Note: Read this operations manual thoroughly before using this equipment. Electrical connections should be completed by an authorized electrician based on local electrical codes.

MSC Filtration Technologies DMS Dome Filter Skid Owners and Operations Manual
Section 1: FilClean DMS Component Description

(Figure 1)

(Figure 2)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Optional – 480V Motor Control Box with Motor Overload Protection</td>
</tr>
<tr>
<td>2</td>
<td>Pump Motor</td>
</tr>
<tr>
<td>3</td>
<td>PSK Progressive Cavity Pump</td>
</tr>
<tr>
<td>4</td>
<td>50 PSIG pump pressure relief valve</td>
</tr>
<tr>
<td>5</td>
<td>Cleanable Magnetic Filter Upstream Block Valve</td>
</tr>
<tr>
<td>6</td>
<td>Optional Cleanable Magnetic Filter</td>
</tr>
<tr>
<td>7</td>
<td>Cleanable Magnetic Filter Downstream Valve</td>
</tr>
<tr>
<td>8</td>
<td>Particulate Filter Upstream Pressure Gauge</td>
</tr>
<tr>
<td>9</td>
<td>Dome Particulate Filter Housing</td>
</tr>
<tr>
<td>10</td>
<td>Dome Particulate Filter Vent Valve</td>
</tr>
</tbody>
</table>
Section 2: FilClean DMS Operating Description

(Figure 3)

The FilClean DMS (Dome System) Filter skid is designed to remove small sized particulate such as grinding fines, from machine tool coolants and oils. It is meant to act as a portable or permanent kidney loop filtration system on machine tool sumps. By keeping coolant or oil clean the FilClean DMS helps prolong coolant life, increases machine tool life and reduces the need for grinding wheel dressings.

The FilClean DMS uses a progressive cavity PSK pump of between 2-25 gpm (item 3) to pull dirty coolant or oil from the machine tool sump and then pumps it through an MSC Dome high capacity filter cartridge (item 9) of between ½ and 30 microns nominal and or a cleanable magnetic filter (item 6) for removal of ferric particles.

The FilClean DMS can be either 110/220 V Single Phase or 480V Three Phase depending on pump flow chosen.
Section 3: FilClean DMS Set Up

1. The FilClean DMS should be set up on a steady flat surface next to the machine tool coolant sump. 8 ft Inlet and outlet hoses supplied with the FilClean should be placed at the bottom of the coolant sump and at opposite ends as in Figure 3 of the previous page to insure good recirculation of coolant. **Do not restrict or kink inlet or outlet hoses in any way and make sure to only use MSC approved or supplied hoses with the unit.**

2. Connect electrical power and cord of the correct amperage to (item 2) pump motor or to optional (item 1) 480V power interlock on the terminals below. Optional 3 phase interlock box (item 1) is supplied with motor overload protection.

(Figure 4)

3. Make sure all block valves on the filter skid such as optional (item 5 and 7) are in the open position with the handles going in the direction of the plumbing.

(Figure 5)
Section 3: FilClean DMS Set Up (Continued)

4. 480 V Models Only check pump rotation. Bump pump motor very quickly by engaging motor on/off switch on optional (figure 6) interlock box. If pump is running in the wrong direction unplug from power and swap one of the 480V phase leads in the box.

(Figure 6)

5. Once correct pump rotation has been established then energize pump and once liquid is flowing open vent valve (figure 7) on top of dome housing to vent any air from vessel. This may take a minute or so. Close vent valve when liquid begins to come out and then insure flow is coming out of outlet hose connected to Dome housing back to coolant reservoir.

