



INTRODUCTION

Thank you for purchasing your AQUASTORM 50 Batch Cleaner.

This document contains information to answer all the frequently asked questions in relation to the installation of a AS-50 batch cleaner.

Section 1 – Important Installation Requirements

Section 2 – Machine Foot Print

Section 3 – Training

If you have any further questions, please don't hesitate to contract the ELECTROVERT Customer Support Group @ 800-737-8110 Option 3 or evtsupport@itweae.com.

Thank you for your cooperation, may I take the opportunity of wishing you many years of quality production with your new AS-50 batch cleaner.

Sincerely,

Pat O'Brien
Vice President/General Manager

Aquastorm™ 50

3000 Model

PRE-INSTALLATION INSTRUCTION



Customer Service and Support

ELECTROVERT
1629 Old South 5 Camdenton,
MO 65020 U.S.A.
800-737-8110 Option 3
evtsupport@itweae.com

PREINSTALLATION CHECK LIST

Are you ready for Installation?

Item		Confirm
Pallet Jack/Fork Lift (Capable of lifting 3000 lbs. (1360.7 kg))		<input type="checkbox"/> Yes <input type="checkbox"/> No
Power Requirements (4 wires- 3 phase 1 ground) 480 Vac, 3 phase, 60 Hz, 40 Amps 380 Vac, 3 phase, 50 Hz, 47 Amps 230 Vac 3 phase 60 Hz, 81 Amps	_____ Voltage	<input type="checkbox"/> Yes <input type="checkbox"/> No
Compressed Air Requirements Air inlet 1/2" pipe size. Air input supply: 379 – 586 kPa (55 – 85 psi) Air volume (intermittent) 28 SCFM Max	_____ Bar	<input type="checkbox"/> Yes <input type="checkbox"/> No
Recommended Water Supply 1/2 inch NPT fitting. 15.1 l/min (4.0 gpm) @ 50 psi with 49C (120F) deionized water.		<input type="checkbox"/> Yes <input type="checkbox"/> No
Exhaust Requirements One (1) 101 mm (4 in.) stack Stainless Steel recommended. Static Port (NO Vacuum) No Exhaust Blower		<input type="checkbox"/> Yes <input type="checkbox"/> No
Drain Requirements 1-1/2 inch NPT gravity drain Optional Sump 1-1/2 inch NPT inlet -1 inch outlet.		<input type="checkbox"/> Yes <input type="checkbox"/> No
Zero Discharge Option 1 HMR, 1 Carbon, 2 Mix beds bottles.		<input type="checkbox"/> Yes <input type="checkbox"/> No
Closed Loop Rinse 2 carbon particulate filters 1 one mix bed filter		<input type="checkbox"/> Yes <input type="checkbox"/> No
Registered on Speedlineonline.com		<input type="checkbox"/> Yes <input type="checkbox"/> No

* For any questions or concerns on the above Installation Check List contract ELCTROVERT Customer Support Group @ 800-737-8110 or etsc@itweae.com.

Important Installation Requirements

It is critical both your facility and your employees are ready for the ITW EAE field service engineer's visit to install your new machine. Please review the list below and let us know if you have any questions. Failure in preparation may incur delays in the installation.

Utility and Environmental Requirements

Electrical Supply

- 480 Vac, 3 phase, 60 Hz, 40 Amps, (4 wires, 3 phase, ground),
- 380 Vac, 3 phase, 50 Hz, 47 Amps, (4 wires: 3 phase, ground)
- 230 Vac 3 phase 60 Hz, 81 Amps, (4 wires, 3 phase, ground)

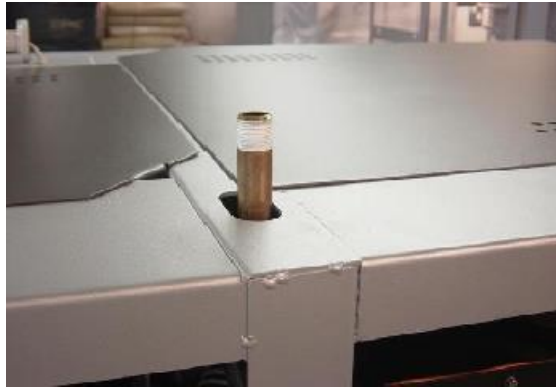
The Inlet hole for the power is a 2-1/2 inch hole sized for a 2 inch conduit fitting. The power cord and conduit should be supported from the ceiling and not resting fully on top of the machine. The electrical connection should look as illustrated in the right justified picture below.



