The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 8

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1928817

Procurement Type: Central Master Agreement

Vendor ID: 000000121592

Legal Name: GVM INC

Alias/DBA:

Total Bid: $0.00

Response Date: 04/13/2026

Response Time: 9:06

Responded By User ID: gvmsnow15

First Name: Joe

Last Name: Anderson

Email: jwa@gvminc.com

Phone: 7172531228

SO Doc Code: CRFQ

SO Dept: 0803

SO Doc ID: DOT2600000081

Published Date: 4/13/26

Close Date: 4/15/26

Close Time: 13:30

Status: Closed

Solicitation Description: Automatic Brine Maker with Remote Fill Capability

Total of Header Attachments: 8

Total of All Attachments: 8

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Solicitation Response

Proc Folder:	1928817
Solicitation Description:	Automatic Brine Maker with Remote Fill Capability
Proc Type:	Central Master Agreement

Solicitation Closes	Solicitation Response	Version
2026-04-15 13:30	SR 0803 ESR04062600000006684	1

VENDOR

000000121592
GVM INC

Solicitation Number: CRFQ 0803 DOT2600000081

Total Bid: 0 **Response Date:** 2026-04-13 **Response Time:** 09:06:13

Comments:

FOR INFORMATION CONTACT THE BUYER
John W Estep
304-558-2566
john.w.estep@wv.gov

Vendor
Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Automatic Brine Maker with Remote Fill Capability	0.00000	EA	90517.800000	0.00

Comm Code	Manufacturer	Specification	Model #
22101700			

Commodity Line Comments:

Extended Description:

SEE ATTACHED PRICING PAGE - ATTACHMENT A, FOR ACTUAL COST

EZ BRINE SYSTEM

EBS Series

EZ Brine Premier

GVM's automatic **EZ Brine Systems** (EBS) are quick, easy, and accurate solution for manufacturing salt brine and custom chemical blends. Flexible enough to meet the needs of any organization, the EZ Brine can be used as a batch system to produce blends on an as-needed basis or as a continuous manufacturing system to ensure your blend is always available. In addition to salt brine, the EZ Brine can blend up to three different micro-ingredients allowing users to produce custom blends to work at various temperatures. Additives and micro-ingredients allow blends to work at lower temperatures and often for longer periods of time.

The programmable controller computer is simple to operate and helps to guide the user through the process. The system constantly monitors salinity and pump performance in addition to logging brine production data. Built in WiFi allows for easy remote monitoring and the built-in printer is an added convenience to quickly print logged data.

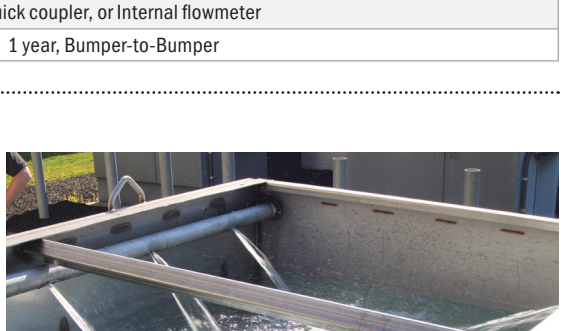
- Produces up to 6,000 gal. of brine per hour (depending on water source)
- Built in computer for easy programing, remote monitoring, and data logging
- Mix brine and up to 3 micro-ingredients, injected on a continuous basis, as programmed by the user
- Continuous or batch style production
- 304 SS mix tank, with skid-style base
- 88 in. wide top opening for easy loading
- All controls mounted in a watertight and corrosion resistant enclosure
- Scot 7.5 hp, 3500 rpm, all SS centrifugal pump
- EZ Brine Roll Off System is a self-contained unit that is installed in one platform.

374 Heidlersburg Road, Biglerville, Pa 17307
800-458-5123 | gvminc.com

EZ BRINE SYSTEM

		EZ Brine Premier	EZ Brine Roll Off
Roll Off Platform	Dimensions	–	8 x 22.5 ft (W x L), channel construction, ¼ in. thick top sheet, hot-dipped galvanized, with 1.8 ft loading hooks
	Max. Skid Dimensions	–	24.25 x 8.19 x 6.5 ft (LxWxH) (with ladder up) with 8 in. rollers for loading and unloading
	Railing Dimensions	–	2 detachable sections, 11ga 1.5 in. square MS tubing, 17 in. gap railing, 15 x 3.5 ft (LxH), yellow
	Ladder Dimensions	–	Detachable with bolt & nut, lockable position w/ 4 in. plated cotter pin – 4 in. length ½ in. dia., 4.5 ft. high, 1 ft between rungs, 16 in. between side rails, 47.9 lbs, yellow
	Overall Weight	–	3960 lbs
Tank Specifications	Dimensions	120 x 64 x 52 in. (L x W x H)	
	Material	304 SS	
	Tank Construction	Built-in forklift pockets & lifting lugs	Built-in forklift pockets, galvanized generator & operator enclosure frame, 304 SS enclosure panels
	Liquid Capacity	1200 U.S. gal. (4542.5 L)	
	Clean Brine Capacity	225 gal.	
	Salt Capacity	5.5 yd^3	
	Mixing Components	(2) 2 in. SS spray bars (2 bottom-mounted)	
Control/Blend Station	Frame	Skid-style base	
	Frame Dimensions	54 x 77 x 72 in. (L x W x H)	
Motor & Pump	Pump Model/Type	Scot 7.5 hp SSI, Centrifugal, frame-mounted	
	Pump Materials	304 SS	
	Flow Rate	110 gpm @ 3500 rpm	
	Pump Head	60 PSI	
	Impeller	5.98 in. diameter	
Sensors, Gauges, & Measuring Devices	Salinity Level	Refractometer Salinity Sensor	
	Mix Tank Levels & Pump	Omega Pressure Transducer	
	Flow Control	Electric Banjo Valve, 2 in. 24 VDC Electric Valve	
Control & Enclosure	Monitor	11.125 x 7.625 in. touch screen	
	Remote Operation	Built-in WiFi & Printer	
Optional Add-Ons	Blending Packages (1-3)	(1) 1 hp pump per micro ingredient , (1) 1-¼ in. hose w/ camlock & quick coupler, or Internal flowmeter	
Warranty		1 year, Bumper-to-Bumper	

EZ Brine Roll Off System



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VIP™ 2 inline REFRACTOMETER
With IRIS Technology

Smart Sensors are Just…Smarter!

The new MISCO VIP2 ("Very Important Process") inline process refractometer is a great example of the latest advancements in smart-sensor technology. Since the intelligence for processing and communication is contained within the sensor itself, the VIP2 refractometer eliminates the need for an external control box. The stainless steel sensor head and sapphire measuring surface are designed to survive the toughest environments. The sensor mounts to your processes using an industry standard 2" Tri-Clamp fitting.

IRIS Smart-Sensor Technology

The VIP2 inline refractometer is afforded higher precision and accuracy thanks to MISCO's revolutionary new IRIS™ technology. IRIS, short for Intelligent Refractive Index Sensor, puts the "smarts" in smart-sensor and is at the heart of every VIP_2 refractometer. Thanks to IRIS, the VIP2 can instantly and accurately measure refractive index, temperature correct the reading, convert refractive index into a more user-friendly unit of measure, and then transmit the results to your data capture system.

Built to Take it

Fabricated from the highest quality 316L stainless steel, and passivated to provide the best possible corrosion resistance, the VIP2 inline refractometer is constructed for years of service in the harshest environments. A precision ground sapphire optic, the next hardest substance to diamond, provides a virtually scratch-proof window into your fluid's physical properties. Ensuring the best possible level of precision and accuracy, the ultra-high-resolution linear detector array can detect even the smallest changes in concentration.

No Control Box Necessary

The new smart-sensor paradigm entirely eliminates the need for a separate external control box. Not only does the VIP2 sensor do all the processing and communicating itself, it does so in a smaller size package, with greater concentration, temperature, and pressure ranges and, it is nearly five-times more accurate than its predecessor.

Flexible Communication Options

Each VIP2 sensor is equipped with a special communication card that allows it to communicate with the outside world. You may select either analog or digital output. The analog communication card allows the user to select proportional 4 to 20 mA or 0 to 10 Volt output. The digital communication card transmits sensor readings in ASCII text format via a RS232 serial connection. All VIP2 sensors can be connected to the USB port on a Windows® computer, through MISCO Inline Connect™ software, where they can be easily configured and calibrated.

MADE IN THE USA - Patent Pending -

Refractive Index Range:	1.3330 to 1.5000 nD20 (0 to 85 Brix) Equivalent
Resolution:	0.0001 nD20 (0.1 Brix) Equivalent
Precision:	+/- 0.0001 nD20 (+/- 0.1 Brix) Equivalent
Temperature Range:	-20 to 100 °C (-4 to 212 °F)
Pressure Range:	0 to 20.68 bar (0 to 300 psi)
Power:	5 to 24 VDC (3 VDC Optional)
Dimensions:	61 mm Tall x 64.1 mm Max Dia. (2.40" x 2.52")
Weight:	0.45 kg (1 lbs.)
Water Resistance:	IP68

MISCO®

www.misco.com

6275 Cochran Rd
Solon, OH 44139
TEL. 440-349-1500
Toll Free 800-358-1100

VIP™ inline $_2$ REFRACTOMETER

With IRIS Technology

Smart Sensors are Just…Smarter!

The new MISCO VIP$_2$ ("Very Important Process") inline process refractometer is a great example of the latest advancements in smart-sensor technology. Since the intelligence for processing and communication is contained within the sensor itself, the VIP$_2$ refractometer eliminates the need for an external control box. The stainless steel sensor head and sapphire measuring surface are designed to survive the toughest environments. The sensor mounts to your processes using an industry standard two inch Tri-Clamp fitting.

IRIS Smart-Sensor Technology

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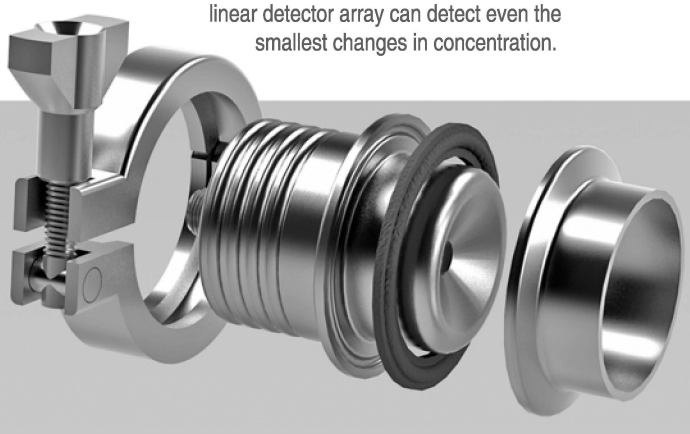
MADE IN THE USA - Patent Pending -



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Resolution:	0.0001 nD20 (0.1 Brix) Equivalent
Precision:	+/- 0.0001 nD20 (+/- 0.1 Brix) Equivalent
Temperature Range:	-20 to 100 °C (-4 to 212 °F)
Pressure Range:	0 to 20.68 bar (0 to 300 psi)
Power:	5 to 24 VDC (3 VDC Optional)
Dimensions:	61 mm Tall x 64.1 mm Max Dia. (2.40" x 2.52")
Weight:	0.45 kg (1 lbs.)
Water Resistance:	IP68

MISCO®

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Solon, OH 44139
TEL. 440-349-1500
Toll Free 800-358-1100

	IRIS	IRIS+	VIP$_2$
Range (Equivalence)*`	1.3330 to 1.3900 nD20	1.3330 to 1.3900 nD20	1.3330 - 1.5000 nD20
Resolution (Equivalence)	0.0001 nD 0.1 Brix	0.0001 nD 0.1 Brix	0.0001 nD 0.05 Brix
Precision (Equivalence)	+/- 0.0005 nD +/- 0.3 Brix	+/- 0.0003 nD +/- 0.2 Brix	+/- 0.0001 nD +/- 0.05 Brix
Adapter Fittings	5/16" (8 mm) Push-to-Connect	5/16" (8 mm) Push-to-Connect	2" Tri-Clamp
1,024 Element Detector Array	✔	✔	✔
LED Light Source @ 589.3 nm	✔	✔	✔
Sapphire Optic Material	✔	✔	✔
Sample Area Material	Polymer/Stainless Steel	316L Stainless Steel	Passivated 316L Stainless Steel
Body Material	Polymer	Polymer	Passivated 316L Stainless Steel
Auto Temperature Correction	✔	✔	✔
Temperature Range	41 to 104 °F (5 to 40 °C)	32 to 125 °F (0 to 52 °C)	-4 to 212 °F (-20 to 100 °C)
Pressure Range	0 to 36 psi (0 to 2.5 Bar)	0 to 50 psi (0 to 3.4 bar)	0 to 300 psi (0 to 20.68 bar)
Power Source	12 to 24 VDC	5 to 24 VDC	5 to 24 VDC
Dimensions	2" Dia. x 3.5" Long (5 cm x 8.9 cm)	2" Dia. x 3.5" Long (5 cm x 8.9 cm)	2.40" L x 2.52" Max. Dia. (61 mm x 64.1 mm)
Weight	11.5 oz. (0.33 kg)	1 lbs. (.45 kg)	1 lbs. (.45 kg)
Two User Calibration Points	✔	✔	✔
IP68 Protection Class	✔	✔	✔
Seals - Standard **	Viton & Buna-N	Kalrez	Fluorosilicone
USB Computer Interface	✔	✔	✔
4 to 20 mA Analog Option	✔	✔	✔
0 to 10 Volt Analog Option	✔	✔	✔
RS232 Digital Output Option		✔	✔
Made in the USA	✔	✔	✔

Operations Manual

EZ BRINE SYSTEM

2026 Model Year

800-458-5123 • www.gvminc.com
374 Heidlersburg Road, Biglerville, PA 17307

Part Number: 50-K2124

Revision: A

To Our Customer

Congratulations on your selection and purchase of a quality piece of GVM equipment. You have chosen an excellent product designed to achieve a maximum return on your investment.

