

OIMICO 1500 INSTALLATION AND OPERATION MANUEL



DIMENSION OIMICO 1500 CABINET 693 MM L X 374 MM W X 741,5 MM H

WEIGHT OIMICO 1500 46 KG , MOUNTED WEIGHT 51 KG ,SHIPPING WEIGHT 53 KG

AIR FLOW DIRECTLY FROM FAN 1500 m³/h , FROM SUCTION HOSE AT OIL RESORVOIR 1000 m³/h

EFFICIENCY UP TO 99,8 %

FILTRATION STAGES 1st 2'' ALUMINIUM MESH IMPINGER

2st 2'' ALUMINIUM BUFFLE FILTER

3,4 st HIGH EFFICIENCY IONIZER

5 st is OPTIONAL HIGH EFFICIENCY IONIZER

POWER INPUT 220V 50 Hz 2,0 Amp HIGH VOLTAGE OUTPUT

START UP

1 Start up OIMICO by rotating fan control knob clockwise. Set the airflow at the minimum air flow setting that will maintain the proper negativ pressure. In the most cases , three o'clock setting on the speed controller will provide enough airflow to maintainn negative pressure. This will reduce noice and maintanance , and will increse efficiency..

2 The performance power light of ionizer light should be on when the blower is running.

ROUTINE MAINTANNACE

CAUTION

1.Be extremly carefull working with the electronic cell.

The edges of the collector plates and the ionizing wires on cell may be sharp.

2. When cleaning the cell, be sure to wear appropriate protective gear, especially goggles and gloves. Skin contact with alkaline detergent solution should be avoided.

3. The electronic cell must be handled with care to avoid damage.

The direct mount OIMICO captures mist droplets from machine tools using either petroleum or synthetic machining fluids. The collected fluids drain directly back into the machine tool through the inlet opening. This draining process actually helps to keep the impingers and electronic cell clean.

The mist impingers and electronic cell will need to be cleaned periodically. The exact maintenance interval is determined by each specific application. Water soluble and synthetic machining fluids will

require more frequent cleaning than will petroleum machining fluids. During the first few months of operation, inspect the impingers and electronic cell. When you have an excessive buildup on them, the impingers and electronic cell, they will need to be cleaned.

PARTS WASHER METHOD

The mist impingers and ionizer can be cleaned with a parts washer. Make sure that the cleaning fluid used is aluminum safe and the maximum pressure does not exceed 60 psi [414kPa].

MANUAL CLEANING THE MIST IMPINGERS

Soak impingers in a solution of hot water and alkaline detergent for 10-15 minutes. Thoroughly rinse with hot water to remove any residual detergent.

MANUAL CLEANING THE ELECTRONIC CELL

1. Fill the wash tub with cell cleaning detergent and hot water per the detergent manufacturer's instructions.
 2. Immerse the cell in cleaner solution for five minutes.
 3. Thoroughly rinse the cell with very hot water. Make certain no residue remains on the cell.
 4. Inspect the collector plates for cleanliness. Repeat wash procedure, if necessary. Check for broken wires and bent collector plates.
- The cell can be installed back into the MistBuster. The indicator light may remain off for the normal two hour drying time.

TROUBLESHOOTING



INDICATOR LIGHT IS ON AND MOTOR DOES NOT RUN

1. Inspect the motor by checking to see if the motor spins freely by hand. If the motor does not spin freely by hand check for obstructions or replace motor as necessary.
2. If the motor spins freely by hand try spinning the motor clockwise or counterclockwise then with the motor spinning turn the unit on. If the motor runs and the fan speed can be adjusted by the speed controller replace the motor capacitor.
3. Try bypassing the speed controller by hooking the supply voltage going into the speed controller directly to the wire that goes from the speed controller to the motor (see schematic). If the motor works with the speed controller bypassed replace the speed controller.

CAUTION

Make sure the power is off to the unit before attempting to bypass the speed controller.

IONIZER POWER LIGHT IS ON , INDICATOR LIGHT IS OFF AND MOTOR RUNS

CAUTION

Make sure the unit is powered off before trying the following.

Inspect the fuse of the power card

If indicator light comes back on when the electronic cell are removed , there is a short circuit in at least one of the electronic cells. Wash and inspect the cell.

Inspect the cell for the following:

- Damaged or bent collector plates
- Damaged or bent ionizer grid fins
- Broken ionizing wires
- Dirt accumulation on the insulators
- Dirt accumulation on the collector plates
- Damaged or corroded electrical contacts
- Small metal shavings from machining
- Deformation of the cell
- The collector plates are properly seated into the slots of the comb on the cell
- Excessive corrosion on the cell

INDICATOR LIGHT IS CONSTANTLY BLINKING AND THE MOTOR RUNS

4. If indicator light continues to flash even without the electronic cell(s) installed, clean or replace the contact boards mounted in the cabinet. Note – clean the red, phenolic material of the board, not the electrical contacts themselves.