Air Supply

- ½ inch pipe size
- Air input supply: 379 – 586 kPa (55 – 85 psi)
- Air volume (Intermittent) 28 SCFM Max

The air Inlet is located on the back top of the machine. This is a BRASS ½ inch NPT pipe. The Air inlet line should be plumbed with a full port valve and at least a ½ inch pipe size.



WATER INLET

- 1/2 in., NPT inch pipe size
- User supplied, heated tap or treated water.
- Temperature: 60 – 71 °C (140 – 160 °F). With Closed loop rinse max is 60 °C (140 °F).
- Flow rate: 15 - 19 l/min. (4 - 5gpm)
- Nominal pressure: 2.8 - 3.3 kg/cm² (35-40 PSI)

The Water inlet is located on the back-top right (From the back of the machine). This is a Stainless Steel 1/2 inch NPT fitting. The Water inlet line should be plumbed with a full port valve and at least a 1/2 inch pipe size.



Exhaust

- 10.1 cm (4 in.) diameter exhaust, (recommended) spiral galvanized or seamless stainless steel.
- No draw rate required.

The exhaust port is a 4 inch tube sticking out of the top of the machine. It is recommended to have Stainless Steel sealed pipe to exhaust the hot gasses and steam out of the machine.



DRAIN

Standard Gravity

- One 1 1/2 in. SST pipe
- 38 Liters/ Min. (10 GPM) constant.

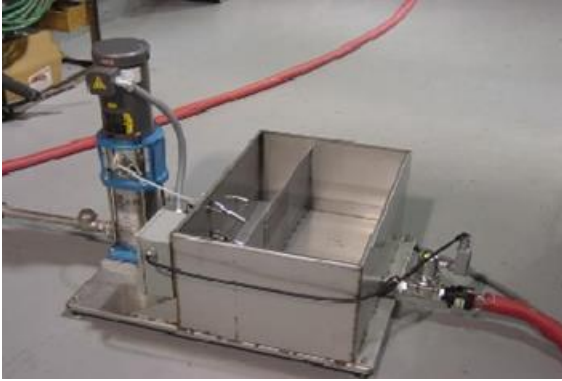
The drain out of the machine is a 1-1/2 inch NPT male fitting. This is a gravity drain and requires a floor drain or a sump pump. If hooked to Speedline's Sump Pump, a pipe from the machine to the Sump Pump needs to be provided by the customer. The Sump Pump comes with a 10 ft cord. The sump should be placed as close to the machine as possible without interfering with normal operation or maintenance.



Optional Sump

- Inlet 1 1/2 inch NPT male fitting – Outlet 1 in. NPT female fitting

The sump is self-contained. It needs to be set in place and plumbed to the machine and then plumbed to an outside container or processing center. The Outlet is 1 inch NPT female fitting with a back flow preventer valve (provided with tank).



The sump tank comes prewired and plugs into the right side of the machine, all power and communication runs through this plug. No external source is needed.

Optional Zero Discharge

- 4 bottles in the series and should be placed in the following order.
- 1 HMR marked with yellow tape.
- 1 Carbon marked with the black tape.
- 2 Mixed bed marked with the white tape. (2 Bottles in series).



Closed Loop Rinse Option

- Three canister filters.
- 2 Carbon particulate.
- 1 Mixed Bed.

There are three canister filters on the side of the machine. The first two are carbon particulate and the third is a mixed bed.



Machine Foot Print

Install the AS50 in a clean, dust-free environment to ensure proper operation. The installation area should provide a minimum clearance of 2 ft. (0.6 m) around to provide adequate space for service.

