USER MANUAL

Wall Mounted Concentrate Foam Unit

EC

11022018



Read this manual completely and understand the machine before operating or servicing it.

- Read all instructions before installing or operating unit.
- Always wear appropriate personal protective equipment (PPE) when operating or servicing unit.
- Always follow all chemical safety precautions and handling instructions provided by the chemical manufacturer and Safety Data Sheet (SDS).
- If this unit is modified or serviced with parts not listed in this manual, the unit may not operate correctly.
- Never point the discharge wand at yourself, another person, or any object you do not want covered in chemical.
- Always depressurize unit after use, as described in the After Use Instructions. Always store unit depressurized, with the discharge valve in the closed position.
- Do not exceed an incoming air pressure of 100 psi (7 bar).
- Do not exceed a fluid temperature of 100°F (37°C).
- Always flush the unit with fresh water for 5 minutes when switching from an alkaline to an acid or an acid to an alkaline.
- Never use unit with hydrocarbons or flammable products.
- Only use clean and dry air. Air must be filtered and free of moisture or pump life will be diminished. If needed, install an air dryer before unit.
- Do not use an air lubricator before the unit.

PROTECT THE ENVIRONMENT

Please dispose of packaging materials, old machine components, and hazardous fluids in an environmentally safe way according to local waste disposal regulations.

Always remember to recycle.

*Specifications and parts are subject to change without notice.

REQUIREMENTS		
Compressed air requirements	40-80 psi (3-5 bar) with 5-10 CFM (141.6-283.3 l/min)	
Water requirements	10-100 psi (0.69-6.9 bar) Backflow prevention is required – consult local plumbing ordinances for more information.	
Liquid temperature range	40-100°F (4.4-37°C)	
Chemical compatibility	Chemical products used with this equipment must be formulated for this type of application and compatible with unit materials and pump seals. For more information on chemical compatibility, consult the manufacturer or SDS for your product or contact our customer service department.	

SPECIFICATIONS		
Power type	Compressed air	
Chemical pickup type	Draws from concentrated product	
Dilution ratio range (water:chemical)*	14:1 to 320:1	
Number of products unit can draw from (and whether it draws simultaneously or one at a time)	One product	
Suction line length/diameter	8 ft. (2.4 m) clear hose with 1/4 in. (6.4 mm) inside diameter	
Discharge hose diameter/length	50 ft. (15.2 m) hose, with 3/4 in. (19.1 mm) inside diameter	
Discharge wand/tip type	7 in. (17.8 cm) stainless steel wand with zero tip and ball valve	
Output distance	25-30 ft. (7.6-9.1 m)	
Flow rate*	2 gal/min (7.6 l/min)	
Pump seals	Santoprene	

*Dilution rates and flow rates given are based on chemical with viscosity of water and factory air pressure settings.

Installation Instructions:

- 1. Remove all components from packaging.
- Select desired area to mount the control box. Note: We recommend mounting the control box at a height of 6 feet or less. The chemical suction line must reach the bottom of the chemical container. The bottom of the chemical container should not be positioned higher than the bottom of the control box.
- 3. Attach the control box mounting feet to the back of the control box, using the four screws provided in the parts package.
- Mount the control box to the wall using four of the screws and plastic anchors provided in the parts package. Note: To drill holes for the plastic anchors, use a 5/16 inch drill bit.
- Mount the hose hanger in a convenient location using the remaining two screws and anchors provided in the parts package.
- 6. Attach the discharge hose assembly to the discharge hose barb and secure it with the larger hose clamp provided in the parts package.
- 7. Connect the air inlet hose barb provided in the parts package to the air inlet valve located on the side of the control box. Then attach a 3/8 inch I.D. air line from your air compressor to the air inlet hose barb, and secure it with the smaller hose clamp provided in the parts package.
- Connect a water line to the unit. The control box has a 1/2 inch FPT water inlet fitting. A garden hose adapter fitting assembly is included in the parts package. Note: A back-flow preventer must be installed in the water line – check local plumbing codes to ensure proper installation.
- Open the cover of the control box. Insert the proper metering tip and connect the chemical intake line to the injector inlet barb. Note: Use the included metering tip color chart to

determine the appropriate metering tip based on the product and dilution rate you will be using.

 Place the other end of the chemical intake line into a chemical container.
Note: The chemical suction line must reach the bottom of the chemical container. A strainer must be used on the chemical intake line.