Your local Dealer has performed the pre-delivery service inspections on your new machine. They will discuss and review the operating and maintenance instructions provided in this manual with you. Please contact your local Dealer at any time should you have a question or require parts for your machine.

We recommend that you or anyone who may operate this machine carefully and thoroughly read this entire manual before operation of the unit. Time spent becoming fully acquainted with the machine's features, performance, adjustments, service, and maintenance process will greatly lengthen the life and performance of your equipment.

This manual has been prepared for the owners and operators of the GVM EZ Brine System. Read this manual carefully and become familiar with all instruments and controls. Practice safe operating and maintenance techniques for the EZ Brine System. GVM offers a variety of options and accessories; therefore, illustrations and/or pictures in this manual may show the EZ Brine System equipped other than standard.

This manual is part of your EZ Brine System. File it in a safe and easily accessible place at all times as a ready reference for anyone who may operate the EZ Brine System. If this manual is damaged or lost, a replacement manual may be purchased from your local Dealer.

As you would with all quality equipment, keep your EZ Brine System in good working order. This manual provides essential information for proper service and periodic maintenance including charts with machine specifications and capabilities.

A Vanair Powerflex AE Generator manual package is also supplied with your EZ Brine System. Read this manual carefully and become familiar with all maintenance and service procedures as recommended by Vanair.

TABLE OF CONTENTS

1.1 - Acronyms and Abbreviations

Abbreviation	Description
aM	One thousandth (10-3) of an ampere
bar	metric unit of pressure
°C	degrees Celsius
°F	degrees fahrenheit
ft-lbf	foot-pound force
HMI	human machine interface
in-lb	inch-pound
mph	miles per hour
N-m	newton meter
psi	pounds per square inch
qt	quart
rpm	revolutions per minute
VDC	volts direct current

1.2 - Serial Number Reference Information

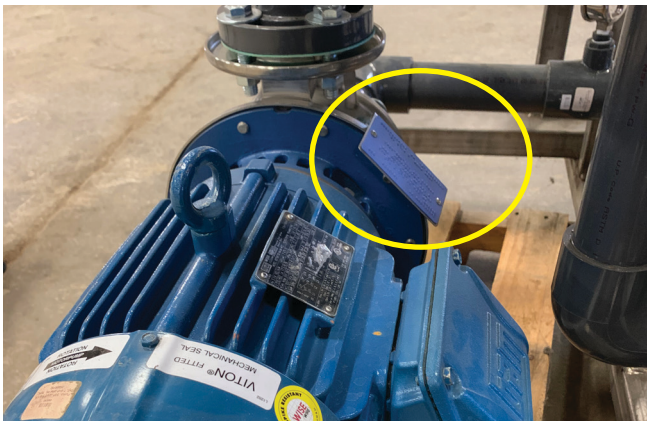
Always use the serial numbers of your machine when ordering parts, requesting service information, or for troubleshooting information for your EZ Brine System. Model year changes may use different parts, service information, or have different troubleshooting procedures. Referencing serial numbers will allow your dealer to better serve you and your machine and minimize downtime.

Use this as a quick reference guide. Record all serial numbers from your machine's serialized components in the provided chart below. Reference Section 1.3 for the locations of serial numbers on your machine. Certain listed components may or may not be present depending on machine configuration.

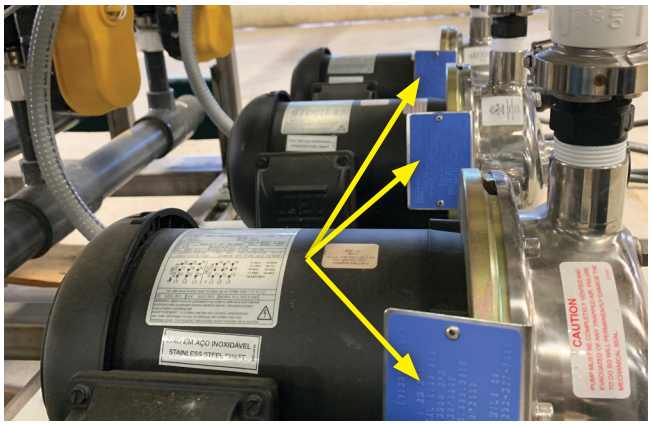
Component	Serial Number
EZ Brine System	
EZ Brine Pump	
EZ Brine Mix Pump	
Generator	
Generator Engine	
Generator Air Compressor	
Generator Electric Motor	
Hose Reel	
Hose Reel Motor	
Dura Impulse GS4 Automation Direct	
Dura Impulse GS4 Module	
Roll-off Platform	
Other Attached Serialized Components	
Other Attached Serialized Components	

1.3 - Serial Number Locations

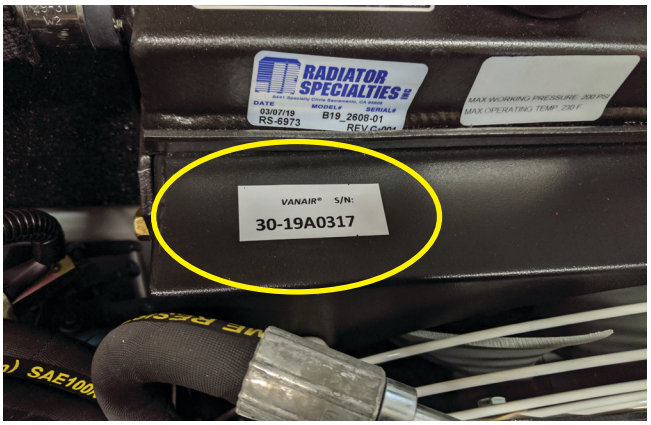
EZ Brine System: Located on frame member.



EZ Brine Pump: Located on the top and side of the pump.

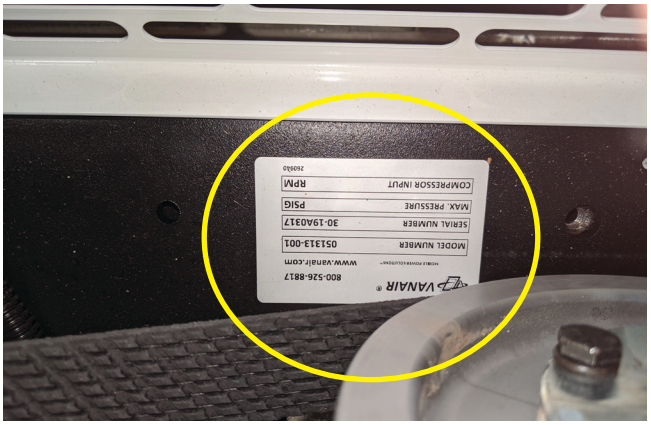


EZ Brine Mix Pump: Located on the sides of each individual pump



Generator (if equipped): Located on the side of the hose reel.

Generator Engine (if equipped): Located inside the generator enclosure.



Generator Air Compressor (if equipped): Located on the side of the hose reel.

1.3 - Serial Number Locations *continued*

Generator Electric Motor (if equipped): Located inside the generator enclosure.

Hose Reel (if equipped): Located on the frame of the hose reel.

Hose Reel Motor (if equipped): Located side of the hose reel unit.

Roll-off Platform (if equipped): Located on the front of the platform.

Dura Impulse GS4 Automation Direct: Located on the side of the unit inside the control panel box.

Dura Impulse GS4 Module 2: Located on the side of the unit inside the control panel box.

Before Operating the Unit

Safety decals are used for important safety messages. When you see any safety decal, follow the safety message to avoid personal injury, death, or equipment damage.

GVM makes every effort to ensure maximum safety. However, a careful study and thorough understanding of this manual and the machine's warning signs is essential for the safe handling and correct operation of the GVM EZ Brine System.

Follow safety warnings at all times.

2.1 - Safety Decal Maintenance

- Ensure all safety decals are clean and legible at all times.
- Replacement of safety decals that are illegible or missing is required. Failure to comply may result in personal injury, equipment damage, or death.
- Refer to safety decal placement (Section 2.3) for safety decal part numbers. Please contact your local Dealer for replacement decals.

DANGER: Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury. The signal word is to be limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

WARNING: Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION: Indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury. It may also be used to alert against unsafe practices.

2.2 - Safety Decal Installation

- **Step 1:** Clean the surface: Remove the old decal and clean the area with an all-purpose cleaner.
- **Step 2:** Position the decal: Reference Safety Decal Placement (Section 2.3) to ensure the exact position of the decal before applying. Mark the edges of the decal for proper placement. Failure to place decals in proper locations may result in personal injury, equipment damage, or death.
- **Step 3:** Apply the decal: Remove the backing of the decal. Align the decal with the surface markings and using firm hand pressure or a squeegee, apply the decal to the surface, beginning in the center and working outward in all directions. Remove the pre-mask from the face of the decal. Inspect the decal for air pockets. If air pockets exist, use your thumb or a squeegee to press air pockets outward.

2.3 - Safety Decal Placement

2.3 - Safety Decal Placement

1

Item 1: Caution, Risk of Electric Shock

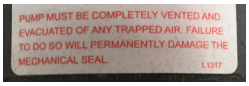
- Disconnect power sources before servicing.

2

Item 2: Caution, Risk of Electric Shock

- Disconnect power sources before servicing.

3



Item 2: Caution, Risk of Electric Shock

- Disconnect power sources before servicing.

2.4 - Common Safety Warnings

Read this entire document before installing, configuring, operating, or maintaining this GVM product.

Activities including installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice. If this equipment is used in a manner not specified by the manufacturer, protections provided by the equipment may be impaired. The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, GVM cannot assume responsibility or liability for actual use based on the examples and diagrams.

Always follow your company's safety procedures, and exercise caution, when installing and operating this equipment. All use of this equipment must follow your company's safety requirements as well as current OSHA requirements. Never operate this equipment if you suspect it is damaged in any way. Only qualified persons familiar with the construction and operation of this equipment should perform work described in this set of instructions. Equipment can start automatically. Lockout/tagout before servicing.

2.5 - Electrical Safety Hazard

All equipment shall be installed and serviced by qualified or licensed electricians in accordance with all applicable national, state, and local electrical codes and regulations — including National Electrical Code, Canadian Electrical Code,

UL Standards, etc. Unless a panel has been designed for unusual service conditions, it should not be located where it will

be exposed to ambient temperatures above 105° F (40° C), corrosive or explosive fumes, dust,

This section reviews the various setup screens and options in the touchscreen HMI.

NOTE: A user must first be logged in as an Admin to set up the GVM EZ Brine Skid. See the beginning of Section 4, Basic Operation, for instructions on logging in to the HMI.

3.1- Products

Salt Brine

- **Item 1:** Name
  The name of brine that will be displayed wherever brine is referenced.

3.1- Products *continued*

- **Item 2:** Hold Back
  Used if there is a micro product being injected into the brine. If the micro has not finished dispensing by the time the remaining amount of brine is equal to the hold back, the brine will pause and allow the micros to finish, then resume once they are complete. This ensures that there is enough brine to flush the micros out of the system at the end of the order.
- **Item 3:** Low Flow Threshold
  When the remaining amount of brine is equal to the low flow threshold, the pump will slow **down** to a pre-set speed. Slowing the pump down at the end of the order ensures that product is not over-delivered.
- **Item 4:** Low Flow Speed
  The pre-set speed from 0-100% that the pump will slow down to when the low flow threshold is met.
- **Item 5:** Anticipation
  When the remaining amount of product equals the anticipation amount, the pump will be stopped to account for the additional flow while the pump is slowing down. This is done to prevent over-shooting the target volume. For example, if a load is run with an anticipation of 0 and a requested volume of 100 gallons, and the system delivered 105 gallons, a value of 5 would be set in the anticipation to stop 5 gallons early on the next run.
- **Item 6:** K-Factor (Pulses/Gallon)
  The meters utilized have a pulse output that is converted to gallons dispensed. This number is specified by the meter manufacturer. If meter inaccuracies have been detected, this number can be adjusted to correct the error.

