

MSC FILTRATION TECHNOLOGIES FILCLEAN MS-DS SUMP CLEANER OPERATION MANUAL

WARNING

**FOR YOUR PERSONAL SAFETY, PLEASE READ THIS MANUAL
CAREFULLY AND COMPLETELY BEFORE OPERATING THIS EQUIPMENT**



FCMS/DM-O&M-05222018-REV0

TABLE OF CONTENTS

1.0	Description of Operation
2.0	Installation and Operation
3.0	Filter Element Changeout
4.0	Spare Parts
5.0	Warranty

1.0 DESCRIPTION OF OPERATION

The FilClean DM-MS filter cart is a dual use filter skid to be used to clean out machine tool sumps in machine shops that do both grinding and heavy machining. The FilClean MS has two filter housings with a 0-25 gpm air diaphragm pump in between. The air diaphragm pump can be deadheaded and run dry without damage.

Compressed Air Requirements 50-100 psig at 3 SCFM.

The first filter bag housing has at minimum a 25 micron bag filter to remove heavy chips from machine sumps while the second Dome Filter is used for removing finer machine waste such as grinding swarf.

The FilClean MS-DM Skid is meant to be used as a kidney loop in machine tool sumps to keep them clean and limit the amount of manual cleanings of the sump.

Important : The FilClean MS-DM Skid can be run without a filter cartridge in the Dome Housing but always be run with at minimum a 25 micron bag filter installed in the bag filter housing or damage to the air diaphragm pump could occur.