Machine Dimensions:

Length: 1527 mm (60.1 in)

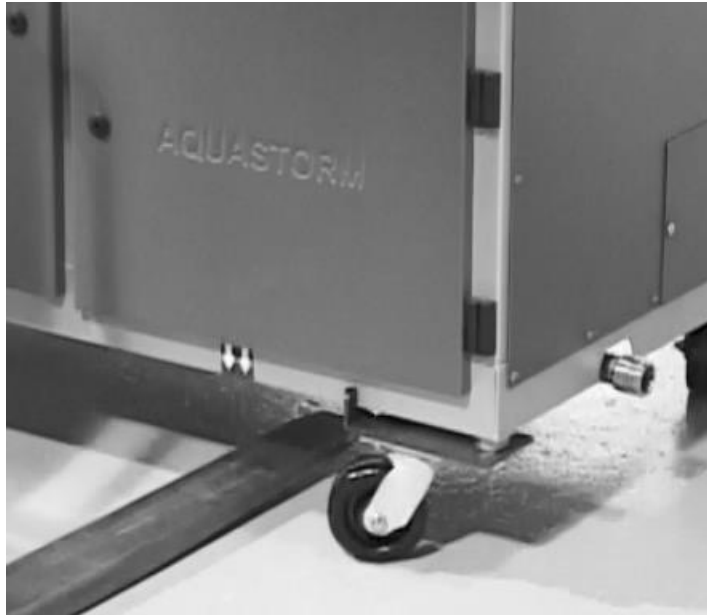
Width: 969 mm (38.1 in)

Height: 1826 mm (71.9 in)



ATTENTION

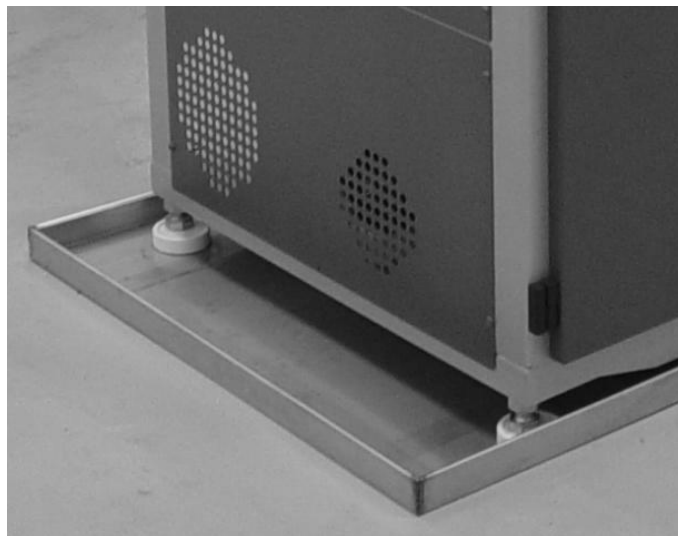
- ITW EAE recommends extended forks of 5 ft to 6 ft (152.4 cm x 182.8 cm) in length to ensure proper weight distribution when lifting the platform off the skid.
- Make certain that the forks have a total width/span of 5 ft (150 cm).
- Align forks with the marks located on the base frame of the machine.
- Visually inspect to confirm the forks are not colliding with the plumbing located near the base frame.
- The forklift must be capable of lifting 3000 lbs (1360.7 kg).



Machine Placement and Leveling

The AS50 machine comes with a set of leveling bolts and a set of plastic pucks as standard.

- Use forklift to remove machine from shipping skid. Install leveling feet in each corner of machine. Run in the bolts to achieve the desired machine operating height. If machine arrived on caster wheels use the same method to lift clear off ground and place leveling feet.
- If available, the drip tray should be positioned so the DI filters are over the tray. The float switch cable for the drip tray should be ran out of the bottom left rear corner of the machine frame.
- Position the pucks under the leveling bolts before lowering the machine onto the tray.

