

## INTRODUCTION

Thank you for purchasing your MicroCel centrifugal cleaning system.

This document contains information to answer all the frequently asked questions in relation to the installation of an Accel MicroCel cleaning system.

Section 1 – Important Installation Requirements

Section 2 – Machine Foot Print

Section 3 – Training

If you have any further questions, please don't hesitate to contact the ELECTROVERT Customer Support Group @ 800-737-8110 Option 3 or [evtsupport@itweae.com](mailto:evtsupport@itweae.com).

Thank you for your cooperation, may I take the opportunity of wishing you many years of quality production with your new Acccel MicroCel cleaning system.

Sincerely,

Pat O'Brien  
Vice President/General Manager

# ACCEL MICROCEL

## 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](mailto:evtsupport@itweae.com)

## PREINSTALLATION CHECK LIST

### Are you ready for Installation?

Item		Confirm
Pallet Jack/Fork Lift Capable of lifting 2500 lbs. (1134 kg)		___ Yes ___ No
Power Requirements: 208-230V, 50 amps, 60Hz, 3phase Optional: 208-230V, 50 amps, 50 Hz, 3-phase; 200-240V, 70 amp 50/60 Hz, single phase; 380-415V, 35 amps, 50/60 Hz 3-phase	_____ Voltage	___ Yes ___ No
Compressed Air Requirements Air In 1/2" FNPT, Dry, clean, oil-free air at 80-100 PSIG	_____ Bar	___ Yes ___ No
Compressed N2 Requirement 1/4" FNPT, Dry nitrogen at 30-100 PSIG		___ Yes ___ No
Water Supply Rinse In 1/2" FNPT, Filtered DI water at 50-100 PSIG		___ Yes ___ No
Chamber out 3/4" FNPT Gravity drain from process chamber. (Set for Standard or Zero discharge)		___ Yes ___ No
Wash In 1/2" FNPT (DI water) at 30-100 PSIG. Wash OUT 3/4" Gravity drain from wash tank.		___ Yes ___ No
Exhaust Requirements 2 IN, Orient connecting ductwork upward - NO SUCTION		___ Yes ___ No
Coolant In: 1/2" FNPT, Tap or chilled water 100 PSIG max. Coolant Out: 1/2" FNPT Outlet for tap or chilled water		___ Yes ___ No
Zero Discharge Option: 2 Carbon, 1 Mix bed filters.		___ Yes ___ No
Registered on Speedlineonline.com		___ Yes ___ No

For any questions or concerns on the above Installation Check List contract ELCTROVERT Customer Support Group @ 800-737-8110 or [etsc@itweae.com](mailto:etsc@itweae.com).

## Shipment Verification

Upon arrival, check the packing list to ensure that all items ordered have been delivered or are accounted for. Notify ITW EAE at once of any shortages or discrepancies between your purchase order and the equipment that you receive.

### 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 plumbing located near the base frame.
- The forklift must be capable of lifting 2500 lbs (1134 kg).

## Machine Unpacking and Placement

The MicroCel machine ships on caster wheels and includes a set of leveling bolts (feet) as standard.

- Remove shrink-wrap, packing fasteners, and any other packing materials from the system. Dispose of the lacking material in accordance with facilities requirements.
- Use forklift to remove machine from shipping skid. Install leveling feet in each corner of machine and drive in to clear the caster wheels. (Do not remove wheels)
- Lower machine in the drip tray and onto the wheels and position as center justified as possible.
- Lower the leveling bolts to support the machine weight and confirm the wheels are not touching the bottom pan.
- Adjust leveling feet to desired machine operating height. 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.

## 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.

### Electrical Supply

- 208-230V, 3-phase, 60 Hz, 50 amps, (standard)
- 208-230V, 3-phase, 50 Hz, 50 amps, (optional)
- 200-240V, single phase, 50/60 Hz, 70 amps (optional)
- 380-415C, 3-phase, 50/60 Hz, 35 amps, (optional)

### Air and N2 Supply

- Air:  
1 1/2" FNPT, Dry, clean, oil-free air, Air input supply: 80-100 PSIG , Air consumption: 280 CFH
- N2:  
1/4" FNPT, Dry nitrogen, input supply: 30-100 PSIG, consumption (intermittent): 60 CFH

## WATER INLET

- Rinse IN, 1/2 in NPT, filtered DI water recommended at 50-100 PSIG
  - Wash in, 1/2 in NPT, filtered DI water recommended at 30-100 PSIG
- Note: Wash/Solvent capacity 28 US Gallons.

## DRAIN

### Standard Gravity

- Outlet 3/4 inch fitting.

### Optional Sump

- Outlet 3/4 inch NPT fitting.

