagulation system – Used in heavy solids applications to help dirt and solids settle for easy removal | All BIO models                    |
| WX-0134     | Dual pH control, 230V – Two set points where pH can be adjusted  | All BIO models                    |
| WX-0135     | Dual pH control, 115V – Two set points where pH can be adjusted  | All BIO models                    |
| WX-0136     | Heater, 230V – Promotes heat for microbes, powered from main box, additional 20A required              | BIO-20R, BIO-25R & BIO-35R models |
| WX-0137     | Heater, 460V – Promotes heat for microbes, powered from main box, additional 20A required              | BIO-20R, BIO-25R & BIO-35R models |
| WX-0138     | Heater, 230V – Promotes heat for microbes, powered from main box, additional 20A required              | BIO-20 models without front deck  |
| WX-0139     | Heater, 460V – Promotes heat for microbes, powered from main box, additional 20A required              | BIO-20 models without front deck  |
| WX-0142     | 250-gallon auxiliary poly tank – Allows you to treat the BIO water with ozone in a separate poly tank  | All BIO models                    |

*Ozone is not available on Marine Aluminum models unless WX-0142 is included.*



# BIO Series

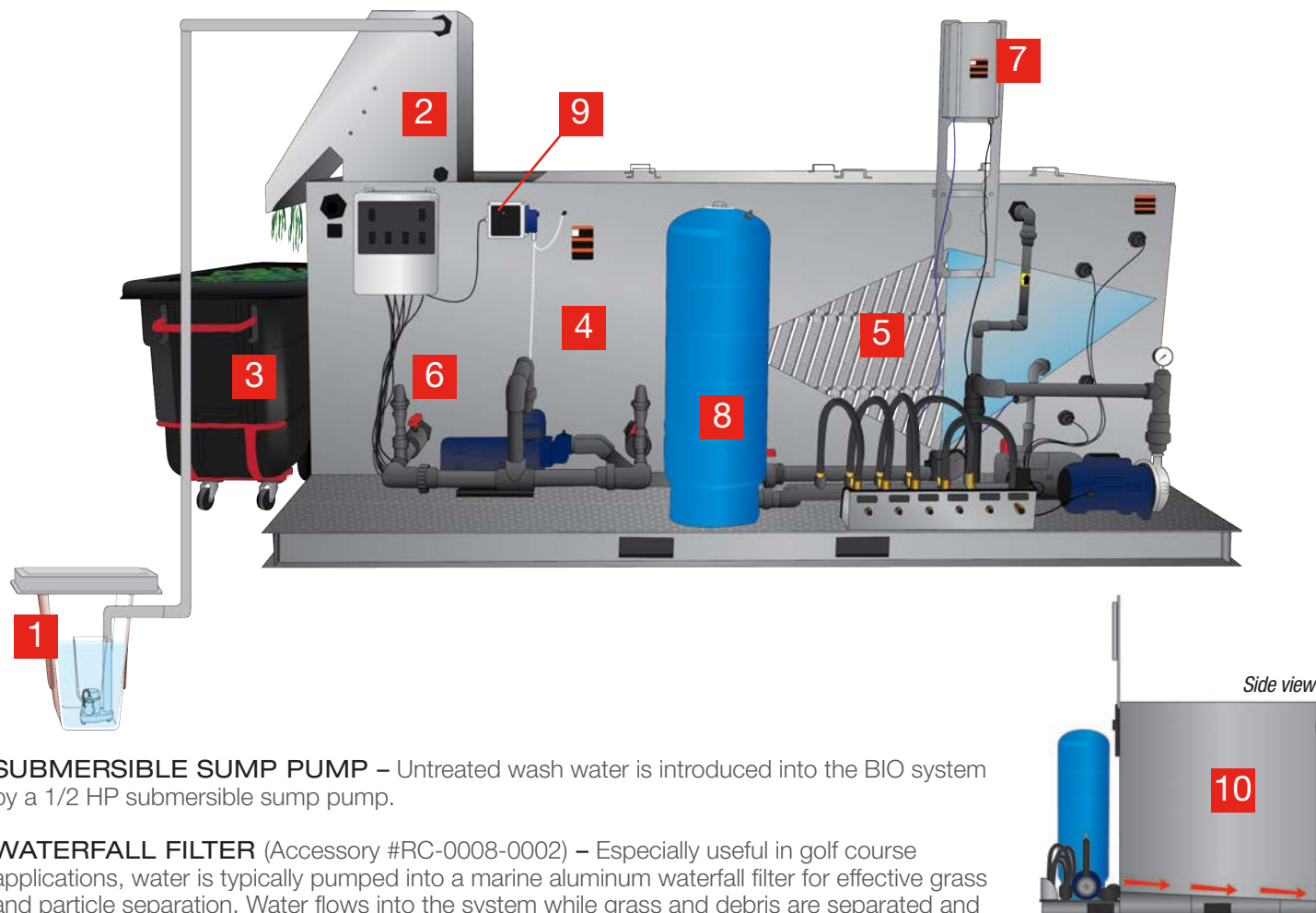
## System Set-Up and Epoxy-Lined Tanks



*Epoxy-lined tank, see options page 8*

# BIO Series

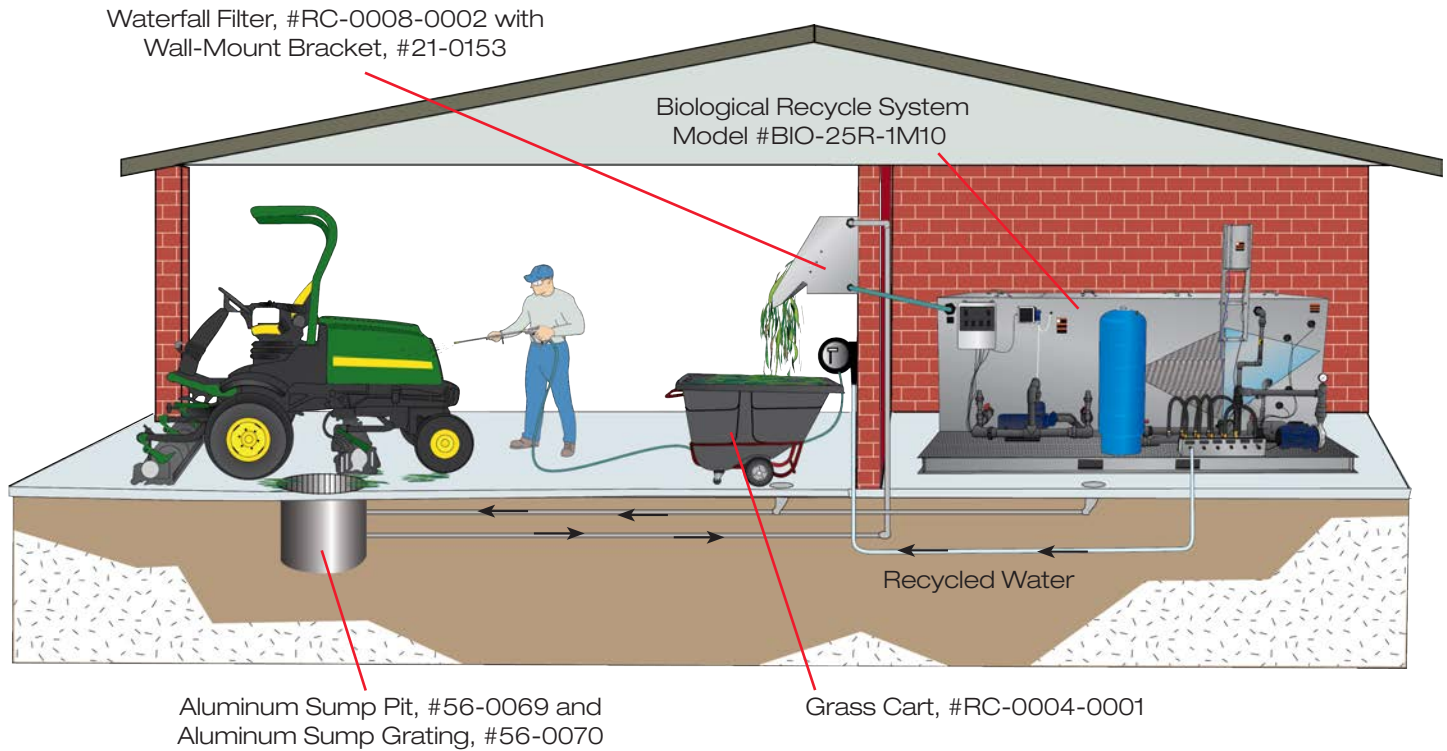
## Process & Flow Description



1. **SUBMERSIBLE SUMP PUMP** – Untreated wash water is introduced into the BIO system by a 1/2 HP submersible sump pump.
