CE370

AUTOPSY TABLE

ROTATING/ELEVATING WITH SELF CONTAINED VENTILLATION

REFERENCE MANUAL

Mopec
Better By Design™

21750 Coolidge Highway • Oak Park, MI 48237 USA
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IMPORTANT INFORMATION

MODEL NO.:

SERIAL NO.:

DATE OF PURCHASE:

DATE OF INSTALLATION:

INSTALLATION NOTES:

SERVICE AND SUPPORT:

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TABLE OF CONTENTS

INTRODUCTION

This autopsy table is a pedestal design that incorporates an elevating and rotating mechanism. A standard feature of the CE370 elevating table is Mopec's Downdraft Ventilation System, which helps ventilate the body during an autopsy.

A hydro-aspirator is conveniently located near the sink basin for ease in collection and/or disposal of bodily fluids. Electrical receptacles are provided on both sides of the table. A hot and cold water faucet is provided with a single lever control and a vacuum breaker to safeguard the facility water supply. A deck mounted sink spray, with a high pressure hose, allows complete rinsing of the body or table with the press of a single lever. The autopsy table has an integrally constructed large sink and is creased toward the center for complete drainage.

A stainless steel roller bearing carousel allows the table to lock at rotations of 0, 90, and 180 degrees. Mopec exclusively utilizes 16 gauge stainless steel bearings for a smooth, accurate and virtually effortless 180 degree motion.

The elevating pedestal consists of an Electro-Mechanical actuator. The elevating pedestal is capable of lifting and lowering 6" (from 30" - 36") using an electro mechanical actuator. **Maximum capacity is 350 pounds**. The weight should be centered on the base.

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 goods for concealed damage. If concealed damage is noticed (i.e. Broken welds, dented stainless, scratches, etc.) Follow through as noted above, and again do not discard the shipping material, they are important in settling claims.

AIR HANDLING REQUIREMENTS

CE370 Pedestal Autopsy Table Design Parameters:

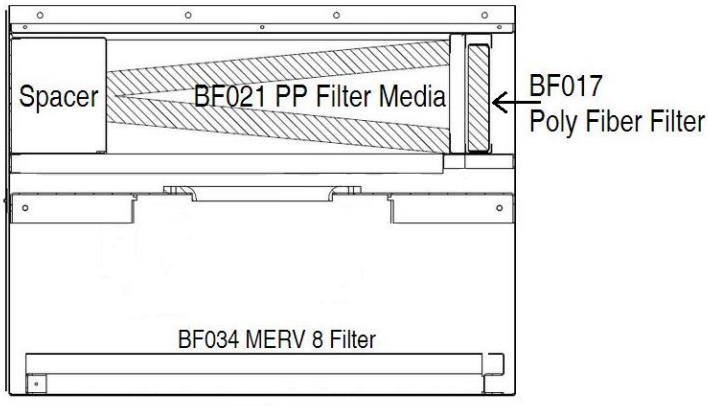
The CE370 Autopsy Tables are designed with what's known as a down draft or more commonly known "Cadaver Venter". The venting is accomplished in a very simple manner and that is to draw air through the center of the table and eventually through the grid plates.

The design is such that the opening is guarded with a mesh screen to keep larger debris and instruments from falling inside the table. There is also a 2" lip around the vent opening to help prevent fluid from flowing into the vent opening. There is also a fluid overflow to assist in fluid drainage. The pedestal of the table is a sealed design and functions as the air chamber.

The design is geared to pull pungent odors away from the user of the autopsy table. The "Cadaver Venter" is indeed very effective yet the various body sizes create an uneven sometimes uncontrollable air flow characteristics. It should also be noted that the environment is totally open therefore existing room conditions and air currents have a serious affect on the efficiency of the venting. The table will need additional air flow within the room to adequately ventilate the odors created during an autopsy. Although the Mopec CE370 Autopsy Table can help ventilate the odors that migrate from a body during an autopsy. Room conditions must also be controlled along with additional ventilation strategically located over the Autopsy Table.

Volumetric flow rates should be adjustable and be between **0 and 2000 Metric Cubic per Hour**. This variable will give the user the ability to adjust to their comfort level. Calculations are based on maintaining 125 (linear feet per minute) face velocity through the grid plates.

The CE370 has three filters, a Pre-filter BF017 which is a blue poly fiber filter and can be washed as necessary. The Main filter BF021 is a Potassium Permanganate filter to remove formalin fumes and an exhaust filter BF034 is a MERV 8 filter



SECTION A-A
FILTER PLACEMENT
Side View

INSTALLATION

Locate the package of smaller items (drain hose, fittings, rubber hoses, silicone caulk) **Use Caution** when removing from the shipping platform, THIS UNIT IS HEAVY. 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 on the floor and resting on the frame. The unit should be leveled to ensure proper drainage. Placing a bubble level on the edge of the unit's edge (do not place the level on the table's surface) side to side and front to back, assures the unit is completely level. Note: It may be necessary to use stainless steel shims or 1/8" thick floor tile pieces to acquire a true level unit. Open the access panels and check the plumbing and electrical locations to confirm their rough-in position. Carefully mark the four mounting holes for fastener drilling and the outer and inner perimeter of the pedestal. Once the floor is clearly marked, move the table away and drill the floor for the fasteners. Place a liberal amount of high grade silicone between the outer and inner perimeter outline of the pedestal. Place the table on the silicone and adjust to the alignment marks.

Mount the unit as required with an approved fastener. The fastener is suggested as being a minimum dimension of 3/8" diameter and having a Tensile Pullout Load of at least 4,000 lbs. Once the unit is mounted you can add a final bead of silicone to complete the seal of the junction between the floor and pedestal. Fill any gaps with silicone and smooth for finish trim.