METERING TIP COLOR CHART

Metering tip color	Ounces of chemical per gallon of water*	Dilution ratio (water:chemical)*
Turquoise	0.40	320:1
Pink	0.80	160:1
Light Blue	0.95	135:1
Brown	1.30	98:1
Red	1.40	92:1
White	1.85	69:1
Green	1.90	67:1
Blue	2.65	48:1
Yellow	2.95	43:1
Black	4.80	27:1
Purple	6.40	20:1
Gray	6.80	19:1
No Tip	9.20	14:1

*Injection rates will vary based on chemical viscosity, air pressure, and many other factors. We recommend testing unit output to verify injection rate prior to use.

Operation Instructions:

- 1. Follow all instructions from chemical manufacturer.
- 2. With the discharge valve in the closed position, open the air inlet valve.
- Slowly open the discharge ball valve to begin foaming. The discharge ball valve should be completely open while foaming.
- 4. While the unit is running and discharging product, adjust the needle valve, located inside the control box, as needed to regulate the wetness or dryness of the foam following the steps below:
 - e. Close needle valve completely in clockwise direction.
 - f. Open needle valve in counter-clockwise direction 2 complete turns.
 - g. Continue to open needle valve in ¼ turn increments, allowing 30 seconds between adjustments, until desired consistency of foam is achieved.

After Use Instructions:

We recommend flushing the discharge hose and depressurizing the unit after each use.

- 1. Place the chemical suction line into a container of water.
- With the unit running, open the discharge valve, and allow the unit to be flushed with fresh water for approximately 2-4 minutes or until all chemical has been discharged from system.
- 3. Shut off the air supply to the unit by closing the air inlet valve.
- 4. Shut off the water supply to the unit.
- 5. Open the discharge valve to relieve any pressure remaining in the unit.
- 6. Close the discharge valve after all pressure has been relieved from the unit. Store the unit with the discharge valve in the closed position.

Maintenance Instructions:

To keep the unit operating properly, periodically perform the following maintenance procedures:

Note: Before performing any maintenance, ensure that the unit has been disconnected from the air and water supply and depressurized according to the After Use Instructions.

- Inspect the pump for wear and leaks.
- Inspect all hoses for leaks or excessive wear. Make sure all hose clamps are in good condition and properly secured.
- Replace the filter located within the air regulator as needed. Clean by unthreading the air regulator bowl from the air regulator.
- Check the chemical metering tip, suction line and strainer for debris and clean as needed.
- Drain your air compressor tank on a regular basis to help extend pump life. An air source with a high moisture content will accelerate pump wear. Note: If your air source has a high moisture content, you may wish to install a water separator before the unit.

Troubleshooting Instructions:

- Check to ensure that the discharge hose is uncoiled properly, and that there are no kinks that could obstruct fluid flow.
- Check the air regulator bowl and air filter for debris such as water, oil, or rust particles. Clean by unthreading the air regulator bowl from the air regulator.
- If the needle valve is open too far, the pump may cycle improperly due to lack of air pressure. If this occurs, close and readjust the needle valve as described in the Operation Instructions.

- Make sure proper foaming chemical and concentration are being used.
- If air passes through the pump without cycling, the pump needs to be replaced.
- If solution backs up into the air regulator bowl, the check valve needs to be replaced.
- If foam comes out wet, no matter where the needle valve is positioned, the check valve may need to be replaced.
- Check for proper air pressure on the air gauge. The air regulator is factory set at 50 psi (3.4 bar). Operating range is 40 to 80 psi (3 to 5 bar) with 5 to 10 CFM (141.64 to 283.30 l/min).
- If the unit operates at a reduced air pressure:
 - Check the air compressor supplying the unit. If the pressure is less than 40 psi (3 bar), turn the unit off until the compressor can catch up.
 - If the air supply is 50 psi (3.4 bar) or above, check the air gauge, which should read near 50 psi (3.4 bar). If the air gauge reads more or less than 50 psi (3.4 bar), adjust the pressure by turning the knob on the top of the air regulator.
- Check the chemical metering tip, suction line and strainer for debris or damage. Clean or replace as needed. To prevent damage to the unit, the strainer must always be used.
- Check for proper water pressure on the water pressure gauge. To check the pressure:
 - With the unit running, open the discharge valve and allow the unit to run for about 1 minute.
 - Close the discharge valve.
 - Check the water pressure gauge. The pressure should read 20 psi (1.4 bar).
 - If necessary, adjust the water regulator using the flathead screw on the regulator body. The water pressure should be set at 20 psi (1.4 bar). Setting the pressure higher or lower may damage the unit or cause it to malfunction.

REPLACEMENT PARTS: Reference Food & Beverage Parts Manual "Foamers/Drop Stations" section on Sales Support for replacement parts.