### Zero Discharge

- 2 Carbon marked with the black tape.
- 1 Mixed bed marked with the white tape.

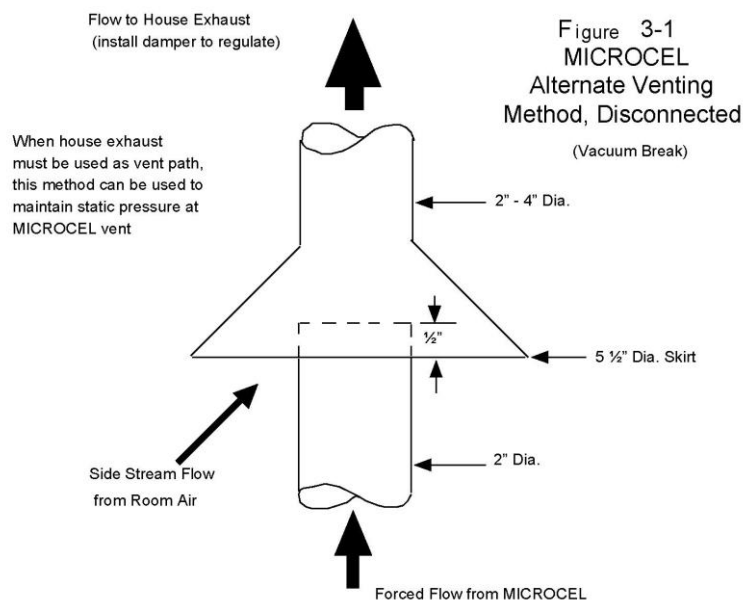
## Exhaust

- 2 in. diameter indirect exhaust.

The vent functions as a pathway for hot air and/or nitrogen and for small amounts of water vapor to exit the processing chamber. Static pressure must be maintained at the vent opening, therefore it cannot be directly connected to an exhaust duct that provides suction to the system. If a direct vent line cannot be

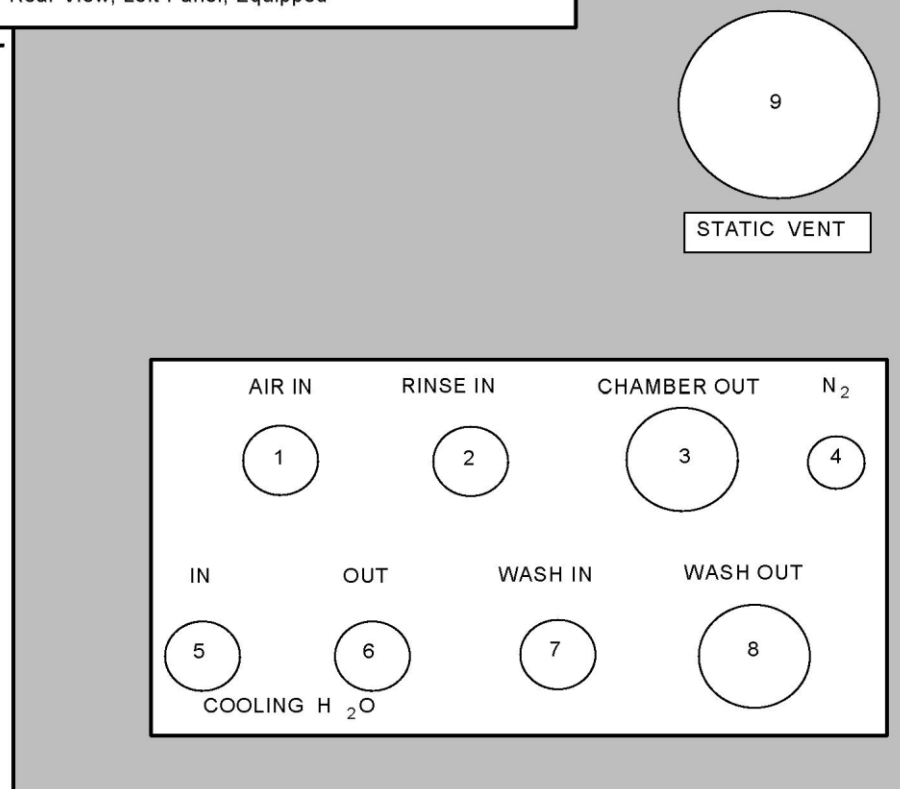
- connected between the system and the outside atmosphere, an indirect connection can be made to an exhaust duct if sufficient side stream air flow ensures that the vent tube opening remains as static pressure. Stainless steel is the recommended construction material for this external line. This connection should be liquid tight. The connection is located above the utility panel and is labeled "STATIC VENT".

See Figure 3-1 for a recommended design.