2. **WATERFALL FILTER** (Accessory #RC-0008-0002) – Especially useful in golf course applications, water is typically pumped into a marine aluminum waterfall filter for effective grass and particle separation. Water flows into the system while grass and debris are separated and dropped into the grass cart.
3. **GRASS CART** (Accessory #RC-0004-0001) – Grass from the waterfall filter is collected in the grass cart. Grass is de-watered through a specially designed stainless-steel screen in the grass cart that allows the cart to be filled with grass and debris without clogging the screen. Water drains back to the pit and the grass can easily be transported for disposal.
4. **BIOREACTION TANK** – Untreated wastewater is pumped in the first chamber of the stainless-steel tank, where solids are precipitated and the microbes begin their work. The tank has up to 2,244 gallons of holding capacity to provide maximum treatment time for the biological microbes.
5. **BIOFILM GENERATIVE MEDIA** – The bioreaction portion of the system houses literally thousands of square feet of biological media surface area where the microbe growth is maximized. Water flows through the media and around a series of baffles, changing direction countless times and maximizing contact with "hungry" microbes. The microbes then treat the water by consuming a broad range of organic constituents (such as herbicides, pesticides, oils, grease, etc.) turning them into carbon dioxide and water. To ensure proper and continued colonization, microbes are added periodically - a process called inoculation.