(Figure 7)
Section 4: FilClean DMS Operations and Maintenance (Use Figure 8, 9 and 10 For Reference)

1. **Dome Particulate Filter Replacement:** Particulate filter in dome housing (Item 9) should be replaced when pressure gauge (Item 8) increases to 25-30 psig. Clean pressure reading should be 0-5 psig. To replace particulate filter, deenergize fluid pump and open vent valve (Item 10) to allow filter housing to drain back to oil reservoir. Once drained use a screwdriver to loosen eye bolts on top of dome housing and open lid. Then loosen seal nut on top of filter element and pull out dirty element using the handle on the filter and replace with clean one. Seal up Dome housing insuring that lid oring is not pinched or compromised.
Section 4: FilClean DMS Operations and Maintenance (Use Figure 8, 9 and 10 For Reference)

2. **Optional Inline Cleanable Magnetic Filter Cleaning:** Optional inline cleanable magnetic prefiltter (figure 8 item 6) should be cleaned on a specific set time based on operational experience or when particulate filter is changed. To clean the magnet - deenergize fluid pump and isolate magnetic filter upstream and downstream block valves. Use a screw driver to loosen eye bolts on top of magnet filter and open lid. Remove magnet and scrape iron filings off using supplied scraping tool into a bucket or other waste container. Reinstall magnet insuring oring on lid is not pinched or compromised.
## Section 5: Spare Parts List

### DOME PARTICULATE FILTER

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td>88LB</td>
<td>BUNA ORING REPLACEMENT FOR LID</td>
</tr>
<tr>
<td>88VN</td>
<td>VITON ORING FOR LID</td>
</tr>
<tr>
<td>FCPL7-PP-.5-F-18</td>
<td>½ MICRON NOMINAL FILTER ELEMENT 18”</td>
</tr>
<tr>
<td>FCPL7-PP-3-F-18</td>
<td>3 MICRON NOMINAL FILTER ELEMENT 18”</td>
</tr>
<tr>
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<tr>
<td>FCPL7-PP-.5-F-36</td>
<td>½ MICRON NOMINAL FILTER ELEMENT 36”</td>
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<tr>
<td>FCPL7-PP-3-F-36</td>
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<tr>
<td>FCPL7-PP-5-F-36</td>
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<tr>
<td>FCPL7-PP-10-F-36</td>
<td>10 MICRON NOMINAL FILTER ELEMENT 36”</td>
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<tr>
<td>FCPL7-PP-20-F-36</td>
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<tr>
<td>FCPL7-PP-30-F-36</td>
<td>30 MICRON NOMINAL FILTER ELEMENT 36”</td>
</tr>
</tbody>
</table>

### OPTIONAL CLEANABLE MAGNETIC FILTER

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>FM1.5+/VS</td>
<td>VITON ORING FM1.5 MAGNET HOUSING</td>
</tr>
<tr>
<td>FM2+/VS</td>
<td>VITON ORING FM2 MAGNET HOUSING</td>
</tr>
<tr>
<td>FM/CT</td>
<td>SPARE CLEANING TOOL BOTH MODELS</td>
</tr>
<tr>
<td>FM1.5+/MC</td>
<td>SPARE 4500 GAUSS MAGNET FM 1.5</td>
</tr>
<tr>
<td>FM1.5+/MC11K</td>
<td>SPARE 11K GAUSS MAGNET FM 1.5</td>
</tr>
<tr>
<td>FM2+/MC</td>
<td>SPARE 4500 GAUSS MAGNET FM 2.0</td>
</tr>
<tr>
<td>FM2+/MC11K</td>
<td>SPARE 11K GAUSS MAGNET FM 2.0</td>
</tr>
</tbody>
</table>
PSK PROGRESSIVE CAVITY PUMP REBUILD KITS (SEE FIGURE 11)

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>PKR-P-2R</td>
<td>2 GPM PSK FLUID PUMP REBUILD KIT</td>
</tr>
<tr>
<td>PKR-P-4R</td>
<td>4 GPM PSK FLUID PUMP REBUILD KIT</td>
</tr>
<tr>
<td>PKR-P-6R</td>
<td>6 GPM PSK FLUID PUMP REBUILD KIT</td>
</tr>
<tr>
<td>PKR-P-9R</td>
<td>9 GPM PSK FLUID PUMP REBUILD KIT</td>
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<tr>
<td>PKR-P-15R</td>
<td>15 GPM PSK FLUID PUMP REBUILD KIT</td>
</tr>
<tr>
<td>PKR-P-25R</td>
<td>25 GPM PSK FLUID PUMP REBUILD KIT</td>
</tr>
</tbody>
</table>