## MICROCEL Utility Connections

Rear View, Left Panel, Equipped



1	-AIR IN	½" FNPT	Requires dry, clean, oil-free air at 80-100 PSIG
2	-RINSE IN	½" FNPT	Requires filtered water, DI preferred at 50-100 PSIG
3	-CHAMBER OUT	¾" FNPT	Gravity drain from Process Chamber
4	-NITROGEN IN	¼" FNPT	Requires dry nitrogen at 30 PSIG Min, 100 PSIG Max.
5	-COOLANT IN	½" FNPT	Requires tap or chilled water 100 PSIG Max.
6	-COOLANT IN	½" FNPT	Outlet for above
7	-WASH IN	½" FNPT	Wash Media (DI water) at 30 PSIG Min,-100 PSIG Max.
8	-WASH OUT	¾" FNPT	Gravity drain from Wash Reservoir
9	-STATIC VENT	2" MNPT	Orient connecting ductwork upward, <u>NO SUCTION</u>

FNPT = Female National Pipe Thread (USA)

## Machine Foot Print

Install the MicroCel 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: 75.0 Inches (190.5 cm)

Width: 38.0 Inches (96.5 cm)

Height: 36.0 Inches (91.4 cm) or 67.0 Inches (170.2 cm) with robot head in the up position.

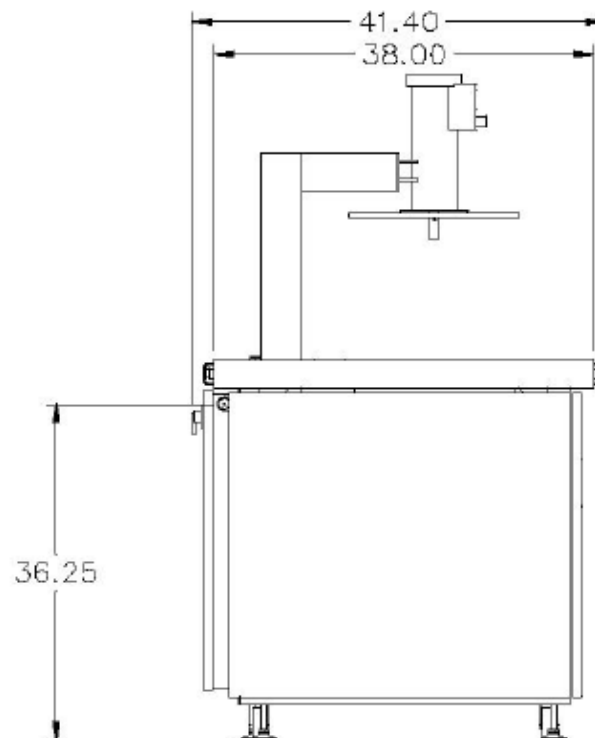
Drip Pan: 36.0 Inches (91.4 cm)x72.0 Inches (182.9 cm) x 3.0 Inches (7.62 cm)

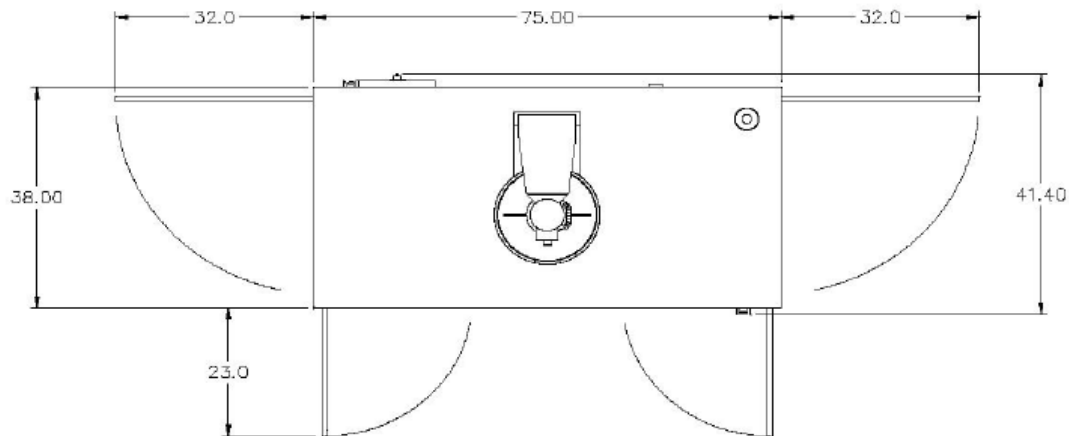
### Machine Weight:

Crated weight: 1660 pounds (747 kg)

Empty weight: 1200 pounds (540 kg)

## Side and Top 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 MicroCel 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](mailto:parts@itweae.com)

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