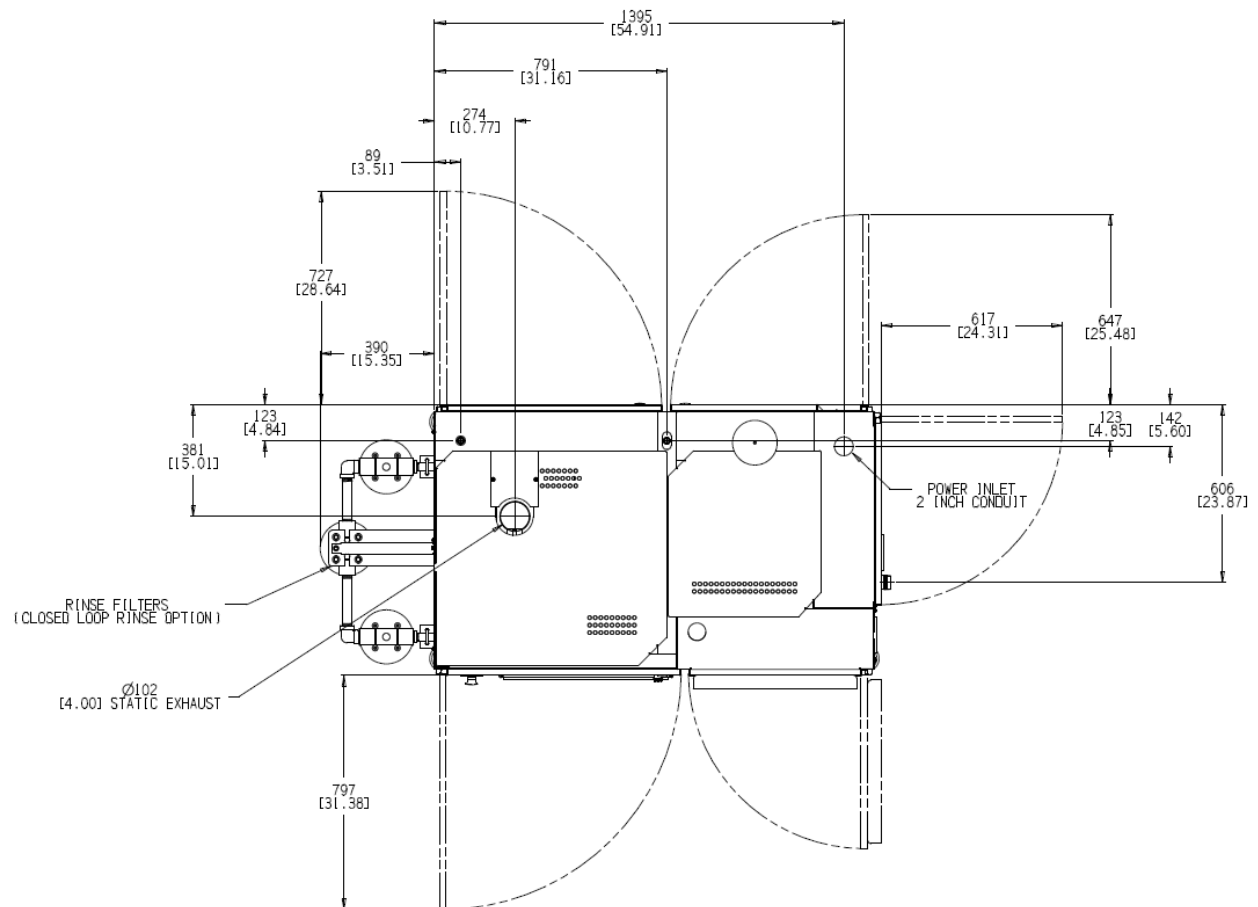


- Level the machine front to back and side to side. Use the base plate of the machine as the leveling plane.