(Figure 11)
FILCLEAN DMS DATA SHEETS
Service Manual for PSK Pumps 25 GPM - 50 GPM

DESIGN FEATURES

Housing: Cast iron
Pump Rotor: AISI 416 Stainless steel
Pump Stator: NBR
Seal: NBR (Nitrile)
Motor Shaft: Mechanical (carbon/ceramic)
Motor: 3 phase, 1 1/2 HP, 280/230/460V
For Model 36651; 2 HP, 230/460V
For Model 36751; 60 Hertz, 1725 Rpm, totally enclosed.

Note: Alternate elastomers available.

INSTALLATION

Mounting Position. Pump may be mounted in any position. When mounting vertically, it is necessary to keep bearings above seals to prevent possible seal leakage into bearings.

Pre-Wetting. Prior to connecting pump, wet pump elements and mechanical seal by adding fluid to be pumped into suction and discharge ports. Turn pump over several times in a clockwise direction to work fluid into pump elements.

Piping. Piping to pump should be self-supporting to avoid excessive strain on pump housing. See Table 1 for suction and discharge port sizes of each pump model. Use pipe “dope” or tape to facilitate disassembly and to provide seal on pipe connections.

Electrical. Follow the wiring diagram on the motor nameplate or inside the terminal box for the proper connections. The wiring should be direct and conform to local electrical codes. Check power connections for proper voltage. Voltage variations must not exceed ± 10% of nameplate voltage. Motor is provided with internal automatic overload protection.

OPERATION

Self-Priming. With wetted pumping elements, the pump is capable of 25 feet of suction lift with pipe size equal to port size. Be sure suction lines are air tight or pump will not self prime. Self-priming capabilities will vary due to fluid viscosity.

PSK MODEL PUMP

DO NOT RUN DRY. Unit depends on liquid pumped for lubrication. For proper lubrication, flow rate should be at least 20% of rated capacity.

Pressure and Temperature Limits. See Table 1 for maximum discharge pressure of each model. Unit is suitable for service at temperature shown in Table 2.

Caution: Suction pressure should never be greater than discharge pressure.

To prevent damage to pump, pump rotation must be CLOCKWISE when facing pump from motor end.

THE PUMP MUST BE PRIMED BEFORE INITIAL START-UP, AND CANNOT BE RUN DRY.

Providing Industrial Filtration Solutions Since 1962
WARNING: Before making adjustments, disconnect power source and thoroughly bleed pressure from system prior to disassembly. Failure to do so could lead to electric shock or serious bodily harm.

TROUBLESHOOTING

Failure to Pump.
1. Motor will not start: Check power supply. Voltage must be ±10% of nameplate rating when motor is in locked rotor condition. Check for faulty capacitor on 1 phase models.
2. Motor runs and thermally kicks out: Check for excessive discharge pressure. Check for defective centrifugal switch on 1 phase models. Increase ventilation to motor. Do no use less than #14 wire size.
3. Stator torn: possible excessive pressure: Replace stator, check pressure at discharge port.
4. Flexible (apex) joint broke: possible excessive pressure: Replace joint, check pressure at discharge port.
5. Wrong rotation (3 phase only): Rotation must be clockwise when facing pump from motor end. Reverse the connections of any two line leads to the motor.
6. Excessive suction lift or vacuum.

Pump Overloads.
1. Excessive discharge pressure: Check pressure at discharge port for maximum ratings given in Table 1.
2. Fluid viscosity too high: Limit fluid viscosity to 100 CP or 500 SSU.