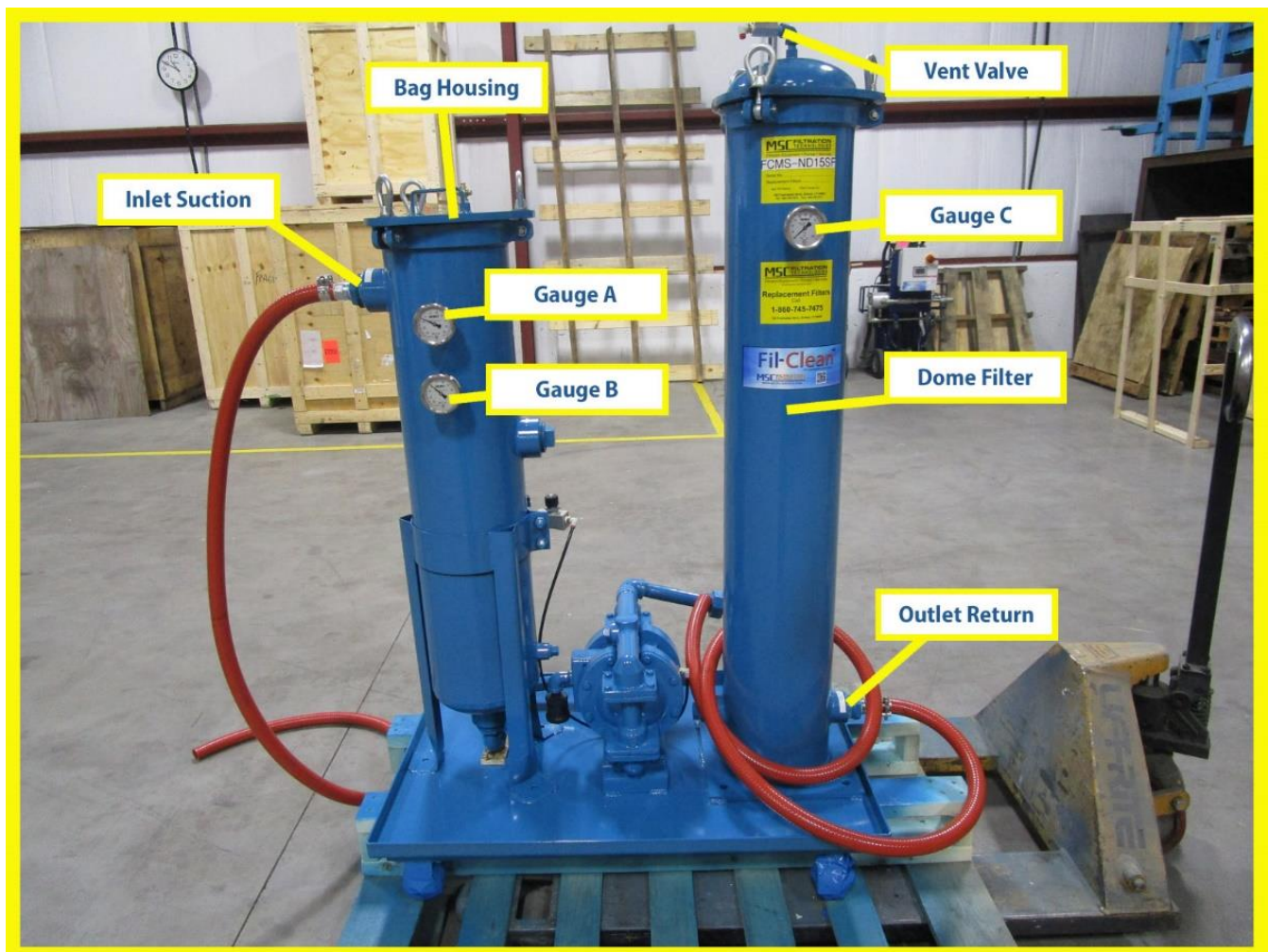


Figure 1

2.0 INSTALLATION AND OPERATION (SEE FIGURES 1 AND 2)

1. Locate FilClean DM-MS on level ground next to the machine sump.
2. Attach Suction and Return Hoses to filter housings.
3. Place the inlet suction hose and outlet return hose into the coolant/oil sump to be cleaned. It is best to place these hoses at opposite ends of the sump to provide good recirculation and to keep most of the contaminant suspended.
4. Filter Element Check - Open both Bag Housing and Dome Housing lids by loosening swing bolts on lid and make sure filter elements are installed in either housing (see replacement element part numbers on parts list). Make sure to pay attention to note on Important Note on page 1. Close and tighten lids.
5. Before connecting compressed air line make sure that Air Pump Flow Control Valve is closed.
6. Connect compressed air line to Compressed Air In connection using a quick disconnect fitting and airline rated for the correct pressure. (Customers Responsibility).
7. Adjust Air Regulator Knob till pressure reads between 50-100 psig.
8. Adjust Air Pump Flow Control Valve to desired pump flow rate up to 25 gpm. As filters begin to plug you may need to adjust flow control valve to maintain high enough flow.
9. Once flow is established make sure to put a container under Dome Filter Vent Valve (figure 1) and opening it until liquid comes out and then close.

