

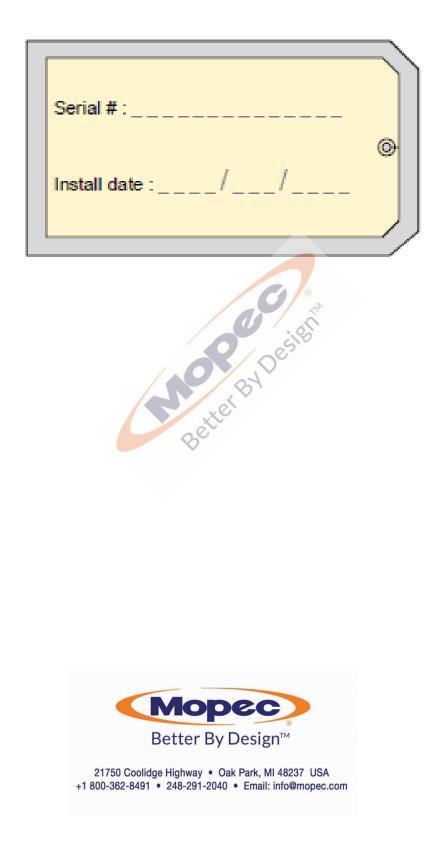
# **USER MANUAL**

# ME Series Grossing Stations ME100, ME200, ME300, ME400, ME600, ME650

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Rev 10-7-16 ©

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#### UNPACKING

- 1) Carefully inspect the exterior of the shipping container before opening. If the crate is damaged and the product has sustained damage then immediately contact Mopec and the freight carrier. **Never discard the shipping container even if it is damaged beyond recognition.**
- 2) Have the delivery driver note any suspected damage on the Bill of Lading and sign it. Mopec will help assist in filing a claim for product repair and/or replacement.
- 3) Carefully open the containers and inspect the equipment for concealed damage. If visible damage is noticed (i.e. broken welds, dented stainless, scratches, etc.) follow through as noted above. Do not discard the shipping material. They are important in settling claims.

**CAUTION:** There are loose components in the packaging of your product. Be very careful in examining the packaging material as it may contain installation parts and/or product components.

#### **INSPECTION**

 After carefully unpacking your Mopec Grossing station please inspect the items in the list below prior to installing the unit. The Grossing station should be thoroughly checked for loose screws, defects, or damage that may have occurred during shipping or packaging.

### **ME Grossing Station Installation Instructions**

Locate package of smaller items (dissection board, tissue boxes, duct hose or filters) When removing from the shipping platform, be careful if the unit has a foot pedal. The unit should be removed from the shipping platform as to not cause damage to the copper plumbing attached to the foot pedal

#### Leveling and Setting Unit in Place

The unit should be off the floor and resting on the leveling pads. The unit should be leveled to ensure proper drainage. This allows water to evaporate or dry in case of a leak without getting trapped by the base of the unit Ensure there is a Minimum of 6.5" from the wall to the back of the unit. This allows for elevating units to move freely without any obstructions to the wall.

#### **Utility Connections**

The only connections necessary are the Electric, Cold and Hot water supply, the drain connection and the HVAC connections if in house ventilation. If the disposal option is ordered the disposal will need to be installed prior to the electrical hook up. The unit is already pre wired and plumbed for the options ordered.

#### **Electrical Connection**

All electrical, water and ventilation stubs should be prepared in accordance with our rough-in dimensions shown on rough in diagram of this manual.

The electrical service provided for the ME Series must include:

1) A switch or circuit breaker to which the wiring harnesses from the workstation will be connected.

Remove the access panels (see photo on next page if necessary). Elevate the unit to its maximum upper position using the Vertical Position Switch. If ordered, install the optional disposal and make all connections that apply, including the additional 115V, Single Phase, 60 Hz, 20 Amp circuit to your electrical service. (This should be on a separate dedicated line.) Replace the access panels.

Each ME Series Grossing Station has a three foot whip for attachment to the facility, unless a plug and cord are requested. The whip leads are labeled. And depending on the options selected there are either 3 wires or 5 wires. L1 and C1 are for the unit electrical options such as lights, lifts and fans if a recirculation unit. L2 and C2 are for the disposal. 115V Info

#### Without a disposal there are three wires:

Black Labeled as L1 White Labeled as C1 Green w Yellow Stripe Ground

#### With the Disposal there are five wires

Black Labeled as L1 White Labeled as C1 Green w Yellow Stripe Ground Red Labeled L2 White Labeled C2

The flexible water tight conduit and connections is the preferred conduit and is not provided with the unit. This is due to an unknown length needed and variances possible in the rough in process. If the disposal option is purchased there

MUST be two separate circuits for the two circuits on the grossing station. You must have separate circuits for the disposal and unit.

#### **Drain Connection**

The ME Grossing stations are equipped with 1.5" Diameter drain and connections. DO NOT modify the drain line or connections without contacting MOPEC first. The Units are built in accordance with the rough in drawings specific to the unit. The drain connection provided unless specifically requested otherwise is Orion Acid Waste Pipe 1.5" Diameter. The height is per the rough in drawings provided at the time of the order.

#### Water Supply Connection

The water supply connections are ½" DIA copper pipe. The unit has been cleared of water and debris during the manufacturing and testing of the unit. The rough in drawing for the unit suggests a 1/4 turn valve to be connected to the wall. This is to allow the water to be localized and disconnected should the need arise to work on plumbing in the future. Before connecting the unit to the facility water supply, check the lines in the facility for debris by flushing the lines for a moment. After the connections are made remove the aerator from the faucet and turn the water on and open the faucet and other water options after the faucet to allow any debris to evacuate the system. Then one option at a time, open the valves for the other water options (i.e. Perimeter Rinse, Spray Hose and then the Disposal). This is the time to look for leaks or other plumbing issues. The plumbing is tested for leaks and function at the facility and is put under pressure for 45 minutes to check for leaks. However the plumbing is hard copper and soldier connections. During transport a unit may experience a failed soldier joint. Contact MOPEC immediately if there is a leak.

#### **Ventilation Connection**

Ventilation is one of two types for the ME Grossing stations; In House Ventilation or Recirculation. For in house the unit is connected to the facility ventilation system via duct work. The duct work will vary depending on the model of grossing station.

#### In House

If your unit elevates, it will have two 8" diameter flexible duct hoses. The duct hoses are connected to the grossing station chamber door on top of the unit and to corresponding stubs at the ceiling per the rough in drawing. The ducts are provided as well as the stainless steel band clamps. The typical flexible duct hose length is 3 foot. If your unit does not elevate the ventilation connection is on the top back of the unit and will vary by model.

ME100/ME200 (48" wide models) the connection is a 3" x 46" rectangular stub on the top back of your unit. The duct work is not provided by Mopec unless specifically ordered.

ME400, ME600/ME650, the connection is an 8" round duct supplied with the unit. ME600. ME650 and ME700 have two ducts the larger ME670 has three 8" round ducts. Clear PVC flexible duct is provided with the unit as well as mounting clamps.

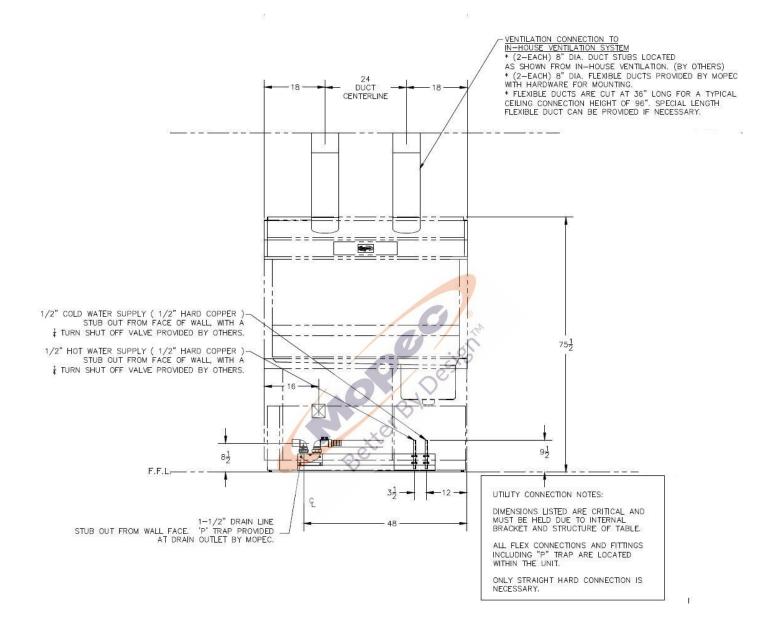
#### Recirculation

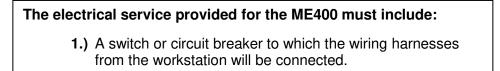
For recirculation models, the filters will need to be installed and the clearance above the unit verified at its highest elevation if the unit elevates. You should have a minimum of 12 inches or more above the grossing station at its highest position. Air flow is generated by multiple fans in the recirculation models. They are set up so one fan is on constantly when the unit is on and the other fan is controlled by a rheostat to control volume/speed.