6. **AERATION SYSTEM** – A unique aeration system injects large amounts of oxygen into the wastewater. Generating dissolved oxygen is critical for maximizing the health and activity level of microbes and the size of the colony.
7. **OZONE (OPTION)** – An ozone generator is an option for specialized applications where sterilization of the waste stream is desired. (Ozone injection is not available for aluminum tank systems)
8. **PRESSURIZED TANK** – Once water is biologically treated, a pressurized tank and pump deliver up to 35.0-GPM of recycled water to three outlet ports.
9. **PERISTALTIC PUMP** (Option) – Self-priming for passive automatic liquid microbe injection.
10. **SLOPED BOTTOM TANKS** – Makes regular scheduled maintenance easier.

# BIO Series

## Sample Equipment Wash Pad Application



### RECOMMENDED APPLICATIONS:

- Rental Yards
- Golf Courses
- Heavy Equipment Dealers
- Trucking Facilities
- Military Bases
- Truck Rental Fleets
- Diesel Repair Facilities
- Forklift Washing Operations
- Aircraft Maintenance and Restoration
- Shipyards
- Municipalities/State DOTs
- Oil Fields
- Engine Rebuilders and Manufacturers

### THE IMPORTANCE OF A PROPER PIT SYSTEM:

Once equipment is washed, the untreated wash water flows into your pit system. A proper pit system for your application is the first step in proper wash water treatment and a critical element in any wash water recycle system.

Consult your dealer to determine the pit system configuration that works best for your application.

### THE RIGHT TOUCH

Our stainless-steel tanks go through a passivation process after the welding phase of production. This ensures a quality product with low maintenance.