5. If the indicator light blinks stops blinking when the electronic cells are removed, there is a problem with at least one of the electronic collector cells. Wash and inspect the cell. For instructions on how to wash the cell see the routine maintenance section of the owner's manual.

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INDICATOR LIGHT IS OFF AND MOTOR DOES NOT RUN

1. Make sure the unit is getting power and is getting the correct voltage.
2. Check to make sure the interlock switch is working properly. Make sure there is voltage passing through the interlock switch when the button for the interlock switch is depressed. With the power disconnected to the unit an ohm meter can be used to check if the interlock switch has continuity when the switch is depressed. The interlock switch has two sets of contacts that are individually switched and will not have continuity between the two separated contacts. If there is no continuity replace interlock switch as needed.
3. With the unit on, check to see if the power supply and motor are getting voltage. If the interlock is functioning properly and there is no power reading to the power supply or motor, check wiring and replace the speed controller as needed.

INDICATOR LIGHT IS ON AND MOTOR DOES NOT CHANGE SPEED

1. Adjust the speed controller fine adjustment. To get to the fine adjustment on the speed controller pull the knob off the speed controller and slide the silver plate behind the speed controller knob up (there is no fasteners holding the speed controller knob or the silver plate on). There is a small hole next to the main adjustment for the speed controller that you can insert a small screwdriver to adjust.
2. If adjusting the fine adjustment does not change the fan speed replace the speed controller.

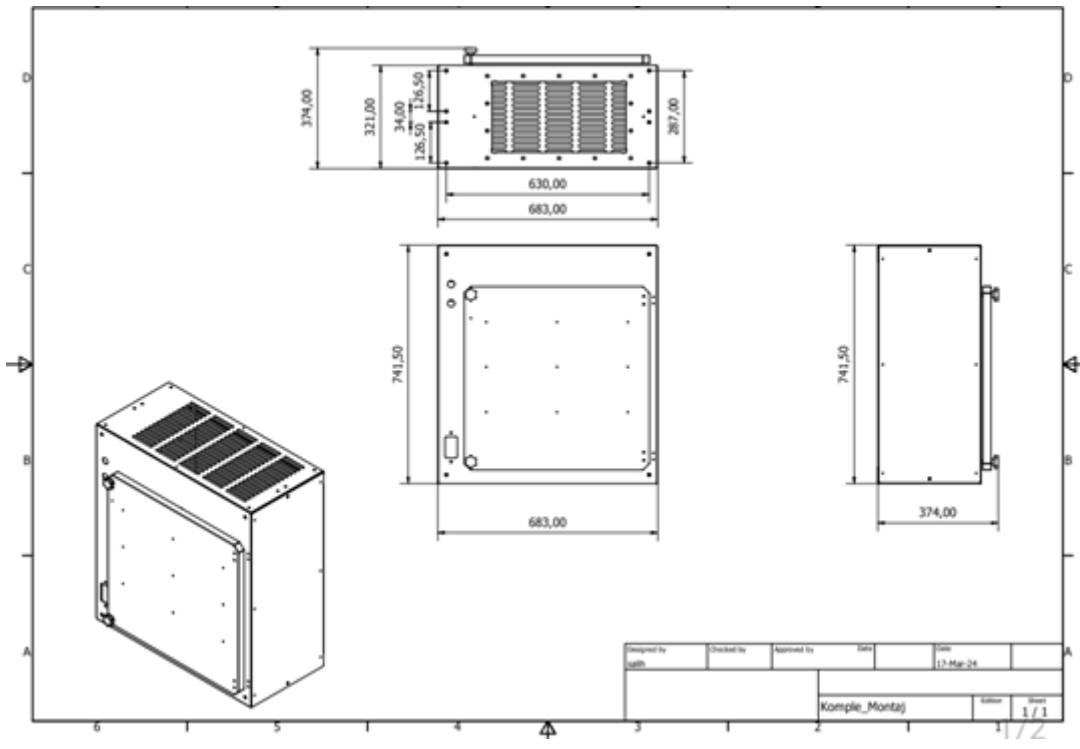
INDICATOR LIGHT IS ON, MOTOR RUNS, AND MIST / SMOKE IS COMING OUT THE EXHAUST

1. Try reducing the speed of the motor to increase the amount of time the electrostatic cells have to collect the mist / smoke.
2. If reducing the motor speed does not help .The reason is extra open hose from conveyor or cabinet side.
3. If the application that the unit was installed in has changed (i.e. higher coolant pressure, shorter cycle times, machine has changed, etc.) the unit might not be able to handle the increased load.

INDICATOR LIGHT IS ON, MOTOR RUNS, AND MIST / SMOKE IS NOT BEING EVACUATED / CAPTURED

1. Make sure there are no obstructions in the ducting or the unit.
2. Make sure there is proper airflow. If the unit is installed too close to openings on the machine cavity the unit will pull in fresh air from the opening and not move / draw into the unit from where the mist / smoke is being generated.
3. If long lengths of ducting / tubing are used the airflow can be drastically reduced. The same issue can result when using ducting / tubing that has a very small diameter.





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