#### \*\* Caution \*\*

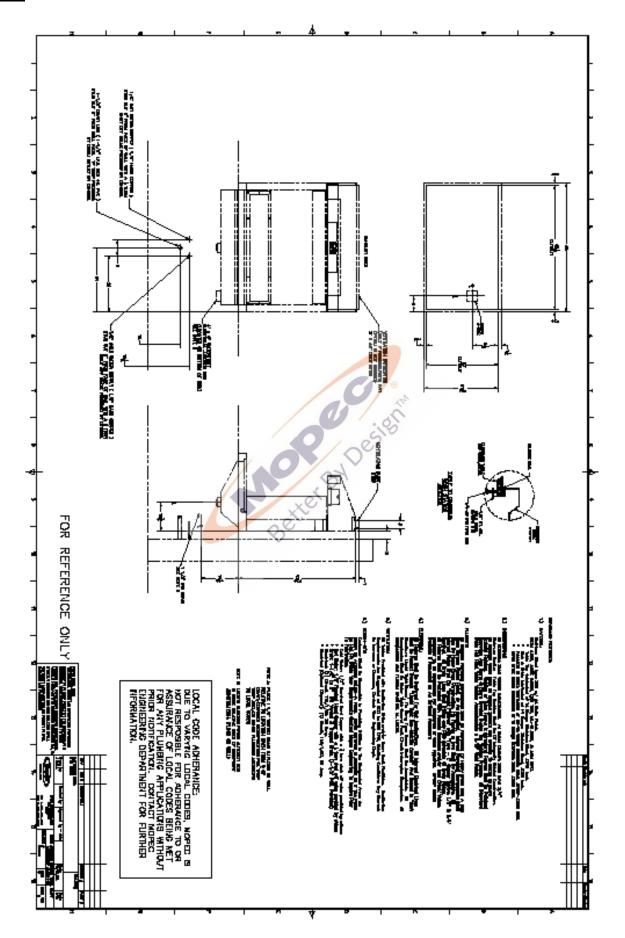
# These are general guidelines and installation is specific for each of the ME units. Professional installation is recommended.

## **Rough In Drawings**

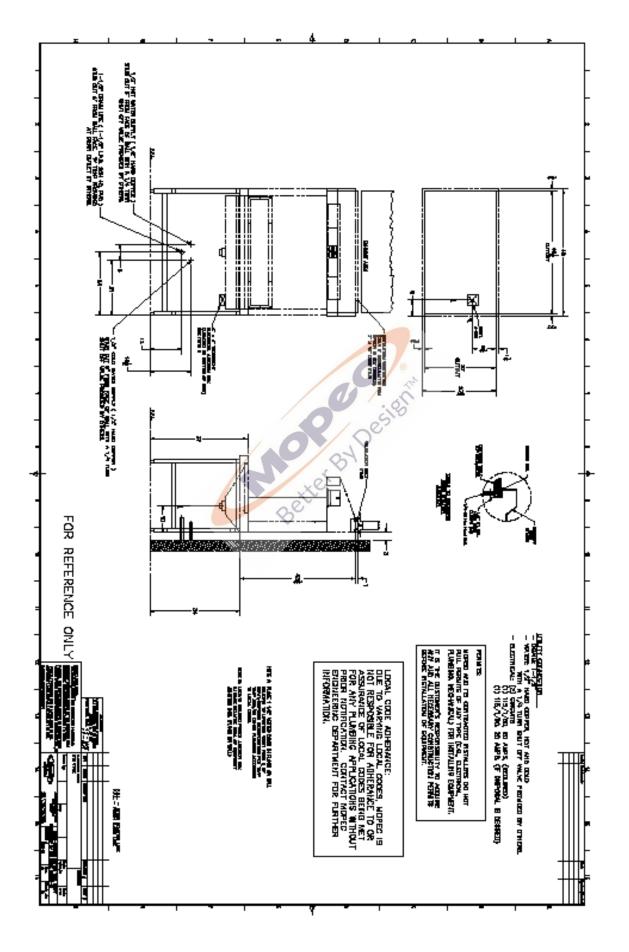


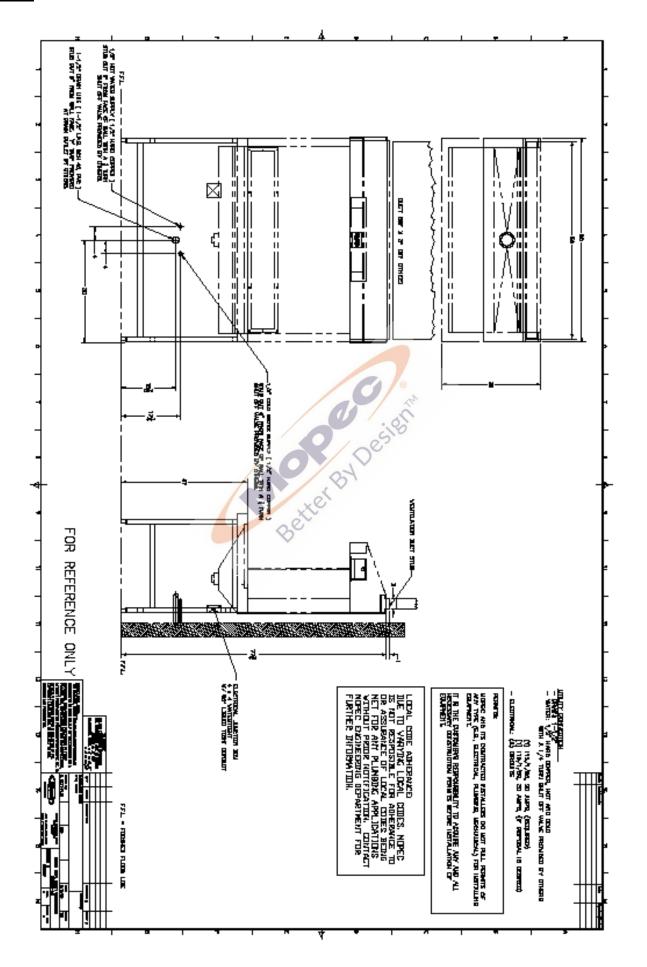


<u>ME100</u>

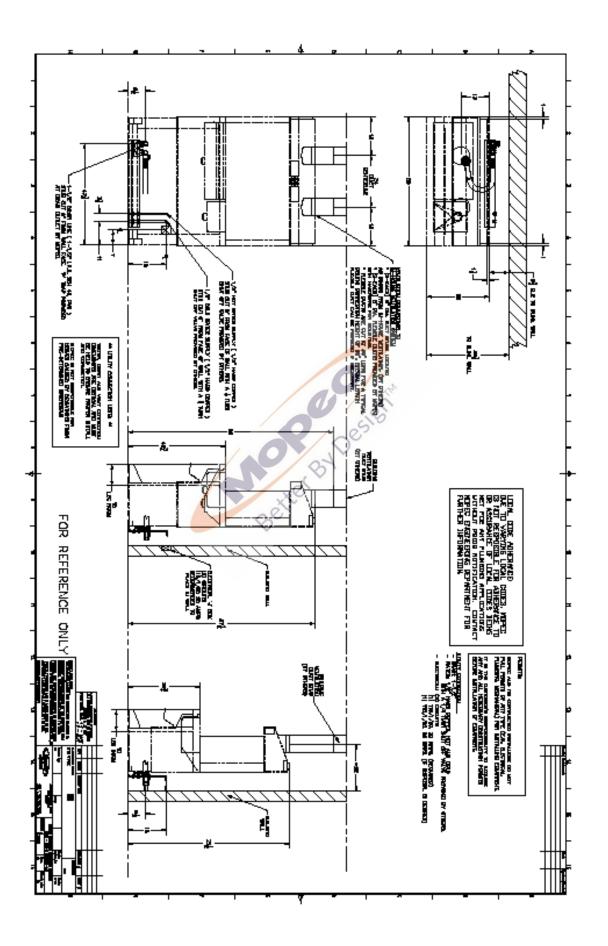


<u>ME200</u>





<u>ME400</u>



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#### INTRODUCTION

Mopec's ME Series Dual Draft Grossing Workstations come in a variety of styles which make them advantageous for a wide variety of users. Mopec's "ME" series incorporates all necessary pathological functions with the safety of an environment free of toxic formaldehyde fumes. All "ME" units come standard with the unique dual draft ventilation system which allows airflow to be constant. As the work surface accumulated grossing peripherals and tissues the air velocity will increase automatically. **The ME Series** workstation provides a safe work area free from toxic formaldehyde fumes. One version of the ME Series may be ducted to an existing laboratory exhaust system. The other "Filtration/Re-circulation" system requires no ducting and incorporates two quiet variable speed exhaust fans that evacuate the entire work surface of harmful formaldehyde fumes. Toxic formaldehyde fumes from the work area are filtered through potassium permanganate impregnated filters which safely absorb and neutralize those fumes. The disposable filters are easily accessible through a specially designed front filter access panel.