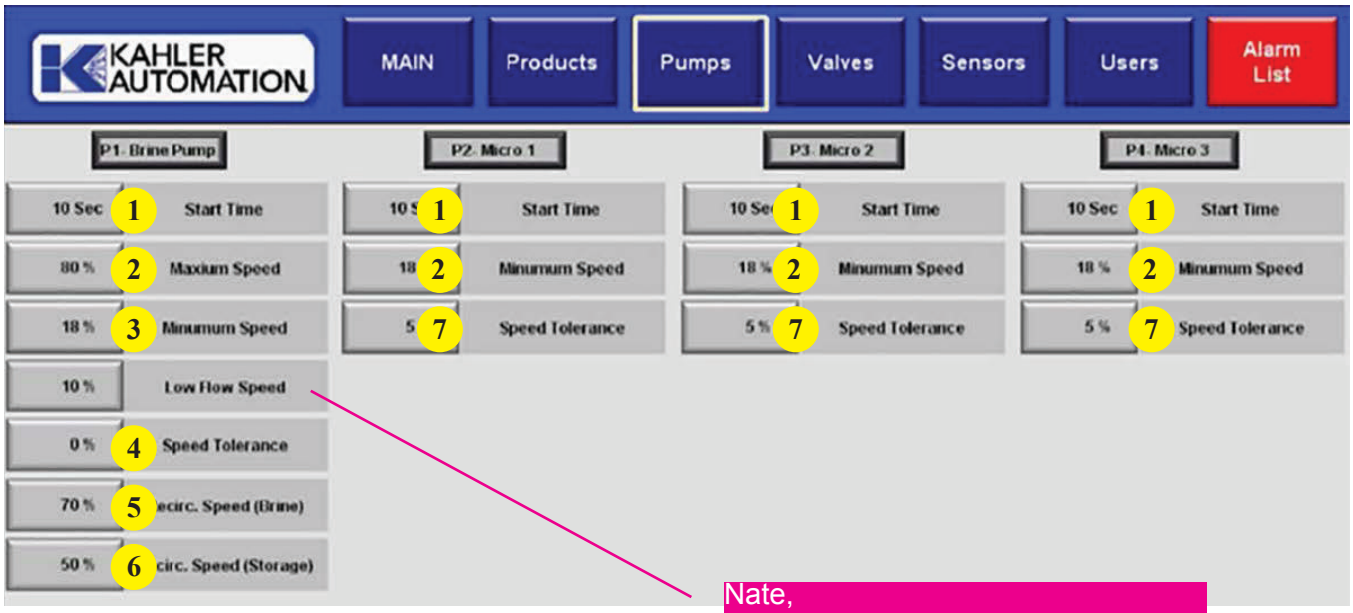
3.1- Products *continued*

- **Item 7:** Gallons Per Minutes @100%
  This setting is the average GPM that the pump can dispense when running at 100%. This should be checked and set by the user any time this unit is hooked to a different source that could affect the speed at which the pump can dispense. This number is used to calculate estimated time to completion on loads, as well as to calculate how fast the pump should run during a load so that the micros can evenly dispense throughout the load. The calculated speed will remain the same throughout the load and the speeds of the micros will be adjusted to match the dispense time of the brine.
- **Item 8:** Target Salinity
  System will add water or recirculate through the salt bed until the salinity of the solution has met this number.
- **Item 9:** Recirc. Time
  This setting forces the system to recirculate the brine through the salt bed for the set amount of time to ensure that the salinity is high enough to go to its destination

Micro 1-3

- **Item 1:** Name
  The name of brine that will be displayed wherever brine is referenced.
- **Item 10:** Follow By
  This setting is used to allow the micro to dispense unless the dispensed volume of brine is greater than or equal to this set amount. This ensures that the micro will not be dispensed into an empty pipe.
- **Item 11:** Low Flow Threshold
  When the remaining amount of brine is equal to this set level, the pump will slow down to a pre-set speed. Slowing the pump down at the end of the order ensures that product is not over-delivered.
- **Item 12:** Low Flow Speed
  The pre-set speed from 0-100% that the pump will slow down to when the low flow threshold is met.
- **Item 13:** Anticipation
  When the remaining amount of product equals the anticipation amount, the pump will be stopped to account for the additional flow while the pump is slowing down. This is done to prevent overshooting the target volume. For example, if a load is run with an anticipation of 0 and a requested volume of 100 gallons, and the system delivers 105 gallons, a value of 5 would be set in the anticipation to stop 5 gallons early on the next run.
- **Item 14:** K-Factor (Pulses/Gallon)
  The meters utilized have a pulse output that is converted to gallons dispensed. This number is specified by the meter manufacturer. If meter inaccuracies have been detected, this number can be adjusted to correct the error.
- **Item 7:** Gallons Per Minute @100%
  This setting is the average GPM that the pump can dispense when running at 100%. This should be checked and set by the user any time this unit is hooked to a different source, or the type of product has changed that could affect the speed at which the pump can dispense. This number is used to calculate estimated time to completion on loads and is also used to calculate how fast the pump should run during a load so that the micros can evenly dispense throughout the load. This will only be used for the starting spend and the speed will be adjusted based on the flow rate of the brine after the load has started.

3.2 - Pumps



P1 (Brine Pump)

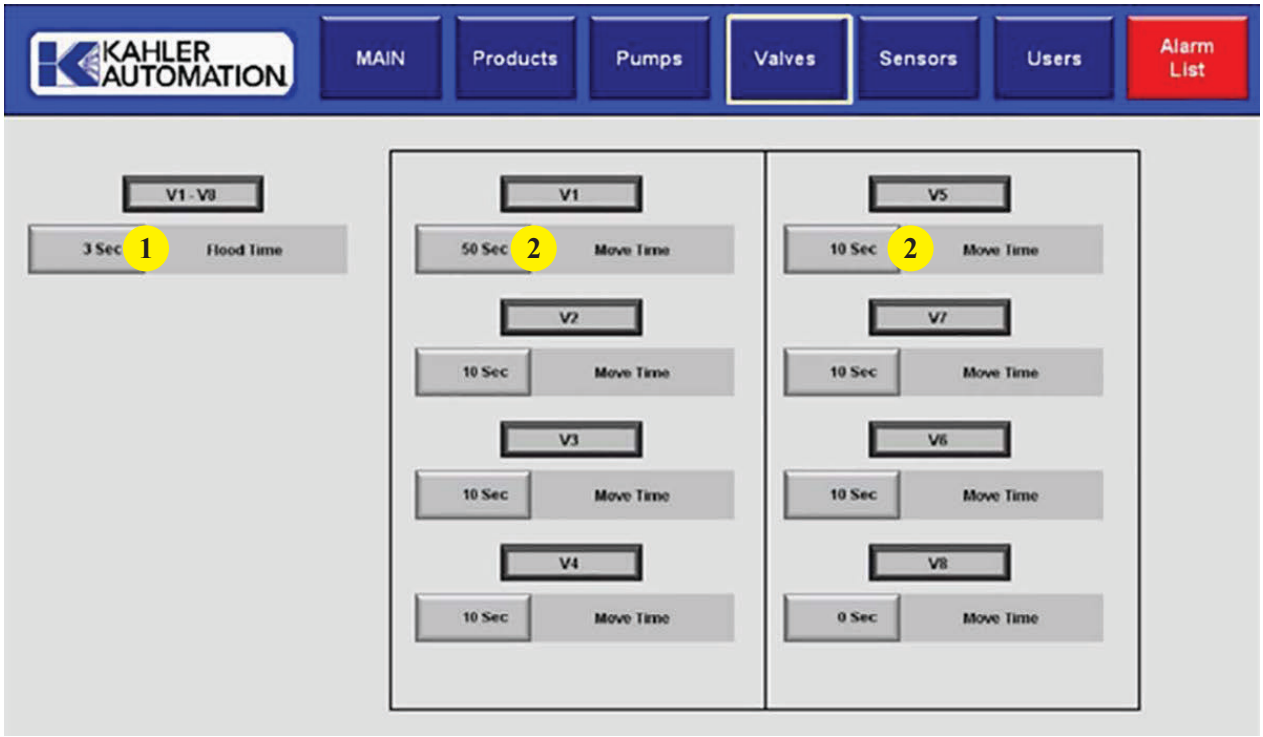
- **Item 1:** Start Time
  The amount of time to allow the pump to start before the system expects to see it running.
- **Item 2:** Maximum Speed
  Limits how fast the pump can run when automatically making brine if there is not enough water available to keep up with the system. This will not affect manual operations or recirculation.
- **Item 3:** Minimum Speed
  The minimum speed the pump will be allowed to run. This prevents the pump from running at a speed where it cannot pump product.
- **Item 4:** Speed Tolerance
  When calculating starting speeds this tolerance is used to give the pump a range to speed up and slow down. For example, if a recipe was calculated that Pump 1 could run at its max speed and that max speed was 100%, if that product fell behind and needed to speed up, it would not be able to. The speed tolerance is added or subtracted from the speed so that it has room for adjustment.
- **Item 5:**Recirc. Speed (Brine)
  The pre-set the pump will run at while recirculating to the salt bed. This speed is used during brine rejection or any time the salt bed is the destination.
- **Item 6:** Recirc. Speed (Storage)
  The pre-set speed the pump will run at when storage is its destination. This would typically be used when recirculating the storage tank and set by the user any time this unit is hooked to a different source that could affect the speed at which the pump can dispense. This number is used to calculate estimated time to completion on loads, as well as to calculate how fast the pump should run during a load so that the micros can evenly dispense throughout the load. The calculated speed will remain the same throughout the load and the speeds of the micros will be adjusted to match the dispense time of the brine.

3.2 - Pumps *continued*

Micro 1-3

- **Item 1:** Start Time
  The amount of time to allow the pump to start before the system expects to see it running.
- **Item 2:** Maximum Speed
  Limits how fast the pump can run when automatically making brine if there is not enough water available to keep up with the system. This will not affect manual operations or recirculation.
- **Item 3:** Minimum Speed
  The minimum speed the pump will be allowed to run. This prevents the pump from running at a speed where it cannot pump product.
- **Item 7:** Speed Tolerance
  When calculating starting speeds this tolerance is used to give the pump a range to speed up and slow down. For example, if a recipe was calculated that Pump 1 could run at its max speed and that max speed was 100%, if that product fell behind and needed to speed up, it would not be able to. The speed tolerance is added or subtracted from the speed so that it has room for adjustment.

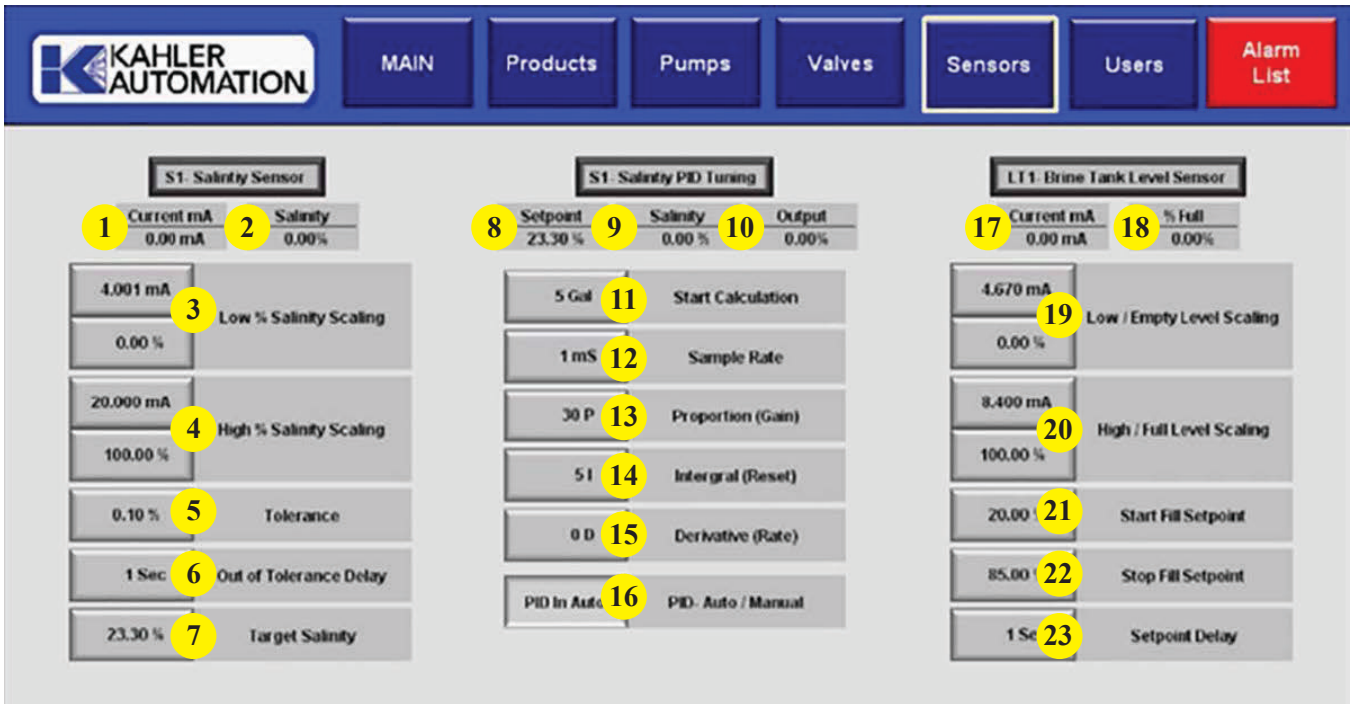
3.3 - Valves



V1-8

- **Item 1:** Flood Time
  How long the system will wait to start the pump after a valve has opened. It is also used to delay the valve from closing after the pump stops. This setting is used to prevent hammering.
- **Item 2:** Move Time
  How long it takes for the valve to fully open or close. If the valve does not reach where it has been told to go in this amount of time, the system will alarm.

