

DRYING CABINET

MODELS: FTM2000 (SINGLE ELEMENT)
- FTM2001 (DUAL ELEMENT)

AQUEOUS SYSTEM



OWNER'S MANUAL

Installation, Operation & Maintenance Information

Table of Contents

Product Record	2
Overview	3
Installation	5
Drying Process	6
Routine Maintenance	8
Troubleshooting	8
Warranty	9

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Product Record

Record the information from your Filtertherm® Dryout Machine's serial number label here for easy product reference.

Part number:	
Serial Number:	

Save these instructions and your sales receipt for future reference. Use the information above to complete your Warranty Registration. You can register your Filtertherm® via online, email or fax. For email or fax, complete the registration instructions listed in the back of this manual. Register your Filtertherm® Dryout Machine within 45 days of purchase online to activate your warranty.

Warranty Registration

[web] www.filtertherm.com/warranty [email] warranty@filtertherm.com [fax] 530-241-0870

Tech Support

[web] www.filtertherm.com [USA/Canada] 888-792-2922 [International] 00-1-530-241-3950

Manufactured by

Diesel Emissions Service Redding, CA 96001

Introduction of the Model FTM2000/2001

The Filtertherm Aqueous DPF Cleaning process offers a single stage approach for the routine cleaning of Diesel Particulate Filters. After the Model FTM1100 Aqueous Machine washes the filter the Dryout then removes the water with a combination of air pressure and heat.

Due to the small size of the filter cells, water will be extremely resistant to being pushed out with air alone, and if you bake the wet filters in an oven you risk damaging both the filter and the oven. The FTM2000 line removes water from the filter much more quickly and safely than alternative drying methods ensuring quick turnaround time on your filters.

Package Contents

The Aqueous DFP Cleaning unit includes the following package contents:

Item	Description
1	Model FTM2000/FTM2001
2	Documentation package that includes links to this owner's manual and a warranty registration worksheet.
3	2" risers.
4	4" risers.
5	Transfer Pump.

Drying Machine Location

Consider the following when choosing a location for the Model FTM2000 and FTM2001:

- Install Indoors only and on a hard, flat surface
- Unit Weight: 875 lbs.
- Unit rests on foot levelers
- Ensure adequate clearance around the machine

Pre-Installation

Inspection

Thoroughly inspect the Machine for damage that may have occurred during shipping. Any damage should be noted and reported to Filtertherm immediately.

Pre-installation Requirements

- Space requirement (including clearance and doors) for proper operation: minimum 66" wide x 88" deep x 80" high
- The upper and lower cabinet doors must be able to open completely
- Power Supply:
 - o FTM2000: 2 x 40Amp, 208V, 3ph circuits.
 - FTM2001: 1 x 40Amp, 208V, 3ph circuit
 1 x 60Amp, 208V, 3ph circuit.
- Contact your local disposal company for proper water disposal regulations and procedure.

Installation

- 1. Position the Machine on a solid, level surface with recommended clearances.
 - a. Allow 16" clearance on the left, back and right sides.
- 2. Duct the exhaust away from the machine. The 4" exhaust port is located on the back, at the bottom, of the machine.
- 3. Adjust the leg levelers until the cabinet is level.
- Connect the electrical supplies.
 They are wired into the grey junction box on the back of the machine.
- 5. Check tightness of all external connections.
- 6. Activate the Warranty

FTM2000 requires the installer or dealer to complete and submit the warranty for the equipment owner on our website: http://www.Filtertherm.com

The Control Panel

- Power Switch
- Warm Up timer

Time remaining on the Warmup Cycle when the machine is first powered on.

Cycle Timer

Time Remaining on the current Drying cycle.

Inlet Temp

Temperature of the air entering the filter.

Outlet Temp

Temperature of the air leaving the filter.

- Start/Stop Buttons
- Estop

Press to kill power to the entire machine in case of emergency. Once the problem has been resolved the Estop must be released and then the power switched off and on again for the blower to work.



Drying Process

A Video version of these instructions can be found by scanning here: *If viewing as a pdf* <u>click here</u>



Power on

- When you first turn on the machine it will run a 10 minute warm up cycle to warm up the lubricant in the bearings.
- It is recommended that the warm up should occur once a day, at a minimum.
- When the warm up cycle is done the green start button will light up.

TIP: If you turn on the dryout right before you load a filter into the FTM1100 Aqueous machine the warm up should be done by the time you need to dry the filter.

Drying a Filter

- 1. Open the upper door.
- 2. Put the wet filter in the machine, inlet side down. (Flow indicator arrow pointing up)
 - For shorter DPFs place one or more risers onto the DPF to increase the height enough that it can seal with the top cone.
- 3. Turn the crank on the right of the machine until the top cone has sealed.

CAUTION: Do not raise the table to where it hits the pillow blocks supporting the screw.

- Close and latch the door.
- Press the start button

Drying Process Cont.