The ME100, ME200 is designed for small laboratories with limited space constraints. The ME100 countertop unit may also serve as a secondary station in larger, busier facilities requiring additional workspace to meet increased demand. The ME200 workstation will maximize workspace with standard conveniences such as recessed fluorescent lighting, a small specimen sink, wrist blade handles and a swing spout faucet. Also incorporated is a large integrally constructed sink allowing for easy and convenient handling of large specimens. The versatile ME200 may also be converted into a free standing unit with optional stainless steel leg frame. Our optional heavy duty frame features four leveling feet for secure placement on uneven surfaces.

**The ME300** like its counterparts has all the conveniences and space to perform the most demanding grossing procedures. The ME300 includes a base cabinet frame, is free standing and can be placed virtually anywhere in the lab. The envelope of the unit is also sized according to standard architectural parameters and will fit into most cabinet schemes.

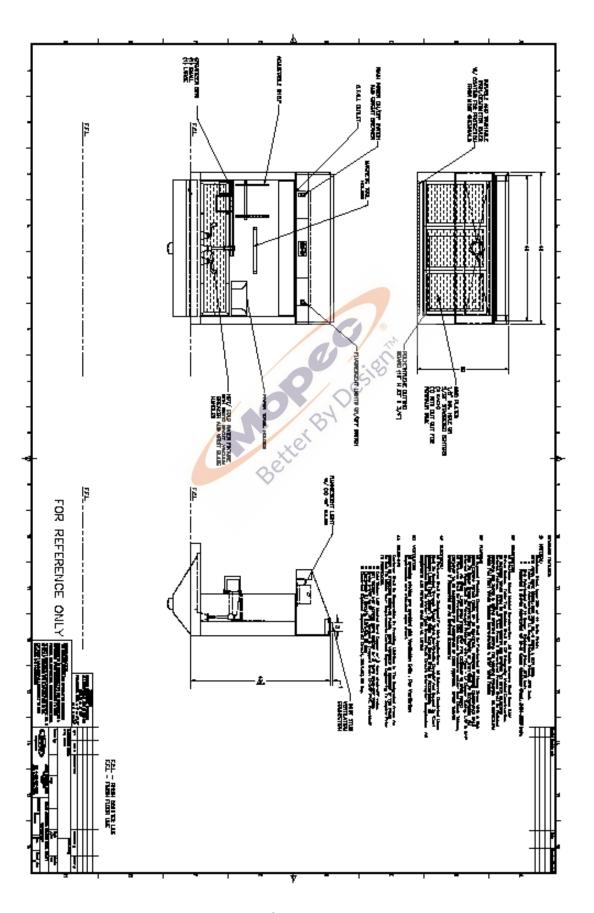
**The ME400** like its counterpart the ME300 has all the conveniences and space to perform the most demanding grossing procedures. The ME400 includes an Elevating base, This unit features adjustable heights from 33.5" (85.09 cm) to 45.5" (115.57 cm) and is free standing and can be placed virtually anywhere in the lab. The envelope of the unit is also sized according to standard architectural parameters and will fit into most cabinet schemes.

**The ME600** workstation provides a safe work area free from toxic formaldehyde fumes. The ME600 incorporates a larger workspace on a tube frame for larger grossing needs. The ME600 offers the same workspace area as the ME400 but is a Dry unit.

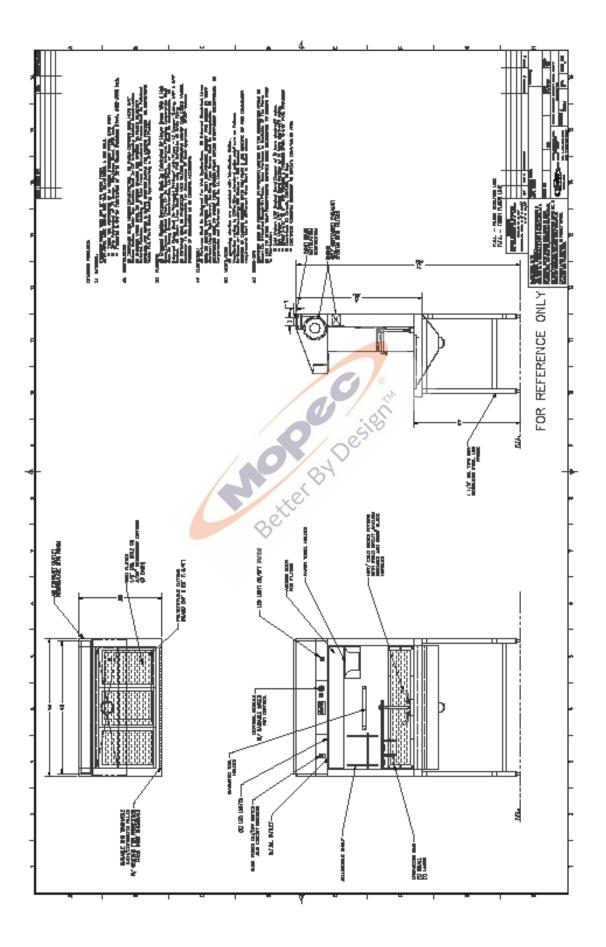
The ME650 like its counterpart the ME600 has all the conveniences and space to perform the most demanding grossing procedures. The ME650 has an open leg space below the work surface on a tube frame for larger grossing needs. The ME650 offers the same workspace area as the ME600 but has standard conveniences such as recessed fluorescent lighting, a small specimen sink, wrist blade handles and a swing spout faucet. Also incorporated is a large integrally constructed sink allowing for easy and convenient handling of large specimens.