3.4 - Sensors



S1 (Salinity Sensor)

- **Item 1:** Current mA Display
  Displays the current mA read from the input card.
- **Item 2:** Salinity
  Displays the salinity reading that is being calculated by the settings below.
- **Item 3:** Low% Salinity Scaling
  - mA: The mA received from the sensor when the salinity is at its low point, typically 4mA. Any reading below this number will be ignored.
  - %: The percent of salinity that should be displayed when the mA reading equals the low mA setting.
- **Item 4:** High% Salinity Scaling
  - mA: The mA received from the sensor when the salinity is at its highest, typically 20mA.
  - %: The percent of salinity that should be displayed when the mA reading equals the high mA setting.
- **Item 5:** Tolerance
  The tolerance that will be added to the target salinity to consider it in acceptable range. For example, if the tolerance is 1% and the target salinity is 23.3, anything between 22.3 and 24.3 would be acceptable.
- **Item 6:** Out of Tolerance Delay
  How long the brine can dispense out of tolerance before the status light changes or the brine is sent back to the salt bed because of too-low salinity.
- **Item 7:** Target Salinity
  The system will add water or recirculate through the salt bed until the salinity of the solution has met this number.

3.4 - Sensors *continued*

S1 (Salinity PID Tuning)

- **Item 8:** Setpoint Display
  Displays the target salinity.
- **Item 9:** Salinity
  Displays the actual salinity.
- **Item 10:** Output
  Displays how far open the system is opening valve "V1" to add fresh water to the brine.
- **Item 11:** Start Calculation
  The system will wait to start calculating how much water to add to the system until the total brine dispensed is greater than or equal to this number. This is to make sure we have enough brine in the system to accurately calculate the salinity.
- **Item 12:** TSample Rate
  How often the system will calculate changes in salinity.
- **Item 13:** Proportion (Gain)
  This value is directly proportional to the control effect, meaning an increase to the proportional value (sometimes referred to as gain) will decrease the control output. In the PID algorithm, the proportional gain is multiplied by the error during each sample and added to the bias term.
- **Item 14:** Integral (Reset)
  This value is a time constant that is used to remove error after the control output has reached a steady state. The integral time setting is inversely proportional to the control effect, meaning as the value increases, the rateat which the error is removed decreases.
- **Item 15:** Derivative (Rate)
  In many cases this parameter is not required to achieve stable loop operation and is highly sensitive to noise in the error term. This value is directly proportional to the control effect, meaning that the higher the derivative term setting, the quicker the error will be removed.
- **Item 16:** PID – Auto/Manual
  When in Auto the system will automatically adjust water injection to achieve a target salinity. When in Manual, this function will be disabled and valve "V1" will have to be controlled manually.

LT1 (Brine Tank Level Sensor)

- **Item 17:** Current mA Display
  Displays the current mA read from the input card.
- **Item 18:** % Full
  Displays the calculated % full based on the settings below.
- **Item 19:** Low/Empty Level Scaling
  - mA: The mA received from the sensor when the level is at its low point, typically 4mA. Any reading below this number will be ignored.
  - %: The percent of level that should be displayed when the mA reading equals the low mA setting, typically 0%.
- **Item 20:** High/Full Level Scaling
  - mA: The mA received from the sensor when the salinity is at its highest point, typically 20mA. Any reading above this level will be ignored.
  - %: The percent of level that should be displayed when the mA reading equals the high mA setting, typically 100%.

3.4 - Sensors *continued*

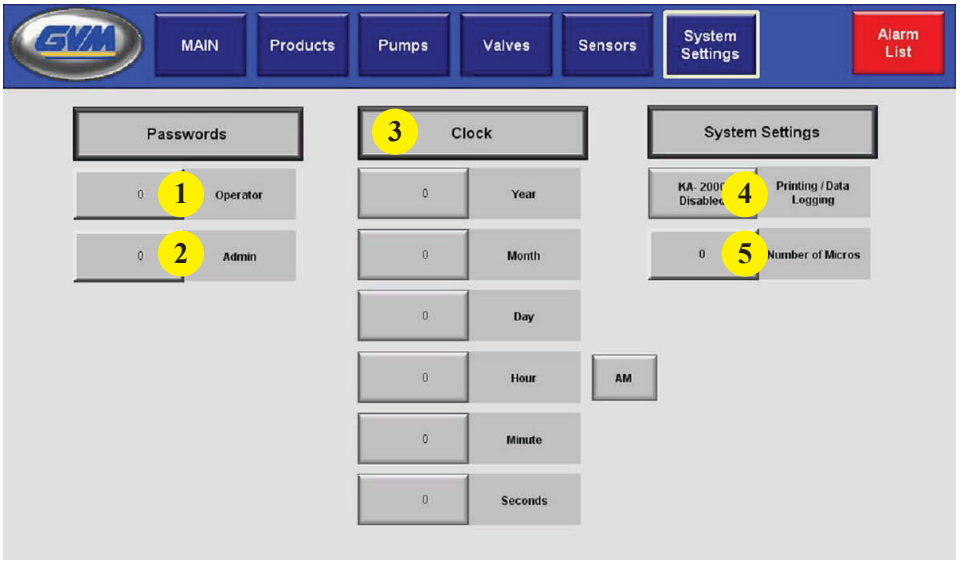
LT1 (Brine Tank Level Sensor) *continued*

- **Item 21:** Start Fill Setpoint
  If the level in the brine tank drops below this level, valve "V2" will open to refill the tank.
- **Item 22:** Stop Fill Setpoint
  If the level in the brine tank is above or equal to this level, valve "V2" will close to stop filling.
- **Item 23:** Setpoint Delay
  Ensures the level is above or below the setpoints before changing the state of valve "V2".

3.5 - System Settings

Passwords

- **Item 1:** Operator
  The password (numeric only) that is required to be entered when the user logs into the system. User rights are described in Section 4.1.
- **Item 2:** Admin
  The password (numeric only) that is required to be entered when the user logs into the system. User rights are described in Section 4.1.



Clock

- **Item 3:** Each button displays the real-time clock in the PLC. Tapping on any of the Time/Date buttons below will allow the user to modify the time.

System Settings

- **Item 4:** Printing / Data Logging
  - KA-2000 Enabled: Set when there is a data logging/printing panel installed on the unit. This allows each order to be saved and printed.
  - KA-2000 Disabled: Disables the printing/data logging function if the data logging/printing panel is not installed.

3.6 Setting IP Address in GS4 VFDs

Pump 1 (P1)

- **Step 1:** Press <MENU> button
- **Step 2:** Select (P1) Parameter Setup; press <ENTER>
- **Step 3:** Scroll to (P1.09) Communications; press <ENTER>
- **Step 4:** Scroll to (P9.48) DHCP C_Card; press <ENTER>; Set to 0; press <ENTER>; Once value changes, press <ESC>
- **Step 5:** Scroll to (P9.49) IP address 1; press <ENTER> ; Set to 10; press <ENTER>; Once value changes, press <ESC>
- **Step 6:** Scroll to (P9.50) IP address 2; press <ENTER>; Set to 20; press <ENTER>; Once value changes, press <ESC>
- **Step 7:** Scroll to (P9.51) IP address 3; press <ENTER>; Set to 200; press <ENTER>; Once value changes, press <ESC>
- **Step 8:** Scroll to (P9.52) IP address 4; press <ENTER>; Set to 2; press <ENTER>; Once value changes, press <ESC>
- **Step 9:** Scroll to (P9.53) Subnet Mask 1; press <ENTER>; Set to 255; press <ENTER>; Once value changes, press <ESC>
- **Step 10:** Scroll to (P9.54) Subnet Mask 2; press <ENTER>; Set to 255; press <ENTER>; Once value changes, press <ESC>
- **Step 11:** Scroll to (P9.55) Subnet Mask 3; press <ENTER>; Set to 0; press <ENTER>; Once value changes, press <ESC>
- **Step 12:** Scroll to (P9.56) Subnet Mask 4; press <ENTER>; Set to 0; press <ENTER>; Once value changes, press <ESC>
- **Step 13:** Scroll to (P9.64); press <ENTER>; Set to 2; Press <ENTER>; After you press Enter the value will go back to 0
- **Step 14:** Press <ESC> until you are on the Main screen
- **Step 15:** All other parameters are set by the PLC

NOTE: Use the <UP> and <DOWN> arrows to change values. PUMP 2 (P2)

Pump 2 (P2)

- **Step 1:** Press <MENU> button
- **Step 2:** Select (P1) Parameter Setup; press <ENTER>
- **Step 3:** Scroll to (P1.09) Communications; press <ENTER>
- **Step 4:** Scroll to (P9.48) DHCP C_Card; press <ENTER>; Set to 0; press <ENTER>; Once value changes, press <ESC>
- **Step 5:** Scroll to (P9.49) IP address 1; press <ENTER> ; Set to 10; press <ENTER>; Once value changes, press <ESC>
- **Step 6:** Scroll to (P9.50) IP address 2; press <ENTER>; Set to 20; press <ENTER>; Once value changes, press <ESC>
- **Step 7:** Scroll to (P9.51) IP address 3; press <ENTER>; Set to 200; press <ENTER>; Once value changes, press <ESC>
- **Step 8:** Scroll to (P9.52) IP address 4; press <ENTER>; Set to 3; press <ENTER>; Once value changes, press <ESC>

3.6 Setting IP Address in GS4 VFDs *continued*

Pump 2 (P2) *continued*

- **Step 9:** Scroll to (P9.53) Subnet Mask 1; press <ENTER>; Set to 255; press <ENTER>; Once value changes, press <ESC>
- **Step 10:** Scroll to (P9.54) Subnet Mask 2; press <ENTER>; Set to 255; press <ENTER>; Once value changes, press <ESC>
- **Step 11:** Scroll to (P9.55) Subnet Mask 3; press <ENTER>; Set to 0; press <ENTER>; Once value changes, press <ESC>
- **Step 12:** Scroll to (P9.56) Subnet Mask 4; press <ENTER>; Set to 0; press <ENTER>; Once value changes, press <ESC>
- **Step 13:** Scroll to (P9.64); press <ENTER>; Set to 2; Press <ENTER>; After you press Enter the value will go back to 0
- **Step 14:** Press <ESC> until you are on the Main screen
- **Step 15:** All other parameters are set by the PLC

Pump 3 (P3)

- **Step 1:** Press <MENU> button
- **Step 2:** Select (P1) Parameter Setup; press <ENTER>
- **Step 3:** Scroll to (P1.09) Communications; press <ENTER>
- **Step 4:** Scroll to (P9.48) DHCP C_Card; press <ENTER>; Set to 0; press <ENTER>; Once value changes, press <ESC>
- **Step 5:** Scroll to (P9.49) IP address 1; press <ENTER> ; Set to 10; press <ENTER>; Once value changes, press <ESC>
- **Step 6:** Scroll to (P9.50) IP address 2; press <ENTER>; Set to 20; press <ENTER>; Once value changes, press <ESC>
- **Step 7:** Scroll to (P9.51) IP address 3; press <ENTER>; Set to 200; press <ENTER>; Once value changes, press <ESC>
- **Step 8:** Scroll to (P9.52) IP address 4; press <ENTER>; Set to 4; press <ENTER>; Once value changes, press <ESC>
- **Step 9:** Scroll to (P9.53) Subnet Mask 1; press <ENTER>; Set to 255; press <ENTER>; Once value changes, press <ESC>
- **Step 10:** Scroll to (P9.54) Subnet Mask 2; press <ENTER>; Set to 255; press <ENTER>; Once value changes, press <ESC>
- **Step 11:** Scroll to (P9.55) Subnet Mask 3; press <ENTER>; Set to 0; press <ENTER>; Once value changes, press <ESC>
- **Step 12:** Scroll to (P9.56) Subnet Mask 4; press <ENTER>; Set to 0; press <ENTER>; Once value changes, press <ESC>
- **Step 13:** Scroll to (P9.64); press <ENTER>; Set to 2; Press <ENTER>; After you press Enter the value will go back to 0
- **Step 14:** Press <ESC> until you are on the Main screen
- **Step 15:** All other parameters are set by the PLC

3.6 Setting IP Address in GS4 VFDs *continued*

Pump 4 (P4)

- **Step 1:** Press <MENU> button
- **Step 2:** Select (P1) Parameter Setup; press <ENTER>
- **Step 3:** Scroll to (P1.09) Communications; press <ENTER>
- **Step 4:** Scroll to (P9.48) DHCP C_Card; press <ENTER>; Set to 0; press <ENTER>; Once value changes, press <ESC>
- **Step 5:** Scroll to (P9.49) IP address 1; press <ENTER> ; Set to 10; press <ENTER>; Once value changes, press <ESC>
- **Step 6:** Scroll to (P9.50) IP address 2; press <ENTER>; Set to 20; press <ENTER>; Once value changes, press <ESC>
- **Step 7:** Scroll to (P9.51) IP address 3; press <ENTER>; Set to 200; press <ENTER>; Once value changes, press <ESC>
- **Step 8:** Scroll to (P9.52) IP address 4; press <ENTER>; Set to 5; press <ENTER>; Once value changes, press <ESC>
- **Step 9:** Scroll to (P9.53) Subnet Mask 1; press <ENTER>; Set to 255; press <ENTER>; Once value changes, press <ESC>
- **Step 10:** Scroll to (P9.54) Subnet Mask 2; press <ENTER>; Set to 255; press <ENTER>; Once value changes, press <ESC>
- **Step 11:** Scroll to (P9.55) Subnet Mask 3; press <ENTER>; Set to 0; press <ENTER>; Once value changes, press <ESC>
- **Step 12:** Scroll to (P9.56) Subnet Mask 4; press <ENTER>; Set to 0; press <ENTER>; Once value changes, press <ESC>
- **Step 13:** Scroll to (P9.64); press <ENTER>; Set to 2; Press <ENTER>; After you press Enter the value will go back to 0
- **Step 14:** Press <ESC> until you are on the Main screen
- **Step 15:** All other parameters are set by the PLC

3.7 - Connecting to HMI through WiFi Bolt

Windows Tablet or Computer

- **Step 1:** Select GVM_EZBrine for your wireless network
- **Step 2:** Type in password “builttolast” to connect to the GVM_EZBrine Network and then you can Remote into the HMI.
- **Step 3:** Type in the IP Address of the HMI (192.168.13.151) in your web browser.
- **Step 4:** Choose Remote Access > 1. No Firewall/Router Connection (192.168.13.151) > Run > The HMI Screen should come up if so and you can operate it is working properly.