Noisy Operation.
1. Excessive suction lift or vacuum: Maximum suction lift is 25 feet of water.
2. Suction line too small: Check pipe size. Be sure lines are free from obstructions.
3. Pump Cavitations: Pump speed is 1725 rpm. Viscosity of fluid should not exceed 100 CP or 500 SSU.
4. Flexible joint worn: Replace joint. Check pressure at discharge port.
5. Insufficient mounting: Mount to be secure to a firm base. Vibration induced noise can be reduced by using mount pads and short sections of hose on suction and discharge ports.

Seal Leakage.
1. Leakage at startup: If leakage is slight, allow pump to run several hours to let faces run in.
2. Persistent seal leakage: Faces may be cracked from freezing or thermal shock. Replace seal.

Pump Will Not Prime.
1. Air leak on suction side: Check pipe connections.

PUMP DISSASSEMBLY

1. Remove suction and discharge piping. Drain pump body by removing drain plug.
2. Remove screws (7) holding suction housing to discharge housing. Remove suction housing and stator (5).
3. Remove rotor (4) from flexible joint (3) by turning counterclockwise (RH thread). On pinned, 3 phase models, remove rotor pin (2) with suitable punch.
4. Flexible joint (3) can be removed from motor shaft by using a 3/16" allen wrench in end of joint and turning counterclockwise. On 3 phase motors, remove motor pin (2) with suitable punch, then remove joint.
5. Slide mechanical seal (1) off motor shaft.
6. Remove discharge housing from adapter flange by removing screws (7).
7. Carefully pry seal seat out of discharge housing. If any parts of the mechanical seal are worn or broken, the complete seal assembly should be replaced. Seal components are matched parts and are not interchangeable.
8. Remove adapter flange from motor by removing screws (7).
9. Remove slider ring.

PUMP ASSEMBLY

1. Install suction ring.
2. Attach adapter flange to motor housing using screws (7).
3. Attach discharge housing to adapter flange using screws (7). Be sure to center seal bore on shaft.
4. Install mechanical seal (1) in the discharge housing using the following procedure:
   a) Clean and oil sealing faces using clean oil (not grease).
   Caution: Do not use oil on EPDM parts. Substitute glycerin or soap and water.
   b) Oil outer surfaces of the seal seat, and push assembly over the motor shaft and into the discharge housing seating it firmly and squarely.
   c) After cleaning and oiling the shaft, slide the seal body along the motor shaft until it meets the seal seat.
   d) Install Seal Spring and spring retainer on shaft.
5. Thread flexible joint (3) into motor shaft in a clockwise direction (RH thread). Tighten with 3/16" allen wrench. On 3 phase models, install motor pin (2).
6. Thread rotor (4) onto flexible joint (3) in a clockwise direction (RH thread). On 3 phase models, install rotor pin (2).
7. Slide stator (5) on rotor (4). On 2 and 4 gpm pumps, insert rounded end of stator ring into end of stator prior to installing stator on rotor.
8. Secure stator (5) and suction housing to discharge housing using screws (7).
9. Lubricate rotor and stator by filling suction housing and discharge housing with fluid to be pumped.
10. Connect suction and discharge piping and power source.

Providing Industrial Filtration Solutions Since 1962
POWERSFUL - ALL PURPOSE - LONG LIFE

The MSC Filtration Technologies PSK Fluid Pump is an all purpose cost effective self priming, positive displacement, progressive cavity pump that delivers long life in abrasive and non-lubricating applications. It is easy to maintain and provides the user with the option of alternating pumping flows from 2-15 gpm with just the simple switch of a rotor and stator.