## **UNIT DRAWINGS**

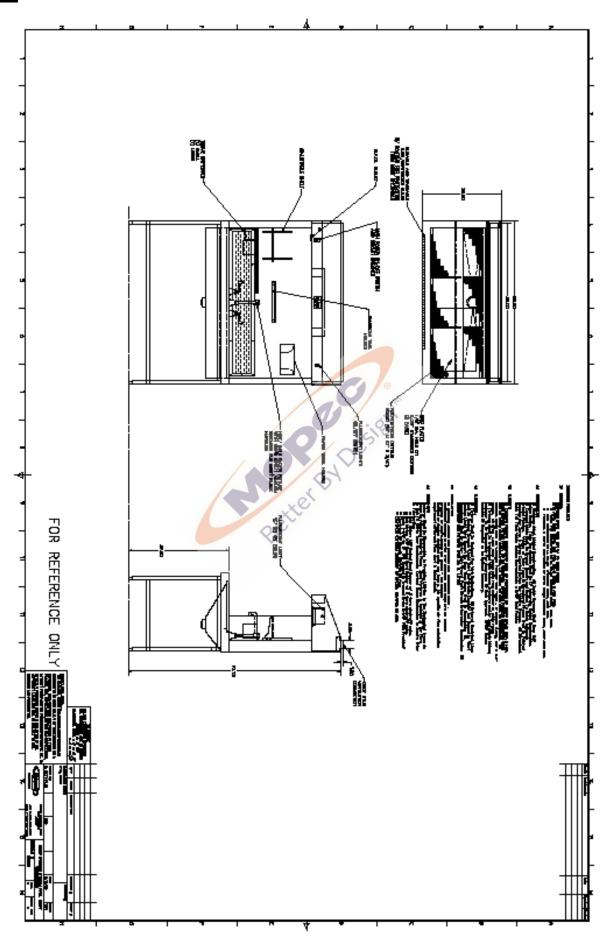
# <u>ME100</u>

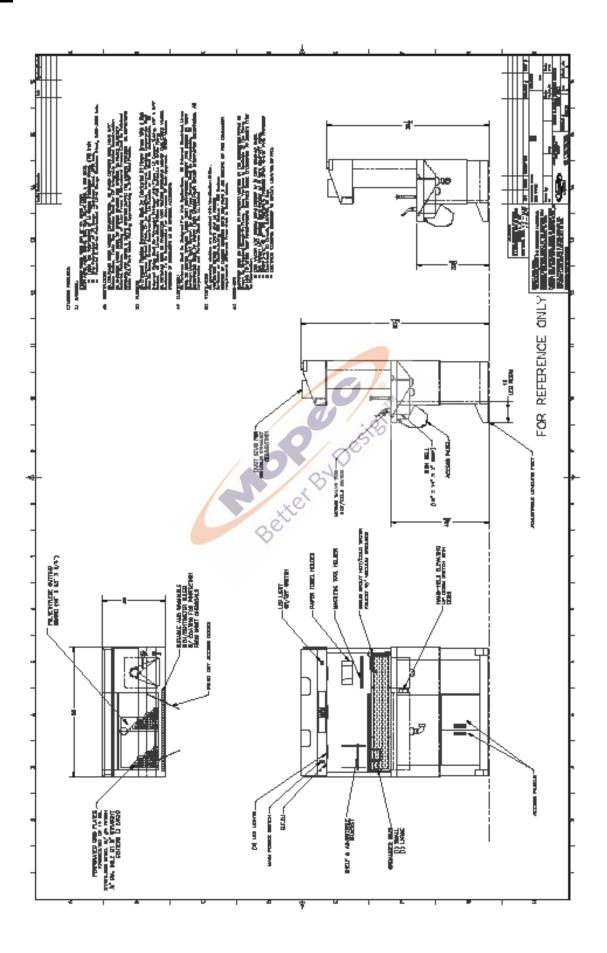


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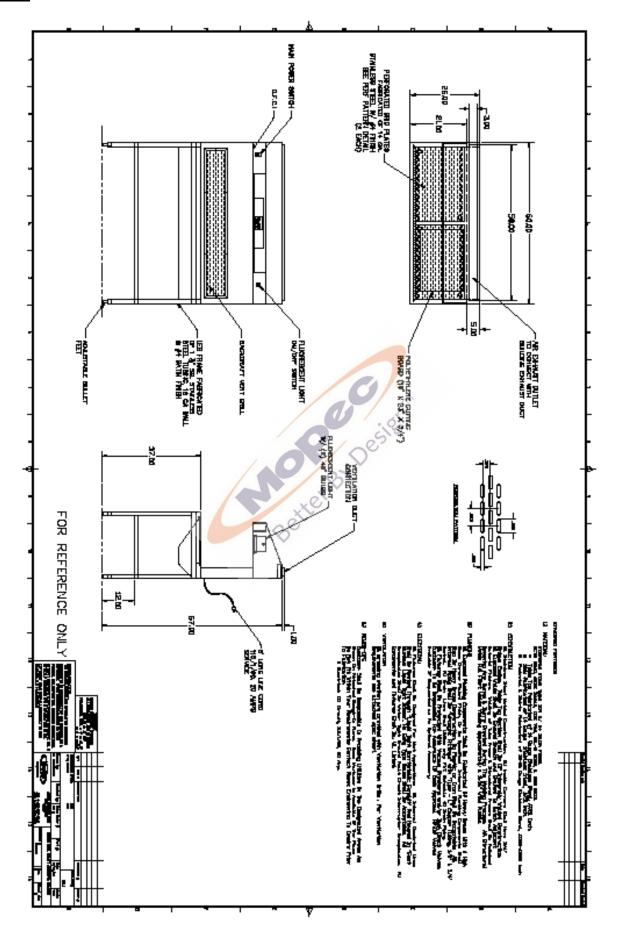


<u>ME300</u>





<u>ME600</u>



All units in the "ME" series consists of the following:

Work Grid:14 Gauge, type 304 Stainless Steel with a # 4 Satin FinishHousing:18 Gauge, Type 304 Stainless Steel with a # 4 Satin FinishElectrical:115 v / 1ph / 60 HzCurrent Draw:20 Amp maximumOptional220 v/1ph / 50HZCurrent Draw:10 Amp maximum

All units have Perforated Grid Plates Hot/Cold Water Fixture w/Swing Spout G.F.C.I. Electrical Receptacle Paper Towel Holder Adjustable Shelf Recessed LED Light Backdraft Grill Downdraft Chamber Replaceable Inch/Centimeter Ruler Magnetic Tool Bar

Optional features by unit consist of the following:

ME Series	ME100	ME200	ME300	ME400	ME600	ME650
MO001 Self Contained Exhaust System - Single	Х	X				
MO003 Formalin Container 2.5 Gallon Capacity	X	X	X	Х	Х	Х
MO004 Dictation Equipment Stand	X	X	X	Х	Х	Х
MO005 Self Contained Exhaust – Dual System		:00	X	Х	Х	Х
MO006 Stainless Steel Leg Frame	X	X			Std	Std
MO007 Hot/Cold Foot Pedal	X	X	Х	Х		Х
MO008 Perimeter Rinse System	X	51 X	Х	Х		Х
MO009 Safety Splash Shield	X	X	Х	Х	Х	Х
MO010 Hand Spray Rinse	X	Х	Х	Х		Х
MO011 LED Light Magnifier	X	Х	Х	Х	Х	Х
MO014 Video Camera Arm	X	Х	Х	Х	Х	Х
MO015 LED Task Lighting - Dual	Х	Х	Х	Х	Х	Х
MO016 Camera Stand	Х	Х	Х	Х	Х	Х
MO018 Formalin Collection System	Х	Х	Х	Х	Х	Х
MO020 LED Task Lighting - Single	Х	Х	Х	Х	Х	Х
MO021 Stainless Steel Organizer Bin - Small	Х	Х	Х	Х	Х	Х
MO022 Stainless Steel Organizer Bin - Large	Х	Х	Х	Х	Х	Х
MO023 Ventilated Trash Container		Х	Х	Х	Х	Х
MO024 Magnetic Instrument Tool Bar	Х	Х	Х	Х	Х	Х
MO026 Formalin Dispensing	Х	Х	Х	Х	Х	Х
MO027 Computer Monitor / Keyboard Holder	Х	Х	Х	Х	Х	Х
MO028 CPU Bracket	Х	Х	Х	Х	Х	Х
MO029 Removable Writing Ledge			Х	Х		Х
MO030 Mounted Dictation Stand	Х	Х	Х	Х	Х	Х
BL800 1 HP Waste Disposal		Х	Х	Х		Х

#### **BL800: 1HP HEAVY DUTY DISPOSAL**

Heavy Duty

Includes Solenoid to supply water directly into disposal

Vacuum Breaker to prevent back siphoning of water

On/Off switch

(Requires separate power circuit other than grossing station)



#### **Operation of Option**

n of tie The BL800 disposal is an option for disposing of tissue and bone pieces that are not needed. There is no Need to turn on the faucet when using the disposal. The disposal switch activates the disposal and allows water to enter the disposal from the electric solenoid. When the disposal is turned off, the water stops. The vacuum breaker prevents back siphoning of water through the disposal. The disposal option requires one 20 amp circuit dedicated to the disposal.

#### DO NOT USE BLEACH OR OTHER CAUSTIC CHEMICALES IN THE DISPOSAL, THIS CAN DAMAGE THE UNIT. ENSURE ALL DISENFECTANTS ARE RINSED THOUROUGHLY.

#### MO001: Self Contained Exhaust-Single

One (1) dual blower air filtration system complete with pilot lighted on/off switch, variable speed control & filter caddy.

Two (2) potassium permanganate filters provided with unit (BF009)

Option only for ME100 & ME200.

See catalog pages 155 & 156 for further details.



#### **Operation of Option**



The filter saturation rate depends on hours of operation and fumes to be filtered. Instructions on how to change and check the saturation of the filters are shown in the following links.

**Replacing Filters Video Link** 

Filter Evaluation Video Link

#### MO003 Formalin Dispensing System

2.5 Gallon capacity Nalgene poly dispensing container.

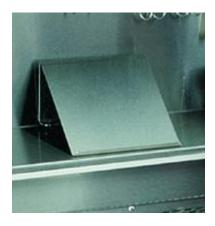
Dispensing valve provided for small controlled dispensing of customer supplied formalin.





#### **MO004: Dictation Equipment Stand**

Angled surface for easy viewing of most dictation systems. Dictation stand is portable and can be placed anywhere. Stainless steel construction.





#### **Operation of Option**

The dictation stand can be placed on the shelf or any other flat surface.

**Dictation Equipment Stand Video Link** 

#### MO005: Self Contained Exhaust-Dual

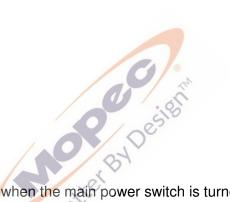
Two (2) dual blower fans w/filters for air filtration complete with lighted on/off switch and variable speed control on one (1) fan only

Three (3) potassium permanganate filters provided with unit (BF009)

Option only for ME400, ME600, ME650



**Operation of Option** 



The unit has two fans, the first one runs when the main power switch is turned on. The second blower motor must be turned on with the red switch next to the fan speed control. The variable speed fan is operated by turning the control to 100 and turning the knob to the desired speed. This allows the fan to attain its full speed and then adjust to the requested speed.

The filter saturation rate depends on hours of operation and fumes to be filtered. Instructions on how to change and check the saturation of the filters are shown in the following links.

**Replacing Filters Video Link** 

Filter Evaluation Video Link

Dispose of contaminated filters in accordance with your facility, state and federal procedures for hazardous materials disposal. See the SDS for the chemicals exposed to the filters for directions.

#### MO006: Leg Frame

Height, 34"

Heavy duty all welded leg frame with adjustable feet for leveling.

Stainless steel construction.

Option only for **ME100 & ME200**.





#### MO007: Foot Pedal

Dual foot pedal Hot/Cold water control valve with swing spout faucet Wrist blade handle controls are not available with this option. Option available on ME200 with the purchase of a leg frame Shipped loose with ME200.