Apple iPad/iPhone and Android Phones

- **Step 1:** First you will need to download and install the Remote HMI App from the App Store.
- **Step 2:** Go on the WiFi from the Stand.
- **Step 3:** Select GVM_EZBrine for your wireless network and type in password “builttolast” to connect.
- **Step 4:** Open the App.
- **Step 2:** In the top right corner, there is a connection button, you will need to select input IP Address
- **Step 2:** Type in 192.168.13.151
- **Step 2:** Press ok and it should connect you to the HMI.

Read and fully understand the instructions in this section before operation. At all times, be aware of this important caution:

CAUTION: Do not run pumps dry!

Serious damage may result if a pump is started or run dry. If the pump sounds like it is pumping rocks it may be from cavitation caused from a lack of water flow to the pump. This will result is a reduced lifespan of the pump bearings and pump.

4.1 - Location and Setup

- **Step 1:** Pick a location for the platform that is level and is near the salt supply, water supply, micro-ingredient add-ins, and storage containers.
- **Step 2:** Off-load platform carefully.
- **Step 3:** Turn on the generator using the control panel mounted in the operators enclosure and turn on the Brine Pumping Station.
- **Step 4:** Unwind the hose reel on the driver's side of the platform, and hook it up to the water supply.
- **Step 5:** Attach the micro ingredients hoses to the micro ingredient hookups located towards the rear of enclosure on the driver's side.
- **Step 6:** Attach all other hoses to the appropriately labeled connections towards the front of enclosure on the driver's side of the platform and cap off any unused hose connections.
- **Step 7:** Load Brine hopper with salt and keep salt filled to (need rate or level from Shane Z) ensure that there are no leaks in the system.

4.2 - Main Screen

On startup, the touchscreen HMI allows the user to log in as either an Operator or Admin (Figure 1). System setup (Section 3) requires the user to log in as Admin. General operation of the brine skid may be done as either an Operator or Admin.

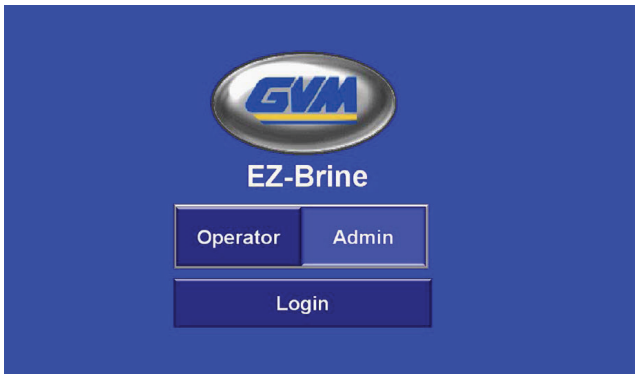


Figure 1

Main Screen displays the following buttons (Figure 2):

- **Item 1:** Main
  Return to Main screen from any other screen
- **Item 2:** Process
  General operation of the brine skid (Section 4.2)
- **Item 3:** Previous Receipt
  View the previous order (Section 4.3)
- **Item 4:** Settings
  View and change brine skid settings; accessible to Admin users only (Section 3)
- **Item 5:** Log Out
  Log out of brine skid HMI
- **Item 6:** Alarm List
  View alarm information (Section 4.4)
- **Item 7:** Clean Screen
  Go to a screen where it is safe to wipe off the FUNCTION

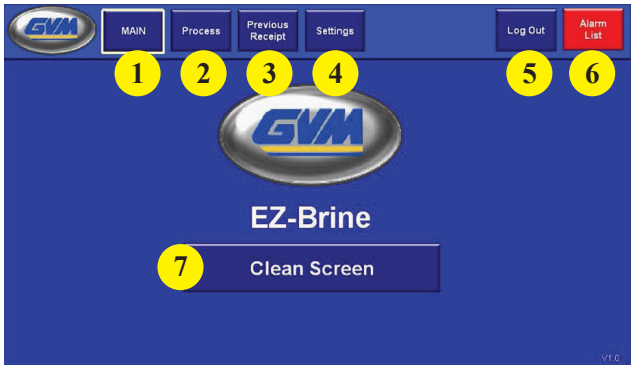


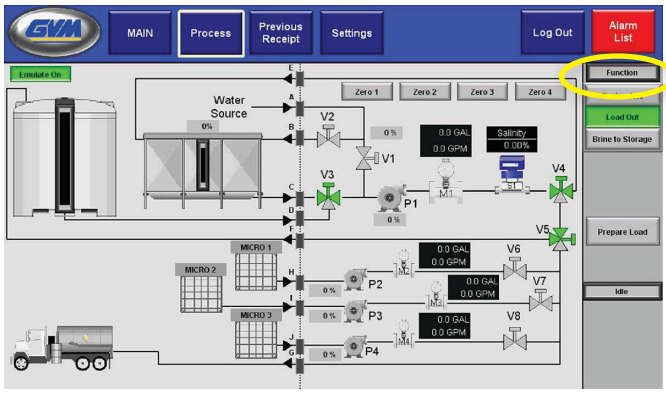
Figure 2

4.3 - Process

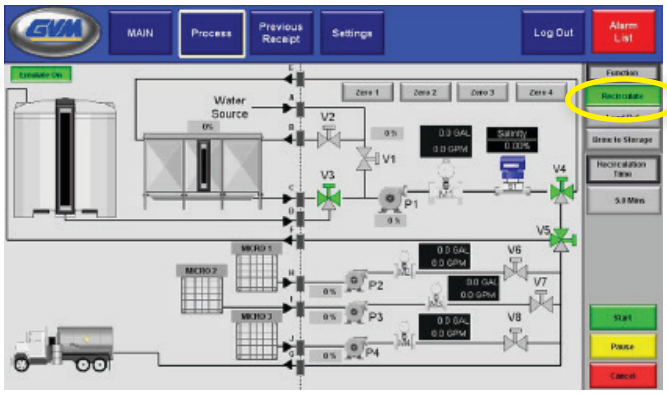
GVM's EZ Brine System is a quick, easy, and accurate solution for manufacturing salt brine and custom chemical blends. Flexible enough to meet the needs of any organization, the EZ Brine can be used as a batch system to produce blends on an as-needed basis or as a continuous manufacturing system to ensure your blend is always available. In addition to salt brine, the EZ Brine can blend up to three different micro-ingredients allowing users to produce custom blends to work at various temperatures. Additives and micro-ingredients will allow blends to work at lower temperatures and often for longer periods of time.

Programmable controller computer is simple to operate and helps to guide the user through the process. The system constantly monitors salinity and pump performance in addition to logging brine production data. Built in WiFi allows for easy remote monitoring and the built-in printer allows you to quickly print logged data.

System Functions

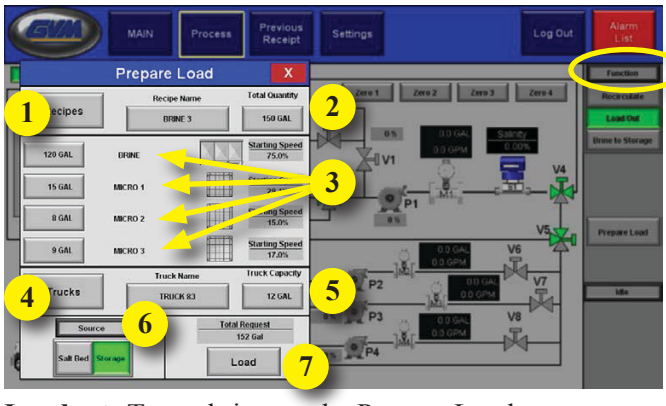


Function: Tap to decide where product will run.



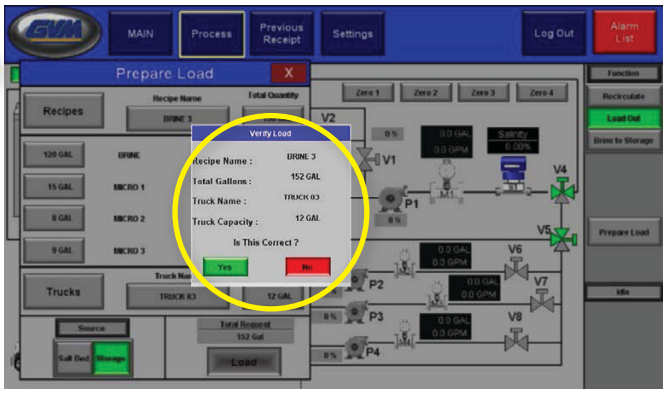
Recirculate: Tap to recirculate the storage tank for a selected amount of time in minutes.

4.3 - Process *continued*

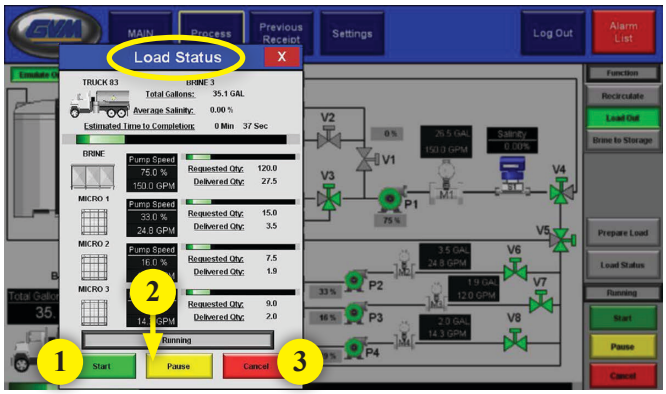


Loadout: Tap to bring up the Prepare Load popup, where you set up a load to run.

- **Item 1:** Create Recipes to name and reuse for multiple loads.
- **Item 2:** Select the Total Quantity for desired amount to run.
- **Item 3:** Brine, Micro 1-3. Change the quantity to customize the recipe.
- **Item 4:** Select the current Truck to load.
- **Item 5:** Set the selected Truck Capacity.
- **Item 6:** Choose the Source, whether to run from salt bed or storage tank.
- **Item 7:** When all information is entered, this starts the Load

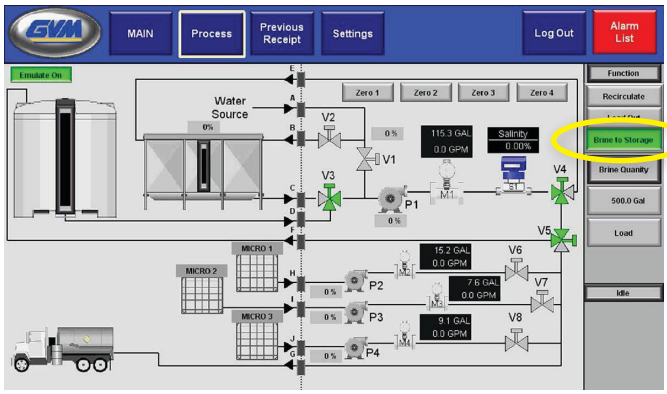


Verify Load: A confirmation popup appears after the load button is pressed. If all information is correct tap "Yes" to advance to Load Status screen. If any information is incorrect tap "No" to return to the Prepare Load screen.



Load Status: Once a load has been verified, this popup displays the status of the current load.

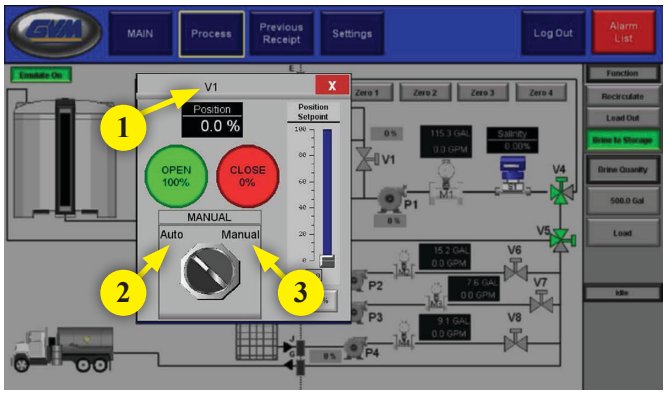
- **Item 1:** Tap Start button to begin the load (and resume a paused order).
- **Item 2:** Tap to Pause a load that is in the process of running.
- **Item 3:** Tap to Cancel to cancel the current load that is running.



Brine to Storage: Tap to run a selected amount of gallons from the brine tank to the storage tank.

4.3 - Process *continued*

Valve System Functions



Note: Item 1 represents all Valve, e.g., V1, V2 etc.

