Maintenance Guide for User

English

ThermoFlex Mid
ThermoFlex Narrow

653-00578A

www.creo.com

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RE37,376	5,325,217	5,532,728	5,742,743	5,996,499	6,158,345	6,353,216
4,558,302	5,339,176	5,561,691	5,764,374	5,998,067	6,159,659	6,366,339
4,743,091	5,343,059	5,568,595	5,764,381	6,003,442	6,164,637	6,371,026
4,992,864	5,355,446	5,576,754	5,771,794	6,014,471	6,180,325	6,377,739
5,049,901	5,359,451	5,579,115	5,785,309	6,016,752	6,181,362	6,387,597
5,079,721	5,359,458	5,592,309	5,813,346	6,031,932	6,181,439	6,396,422
5,103,407	5,367,360	5,594,556	5,818,498	6,043,865	6,186,068	6,396,618
5,111,308	5,384,648	5,600,448	5,854,883	6,060,208	6,189,452	6,407,849
5,113,249	5,384,899	5,608,822	5,861,904	6,063,528	6,191,882	6,414,755
5,122,871	5,412,491	5,615,282	5,861,992	6,063,546	6,204,874	6,422,801
5,124,547	5,412,737	5,625,766	5,875,288	6,072,518	6,208,369	6,435,091
5,132,723	5,420,702	5,636,330	5,894,342	6,090,529	6,214,276	6,441,914
5,150,225	5,420,722	5,649,220	5,900,981	6,096,461	6,217,965	6,450,092
5,153,769	5,459,505	5,650,076	5,934,196	6,098,544	6,260,482	6,456,396
5,155,782	5,473,733	5,652,804	5,942,137	6,107,011	6,266,080	6,476,931
5,157,516	5,481,379	5,680,129	5,946,426	6,112,663	6,266,134	6,477,955
5,208,818	5,488,906	5,691,823	5,947,028	6,115,056	6,267,054	6,509,903
5,208,888	5,497,252	5,691,828	5,958,647	6,121,996	6,268,948	
5,247,174	5,508,828	5,696,393	5,966,504	6,130,702	6,283,589	
5,249,067	5,509,561	5,699,174	5,969,872	6,134,393	6,295,076	
5,283,140	5,517,359	5,699,740	5,973,801	6,136,509	6,299,572	
5,291,273	5,519,852	5,708,736	5,986,819	6,137,580	6,318,266	
5,323,248	5,526,143	5,713,287	5,995,475	6,147,789	6,352,816	

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Maintenance Guide for User

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Overview

This document describes the periodic maintenance to be performed on the ThermoFlex® Mid and the ThermoFlex® Narrow platesetters.



Important: *ThermoFlex* refers to all the above mentioned machines unless otherwise specified.

Periodic maintenance should be performed by a trained ThremoFlex operator, according to the *Safety Precautions for User* documentation.

Before performing the periodic maintenance procedures, verify that you have the Drum holes cleaning kit, 510K1R593. If you do not, then order it. Also make sure you have a piece of cloth and a cotton swab.

The table below lists the periodic maintenance schedule. Details of each procedure are provided later in this document.

Table 1: Periodic Maintenance Procedures Checklist

#	Periodic Maintenance	Clean....	Done	Replace Every...
1.	Drum vacuum holes	weekly/biweekly		
2.	Entire drum	weekly/biweekly		
3.	Debris Removal Nozzle	weekly/biweekly		



Note: Depending on the media type and frequency of exposure, perform the periodic maintenance procedures on the parts either weekly or biweekly, unless otherwise mentioned.

Performing Maintenance on the ThermoFlex Machines

The procedures in this section are for all machine types.

Before You Begin

Before starting any of the procedures described in this document, open the front door:



1. From the **Utilities** menu, click the **Preventive Maintenance** button.



2. From the **Routine Functions** menu, click the **Open Top Door (for ThermoFlex Mid)** or **Open Front Door (for ThermoFlex Narrow)** button.



You are now ready to perform the maintenance procedures. They should take up to half an hour to complete. Perform these procedure weekly or biweekly unless otherwise specified.

Drum

Cleaning the Drum Vacuum Holes

Clean the drum vacuum holes as follows:

1. Turn the drum vacuum *on* during cleaning so that the loosened particles will be sucked through the holes.
2. From the ThermoFlex Controller, go to **Utilities > Hardware > Drum System > Drum Vacuum Pump**.
3. Click **Start**.
4. Remove the cleaning jig (shown in Figure 1 on page 4) found in the *Drum Hole Cleaning Kit*, 510K1R593 (*Accessories box*).