Also available on ME400, ME450, ME600, ME650, and ME670





#### **Operation of Option**

The foot pedal is operated by pressing down on the right pedal for cold and the left pedal for hot. Pressing both pedals will mix the hot and cold water. Water pressure adjustment is limited by the short stroke of the pedal, if your water pressure is high try adjusting the pressure by closing the shut off valve installed between the wall and the unit or adjustable water pressure regulators can be installed (not supplied with unit).

Foot Pedal Video Link

Full perimeter rinse on three (3) sides.

Control valve w/atmospheric vacuum breaker protection included for water flow adjustment



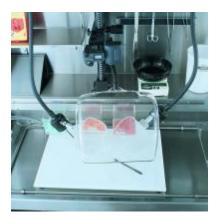
#### **Operation of Option**

Ilve 2 Desibility The perimeter rinse water flow is controlled by the valve. The water must be connected to the grossing station. The perimeter rinse is placed on the work surface with the hose connected to the valve and the perimeter rinse bar.

Perimeter Rinse System Video Link

#### MO009: Safety Splash Shield

11" x 12" Lexan shield on flexible arm for easy positioning Removable



**Operation of Option** 

The Safety splash shield is on a flexible arm and can be moved up and out of the way as well as right and left. The shield can also be removed from it's mount. The splash shield may have some distortion due to the curve of the molded plastic shape. The splash shield should be cleaned with soap and water and a soft cloth. We recommend you do not use paper towels on the splash shield.

Safety Splash Shield Video Link

#### MO010: Hand Spray Rinse

Chrome plated brass hand sprayer with soft spray & 60" Long high pressure hose for easy and controlled rinsing of work surface



Operation of Option
Ensure the water is connected to the unit and the spray rinse valve is opened. The water pressure is regulated by the deck mounted valve. Press the lever on the spray head to utilize the spray rinse. regulated by the deck mounted valve. Press the lever on the spray head to utilize the spray rinse.

Hand Spray Rinse Video Link

#### MO011: Halogen Light Magnifier

Dimension: 4" H x 5-5/6" W Poly magnifier with 2X magnification One (1) each provided.





swivel base and can be moved to accommodate right of left hand operators.

Easy positioning of camera over full length of grossing station. Overhead positioning with articulating arm to support most camera systems <u>Video camera not included.</u>



**Operation of Option** 

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87

The video arm can be moved the length of the grossing station and be configured to overlook an operation at the table. To move the arm the top turn knob must be loosened and the arm will slide to the new position, and the knob tightened to hold the arm in place.

Video Camera Arm Video Link

#### MO016: Camera Stand

Vertical camera stand with X-Axis & Y-Axis adjustable arm. Capable of supporting both digital and 35MM type cameras

Ruler for recording height adjustment. Cameras not included.

See catalog pages 155, 156 & 157 for further details







#### **Operation of Option**

The adjustable axis allows positioning the camera for greater versatility and ease of operation. The camera stand can be lowered or raised with the turn of a knob. Camera can be adjusted to the front or back with the turn of a knob.

The camera mounting knob is provided to mount your digital or 35mm camera. The set screws are provided to lock the camera in place when mounted. The camera is mounted to the mounting knob and the locking ring helps keep the camera locked onto the knob.

#### MO018: Formalin Collection System (ME200, ME400 and ME650 and ME700)

Includes collection funnel piped to a 2-1/2 gallon collection carboy w/easy grip handles, located under the grossing station

Quick disconnects included with safety caps provided for safe transport to disposal or recycling area.

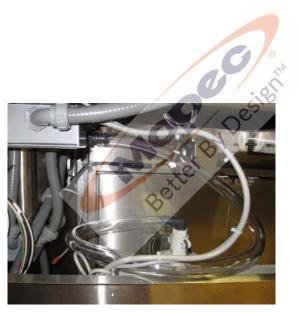
Includes:

- 1 ea. PP0309 is the dust cap <sup>3</sup>/<sub>4</sub>" (Male for carboy)
- 1 ea. PP0310 is the dust cap  $\frac{3}{4}$ " (Female for hose)
- 1 ea. PM0140 Carboy with flat cap
- 1 ea. PM0140 Carboy with FP003 Carboy cap with Fittings

#### Not available on ME100, ME600 or ME670

#### Formalin not included





#### **Operation of Option**

The formalin collection system is piped from the collection point at the sink to the storage bottle below the grossing station with vinyl tubing. The collection system has a stainless steel funnel to allow simple pouring of the formalin to be collected. The Formalin collection bottle has quick disconnect caps for the hose and the bottle to allow for safe handling of the carboy container.

#### **MO023: Ventilated Trash Container**

Dimensions: 8" Wide x 15-3/8" Deep x 28" H Removable stainless steel trash container

12 gallon capacity Connects to grossing station ventilation system Not available on the ME100 or ME200 MB050 (Ventilated trash can on casters) is not compatible with this option



**Operation of Option** 

Better By Design The ventilated trash container has a vinyl liner and is meant to have a trash bag inside the liner. The trash can raises and lowers with the work surface. The ventilation is connected to the grossing station with a 4" diameter vent hose.

Ventilated Trash Container Video Link

#### MO026: Formalin Dispensing System (Cube Style)

Includes pump and backsplash mounted valve

Quick Connect coupler to connect the formalin cube Option for ME100 and ME200 with purchase of leg frame Available on ALL ME Models

Does not include the formalin collection system or formalin



The Formalin dispensing option is operated by turning on the electrical switch to activate the pump. The pump is a self-priming pump. The amount of fluid is controlled by turning the needle valve to allow the liquid to flow. *Do not over tighten the dispensing valve when closing* this could cause damage to the plastic needle valve seat or the needle.

To connect the formalin cube to the dispensing system; Turn the pump off, set the cube under the grossing station, remove the cap, install the male connector to the formalin cube, push the female connector onto the male half until it clicks in place. Turn on pump. The pump may run for a few minutes to get to pressure. Open valve to dispense fluid.

Formalin Dispensing Video Link

#### MO027: LCD Flat Screen Monitor & Keyboard Adj. Arm System

Allows positioning & of LCD display for greater visibility Re-position your LCD with just a touch. Up, down, forward and back Full range of motion for maximum comfort level Keyboard Adjustable Arm Provides vertical and side to side motion Flat screen, monitor, keyboard and computer not included.



#### Operation of Option

The adjustable arms allow positioning & of LCD display for greater visibility and re-position your LCD with just a touch. Full range of motion for maximum comfort level, up, down, forward and back

Keyboard Adjustable Arm provides vertical and side to side motion. Effortlessly position a keyboard in the most comfortable typing position, seated or standing use. Keyboard can be positioned for maximum comfort and productivity with a range of 25.6" (65cm) extend/retract motion 11-1/2" (29cm) Height adjustment Tray tilts back at negative 5 Degree angle for ergonomic and healthy data entry Mouse tray slides out to left or right, depending on user preference

Adjustable width mounting bracket for CPU.

Two piece construction consisting of a mounted plate to the side panel of the Grossing Station and a sliding plate that adjusts to the width of the CPU. CPU holder comes with tightening knobs or nuts to secure permanently, rubber feet, spacer block and safety strap.

#### Computer not included.



#### **Operation of Option**

The CPU bracket is adjustable. The CPU is secured in the bracket by the rubber feet and the outside bracket sliding to hold the CPU the safety strap is to keep the CPU from accidently being knocked off the grossing station. The CPU should be centered in the bracket to support the unit properly.

#### MO029: Combination Ledge & Pencil Drawer

Convenient pull out writing ledge and utility drawer Stainless steel construction NOT COMPATABLE WITH ALL OPTIONS



**Operation of Option** 

The combination writing ledge and pencil drawer has a removable pull out drawer for cleaning. The drawer has a loop handle for pulling the drawer open. The pencil drawer cover has a small lip for holding a pen even when the drawer is shut. The lid is also removable if not needed.