V1: Valve V1 (Item 1) is a proportioning valve that will open and close depending on the salinity. It allows fresh water to enter the system to keep the salinity level within range of the target salinity. If the salinity is low the valve will close more; if the salinity is high the valve will open more.

- **Item 2:** When in Auto the valve will open and close based on where the current salinity is in relationship to the target salinity and its destination.
- **Item 3:** Allows the operator to manually control the valve.

V2: Valve V2 (Item 1) is a 2-position valve to add water to the salt bed.

- **Item 2:** When in Auto this valve will keep the level of the salt bed full based on the reading of a pressure sensor on the tank.
- **Item 3:** Allows the operator to manually control the valve.

V3: Valve V3 (Item 1) is a 3-position valve that allows selection between the salt bed and storage tank.

- **Item 2:** Valve will move into position based on the selected source.
- **Item 3:** Allows the operator to manually control the valve.

V4: Valve V4 (Item 1) is a 3-position valve that allows selection between recirculating to the salt bed or to the valve V5.

- **Item 2:** Valve will move when needing to recirculate to the salt bed or will go to valve V5 if storage tank or truck loadout is the destination..
- **Item 3:** Allows the operator to manually control the valve.

V5: Valve V5 (Item 1) is a 3-position valve that allows selection between the storage tank and truck.

- **Item 2:** Valve will move based off the selected destination.
- **Item 3:** Allows the operator to manually control the valve.

V6: Valve V6 (Item 1) is a 2-position valve for Micro Product 1.

- **Item 2:** Valve will open when Micro Product 1 is called for.
- **Item 3:** Allows the operator to manually control the valve.

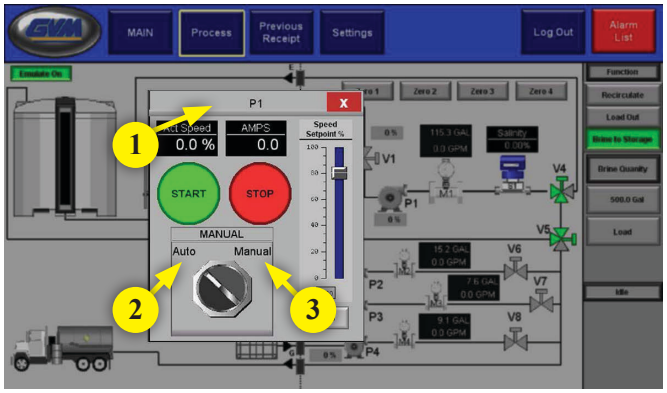
V7: Valve V7 (Item 1) is a 2-position valve for Micro Product 2.

- **Item 2:** Valve will open when Micro Product 2 is called for.
- **Item 3:** Allows the operator to manually control the valve.

V8: Valve V8 (Item 1) is a 2-position valve for Micro Product 3.

- **Item 2:** Valve will open when Micro Product 3 is called for.
- **Item 3:** Allows the operator to manually control the valve.

4.3 - Process *continued*



Note: Item 1 represents all Pumps, e.g., P1, P2 etc.

Pumps System Functions

P1 - Brine Pump (Item 1)

- **Item 2:** The pump will run when an order is being called for. The speed is determined by the function it is doing. If it is recirculating or pumping brine to storage it will run at a set speed determined by the operator in the Setting page. If it is running to truck it will run at a calculated speed with the micro products to finish the order as quickly as possible.
- **Item 3:** Allows the operator to manually run the pump at the desired speed.

P2 - Micro Product 1 (Item 1)

- **Item 2:** The pump will run when Micro Product 1 is called for. The speed is calculated to finish the order as quickly as possible.
- **Item 3:** Allows the operator to manually run the pump at the desired speed.

P1 - Micro Product 2 (Item 1)

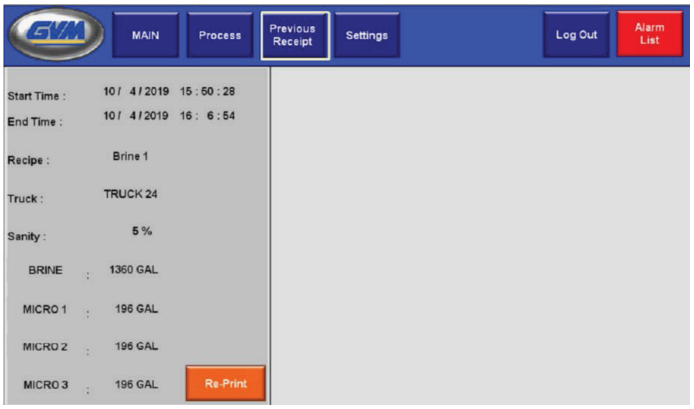
- **Item 2:** The pump will run when Micro Product 2 is called for. The speed is calculated to finish the order as quickly as possible.
- **Item 3:** Allows the operator to manually run the pump at the desired speed.

P1 - Micro Product 3 (Item 1)

- **Item 2:** The pump will run when Micro Product 3 is called for. The speed is calculated to finish the order as quickly as possible.
- **Item 3:** Allows the operator to manually run the pump at the desired speed.

4.4 - Previous Receipt

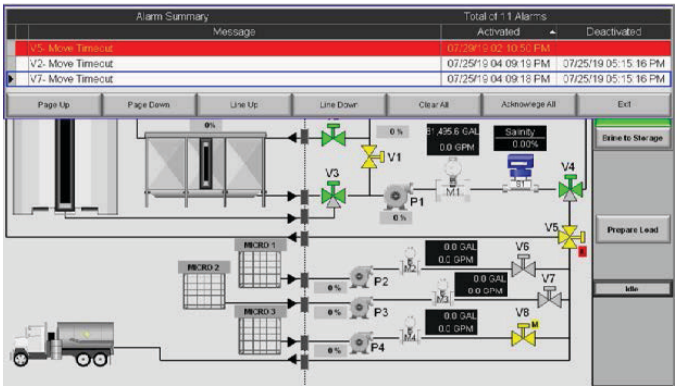
This screen allows you to look at the previous order and re-print the receipt if needed.



4.5 - Alarms and Troubleshooting

If an error occurs during operation of the brine skid, an alarm popup window will appear on the HMI screen with an alarm name as well as alarm activation/deactivation time/date info. New alarms appear in red.

See below for a complete list of possible alarms, what they mean, and suggested solutions.



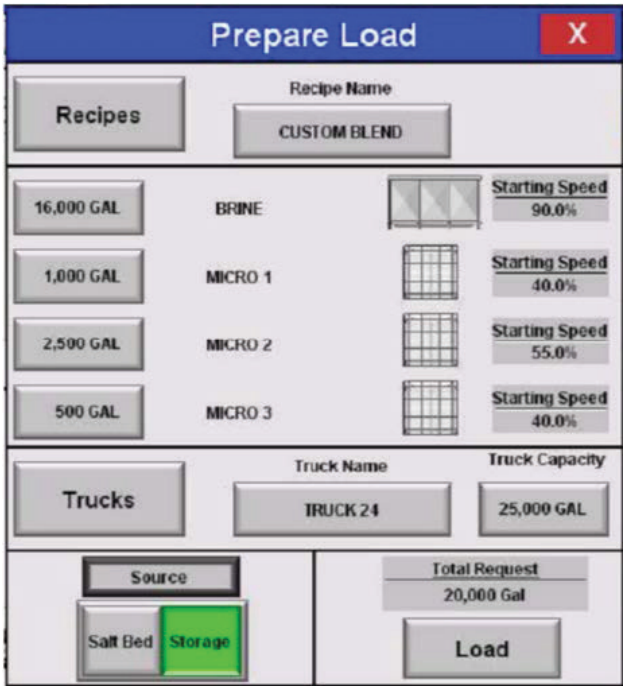
ISSUE	PROBLEM	SOLUTION
VALVES		
Out of Position	A valve moved out of position without the system commanding to move.	Manually operate valve and physically verify the valve's position. Verify fuses in panel.
Move Timeout	A valve did not reach its commanded position in the amount of time configured in the settings.	Manually operate valve and physically verify the valve's position. Verify fuses in panel.
PUMPS		
Drive Fault	The VFD for the pump motor has indicated a fault.	Acknowledge alarm and try to restart. If the problem continues turn off power using the disconnect lever on the power panel for 2 minutes. If problem continues after this, call tech support with fault code displayed in the alarm.
Not Running	The pump has failed to start or has stopped running while being commanded to run.	Acknowledge alarm and try to restart. Verify that the display is on in the starter panel VFD; this ensures that there is power to the drive. If the problem continues turn off power using the disconnect lever on the power panel for 2 minutes. If problem continues after this call tech support with fault code displayed in the alarm.
Loss of Communications	The system has lost communications with the VFD.	Verify there is power to the network switch and the VFD.
KA-2000		
Failed to Print	The system has failed to print.	Verify there is sufficient paper in the printer and that all cables are connected. Once the problem is corrected, press the Re-Print button on the Receipts page.
Failed to Save	The system has failed to save last order to the KA-2000.	Verify that the KA-2000 is powered up and communicating to the control system.
Loss of Communications	The system has lost communications with the KA-2000.	Verify that the KA-2000 is powered up all Cat 5 cables are plugged in.
RECIPE		
Recipe Greater than 100%	The selected recipe has ingredients that add up to greater than 100%.	Adjust recipe so each ingredient percentage adds up to 100%.
Recipe Less than 100%	The selected recipe has ingredients that add up to less than 100%	Adjust recipe so each ingredient percentage adds up to 100%.
SENSORS		
Sensor Loss	The system has detected that the sensor is not present.	Verify sensor is connected to the system, press the Reset button on outlet inside of the panel.
Sensor Fault	The system has detected a fault on the salinity sensor	See salinity sensor screen for details on the fault.
METERS		
No Flow	The meter is detecting a flow lower than the minimum flow setting.	Verify there are no restrictions in the plumbing. Run pumps in manual to verify flow.

4.6 - Making a Custom Order

Below are the basic steps for making a custom order.

Note: The user must be signed in as an Admin.

- **Step 1:** Select loadout
- **Step 2:** Prepare load
- **Step 3:** Change gallon amount for each product desired
- **Step 4:** Name recipe
- **Step 5:** Select truck
- **Step 6:** Select source
- **Step 7:** Press load
- **Step 8:** Verify load
- **Step 9:** Press start



Example of a 20,000-gallon load

Brine: 16,000 gallons
Micro 1: 1,000 gallons
Micro 2: 2,500 gallons
Micro 3: 500 gallons
Recipe Name: Custom Blend
Truck: Truck 24
Source: Storage

4.7 - Quick Start Guide

Setting Up Brine Tank Pressure Sensor (Lt1)

- **Step 1:** Go to Settings > Sensors > then look at the 3rd column
- **Step 2:** Starting with an empty brine tank, enter the current mA in Empty Level Scaling.
- **Step 3:** Set the High/Full Level Scaling by filling water in the brine to where you want the full level. Read thecurrent mA and put that in the High/Full Level Scaling.
- **Step 4:** Next set the Low Level Pause Setpoint and Low Level Resume Setpoint while you continue to fill thebrine tank (the purpose of the Low Level Pause Setpoint is to protect the pump from running dry).
- **Step 5:** Keep filling the brine tank to set the Start Fill Setpoint and Stop Fill Setpoint. These are the points you want fresh water to start and stop filling.

Maximum Speed and Gallons Per Minute at 100%

- **Step 1:** When setting the Maximum Speed of P1 you should have the system connected to the brine tank. You will put the pump and valves in manual so the flow is from the brine tank and back to the brine tank. Then you can manually start the pump at 100%; if the pump is cavitating decrease speed until it quits cavitating. That will be your Maximum Speed. This setting can also be adjusted if fresh water cannot keep up with filling the tank. Lowering the Maximum speed will allow the system to keep running at a steady pace rather than starting and stopping because of the brine tank level being too low.
- **Step 2:** Run in Manual at 100% and watch the GPM display. When it's a stable reading, put that in the Gallons Per Minute at 100%.
- Step 3: If you have micros you need to do the same GPM @ 100% reading for them. You do not need to set a Maximum Speed for micros. Do the same process of running the system in manual to get this value.

Anticipation

Once you have run a few orders, if your delivered amount is either high or low you may need to adjust youranticipation. For example, if you are consistently over 10 gallons you should increase your anticipation by 10. Or if the delivered amounts are consistently below the requested amount by 10 gallons, the anticipation should be decreased by 10 gallons.