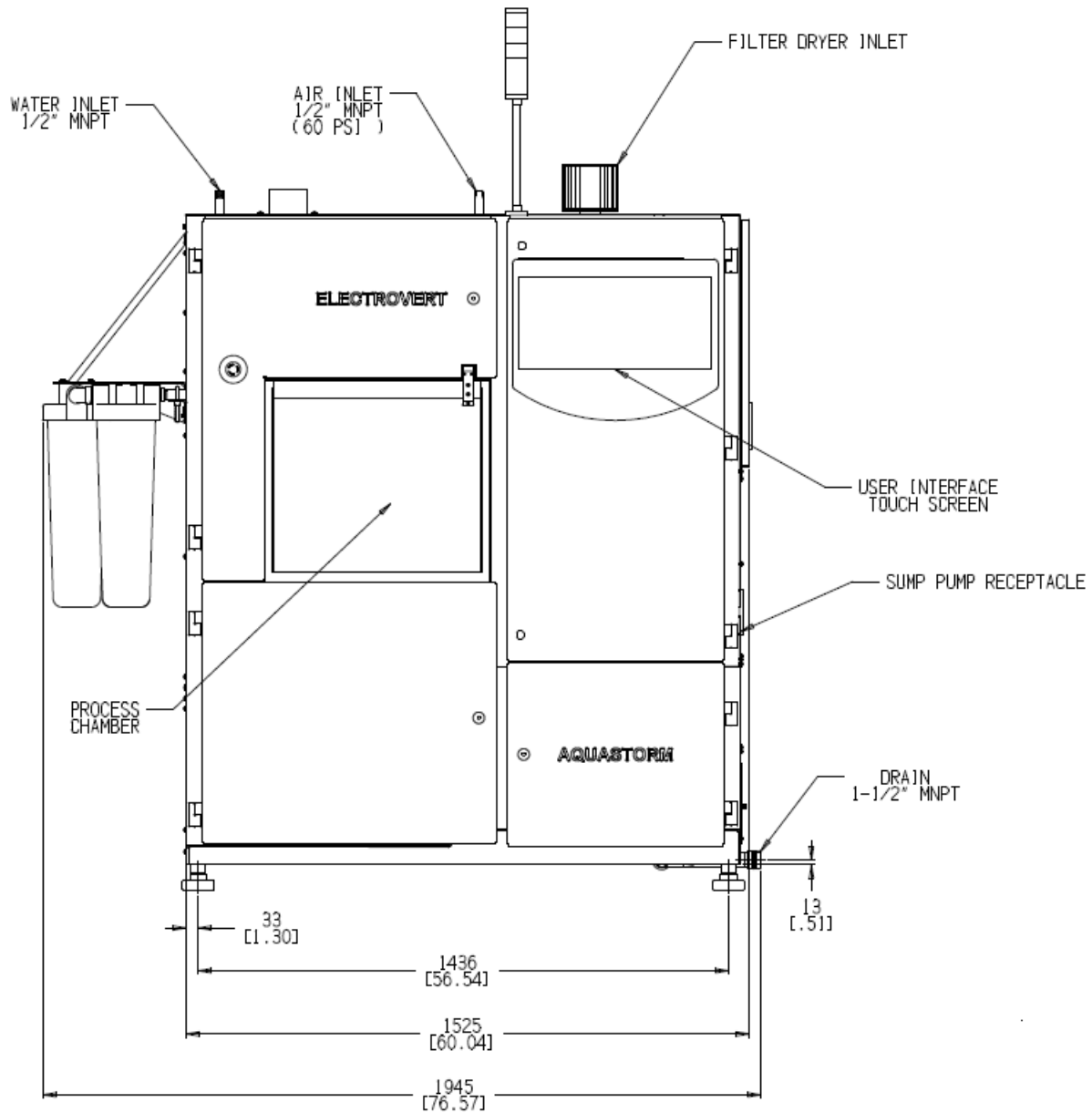


- Once machine has been leveled and in position, all the external connections can be made.