#### AIR HANDLING

#### **ME – Series Dual Draft Grossing Workstations Design Parameters:**

The ME – Series Grossing Workstations are designed with the basis of fulfilling one goal and that is to adequately ventilate the work surface to insure the safety of the user. An adverse effect of ventilation is noise that has been considered but does not govern the ultimate design criteria. Our design criteria is the most stringent utilizing exerts as outlined from "Industrial Ventilation" by Committee on Industrial Ventilation and Escape Velocity Parameters. Design data is unfortunately based on the table as a completely flooded vat of formaldehyde. Ideal conditions in a grossing environment obviously do not warrant such a large amount of formaldehyde, yet concentration levels are on a higher extreme regarding design data parameters available. Therefore assumptions are made regarding grossing practices and ultimately formaldehyde concentrations. One (1) blower is supplied with the ME100 and ME200 and is designed with an adjustable control to regulate the speed and consequentially the airflow. The ME400 and ME600 workstations are provided with two (2) blowers. One (1) runs continuously while the other is adjustable as described above. With all the above considered, below is a chart of actual ventilation parameters for ME Series Grossing Workstations along with their respective definitions:

### Identification Description Ventilation Volume

#### System Requirements

ME100 Grossing workstation Counter Top 48" Re-circulating 300 cfm ME200 Grossing workstation Counter Top Re-circulating 320 cfm ME300 Grossing workstation Free Standing Facility Ventilation 300 cfm ME400 Grossing workstation Elevating Re-circulating 640 cfm ME600 Grossing workstation Free Standing Re-circulating (Fan 1) 320 cfm b ME600 Grossing workstation Free Standing Facility Ventilation 600 cfm ME600 Grossing workstation Free Standing Facility Ventilation 600 cfm ME600 Grossing workstation Free Standing Facility Ventilation 600 cfm ME650 Grossing workstation Free Standing Re-circulating (Fan 1) 320 cfm b ME650 Grossing workstation Free Standing Re-circulating (Fan 1) 320 cfm b

a Re-circulating (Self-contained exhaust Systems): This system is simply a self-contained exhaust system provide with the ME600 Elevating Grossing Workstation. Air is ventilated through the exhaust grill and circulated through potassium permanganate filters and exhausted out the top of the Grossing Workstation. The exhaust fans are internal and are provided.

b Both specifications for Fan 1 and Fan 2 are "Free Air" cfm.

The grill for the ME600 is 8" high at an angle of 60 Degrees and 48" Long with (994)  $3/16" \times 5/8"$  holes. The vent grill is perforated with  $3/16" \times 5/8"$  slots on  $13/16" \times 3/8"$  staggered centers, yielding a 30% open area. Below is a chart of ventilation parameters for the ME series Grossing Workstations.

<b>RE-CIRCULATING VENTILATION SYSTEM a</b>	VOLUME
Fan 1 Re-Circulating – Continuous Running	320 cfm b
Fan 2 Re-Circulating – Variable Speed	0 – 320 cfm ♭

a. Re-Circulating (Self-contained Exhaust Systems): This system is simply a self-contained exhaust system provide with the ME series Grossing Workstations. Air is ventilated through the exhaust grill and circulated through potassium permanganate filters and exhausted out the top of the Grossing Workstation. The exhaust fans are internal and are provided.

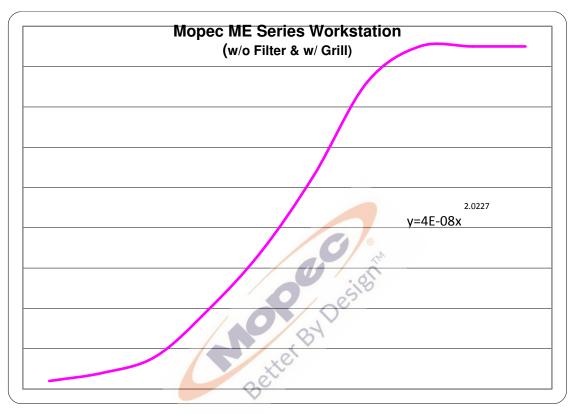
The grill for the ME series is 8" high at an angle of 60 Degrees and 44" Long, with (994) 3/16" x 5/8" holes. The vent grill is perforated with 3/16" x 5/8" slots on 13/16" x 3/8" staggered centers, yielding a 30% open area.

b. Both specifications for Fan 1 and Fan 2 are free air cfm.

The preceding design parameters of the Mopec Grossing Stations and suggested ventilation requirements Are based on stringent ventilation requirements and ideal conditions. Personalized conditions and practices may warrant an increase and/or decrease of the ventilation.

#### **DESIGN PARAMETERS (Non-Recirculating)**

The following chart is based on actual test data with the ME series Externally Exhausted Workstation (Non-Recirculating). An optimum installation would provide 650 CFM of draft. The chart will demonstrate static pressure at various quantities of air flow. To maintain an average of 125 LFM (Face Velocity at the grill and grates)



#### GOOD PRACTICE WILL OPTIMIZE OUR PROTECTION:

- 1. Never block the ventilation grill.
- 2. Placing open containers as close to the exhaust grill as possible, yet never blocking the ventilation grill.
- 3. Grossing should be accomplished as close to the exhaust grill as possible.
- 4. Strategically locate the Grossing Station away from room air currents.
- 5. Practice complete rinsing of residual formaldehyde with hand held spray.

Although the Mopec Grossing Workstation can be the answer to formaldehyde exposure, Mopec cannot assume responsibility of exposure since good laboratory practices and room conditions are beyond Mopec's control.

#### DISINFECTING AND CLEANING STAINLESS STEEL SURFACES

All stainless steel surfaces can be cleaned with soap and water, which will remove debris.

The stainless steel surfaces can be disinfected with a non caustic disinfectant. We suggest using BE045 Path Cloud or BE047 Bench Wipe for cleaning purposes. We recommend you **NOT USE** a bleach solution to clean your unit. Bleach will eventually erode stainless steel if not thoroughly rinsed. The use of chlorine bleach will <u>VOID THE STAINLESS</u> <u>STEEL WARRANTY</u>

During the cleaning we suggest wiping the surface in the same direction as the satin finish which will help lift up dirt from the grain finish.

Most scratches can be removed simply by utilizing a "non-metallic" abrasive pad and rubbing in the same direction as the satin finish.

Since most abrasive pads vary from one supply to another, we suggest rubbing the entire surface to blend the scratch and blend the balance of the surface.

Plexi-glass surfaces will scratch if cleaned with an unsuitable cleaner and improper cleaning. Many plastic cleaners are available and we suggest using one. Wipe dry with a clean, absorbent cloth or paper towel turning often

#### CLEAR DISPOSAL JAMS

The accidental entry of foreign material will cause any Waste Disposal unit to jam. To free jammed material, follow these steps **to avoid personal injury**.

- 1. Turn off Waste Disposal and shut off cold water.
- Fig. 1
   Insert one end of your Self Service Wrench, provided with your Waste Disposal, into the center hole of the bottom of the disposer as shown (fig. 1).
- 3. Work the wrench back and forth until it moves freely for at least one complete revolution. **Remove the wrench before restarting the Disposal.**
- 4. Wait 3 to 5 minutes to allow Waste Disposal motor to cool and then push the reset button (fig. 1). Be sure the main Disposal control switch is in the OFF position before pressing the reset button.

#### **CLEANING DISPOSER**

Over time, particles may accumulate in the grind chamber and baffle. An odor from the disposer is usually a sign of buildup, caused by insufficient water flow during and after disposer use.

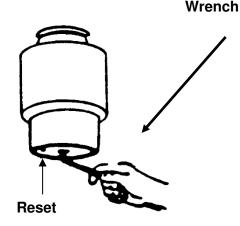
To clean disposer:

1. Turn off disposer

2. Place stopper in sink opening and fill sink halfway with warm water.

3. Mix 1/4 cup baking soda with water. Turn disposer on and remove stopper from sink at same time to wash away loose particles.

4. Remove Quiet Collar Sink Baffle and clean by hand or in dishwasher. Do not operate disposer without Quiet Collar Sink Baffle in place.



The following instructions can be used to perform the reset procedure on motorized lift units. These instructions should be used if a new controller is introduced to the system, the limits have changed on the controller, or if the system is simply behaving unexpectedly. To reset the controller:

- Turn the main power switch Off (Approx. 45-60 seconds)
- Turn the main power switch On
- Press and hold the down button on the switch
- Continue holding the down button and the unit will continue downward.
- Press and hold the down button (approx.. 45-60 seconds) on the switch; at this point, all legs should begin slowly creeping downward to the "zero" (fully retracted) position
- Release then press the down button for 5 seconds the system has reached its "zero" (Bottom) position.

Your lift system should be reset to its home position at this time. To verify, try operating the system by moving it upwards with the up button, and again downwards; ensure the system returns to the home position

If this should not correct the problem please contact Mopec at 800-362-8491.

#### **EVALUATING FILTERS FOR REPLACEMENT**

The filters in your ME unit contain alumina pellets impregnated with potassium permanganate, KMnO<sub>4</sub>, which is a fast oxidizer. Formaldehyde passing through the filter is converted to carbon dioxide and water. **The filter's life depends entirely on the amount of formaldehyde fumes passing through the filter.** 

The pellets are bright purple when new and become dark brown when spent. Once the inner part of the pellet is brown it is totally spent and must be replaced.

This chemistry is very effective and essentially removes all formaldehyde as long as there is active KMnO<sub>4</sub> available. The efficiency drops off as the filter media approaches its maximum capacity. The last 15-20% capacity will exhibit some pass through of formaldehyde.

#### Health Hazard Data - Alumina Permanganate Filter Media

**Effects of Exposure** – The filter media is non-toxic upon oral, skin, and inhalation exposure and is non-irritant of the skin. Breathing of dust may cause sneezing. Skin may feel dry after contact. The filter media is an eye irritant.

#### **PROCEDURE - EVALUATING FILTERS FOR REPLACEMENT**

One side of the filter will have a small tab which can be opened just enough to allow one or two pellets to be removed. (see photo)

To determine when the KMnO<sub>4</sub> has been exhausted, remove a pellet and slice it in half.