Target Salinity

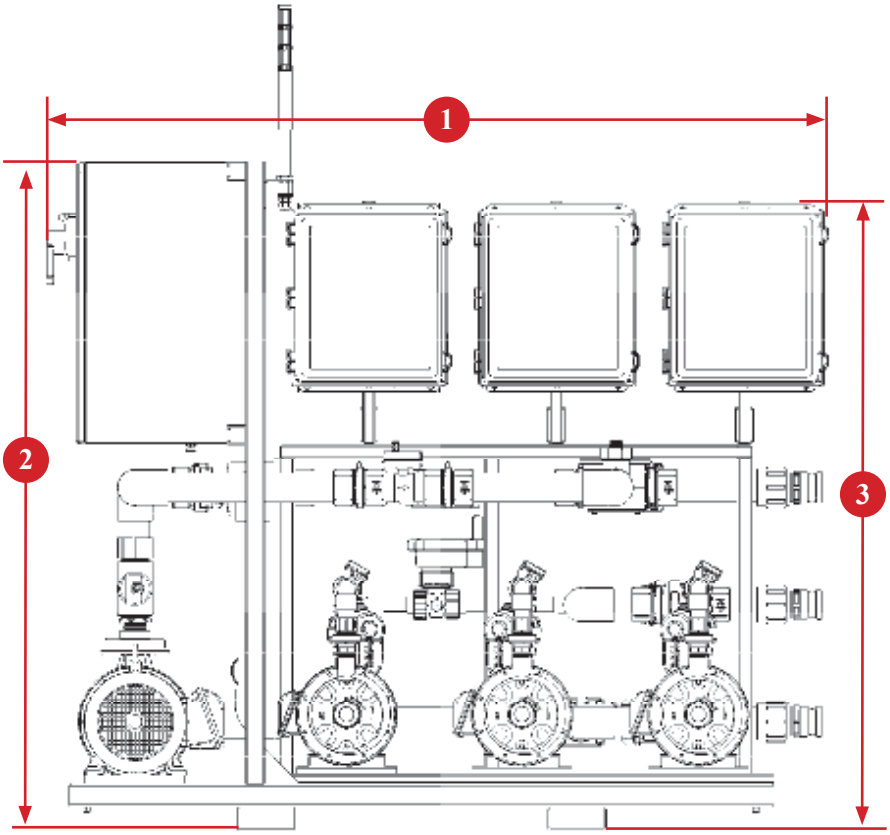
On the Sensors setting page you must set your target Salinity.

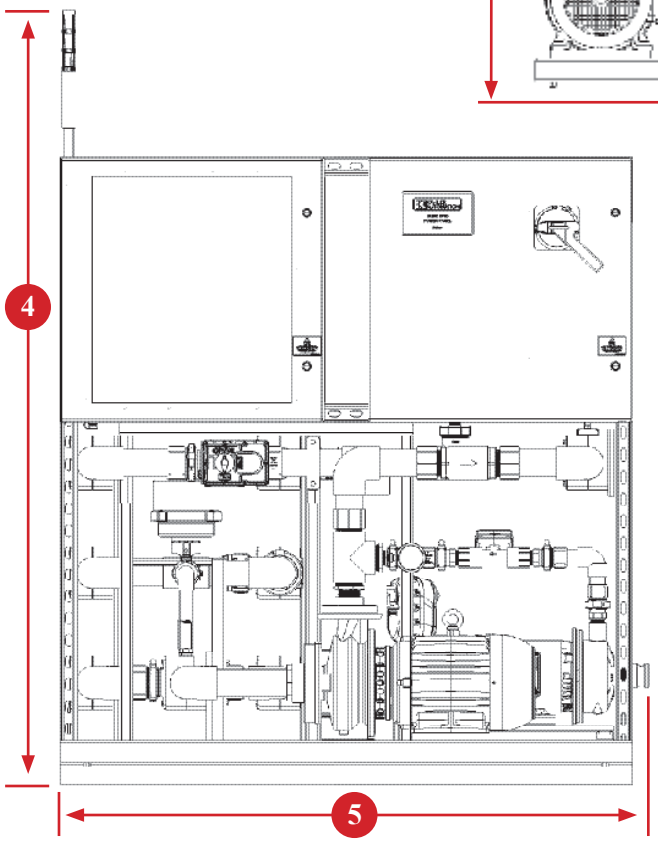
Clock

Check the Clock setting to ensure it is correct for your time zone / Daylight Saving Time. Adjust accordingly.

5.1 - Machine Dimensions

- **Item 1:** 66 in. (167.6 cm)
- **Item 2:** 57 in. (144.8 cm)
- **Item 3:** 53.63 in. (136.2 cm)
- **Item 4:** 70.32 in. (178.6 cm)
- **Item 5:** 53.49 in. (135.9 cm)





5.2 - Machine Specifications

		EZ Brine Classic	EZ Brine Premier
Tank Specifications	Dimensions	120 x 63.5 x 65 in. (L x W x H)	
	Material	304 SS	
	Construction	Built-in forklift pockets & lifting lugs	
	Liquid Capacity	1600 U.S. gal. (6057 L)	
	Salt Capacity	6.5 yd^3	
	Mixing Components	(4) 2 in. SS spray bars (2 top mounted & 2 bottom mounted)	
Control / Blend Station	Frame	Skid-style base	
	Frame Dimensions	60 x 52 x 58 in. (L x W x H)	
Motor & Pump	Pump Model	Scot SSP324 6.5 hp	
	Pump Type	Centrifugal	
	Pump Materials	304 SS	
	Flow Rate	120 gpm @ 3500 rpm	
	Pump Head	60 PSI	
	Impeller	5.98 in. diameter	
Sensors, Gauges, & Measuring Devices	Salinity Level	Toroidal Conductivity Transmitter	
	Mix Tank Levels & Pump	Pressure Transducer	
	Flow Control	Electric Banjo Valve, 24 VDC	
Controls & Enclosure	Monitor	11.125 x 7.625 in. touch screen	
	Remote Operation	Not available	Built-in WiFi & printer
Optional Add-Ons	Blending Packages (1-3)	Not available	• (1) 1 hp pump per micro ingredient • (1) 1-¼ in. hose w/ camlock & quick coupler • Internal flowmeter

Proper service and maintenance of your GVM EZ Brine System will greatly increase the life of the machine. The EZ Brine System requires regular maintenance. Machine maintenance is broken down into an easy-to-follow schedule and should be done daily, weekly, monthly, and annually.

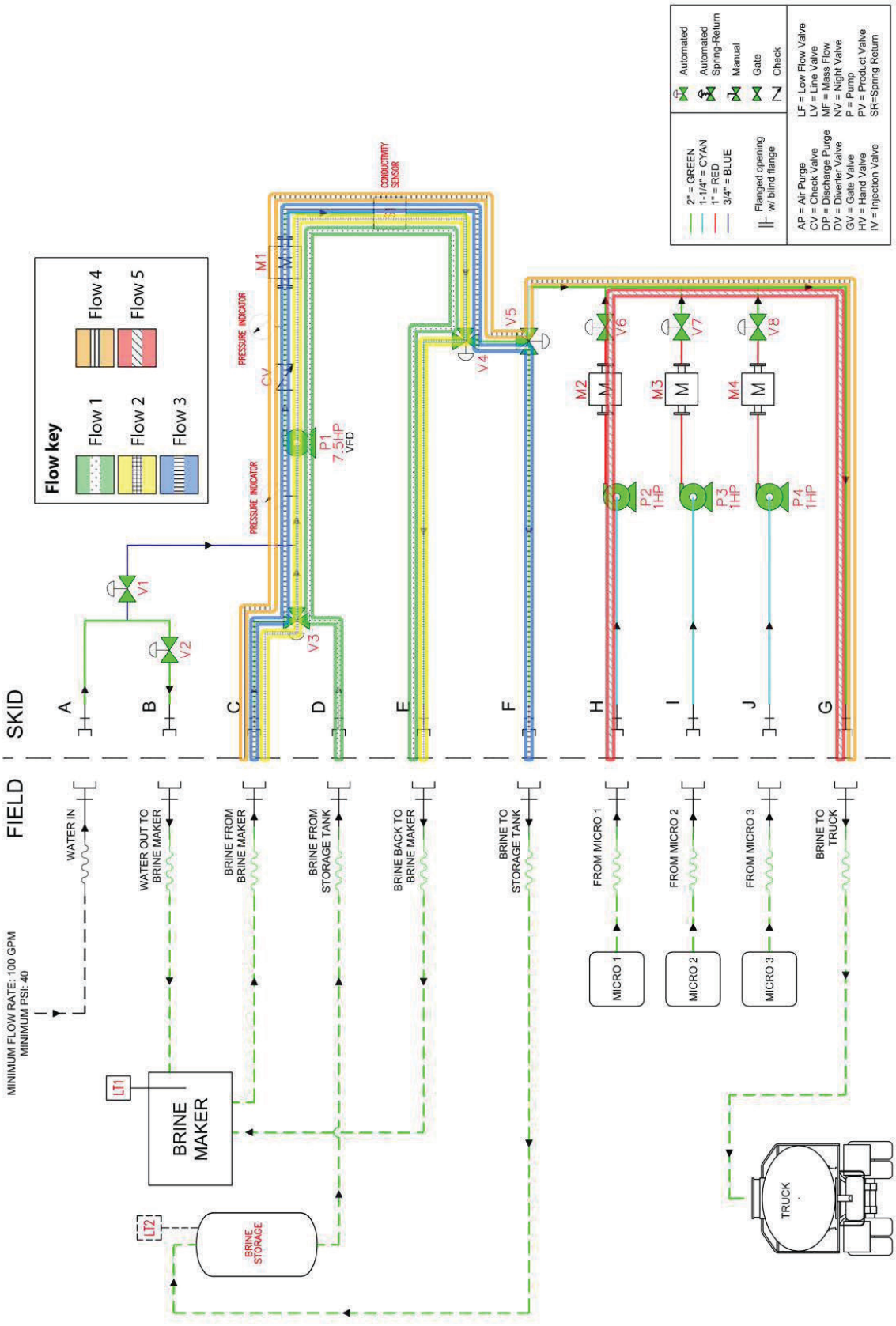
Please contact your local Dealer with any questions or comments in regards to service, repairs, and/or parts. Additional information may be available online at www.gvminc.com.

Parts manuals for GVM equipment can be found online at www.gvmparts.com.

To find your local Dealer, visit www.gvminc.com and select the Locate a Dealer tab at the top left.

WARNING: DO NOT RUN PUMPS DRY! Serious damage may result if a pump is started or run dry. If the pump sounds like it is pumping rocks it may be from cavitation caused from a lack of water flow to the pump. This will result in a reduced lifespan of the pump bearings and pump.

Note: Reference this diagram when “Diagram Flow X” is referenced in this section’s maintenance instructions.



6.1 - Routine Maintenance

The following routine maintenance should be performed daily during bring-making operations.

1. Inspect the skid and components for any leaks or damaged parts. Replace or repair parts as needed.
2. Check salinity with a handheld meter and adjust sensor as needed.

6.2 - Short-Term Machine Storage

The following maintenance should be performed before placing unit into short-term storage, 15 days or less without being used. Amient temperatures during short term storage must be above 32°F

1. Flush all lines with clean water.

WARNING: DO NOT RUN PUMPS DRY! Serious damage may result if a pump is started or run dry. If the pump sounds like it is pumping rocks it may be from cavitation caused from a lack of water flow to the pump. This will result in a reduced lifespan of the pump bearings and pump.

2. Wash frame and non-electrical parts to rinse off any brine residue.
   Note: Do not use a high-pressure washer to clean skid.
3. Hoses can be left attached as long as they are not subject to physical damage; if removed, attach a Banjo cap.
4. Brine maker level transmitter can be left connected as long as it is not subject to physical damage, and the end of the level transmitter extending into the brine maker is protected from damage.
5. The skid can be left with power on.

6.3 - Long-Term Machine Storage

The following maintenance should be performed before placing unit into long-term storage, 15+ days, or after brine-making season is over.

1. Flush the micros with clean water (see Diagram Flow 5). If micros are not used, skip to Step 2.

WARNING: DO NOT RUN PUMPS DRY! Serious damage may result if a pump is started or run dry. If the pump sounds like it is pumping rocks it may be from cavitation caused from a lack of water flow to the pump. This will result in a reduced lifespan of the pump bearings and pump.

   a. Connect a freshwater line to the micro pump inlet port H, I, or J as needed.
   b. Make sure valve V5 is set to Brine to Storage Tank. This will prevent backflow into the rest of the skid.
   c. If the rinse water is to be saved, connected a hose from port G to a container capable of holding all the rinse water.
   d. From the touchscreen, manually open the micro discharge line valve.
   e. Open the freshwater connection to the micro pump.
   f. From the touchscreen, set the micro pump to a low speed 15-20% then start the micro pump. Slowly ramp up the speed of the micro pump until it is running at 100% speed.
   g. Run enough water through the system until you are confidant it is completely cleaned out.
   h. Stop the pump and close the micro pump discharge valve.
   i. Stop the water source and disconnect the hose to the micro pump.
   j. Repeat from step “c” for each of the micros.
   k. Remove drain plug at the bottom of micro pump casings.

5.3 - Long-Term Machine Storage *continued*

2. Flush all piping on the skid with clean water (refer to WARNING above)
   a. Disconnect the hose from the brine maker to the brine skid at port D. Connect a freshwater line equipped with a manual valve to port D (brine from brine maker); leave the valve in the OFF position (see Diagram Flow 5).
   Note: The hose from port E (brine back to brine maker) can be left attached if desired. This will allow flushing the hose and the brine maker.
   b. From the touchscreen's Manual screen, set valve V3 to port D (brine from storage tank).
   c. From the touchscreen's Manual screen, set valve V4 to port E (brine back to brine maker).
   d. From the touchscreen's Manual screen, set pump P1 to about 30% speed.
   e. Open the freshwater line manual valve, make sure the pump P1 is flooded and then start pump P1 from the touchscreen. Ramp pump P1 up to 50% speed after water is flowing from port E.
   f. Allow about 2 minutes of flow at 50% speed to clean out pump P1, flow meter, and salinity meter. If hose is still connected to brine maker, use your own judgement as to the amount of time it takes to clean the brine maker.
   g. When finished flushing, stop pump P1.
   h. Move the hose with clean water from port D to port C (see Diagram Flow 2).
   i. Run pump P1 for an additional 30 to 60 seconds to finish cleaning valve V3.
   j. Stop pump and close the hand valve on the freshwater hose.
   k. Set valve V5 to brine to storage tank (see Diagram Flow 3).
   l. Set valve V4 to feed valve V5.
   m. Start and run pump P1 at 50% speed.
   n. After 2-3 minutes of flushing set valve V5 to brine to truck (see Diagram Flow 4).
   o. Run the pump until the lines are all cleaned out.
   p. Stop pump P1.
   q. Close the hand valve to stop water flow to the skid.
   r. Remove the hoses from the skid.
   s. Remove the plug from the bottom of pump P1.
   t. Allow the pump and all piping to drain. The skid may need to be raised up a couple of inches on the pump end of the skid to enhance draining.