Utility Connections
The only connections necessary are the Electric, Cold and Hot water supply and the drain connection. 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 the rough-in dimensions shown on rough in approval print. Your approval print is specific to your installation.
The electrical service provided for the CE370 Autopsy Table 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). 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, Replace the access panels.

Each CE370 Autopsy Table has a three foot whip for attachment to the facility. The whip leads are labeled.

With the Disposal there are 7 wires
Hot 220 Black Labeled as 220
Hot 220 Red Labeled as 220
Neutral White Labeled as Neutral
Ground Green w Yellow Stripe Labeled as PE
Red Labeled L2 (Disposal Hot)
White Labeled C2 (Disposal Common)
Green w Yellow Stripe Ground Labeled PE (Disposal Ground)

If the disposal option is purchased there MUST be two separate circuits for the two circuits on the autopsy table. You must have separate circuits for the disposal and unit.

Drain Connection
The CE370 Autopsy Tables 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 Hard Copper DWV 1.5" Diameter. The height is per the rough in drawings provided at the time of the order.

Water Supply Connection
Once the unit is secured to the floor, the utilities can be hooked up. The cold water line is ¾" and the hot water is ½" hard copper which will require customer supplied on/off valves. Mopec suggests using ball type water valves to assure proper water flow for operating all table accessories. Drain lines are standard 1 1/2" IPS and need to be vented to assure proper drainage.

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. 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.

FEATURES

The table top is fabricated of 14 Ga. 304 type stainless steel with a #4 satin finish, with built-in large sink on one end.

Two electrical receptacles are utilized, positioned on each side of the pedestal.

Hydro-Aspirator located on the end of the table near the sink basin. The aspirator is provided with a reversing valve to clear the aspirator of any foreign matter. The aspirator is designed to drain into the sink end for collection or disposal and is completely plumbed with control valve, vacuum breaker and tubing.

Swing spout faucet provided with vacuum breaker and single lever handle H/C mixing valve.

Integral sink to front panel construction eliminates sharp eaves and ledges where bacteria can accumulate. All welded, seamless construction provides durability. No hidden areas for bacteria to breed.

Sink spray is deck-mounted for convenience and is fabricated of chrome plated brass along high pressure hose.

Table pedestal is fabricated of 16 Ga. type stainless steel type 304 with a #4 satin finish.

Three Perforated Grid Plates: fabricated of 16 Ga. type 304 stainless steel with a # 4 satin finish

Optional Features:

1HP Disposal, The disposal power switch activates a solenoid to continuously feed water to the unit. Swivel impellers ensure the disposal should never jam.

Gas and/or air cock.

Safety eye wash deck mounted with pivot mount. Vacuum breaker protected.

Head Rest

Inch and Centimeter Scale

FEATURES - CONTINUED

Scale Support Socket

Scale Support Bar

Scale

Dissecting Boards

Aspirator fluid collection device: Fabricated of polyvinyl chloride for safety.

CLEANING AND MAINTENANCE

DISINFECTING AND MAINTAINING 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 **VOID THE STAINLESS STEEL WARRANTY**

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.

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.

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.

CORRECTING WASTE 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**.

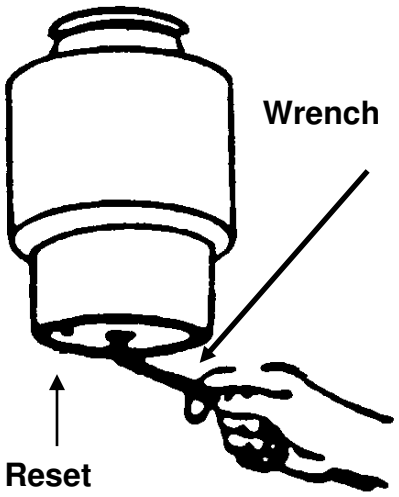
1. Turn off Waste Disposal and shut off cold water.

2. 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.**

Fig. 1



OVERVIEW - EVALUATING FILTERS FOR REPLACEMENT

EVALUATING FILTERS FOR REPLACEMENT

The BF021 filter in your MG100 unit contain alumina pellets impregnated with potassium permanganate, $KMnO_4$, 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 $KMnO_4$ 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.

Emergency Treatment – Flush eye with large quantities of water and seek medical attention.

PROCEDURE - EVALUATING FILTERS FOR REPLACEMENT

One side of the filter there are four tabs which can be opened to allow pellets to be removed. (see photo)

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.

To determine when the $KMnO_4$ has been exhausted, remove a pellet and slice it in half. 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 $KMnO_4$ is totally spent. See Video for example

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)

CLEANING AND MAINTENANCE

PROCEDURE – 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.

LIFT HEIGHT PROGRAMMING PROCEDURE

The MG100 can be set up with three preset heights or adjusted anywhere in-between. To program the three preset heights.

Move the unit to the height you want as a present with the up down button.
Press and hold the memory button top left corner of hand set.
Then press and hold the numbered button you want assigned to that elevation for 5 sec.

Your unit has now been programmed for your desired height settings

LIFT RESET PROCEDURE

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 up and down button on the switch for 5 seconds. An intermittent signal confirms the action
- Press and hold the down button at this point, all legs should begin slowly creeping downward to the “zero” (fully retracted) 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.

WARRANTY

MOPEC CE370 AUTOPSY TABLE

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 WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THE WARRANTY AS SET FORTH HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS 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.

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

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.:	CERT-0078089	Original Certification Date:	April 9, 2008
File No.:	1068177	Current Certification Date:	April 7, 2014
Issue Date:	March 11, 2014	Certificate Expiry Date:	April 6, 2017

Chris Jouppi
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Certified System

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