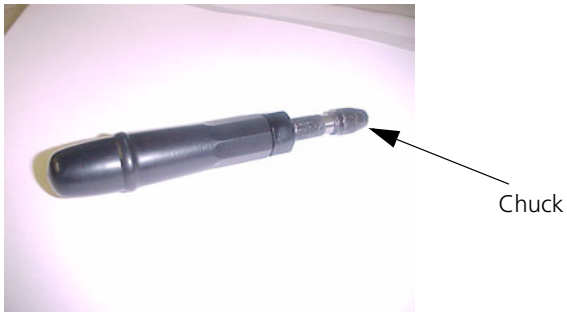


Figure 1: Cleaning jig

5. Open the chuck.
6. Insert the 0.8 mm drill.



Note: Make sure the drill is inserted so that it is long enough, at least 25.4 mm or 1 inch, to completely enter the drum holes.

7. Tighten the chuck.
8. Swivel the drill to open and clean the drum holes.
9. On the ThermoFlex Controller, in the Open dialog box, click **Stop**.
10. Close the ThermoFlex Controller application and shut down the Windows Operating system.
11. On the distribution box, turn off the main power switch.

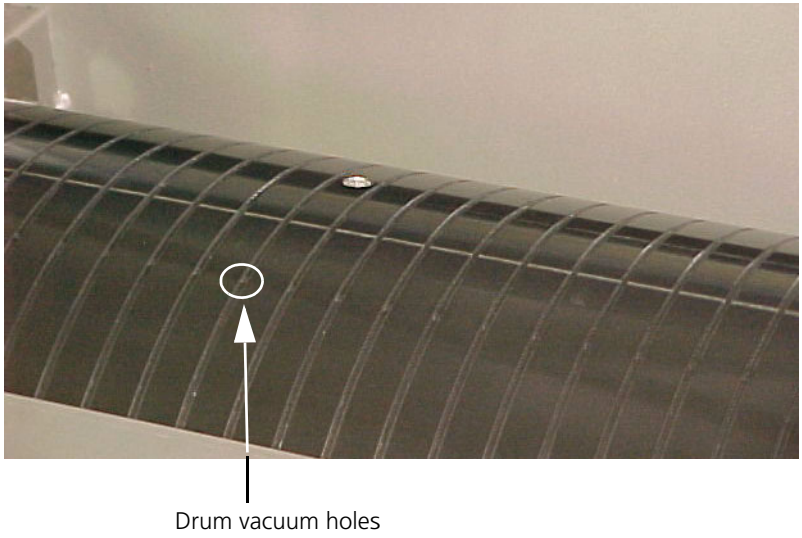


Figure 2: Drum vacuum holes

Cleaning the Drum Surface

After cleaning the drum vacuum holes, use a cloth dampened in alcohol to clean the entire drum surface. Clean the grooves.

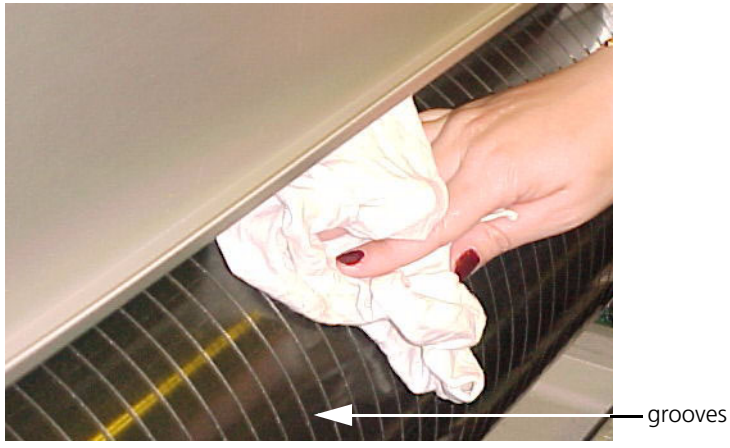


Figure 3: Cleaning the drum and grooves

Cleaning the Debris Removal Nozzle

Clean the debris removal nozzle daily or as necessary as follows:

1. Lift and secure the loading tray.



Figure 4: Lift the loading tray

2. Put a piece of cloth over the optic lense. This protect the lens from getting dirty while cleaning the debris removal nozzle.