A cycle will now run until the programmed time has passed or the air coming out of the filter is 175 °F.

It may take several minutes for the blower to break the surface tension on a filter. During this time the heater will be off.

You can see the drop in pressure on the front pressure gauge when the surface tension on the filter has broken and air is starting to flow.

- 6. After the cycle is finished the filter may be hot, use Recommended PPE to avoid injury.
- 7. Unlatch and open the door.
- 8. Turn the crank to lower the table.
- 9. Remove the DPF. You are now ready to dry another filter.

Some filters may take multiple cycles to dry.

Using the FTM2250 Light duty Adapter

- 1. Open the upper door.
- 2. Insert the FTM2250 chamber into the dryout.
- 3. Turn the crank on the right of the machine until the top cone has a good seal against the adapter chamber.
- 4. Attach the hose to the chamber.
- 5. Insert the inlet end of the closed end filter into the opening on the chamber. And secure it with the overhead support cable.
- 6. Connect the hose to the DPF with the appropriately sized adapter.
- 7. Press the start button.

CAUTION: The Dryout machine will be louder with the door open. Hearing protection is recommended.

Routine Maintenance

Check the Water

Depending on the number of filters the machine dries during an average month, the water tank may need to be emptied. There is a drain valve on the back of the machine

Be sure to consult your local water regulations before emptying the tank into a drain.

A transfer pump is supplied with the Dryout machine. The pump can be used to empty the tank back into the FTM1100 Aqueous machine. There is no switch on the transfer pump, simply plug in to start, and unplug to stop.

Lubricate the Lift Screw

Periodically lubricate the table lift screw to protect it from moisture and ensure ease of use.

Troubleshooting

Blower won't run

If the machine will not run check to see if the Estop has been pressed and then power cycle the Dryout.

Other

For troubleshooting:

call: 888-792-2922

or Email: TechSupport@Filtertherm.com

Warranty Information

Diesel Emissions Service ("Seller") warrants to the original purchaser of the Filtertherm® Aqueous Cleaning System ("product"), subject to all of the terms and conditions hereof, that the Product and all components thereof will be free from defects in materials and workmanship for the following period(s) of time, measured from the date of purchase:



Diesel Emissions Service warrants the Filtertherm® Aqueous Cleaning System for a period of ONE (1) YEAR.

Seller's obligation under this warranty is specifically limited to repairing or replacing, at its option, the product or any part thereof which is determined by Seller to be defective during the applicable warranty period. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This warranty is made to the original purchaser of the Product only, and is not transferable or assignable. This warranty applies only to components of the Filtertherm® system. This warranty does not apply to any unauthorized or improper installation, alteration or repair of the Product, or to any Product or component which has been damaged or deteriorated due to misuse, neglect, accident, failure to provide necessary maintenance, normal wear and tear, or acts of God or any other cause beyond the reasonable control of Seller, missing or damaged parts due to clearance, repairs, and maintenance to components.

ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT,
INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF
MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE
LIMITED IN TIME TO THE APPLICABLE WARRANTY PERIOD REFLECTED

ABOVE. NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE LIMITED WARRANTY PERIOD HAS EXPIRED.

Some states do not allow limitations on how long an implied warranty lasts. IN NO EVENT SHALL DIESEL EMISSIONS SERVICE OR ITS AFFILIATES BE RESPONSIBLE FOR, OR LIABLE TO ANYONE FOR, SPECIAL, INDIRECT, COLLATERAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES, even if Seller has been advised of the possibility of such damages. Such excluded damages include, but are not limited to, loss of use, cost of any substitute product, or other similar indirect financial loss. Some states do not allow the exclusion or limitation of incidental or consequential damages. Claims under this warranty must be made promptly after discovery and within the applicable warranty period.

To obtain warranty service, you must contact DIESEL EMISSIONS SERVICE customer service and provide proof of the date and location of purchase and identification as the original purchaser. Call (DES) Customer Service toll free at 1-888-792-2922 to speak with a trained representative.

Purchaser must allow the seller a reasonable opportunity to inspect Product claimed to be defective prior to removal or alteration of its condition. Upon determination by Seller that the Product or any part thereof is defective during the applicable warranty period (which may require purchaser to return the Product to Seller at purchaser's expense), Seller will supply the purchaser with replacement parts or, at its option, a replacement Product. Seller may use new or reconditioned parts, or a new or reconditioned Product of the same or similar design.

Purchaser's warranty responsibility

- Warranty form submitted within 45 days of purchase submit online, fax or email
- Detailed description of failure
- Pictures of failure
- Contact Diesel Emissions Service within 24 hours of failure

Warranty Form

Complete registration and return via email, fax, mail or online (at www.filtertherm.com/warranty) within 45 days of purchase to register your Machine and activate the warranty.

Name	Email Address
Company Name	Phone Number
Address	Model Name
Address 2	Serial Number
City	Date of Purchase
State	Dealer Purchased From
Zip	Date of Installation