Eye protection is recommended based on the above "Health Hazard Data".

The usefulness of the filter is approximately 80% diminished when the purple color first disappears from the core.

Place the sliced pellet(s) on a paper towel and add a few drops of water. The water running off the pellet(s) should be initially purple and then turn a deep iodine color. If no purple coloration is present, the KMnO<sub>4</sub> (Potassium Permanganate) material is totally spent.

When the purple color first disappears from the core of the pellet as described above, the rate at which formaldehyde is removed from the air stream is slowed considerably. (See Summary On Following Page)

#### PROCEDURE – VIDEO SUMMARY OF EVALUATING FILTERS FOR REPLACEMENT

From a practical standpoint, it may be desirable to perform the tests on the preceding page more frequently during initial usage of the filters to determine when the purple first begins to disappear from the core of the sliced pellet. Based on these early observations, the user can establish a Replacement Testing Cycle with occasional re-checks for verification.

Dispose of contaminated filters in accordance with your facility, state and federal procedures for hazardous materials disposal. See the SDS for the chemicals exposed to the filters for directions.

#### STAINLESS STEEL CARE AND MAINTENANCE

#### To maintain your stainless steel product, follow these four steps:

1) Never, ever use wire brushes, Brillo, steel wool or abrasive cleansers (like Ajax or Comet). If something needs to be aggressively cleaned only use a Scotch-brite pad or similar product and only scour with the "grain" of the stainless. As an example, please reference the photo on page 2 of this document. It is clear that a very abrasive product was used in an area on the unit and that did not follow the grain of the stainless. The effects of this scratching may diminish over time with proper care but the effects of this scouring are obvious. (The use of the Scotch-brite Pad following the grain over time may help scratches such as this). Depending on the surface finish of your stainless steel, abrasive cleaners can cause scratching. Duller finishes probably won't show scratching as much as mirror or highly polished finishes. When in doubt, test in a hidden spot, and also work from the least risky type of cleaning, (i.e. water) to the heavy duty stuff.

**Do not use cleaners containing chlorine.** While it may be second nature to bleach everything, stainless steel and chlorine do not mix well. Do not use bleach when cleaning stainless steel. Do not allow bleach or bleach water to sit for long periods. Bleach can eventually cause staining and pitting. Bleach stains are removed with stainless steel cleaning polish.

2) Keep the surface clean of grime, tissue and particulates. This can be accomplished by using the "Water Hand Spray Rinse" and use of cleaning products.

3) **Rinse the surface after using disinfectant.** In Pathology and other medical areas the act of disinfecting is desired. There are a number of ways to do this including using Mopec's Bench Spray & Wipe Disinfectant. Labs use any number of different products including 10% bleach or other disinfectant sprays and wipes. For the most part, each and every one of these has high salt contents and lower PH levels to aid with disinfection. Most disinfectants must be followed up with a water rinse to remove the salts that remain after these products dry. We advise to always follow up a disinfection cleaning with a thorough rinse of water. We advise not to use diluted bleach, if you must; we stress the importance of a thorough rinse of water after use. If not rinsed properly, these salts can become visible after the disinfectant dries. They can appear with a whitish characteristic or contain light lines of white with a grainy feel when you wipe your hand across the work surface. If these residues are not removed with a thorough water rinse and wipe down they will accumulate and eventually degrade the appearance and integrity of your stainless surface. Rust is a long term possibility if salts are allowed to remain on the work surfaces over time. Gritty, dirty water or residue from cleaning solutions left on a stainless steel surface can stain or damage the finish.

4) All stainless steel products should be protected by a polish. As a prime example before any product leaves Mopec it is coated with WD-40 as a protecting coating for the stainless. Mopec offers a Stainless Steel Cleaner and Polish in both wipe and spray. These Mopec products will not only deep clean your stainless but will also protect their finish from chemical, low PH and salt and keep the finish looking like new.

#### Decal

Mopec advises that if the technicians are not taking the proper precautions when using the Decal solution the possibility of two things will occur, a brown or rust ring where the Decal resides along with a milky white substance on the surface. (As an example, reference the below photos to see the rust rings.) Decal is very harsh, even the fumes can and will cause staining on stainless steel. One thing that you might want to consider doing is to place the Decal container you currently use inside a plastic base that will help catch drips that might occur. Clean and rinse your station after every use of Decal solution.

#### Rust

Rust can and will occur on stainless if it is not maintained properly. The most common cause of rust is from using metal or stainless racks that are not made of 304 stainless. This is referred to as "transfer rust". Leaving of salts from cleaners or disinfectants can and will lead to possible rust areas in the long term. Always rinse all disinfectants before they dry. Decal solutions and even fumes are very aggressive and can cause rust if not cleaned up and used properly around stainless. Formalin use has not been shown to cause rust in any way. **Conclusions & Suggestions**  We are confident and can assure you that if you institute the suggestions detailed above that your Mopec Grossing station will look as it did the day it arrived.

**Do not assume it's the cleaner.** If you do have some spotting or staining, and you've followed all of the suggestions, it may not be the cleaner. Water, especially hard water, can leave spotting and staining on stainless steel surfaces. Hard water can leave mineral deposits, resulting in whitish-colored spots and streaks. Remove hard water stains with vinegar or with stainless steel cleaning polish. Prevent hard water stains by towel-drying after every wash. Do not allow soaps and cleaners to dry on surfaces. The chemicals in many soaps and cleaners can cause staining. Never use corrosive cleaners such as mineral spirits. Use stainless steel cleaning polish and a non-abrasive scrub pad to remove dried cleaner stains. Baking soda mixed with liquid dish soap can make a good paste to gently rub on stains. Be sure to rinse the stainless steel surface thoroughly, and towel dry. If stains remain Mopec recommends trying a stainless steel cleaner and polisher. Barkeeper's Friend is a good powder formula that can clean without scratching. Be sure to follow the directions, rinse thoroughly, and towel dry. These methods should help remove any discoloration.

**Fingerprints and Stains** – The most common surface contaminates that occur from normal use are fingerprints and mild stains. These usually affect only appearance so fortunately they do not have an effect on corrosion resistance. They can easily be removed by a variety of simple cleaning methods. The most troublesome marks to remove from the surface of smooth polished or bright finished stainless steel are fingerprints; fortunately they can be removed with a common glass cleaner or by gently rubbing with a paste of soda ash (sodium carbonate) and water which would be applied with a soft cloth. Again, it is best to follow with a warm water rinse.

**Clean Water and Wipe** – The method that will do an adequate job and is the simplest, safest and the least costly is the best method. There is no surface coating to wear off of stainless steels so the surface will thrive with frequent cleaning. The first choice to clean mild stains and loose dirt and soil should always be a soft cloth and clean, warm water. Rinsing with clean water and wiping the surface dry will finish the process and eliminate the possibility of water stains.

**Solvent Cleaning** – To remove oils, greases and fresh fingerprints that have not had time to oxidize or decompose, use a solvent that does not contain chlorine. There are many organic cleaners on the market today that optimize safety attributes and clean ability. Spray or vapor methods or by wiping with clothes containing solvents can also clean surfaces. The wiping technique will sometimes leave the surface streaked.

#### Scratch Repair

A surface scratch can be repaired using the following technique. Completely removing the scratch will depend on how severe it is. Use 120 grit emery cloth or paper and firm pressure to sand the scratch. Sanding must always go in the direction of the grain. Sand in a perfectly straight line, avoiding the natural tendency to sand in an arc. Sand the surface until the scratch is gone. Polish using a very fine grade of 3M scotch-brite pads. Use the same motions as with sanding. Polish the surface until the original finish is restored.

For stubborn spots, stains, light discoloration, water marking or light rust staining use a mild, non-scratching cream or polish. Apply with soft cloth or soft sponge and rinse off residues with clean water and dry. Avoid cleaning pastes with abrasive additions. Suitable cream cleansers are available with soft calcium carbonate additions, or with the addition of citric acid. Do not use chloride or acidic solutions Nylon abrasive pads should be adequate for dealing with most deposits (DO NOT USE STEEL WOOL OR BRILLO PADS). If a more severe treatment is needed to mask coarse scratches or physical damage on a surface, use the finest abrasive medium consistent with covering the damage marks. With directional brushed and polished finishes, align and blend the new "scratch pattern" with the original finish, checking that the resulting finish is aesthetically acceptable. Silicon carbide media may be used, especially for the final stages of finishing. Avoid using hard objects such as knife blades and certain abrasive/souring agents as it is possible to introduce surface scuffs and scratches. Scratching is particularly noticeable on sink drainer areas. These are usually superficial and can be removed with proprietary stainless steel cleaners or, alternatively, with a car paint restorer, such as 'T-cut'. Rust marks or staining on stainless steels is unlikely to be the result of corrosion to the stainless steel itself (similar marks may also be found on porcelain and plastic sinks). These marks are likely to result from small particles of carbon steel from wire wool.