APPLICATIONS

Water
- Waste Water
- Polymer Transfer
- Booster
- Sampling

Agricultural
- Food & Beverage
- Plant Feed

Industrial
- Oil/Fluid Recovery
- Oil/Water Separators
- Abrasives
- Inks/Dyes

Machine Tool
- Cutting/Grinding Oils
- Slurries
- Metering
- Chemical De-burring
- Dielectrics
- Cooling Oils
- Abrasives
- Water Based Coolants

Medical/Biotech
- Control Equipment

Petrochemical
- Waste Oil Recovery
- Abrasive Chemicals
- Chemical Transfer

PSK PUMP DESIGN

The PSK progressive cavity design forms a series of sealed cavities which contain the pumped fluid. As the rotor turns, the cavities "progress" from the suction to the discharge side of the pump moving the fluid. This results in a constant, uniform, non-pulsating flow that provides low shearing and reduced degradation of pumped materials. It also provides low velocity capability for pumping of viscous fluids.

In abrasive applications, the stators ability to deform slightly to accommodate solid particles contributes to its abrasive resistance and the pumps ability to handle abrasive solids.

FEATURES
- Cost Effective Design
- Self Priming
- Pressure to 150 psi
- Available Flow Rates 2-50 gpm
- Excellent for OEM Applications
- Easy/Simple Maintenance Repair
- Temperatures up to 250 F
- Single or Three Phase Voltage
- Interchangeable Parts
- Flow Variablity
**PSK ORDERING INFORMATION**

**DIMENSIONS**

- **PKR-P-2**: 4; 6; 9; or 15
- **PKR-P-25**
- **PKR-P-50**

**MODEL NUMBER FLOW VS PRESSURE**

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>PHASE</th>
<th>H.P.</th>
<th>PSI</th>
<th>G.P.M. OF WATER @ 70 °F @ 1750 R.P.M.</th>
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</thead>
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<td>1.70</td>
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<td>50</td>
<td>1.40</td>
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<td>PUMP ONLY</td>
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**MATERIALS OF CONSTRUCTION**

- Simple Inter-Changeable Parts
- To Order Correct Replacement Parts: Use Pump Model Number
  - 1: Mechanical Seal & Spring
  - 2: Pin
  - 3: Flexible Apex Joint
  - 4: Chrome Plated Rotor
  - 5: Stator Housing
  - 6: Housing Screws

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>MATERIAL</th>
</tr>
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<tbody>
<tr>
<td>HOUSING</td>
<td>CAST IRON</td>
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<tr>
<td>ROTOR</td>
<td>CHROME PLATED 416 STAINLESS STEEL</td>
</tr>
<tr>
<td>STATOR</td>
<td>NBR (NITRILE)</td>
</tr>
</tbody>
</table>

**Corporate Offices & Distribution Center**

MSC Filtration Technologies
198 Freshwater Blvd.
Enfield, Connecticut 06082
Ph: 800-237-7359 | (860)745-7475
Fax: (860) 745-7477

Email: sales@mscfiltertech.com
Web: www.msfciltertech.com
INDUSTRIAL FILTER HOUSINGS AND ELEMENTS!
The MSC FilClean DM (Dome) filter housings and elements are available in a variety of sizes, media types and micron ratings. They provide affordable high dirt loading, high efficiency filtration designed but not limited to the removal of contaminants from fluids such as:

* Water Soluable Coolants
* Grinding Oils
* Cutting Oils
* Hydraulic and Lube Oils
* Quench Oils
* Fuels
* Solvents
* Dielectric Oils
* Glycol Based Heat Transfer Fluids

ENGINEERED WITH FLEXIBILITY IN MIND!
Dome Filter Housings can be supplied with the following filter types and media depending on your industry and application.

* Dual-Phase Microglass (Lube & Hydraulics)
* Stainless Steel Mesh (Lube and Hydraulics)
* Pleated Paper (Industrial)
* Synthetic & Microglass (Industrial & Lube & Hydraulics)
* Oil Absorbent Media (Industrial)
* Fullers Earth (Industrial)
* Water Absorbent Media (Industrial)

Please contact MSC today to speak to our technical support staff in regards to choosing the correct filter type for your application.