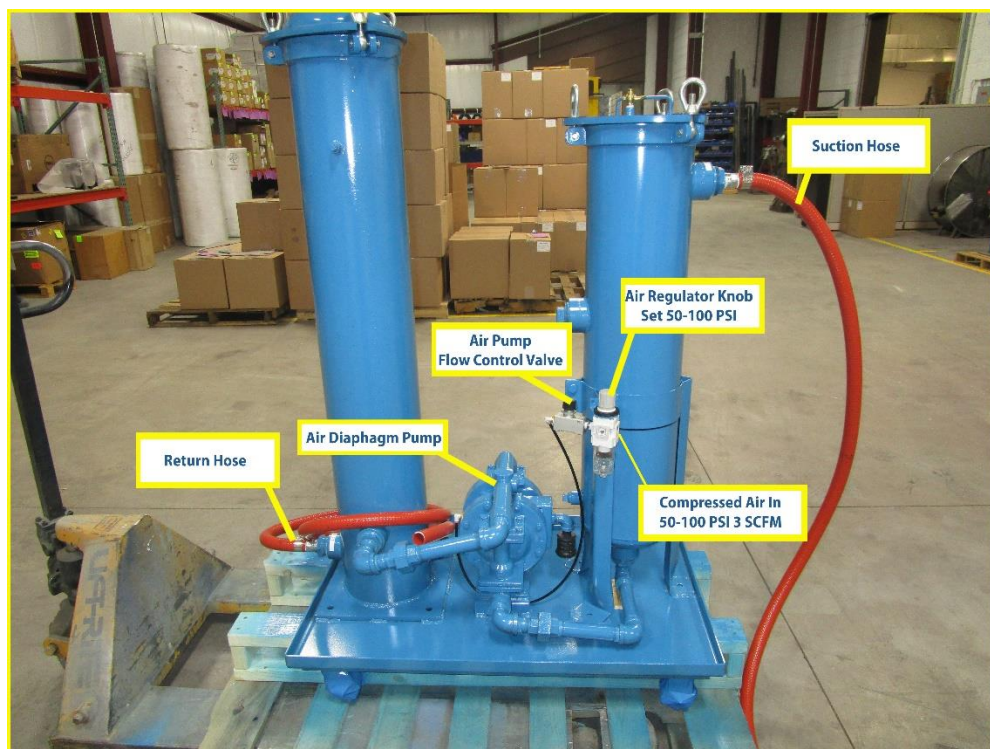


FIGURE 2

3.0 FILTER ELEMENT CHANGE (SEE FIGURES 1 AND 2)

1. Bag filter requires changing when either air pump struggles to pump, flow slows down or difference between Gauge A and Gauge B (Figure 1) is 15-20 psid.
2. Dome cartridge filter requires changing when Gauge C (Figure 1) reads 20-25 psid.
3. To change filters remove suction hose from sump leaving return hose in and pump unit completely out back to sump until no more coolant/oil comes out of return hose.
4. Close Air Pump Flow Control Valve (Figure 2) to stop pump.
5. **Important: Before opening filter housings open Dome Vent Valve (Figure 1) to make sure that pressure is relieved in housing.**
6. Open either Bag Housing or Dome Housing by loosening the three swing bolts on top of housing and remove an replace plugged bag filter or dome cartridge.
7. Close housing lids and start unit back up.

4.0 FILTER ELEMENT REPLACEMENTS

BAG FILTER PART NUMBERS

DE25D12C	25 MICRON SIZE 12 BAG FILTER POLYESTERV (25/BOX)
DE10D12C	10 MICRON SIZE 12 BAG FILTER POLYESTER (25/BOX)
DE5D12C	5 MICRON SIZE 12 BAG FILTER POLYESTER (25/BOX)

DOMES FILTER PART NUMBERS

FCPL7-PP-.5-F-36	1/2 MICRON 36" LONG DOME ELEMENT (6/BOX)
FCPL7-PP-3-F-36	3 MICRON 36" LONG DOME ELEMENT (6/BOX)
FCPL7-PP-5-F-36	5 MICRON 36" LONG DOME ELEMENT (6/BOX)
FCPL7-PP-10-F-36	10 MICRON 36" LONG DOME ELEMENT (6/BOX)
FCPL7-PP-20-F-36	20 MICRON 36" LONG DOME ELEMENT (6/BOX)
FCPL7-PP-30-F-36	30 MICRON 36" LONG DOME ELEMENT (6/BOX)

5.0 WARRANTY CERTIFICATE

MSC FILTRATION TECHNOLOGIES, INC. WARRANTIES ALL THE PARTS MANUFACTURED BY MSC FILTRATION TECHNOLOGIES, INC. TO THE ORIGINAL PURCHASER AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP UNDER NORMAL USE FOR A PERIOD OF (1) ONE YEAR.

PURCHASED COMPONENTS WILL CARRY ORIGINAL MANUFACTURERS WARRANTY.

PUMP SEALS, GASKETS, FILTER ELEMENTS, ELECTRIC BULBS AND FUSES ARE NOT WARRANTED.

ALSO PARTS WHICH HAVE BEEN SUBJECTED TO LACK OF MAINTENANCE, NEGLECT, DAMAGE BY ACCIDENT OR TRANSIT WILL NOT BE COVERED UNDER THIS WARRANTY.

ANY LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES IS EXPRESSLY DISCLAIMED. IN ALL EVENTS THE LIABILITY IS LIMITED TO AND SHALL NOT EXCEED THE PURCHASE PRICE PAID.

ANY FIELD REPAIRS OR ALTERATIONS AND THE RELATED COST HAS TO BE APPROVED BY FILTRATION TECHNOLOGIES, INC. PRIOR TO SUCH REPAIRS AND OR ALTERATIONS.

DEFECTIVE COMPONENTS WILL BE RETURNED TO FILTRATION TECHNOLOGIES, INC. REPLACEMENTS OF SUCH COMPONENTS WILL BE SHIPPED BACK TO THE CUSTOMER WITHIN (48) HOURS. CUSTOMER WILL BE RESPONSIBLE FOR ALL FREIGHT CHARGES.