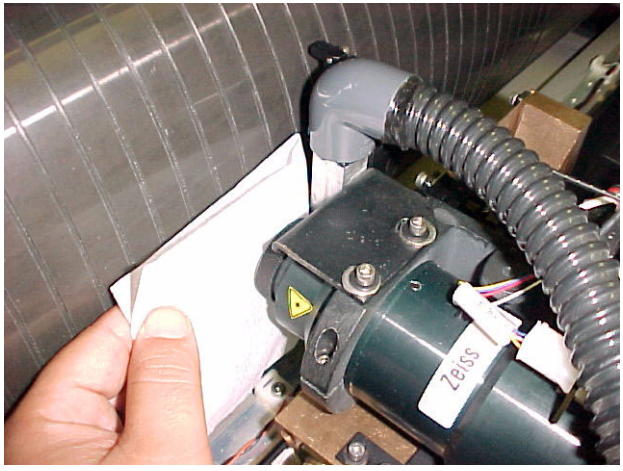


Figure 5: Cloth protecting the optic lens

3. Use a cotton swab to clean the debris removal nozzle (as shown in Figure 6 on page 7).

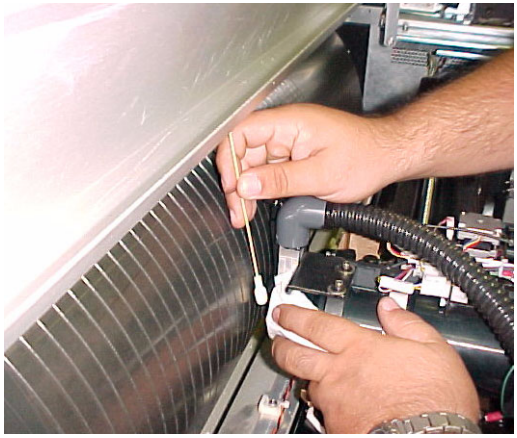


Figure 6: Cleaning the debris removal nozzle with a cotton swab

Completion of ThermoFlex Maintenance

When you have completed the maintenance procedures, follow these steps:

1. Close all the doors.
2. Turn on the machine.
3. Make sure the machine is in the **Ready** mode.

Fuchs Filter

Safety Regulations for Changing Filters

Hazards While Replacing Filters

Replacing contaminated filters in an improper manner represents a considerable health risk to those carrying out the replacement and their immediate surroundings.



CAUTION: You must therefore observe the following safety rules for filter replacement without fail!

CAUTION: Breathing masks and protective gloves must be used for filter replacement.

CAUTION: Particle and gas filters are subject to statutory regulations regarding special waste and are to be disposed of according to their level of pollutant contamination.

Breathing Mask

- Use fine-dust masks, tested at protection level 3

Hand protection

- Use long disposable polythene gloves

Replacing Contaminated Filters

When to Replace Filters

- When the red control lamp lights up (safety filter bag only)
  - ❒ the extraction turbine switches off automatically
- A short time after the filter pre-warning lamp (accessory) lights up
  - ❒ 3/4 of the filter capacity has been reached

Replacement Filters

- Make sure that you use the correct replacement filters. The type of filter used in your filtering device is listed below.



Note: Only filters as prescribed by the manufacturer may be used. These filters have been specially adapted to the prevailing conditions. In the case of other filters, there is a risk of damaging emissions as a result of inadequate filtering!

Filter Replacement Procedure

➢ Release the clamping fasteners on the upper section of the filtering device and remove the cover module.

The filters are now accessible.

Filter combinations of various materials are used:

- (1) Metal mesh filter - clean only
- (2) Safety filter bag (Creo part mumber - 620B00104, Fuchs part number -TKF FB6) – replace when the Red LED is ON (Filter Full)
- (3) Preliminary filter bag (Creo part mumber -620B00105, Fuchs part number -MKF EU51) – replace only after replace the Safety Filter Bag 12 times
- (4) High eff FLTR submicron class s (Creo part mumber - 620B00106, Fuchs part number - MKF SF10) – replace only after replace the Preliminary Filter Bag 10 times (620B00105)
- (5) Carbon gas filter (Creo part mumber - 620B00107, Fuchs part number - MKF A150) – replace after 800 working hours OR one year OR unpleasant smell OR increase of weight (see *Carbon Gas Filter* on page 11 for more details)