Features and Benefits:
- Painted Carbon Steel Construction
- Easy To Open Swing Bolt Closures
- Lid Service Filter Removal - Minimum Spillage
- Low Fluid Hold Up
- High Flow: Up to 50 gpm (based on water)
- 150 Psig @ 350 F Design
- Custom Paint Schemes Available For OEM’s
### Dome Housing Ordering Information

**FCDM**

<table>
<thead>
<tr>
<th>Table 1: Length</th>
<th>Table 2: Oring Material</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>Takes qty 1 18” Long Dome Element</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>Takes (qty 2) 18” Stacked or (qty) 1 36” Element</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Table 2: Oring Material</strong></th>
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### Filter Element Ordering Information

**FCPL7**

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<thead>
<tr>
<th>Table 1: Filter Media</th>
<th>Table 2: Micron (correspond to filter media on left)</th>
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<tbody>
<tr>
<td>PP</td>
<td>Pleated Paper (Phenolic Impregnated Cellulose)</td>
</tr>
<tr>
<td>GF</td>
<td>Glass Fiber (Dual Phase Microglass)</td>
</tr>
<tr>
<td>SM</td>
<td>Metal Mesh (304 Stainless Steel)</td>
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<tr>
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<td>Oil Absorbing Media</td>
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<table>
<thead>
<tr>
<th>Table 3: Gasket</th>
<th>Table 4: Length</th>
<th>Table 5: Hardware</th>
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<td><strong>BN</strong></td>
<td>Buna</td>
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<td><strong>V</strong></td>
<td>Viton</td>
<td>Carbon Steel</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>Fiber (Cellulose)</td>
<td><strong>SS</strong> Stainless</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>18” Can be stacked.</strong></th>
<th><strong>18” Can be stacked.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>36</td>
<td>36</td>
</tr>
</tbody>
</table>

### Dome Specifications

- **Housing Max Pressure**: 150 psig @ 350 F
- **Housing Material**: Carbon Steel
- **Housing Max Flow**: 50 GPM (Based on Water)
- **Element Collapse Pressures**:
  - 100 psid - GF & PP
  - 75 psid - OA
- **Element Changeout Pressure**:
  - 25 psid - GF & PP
  - 15 psid - OA
- **Element Max Operating Temp**:
  - 250 F - GF & PP
  - 225 F - OA
- **Element Sealing Material**: Epoxy @ Polyurethane Adhesive
- **Element Hardware Material**: Electro Tin Plated Carbon Steel (Standard) Stainless Steel Optional
Filtramag+ is a high performance magnetic filter with full stainless steel construction which makes it suitable for use in a variety of industry sectors and applications.

- Patented design
- Easy installation
- Unique dual flow technology™ – maximises collection capability
- Operates at up to 290psi bar
- Removes both magnetic and non-magnetic contamination
- Minimal pressure drop
- In-line connections
- Ideal for use in harsh chemical environments

Dual flow technology™
Filtramag+ is the most efficient filter of its type. The dual chambered design means that fluid is exposed to the high intensity magnets for the maximum time thus ensuring almost 100% of contamination is removed on first pass through the filter. The patented magnetic circuit on the 4,000 gauss version design ensures that the filter can never block even in high contamination applications.

Magnetic core options
High intensity magnetic cores ensure particle filtration down to submicron size. For standard machining or wash system applications a 4,000 gauss magnetic core pack is available. For applications which involve lower magnetically permeable materials e.g. Cast Iron and Carbide or require an ultra-precise surface finish an 11,000 gauss magnetic core pack is available.

Benefits
Using fully filtered fluids, free from ferrous particles provides:
- Improved surface finish
- Cost savings on disposable filtration media
- Extended fluid lifespan
- Reductions in waste disposal
- Longer lasting tools and machinery

Suitable fluids
Oil, coolants, fuel, ink, paint, chemicals.