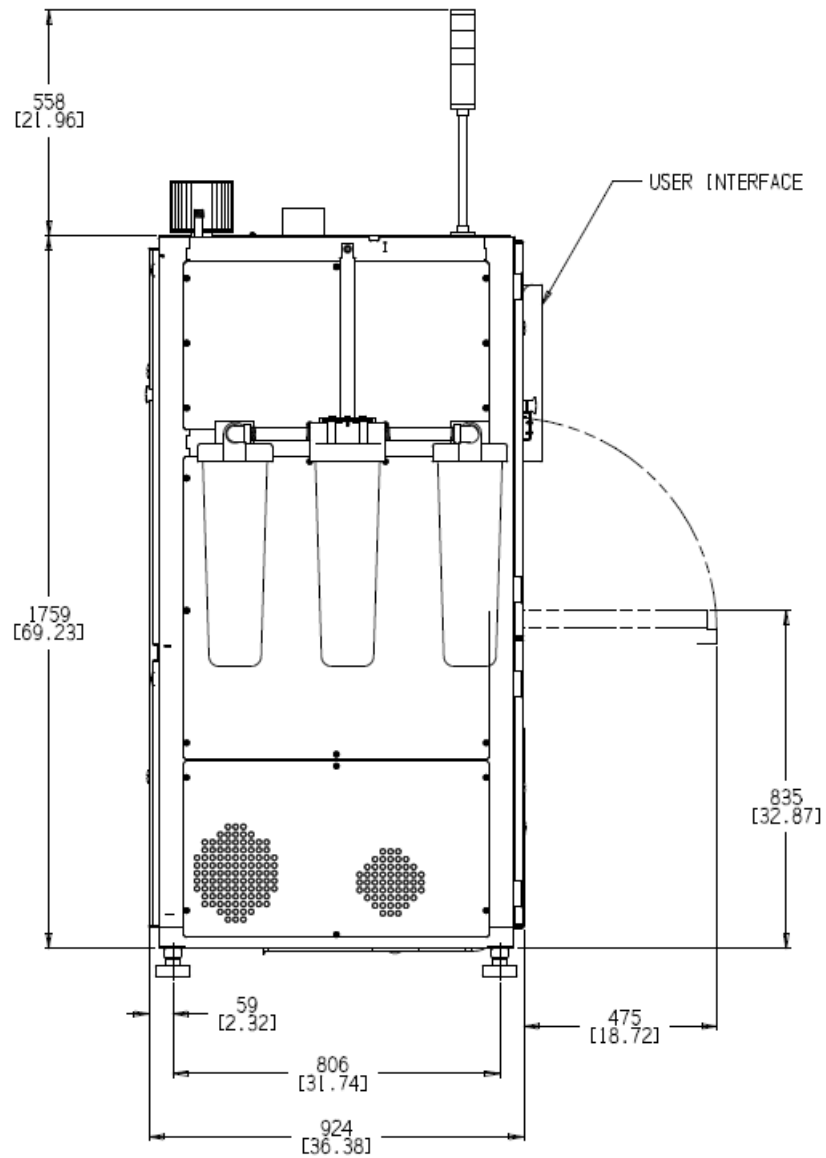
Top View



Front View



Side View





TRAINING AT INSTALLATION

As part of the Installation process, ITW EAE offers a complimentary “up and running” training program. This covers the basic operation, maintenance and programming of the cleaner and associated options.

Training Summary

Customer Start-Up Assistance Training

- The FSE (field service engineer) will provide maximum of 4 hours of training for up to four process engineers)
- The FSE will provide a maximum of two hours of training for up to four operators.
- The FSE will provide a maximum of two hours of training for up to four maintenance technicians.
- The FSE will then demonstrate that the system performs to specification using the customer’s production materials

***NOTE:** The customer's personnel are expected to devote the entire time to the training program. Hours not devoted by the customer may not be “banked” for later use.

Additional Training

A full range of training courses are available covering operation, maintenance and process. Courses are conducted at our ITW EAE facility in Camdenton, MO.

For further information, including course descriptions and schedule please contact the Training Department or visit <http://www.itweae.com/services-and-support/americas>

NEED CONSUMABLES?

*For current pricing and availability please contact our Parts Department at parts@itweae.com.

*For any questions you may also contact us at 800-737-8110 Option 4.