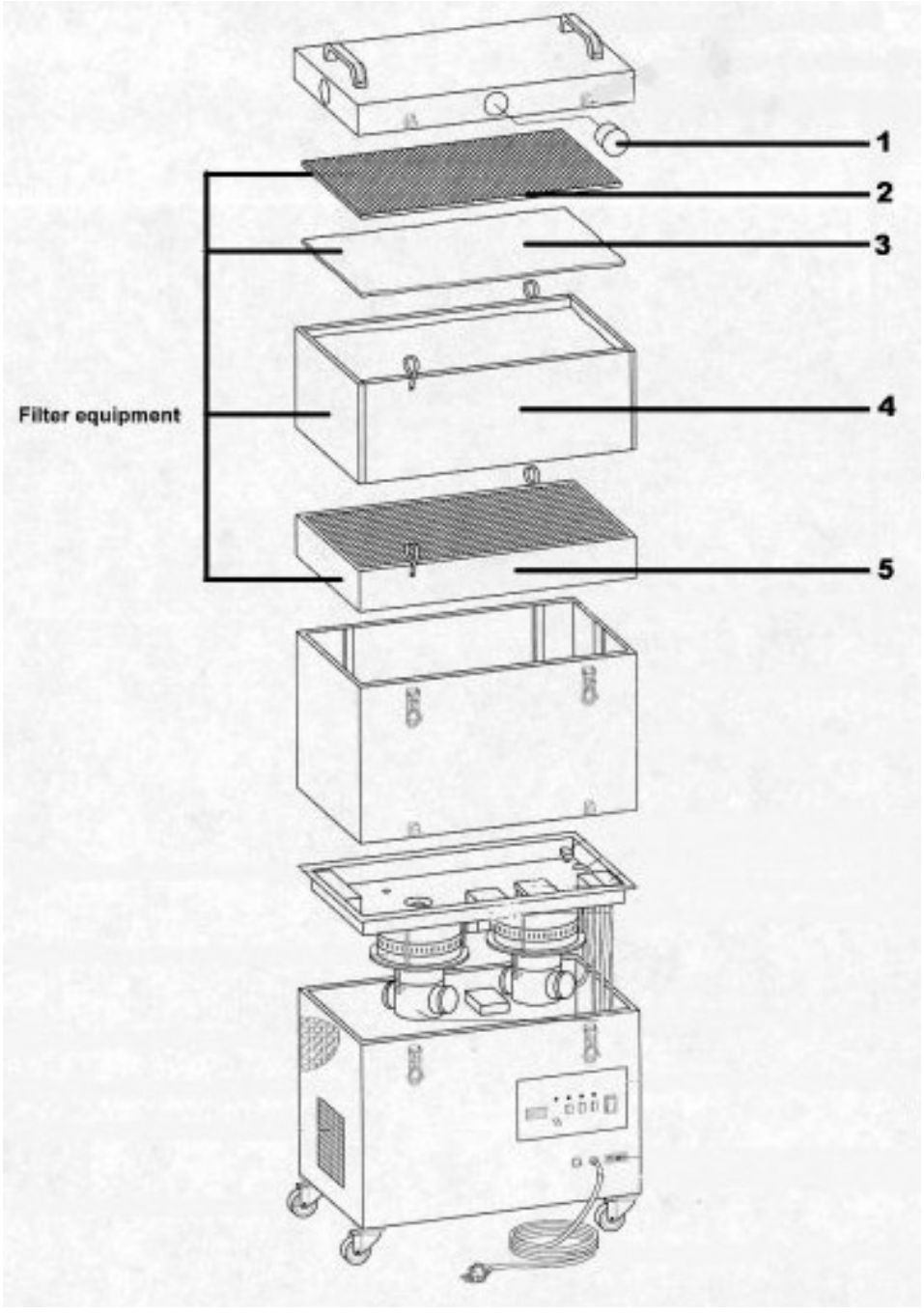


Figure 7: Complete view of filtering device

Safety Filter Bag

- Switch off the filtering device at the on/off switch
- Release the clamping fasteners
- Remove the cover module
- Carefully pull the safety filter bag off the extraction connection point in the cover module
- Immediately close by means of the self-adhesive fastening tab. Pack in an airtight polythene bag.
- Dispose of in accordance with regulations



CAUTION: Under no circumstances should the safety filter bag/sack be cleaned!

Fitting a New Safety Filter Bag

- When fitting, handle the filter with care. It is sensitive to pressure and knocks.
- Slide the new safety filter bag on to the extraction connection point as far as it will go
- Press the exit key on the turbine flange cover
  - ❒ Turbine starts up



CAUTION: Do not reach into the turbine while it is running.

- Re-assemble the device
- Switch on the filtering device and continue operation

Carbon Gas Filter

An active carbon filter is used up after an increase in weight of approx. 25 - 30 %.

A used-up active carbon filter emits pollutants to the surrounding environment.



CAUTION: It should be removed as soon as it is used up!

For technical reasons, an optical display for used-up active carbon filters is not possible.

Determine the state of the active carbon filter in the following manner:

1. Increase in weight of the filters by 25-30 % compared to original weight.

   Example: original weight: 12 kg, replace at approx. 16 kg 2.

2. Occurrence of unpleasant smells.
3. Excess of 800 operating hours (average value).
4. After one year of use (average value).

Full active carbon filters must either be

- disposed of as special waste

or

- reactivated as recovered material