   After draining, attach a Banjo cap to the 2 in. lines. This is to prevent dirt, rodents, and other unwanted objects from entering the piping system.

   WARNING: During warm/hot weather, check the pressure gauges by the pump to verify that unwanted pressure is not building up because of a closed system.

   Note: A couple of small ⅛ in. or 3⁄16 in. holes drilled in the end of the Banjo cap will allow piping on the skid to breathe and not let pressure build up.

3. Remove all hoses from the skid after completing the flushing process.
4. Wash frame and non-electrical parts to rinse off any brine residue.
   Note: Do not use a high-pressure washer to clean skid.
5. Drain lines of water after flushing, by raising the skid up at the control panel end by a few inches.
   Note: Dispose of all rinse water in a safe and environmentally friendly way.

6.3 - Long-Term Machine Storage *continued*

6. After draining, attach a Banjo cap to the 2 in. lines and, if micros are used, attach a cap to the 1.25 in. micro lines. This is to prevent dirt, rodents, and other unwanted material from entering the piping system. During warm/hot weather check the pressure gauges by the pump to verify that unwanted pressure is not building up because of a closed system.

   WARNING: Removing the Banjo caps may result in injury due to a buildup of pressure during storage. Check the pressure gauges before removing caps.

   Note: A couple of small ⅛ in. or 3⁄16 in. holes, drilled in the end of the Banjo cap will allow the piping on the skid to breathe and not let the pressure build up.

7. Unplug the level transmitter from the control panel and remove the level transmitter from the brine maker. Clean and flush the end of the level transmitter in contact with the brine with clean water. Store the level transmitter and attached cord in a clean environment.
   Note: Place the level transmitter in a clean, dry, heavy-duty plastic bag and use a cable tie to attach the bag to the cord. This will help prevent any foreign material from entering the end of the transmitter.

8. The skid can be unpowered for long storage times.

9. Add a couple of desiccant packs to each control panel for long-term storage.

6.4 - Pre-Season Service

The following maintenance should be performed before restarting a unit that has been in long-term storage.

1. Inspect the skid for any damage that happened during storage. Repair or replace any parts as needed.

2. Place platform on a level surface.

3. Apply power to the main panel and turn on the disconnect. Wait 1-2 minutes for the PLC and HMI to go through these start-up procedures.
   a. Put the level transmitter back in the brine maker and connect the cord to receptacle on the bottom of the control panel.
   b. Verify the control panel HMI powers up.
   c. Verify the salinity meter powers up.
   d. If there are micros, verify the display on the VFD is on and working.
   e. When the HMI is powered up, cycle the valves from the Manual screen. Watch the indicator on the front of the valve; verify that it moves.
   f. Follow the same process as when setting up a new machine (Section 3).

6.5 - Operator's Notes

Warranty Information

GVM warrants to its authorized EZ Brine System dealer, who in turn warrants to the original buyer (hereafter referred to as Owner) that each new EZ Brine System and/or EZ Brine System component will be free from proven defects in material and workmanship for the term of 12 months or 400 hours, whichever comes first after the delivery to the original Owner.

This warranty covers all parts constructed or installed by GVM with the exception of the Briggs Stratton engine. GVM is not responsible for warranty repairs done to the Briggs Stratton engine. Any and all repairs to the Briggs Stratton engine must be completed by an authorized Briggs Stratton small engine dealer (reference Briggs and Stratton Operations Manual).

This warranty does not cover any wearable items such as tires, filters, or spinner blades.

This warranty does not cover damages resulting from abuse, accidents, alterations, or failure to maintain or use the GVM product according to instructions applicable to it.

During the warranty period, the authorized selling GVM dealer shall repair or replace, at GVM's option, without charge for parts and/or labor, any part of the GVM product, other than the engine, which fails because of defects in material or workmanship. The Owner shall provide the authorized dealer with prompt written notice of the defect and allow reasonable time for replacement or repair. GVM, at its option, may request failed parts to be returned to the factory. Costs related to travel time, tolls, meals, lodging of service technician, and/or transportation of the GVM product to the authorized servicing dealer for warranty work are the responsibility of the Owner.

This warranty is in lieu of all other warranties (except those of Title), expressed or implied, and there are no warranties of merchantability or fitness for a particular purpose. In no event shall the authorized selling dealer or GVM be liable for downtime expenses, loss of machine use, or other incidental, consequential, or special damages.

GVM Inc., 374 Heidlersburg Road, Biglerville, PA 17307
Phone: 717-259-1577 or 800-458-5123 • www.gvminc.com

Virginia Purchasing Division showing quantities, total dollar value of the Contract Items purchased, ordered, shipped & invoiced with dates in spreadsheet format as defined by the Agency. Failure to supply such reports may be grounds for cancellation of this Contract.

8.5 **Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract Manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract Manager and his or her contact information below.

Contract Manager: Joe Anderson
Telephone Number: 717-253-1228
Fax Number: N/A
Email Address: Jwa@Gvminc.com

Vendor shall inform the Agency in writing of any changes to the information provided above within 10 calendar days of such changes. Failure to comply may be grounds for cancellation of this contract.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFQ DOT2600000085

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge the addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[X]	*Addendum No. 1*	[ ]	*Addendum No. 6*
[ ]	Addendum No. 2	[ ]	Addendum No. 7
[ ]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of the addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

GVM Inc
Company

Joe
Authorized Signature

4/06/2026
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Joe Anderson V.P of Sales

(Address) 374 Heidlersburg Rd Biglerville, PA 17307

(Phone Number) / (Fax Number) 717-253-1228

(email address) JWA@GUMinc.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through *wv*OASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

GVM Inc

(Company)

Joe A

(Signature of Authorized Representative)

Joe Anderson Vice President of Sales

(Printed Name and Title of Authorized Representative) (Date)

717-253-1228

(Phone Number) (Fax Number)

JWA@GUMinc.com

(Email Address)

Automatic Brine Maker with Remote Fill Capability

ATTACHMENT A PRICING PAGE (ATT A)

Vendor Name: **GVM INC**

VENDOR INSTRUCTIONS:

Vendor shall provide a bid price for Automatic Brine Maker with Remote Fill Capability for each district they can provide services to. Estimated quantities are not available. This is a multiple vendor award contract. A contract will be awarded to the lowest bidding responsible vendor, per district.

Contract Item #	Contract Item Description: Automatic Brine Maker with Remote Fill Capability	Unit of Measure	List Price
1	District 1: Boone, Clay, Kanawha, Mason and Putnam counties	Each	91017.00
	District 2: Cabell, Lincoln, Logan, Mingo and Wayne counties	Each	91017.00
	District 3: Calhoun, Jackson, Pleasants, Ritchie, Roane, Wirt and Wood counties	Each	91017.00
	District 4: Doddridge, Harrison, Marion, Monongalia, Preston and Taylor counties	Each	91017.00
	District 5: Berkeley, Grant, Hampshire, Hardy, Jefferson, Mineral and Morgan counties	Each	91017.00
	District 6: Brooke, Hancock, Marshall, Ohio, Tyler and Wetzel counties	Each	91017.00
	District 7: Barbour, Braxton, Gilmer, Lewis, Upshur and Webster counties	Each	91017.00
	District 8: Pendleton, Pocahontas, Randolph and Tucker counties	Each	91017.00
	District 9: Fayette, Greenbrier, Monroe, Nicholas and Summers counties	Each	91017.00
	District 10: McDowell, Mercer, Raleigh and Wyoming counties	Each	91017.00

QUOTE

CUSTOMER WV Bid UPDATE

4/06/2026

SALESMAN Salesman Name
Salesman Phone
Salesman email

2026 GVM EBS BRINE SYSTEM

STANDARD EQUIPMENT

TANK/BLEND STATION
- 304 SS tank, 120 × 64 × 52 in. (L × W × H) with 3/16 in. dia perforated debris screen
- Built-in forklift pockets and lifting lugs
- 1200 gal. liquid capacity (250 gallon clean brine capacity)
- 5.5 yd^3 salt capacity
- Mixing components: (2) 2 in. SS spray bars
- Blend station frame, galvanized skid-style base, 54 x 77 x 72 in. (L X W X H)

MOTOR / PUMP
- Scott 7.5 hp SSI centrifugal pump, frame mounted
- 110 gpm flow rate, 75 ft clearance

SENSORS, GAUGES, AND MEASURING DEVICES
- Salinity level: inductive conductivity transmitter
- Mix tank levels and pump: SS level transducer
- Flow start/stop: 2 in. 24VDC electric valves

TRANSFER HOSES
- (6) 2 in. flexible PVC with camlock and quick couplers
- (1) 3 in. flexible PVC with camlock and quick couplers

CONTROLS AND ENCLOSURE
- Touch screen monitor with graphic interface
- Built-in batch data
- Dual NEMA 4 electrical enclosures

WARRANTY
- Bumper-to-bumper, 1-year

PRICING AND OPTIONS

ITEM NUMBER	QTY	DESCRIPTION	USD PRICE	EXTENDED PRICE
644044		**EZ Brine Premier**	$76,923.00	$0.00
644046		**EZ Brine Premier,** 1 micro ingredient	$88,462.00	$0.00
644048	1	**EZ Brine Premier,** 2 micro ingredient	$95,192.00	$95,192.00
644050		**EZ Brine Premier,** 3 micro ingredient	$101,923.00	$0.00
OPTIONS				
52-00214	1	Tank Plumbing Package, includes 2 in. SS shutoff valve, 2 in. × 15 ft flexible PVC hose with fittings from tank to pump suction, 2 in. poly 3-way ball valve with truck fill quick coupler for filling bulk storage tank from bulk delivery truck, SS hose clamps, and poly hose barb fittings.	$1,250.00	$1,250.00
	1	Wireless 2 way data transfer and 1 year Modem	$1,050.00	$1,050.00
	1	Air Purge System for fresh water	$2,250.00	$2,250.00

SUBTOTAL	**$99,742.00**
Discount	($9,974.20)
INSTALL & ASSEMBLY	$750.00
OUTBOUND FREIGHT	tb d
TOTAL PRICE	**$90,517.80**

Acceptance of Quote

QUOTE

CUSTOMER WV Bid UPDATE

4/06/2026

SALESMAN Salesman Name
Salesman Phone
Salesman email

2026 GVM EBS BRINE SYSTEM

Signature **Date**

F. O. B. Biglerville, PA
Note: Quote valid for 30 days.

Print Name **Purchase Order #**

Note: A 25%, non-refundable deposit is required upon signature. Remainder of balance due before delivery of goods. By signing you

	Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130	State of West Virginia Centralized Request for Quote Highways

Proc Folder: 1928817 **Doc Description:** Automatic Brine Maker with Remote Fill Capability **Proc Type:** Central Master Agreement			**Reason for Modification:** ADDENDUM NO_1 Vendor Questions and responses Attach updated Specifications Bid Opening Moves to April 15th
Date Issued	**Solicitation Closes**	**Solicitation No**	**Version**
2026-04-06	2026-04-15 13:30	CRFQ 0803 DOT2600000081	2

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code: 121592
Vendor Name : GVM Inc
Address : 374
Street : Heidlersburg Rd
City : Biglerville
State : PA **Country :** USA **Zip :** 17307
Principal Contact : Joe Anderson
Vendor Contact Phone: 717-253-1228 ***Extension:*** Cell Phone

FOR INFORMATION CONTACT THE BUYER
John W Estep
304-558-2566
john.w.estep@wv.gov

Vendor Signature X [signature] **FEIN#** 232065809 **DATE** 4/07/2026

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION
ADDENDUM NO_1 Addendum No_1 issued to publish and distribute the attached information to the Vendor Community. REQUEST FOR QUOTATION: The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Division of Highways to establish an open-end *contract for Automatic Brine Maker Production Systems Equipment, bid by District, for use throughout the state of West Virginia.* Per the Bid Requirements, Specifications, Terms and Conditions attached to this solicitation.

INVOICE TO	SHIP TO
VARIOUS AGENCY LOCATIONS AS INDICATED BY ORDER No City WV US	VARIOUS AGENCY LOCATIONS AS INDICATED BY ORDER No City WV US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Automatic Brine Maker with Remote Fill Capability	0.00000	EA	90,517.80	

Comm Code	Manufacturer	Specification	Model #
22101700	GVM Inc.	Automatic Brine Maker	EZ-Brine Premier

Extended Description:
SEE ATTACHED PRICING PAGE - ATTACHMENT A, FOR ACTUAL COST

SCHEDULE OF EVENTS

Line	Event	Event Date
1	Tech Questions due by 10:00am	2026-03-27