Before



After

# Fiberglass Pits & Consumables

## IN-GROUND FIBERGLASS PIT SYSTEMS

### 3' x 9' PIT SYSTEMS

| PART NUMBER   | PIT SIZE (FT.) | DESCRIPTION   | SHIP WT. |
|---------------|----------------|---|----------|
| 12-0074       | 3x9x4.5        | 3-stage collection pit, fiberglass, 600-gallon capacity   | 480 lb.  |
| 12-0223       | 3x9x4.5        | 3-foot x 9-foot baffleless pit, fiberglass, 600-gallon capacity   | 480 lb.  |
| 12-0238       | 3x9x4.5        | 2-stage collection pit with single baffle, fiberglass, 600-gallon capacity  | 480 lb.  |
| 12-0244       | 3x9x4.5        | 3-stage collection pit with middle weir and third baffle, fiberglass, large solids settling area, 600-gallon capacity | 480 lb.  |
| 20-1505A18    | Fits 3x9       | Pit liner assembly, painted; 2 qty. are required  | 45 lb.   |
| 56-0032       | Fits 3x9       | Aluminum hinged diamond plate cover with 3 frame sections   | 100 lb.  |
| RC-0001-0003  | Fits 3x9       | Brace kit for installation of 3-stage collection pit  | 200 lb.  |
| RC-0018-0001* | Fits 3x9       | Steel grating for pit; 3,060 lb./ft. <sup>2</sup> uniform load rating   | 546 lb.  |
| RC-0018-0002* | Fits 3x9       | Steel grating for pit with steel cover; 3,060 lb./ft. <sup>2</sup> uniform load rating                                | 680 lb.  |

\*May combine RC-0018-0001 and RC-0018-0002 to have both open and closed sections for the 3' x 9' pits.

### 3' x 3' PIT SYSTEM

| PART NUMBER  | PIT SIZE (FT.) | DESCRIPTION  | SHIP WT. |
|--------------|----------------|--|----------|
| 12-0071      | 3x3x4.5        | Catch basin, fiberglass, 100-gallon capacity   | 190 lb.  |
| 20-0480A18   | Fits 3x3       | Steel grating for pit, 2 sections; 6,250 lb./ft. <sup>2</sup> uniform load rating, H-20 load rated | 250 lb.  |
| 20-1533A18   | Fits 3x3       | Pit liner assembly, painted  | 26 lb.   |
| 56-0031      | Fits 3x3       | Aluminum diamond plate cover and frame   | 30 lb.   |
| RC-0001-0002 | Fits 3x3       | Brace kit for installation of 3-foot x 3-foot pit  | 150 lb.  |

### 2' x 2' PIT SYSTEM

| PART NUMBER  | PIT SIZE (FT.) | DESCRIPTION  | SHIP WT. |
|--------------|----------------|--|----------|
| 12-0073      | 2x2x3          | Sump pit, fiberglass, 50-gallon capacity   | 92 lb.   |
| 20-0479A18   | Fits 2x2       | Steel grating for pit; 6,660 lb./ft. <sup>2</sup> uniform load rating, H-20 load rated | 100 lb.  |
| 56-0030      | Fits 2x2       | Aluminum diamond plate cover and frame   | 60 lb.   |
| RC-0001-0001 | Fits 2x2       | Brace kit for installation of 2-foot x 2-foot pit                                      | 75 lb.   |

Additional product information available in the Pit Systems Brochure.



## CONSUMABLES

| PART NUMBER  | DESCRIPTION   | CFU COUNT             |
|--------------|---|-----------------------|
| AW-0058-0020 | Liquid concentrate hydrocarbon bacteria – Use with peristaltic pump, 5-gallons                  | 54 Million CFU/ml     |
| AW-0058-0021 | Surface prep liquid microbes – For concrete and parts cleaning, removes hydrocarbons, 5-gallons | 67 Million CFU/ml     |
| RC-2014-0002 | Hydrocarbon microbes – 2 lb. solid cube, lasts approximately 2-3 months                         | 4 Billion CFU/gm      |
| RC-2017-0001 | Hydrocarbon microbes – Tablet, lasts approximately 15-30 days                                   | 4 Billion CFU/gm      |
| RC-2001-0001 | Hydrocarbons/VOCs mix – Microbes, monthly inoculation   | 2.27 Trillion CFU/lb. |
| RC-2002-0001 | Golf course mix – Microbes, monthly inoculation   | 2.27 Trillion CFU/lb. |
| RC-2003-0001 | Fats, oils and greases – Microbes, monthly inoculation  | 2.27 Trillion CFU/lb. |



3647 Standish Avenue, Santa Rosa, CA 95407  
(707) 585-0100 | [www.northbayequipment.net](http://www.northbayequipment.net)