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#### **USER PARTS**

Replacement parts are available from Mopec The can be ordered by contacting Mopec at 800-362-8491.

Due to the many configurations your unit may not have some of the parts listed below:

POTASSIUM PERMANGANATE FILTER	BF009
LED TASK LIGHT REPLACEMENT HEAD	PE0332
HALOGEN TASK LIGHT BULB	BB039
RULER SELF ADHESIVE/CHEMICAL RESISTANT	PM0002
POLY DISSECTING BOARD 23X16X3/4" (WHITE)	BC001
ORGANIZER BIN-SMALL-STAINLESS STEEL	MO039
ORGANIZER BIN-LARGE-STAINLESS STEEL	MO040
SHELF 14" STANDARD – STAINLESS STEEL	PF1215

EEL PF1215

#### PREVENTITIVE MAINTENANCE CHECKS

#### **Procedure:**

- Visually check the exterior of equipment for any signs of damage. 1.
- 2. Visually check the condition of the power cord and plug(s) for cracks, cuts, bare or broken wires and signs of excessive heat (discoloration).
- 3. Visually inspect electronics for signs of damage and/or overheating.
- Ensure all the receptacles and covers are operating properly (testing GFCI). 4.
- 5. Verify correct operation of unit including all controls, buttons, displays and indicators when applicable.
- 6. Access the main pedestal to ensure no leaks, dry rotted hoses, or electrical issues under the table.
- 7. Check all water fixtures.
- 8. Operate Lifting Mechanism up and down several times.
- 9. Verify correct operation of all lift movements.
- 10. Sync the unit per instructions in the manual.
- 11. Verify correct lubrication of all applicable parts.
- 12. Clean exterior of unit.
- Better By 13. Complete paper work of inspection and file in appropriate file for future reference. Complete and affix an inspection sticker, when applicable.
- 14. Return the unit to service.

### LIMITED WARRANTY

Products manufactured by Mopec will be free from defects in material and workmanship and conform to Mopec's description or specifications. If a warranty claim is made within one (1) year from the earlier if the date of acceptance/first beneficial use, the defective or nonconforming Product or Part thereof will be repaired or (at Mopec's option) replaced free of charge, FCA Mopec's dock. All warranty claims must be in writing and received by Mopec within the warranty period. The warranty is not transferable (other than to customers of Mopec's authorized Distributors), and will not apply unless the Equipment has been properly installed, maintained and operated in accordance with all instructions; and does not apply to defects, nonconformities or other failure due to Equipment misuse, abuse, modifications, or other causes outside Mopec's control. If a warranty claim is made in writing within the warranty period, the defective or nonconforming Equipment (or Part thereof) will be repaired or (at Mopec's option) replaced free of charge, FCA Mopec's dock.

THERE ARE NO WARRANTIES THE WHICH EXTEND BEYOND DESCRIPTION ON THE FACE HEREOF. THE WARRANTY AS SET FORTH IN LIEU OF ALL OTHER WARRANTIES, EXPRESS HEREIN IS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

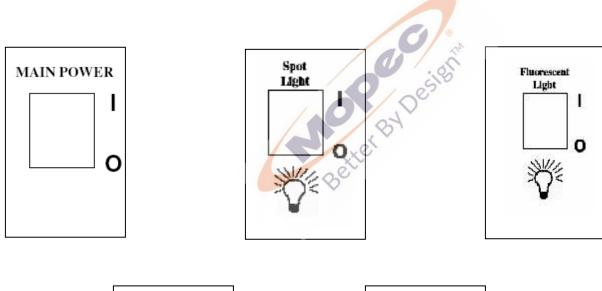
To the extent that Mopec is acting as a supplier of Products manufactured by a third party, the Products will be warranted only to the extent that they are warranted by their manufacturers and Buyer (or its customer) agrees to look solely to the Product manufacturer for all warranty claims.

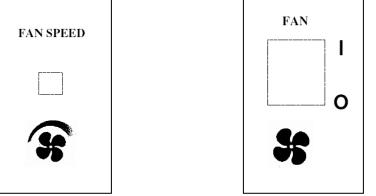
MOPEC, 21750 COOLIDGE HIGHWAY, OAK PARK, MI 48237

#### BEFORE SERVICING THE UNIT LOOK FOR AND HEED THE FOLLOWING LABEL



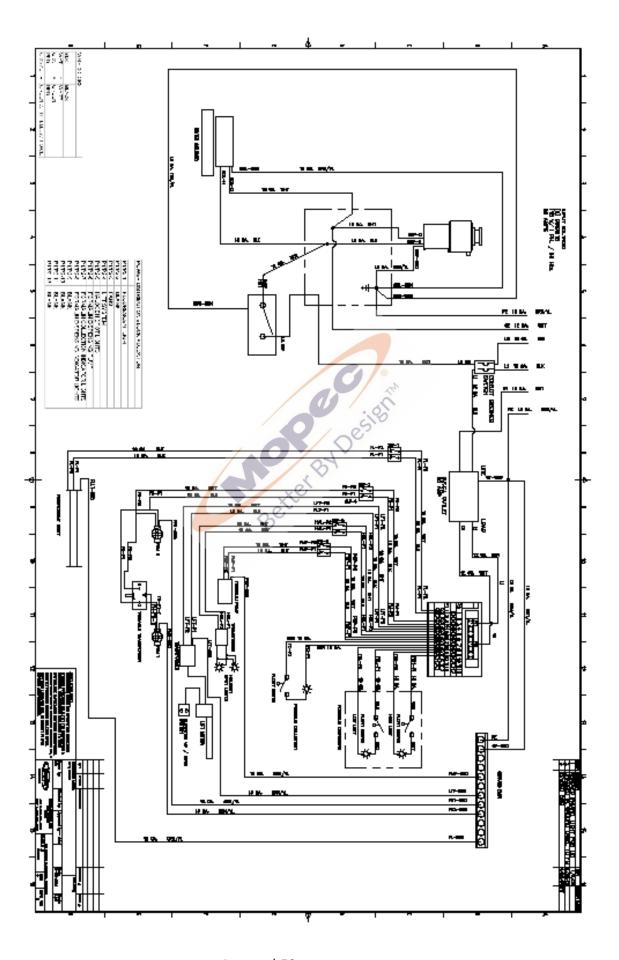
### Symbols that may be found on the Equipment





#### TROUBLE SHOOTING

<u>Problem</u>	Possible Solution
My Unit does not turn on	Assure your facility circuit breaker has not been tripped.
	Assure the G.F.C.I. has not been tripped (off) –
	Reset to on.
My unit does not elevate	Assure your facility circuit breaker has not been tripped.
	Assure the G.F.C.I. has not been tripped (off) –
	Reset to on.
	ME600/ME670 units ensure the doors are closed.
My unit's faucets do not work	Assure the water valve from your facility is on.
My hand spray does not work	Assure the water valve from your facility is on.
	Assure the concealed shut off valves to the
	hand spray are on.
	Assure hose is not kinked.
My disposal is not working	Assure your facility circuit breaker has not been tripped.
	Assure the G.F.C.I. has not been tripped (off) –
	Reset to on.
	Reset circuit breaker on the bottom of disposal
	or switch box for the disposal.



#### CERTIFICATES



# CERTIFICATE **OF REGISTRATION**

This is to certify that

# **MP Acquisition, LLC DBA Mopec**

21750 Coolidge Highway, Oak Park, Michigan 48237 USA

operates a

# **Quality Management System**

which complies with the requirements of

## ISO 9001:2008

for the following scope of registration

ByDesie The registration covers the quality management system for the design, engineering, manufacturing and installation of equipment and distribution of supplies for morgue, pathology, histology and necropsy applications.

Certificate No.: File No.: Issue Date:

CERT-0078089 1068177 March 11, 2014

Original Certification Date: April 9, 2008 Current Certification Date: April 7, 2014 Certificate Expiry Date:

April 6, 2017

Chris Jouppi President QMI-SAI Canada Limited



Samer Chaouk Head of Policy, Risk and Certification

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Cartificate no	Certificate TÜV				
Certificate no.	CU 72041125 0	1			
<b>License Holder:</b> Mopec, Inc. 21750 Coolidge Hwy Oak Park MI 48237 USA		Manufacturing Plant: Mopec, Inc. 21750 Coolidge Hwy Oak Park MI 48237 USA			
Test report no.: USA-GB 3	30471065 001	Client Reference: Rick Bell			
		Desient			
Certified Product: Gross	ing Station	xet By	License Fee - Units		
Model Designation:	MMBXXXX (X= 0-9, A-24	= not safety-relevant	) 7		
Rated Voltage: Rated Current: Protection Class:	AC 115V, 60Hz 20A I				
Special Remarks: To installation instr	o be installed a uctions.	ccording to the licens	ee's		
			7		
Appendix: 1 Licensed Test mark:		Signatures			



21750 Coolidge Highway • Oak Park, MI 48237 USA +1 800-362-8491 • 248-291-2040 • Email: info@mopec.com