Suitable locations
Pre & Post fluid holding tank, machine or process

Typical applications
- With carbide or cast iron materials
- General machining operations
- Inks/paints
- Wash systems
- Diesel/gasolene
- Slurry/glazes

Filtramag+ Components
- Easy access for gloved hand
- Patented high intensity magnetic rods
- Restricted hinged lid - prevents over travel
- Optional mesh strainer - removes non-magnetic debris (FM 2.0" JANSI only)
- Flanged connections (Hose tail adapters available)
- Integral base can be bolted to floor
Technical Data

<table>
<thead>
<tr>
<th>Product number</th>
<th>Max. flow rate</th>
<th>Contamination capacity</th>
<th>Max. operating pressure</th>
<th>Connection</th>
<th>Dimensions inches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gallons/min</td>
<td>lbs</td>
<td>PSI</td>
<td>ANSI</td>
<td>A</td>
</tr>
<tr>
<td>FM1.5''/ANSI</td>
<td>66</td>
<td>6.6</td>
<td>290</td>
<td>1½</td>
<td>15.5</td>
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<tr>
<td>FM2.0''/ANSI</td>
<td>132</td>
<td>13.2</td>
<td>290</td>
<td>2</td>
<td>17.4</td>
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</tbody>
</table>

Part Numbers (including spares)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM1.5''/ANSI</td>
<td>FM1.5'' unit with 4,000 magnet cartridge, cleaning tool &amp; cleaning tray</td>
</tr>
<tr>
<td>FM2.0''/ANSI</td>
<td>FM2.0''/ANSI unit with 4,000 magnet cartridge, cleaning tool &amp; cleaning tray</td>
</tr>
<tr>
<td>FM1.5''/ANSI /11K</td>
<td>FM1.5''/ANSI unit with 11,000 magnet cartridge, cleaning tool &amp; cleaning tray</td>
</tr>
<tr>
<td>FM2.0''/ANSI /11K</td>
<td>FM2.0''/ANSI unit with 11,000 magnet cartridge, cleaning tool &amp; cleaning tray</td>
</tr>
<tr>
<td>FM1.5''/ANSI/MC</td>
<td>4,000 magnet cartridge for FM1.5''/ANSI units</td>
</tr>
<tr>
<td>FM2.0''/ANSI/MC</td>
<td>4,000 magnet cartridge for FM2.0''/ANSI units</td>
</tr>
<tr>
<td>FM1.5''/ANSI/MC11K</td>
<td>11,000 magnet cartridge for FM1.5''/ANSI units</td>
</tr>
<tr>
<td>FM2.0''/ANSI/MC11K</td>
<td>11,000 magnet cartridge for FM2.0''/ANSI units</td>
</tr>
<tr>
<td>FM2.0''/ANSI/MB0.5</td>
<td>Optional 0.5mm mesh basket for FM2.0''/ANSI units</td>
</tr>
<tr>
<td>FM2.0''/ANSI/MB1.0</td>
<td>Optional 1.0mm mesh basket for FM2.0''/ANSI units</td>
</tr>
<tr>
<td>FM1.5''/ANSI /VS</td>
<td>Spare Viton seal for FM1.5''/ANSI units</td>
</tr>
<tr>
<td>FM2.0''/ANSI /VS</td>
<td>Spare Viton seal for FM2.0''/ANSI units</td>
</tr>
</tbody>
</table>

Magnetic Performance

- Maximum Pressure: 290psi
- Magnetic Performance: Standard option 4,000 gauss, high intensity option 11,000 gauss
- Magnet material: Rare earth neodymium iron boron NdFeB
- Magnet grade: N35 (Standard option), N45 (High intensity option)
- Temperature: 23 to 176F

Materials

- Housing: 304 Grade Stainless Steel
- Lid: 304 Grade Stainless Steel
- Tube: 316 Grade Stainless Steel
- Surface finish: External-powder coated
- Sealing: Viton O-ring
- Mesh strainer: 304 Grade Stainless Steel
- Swing bolts: High tensile steel
- Cleaning Tool: Stainless steel
- Mesh strainer options (FM2.0''/ANSI only): 0.02 inches and 0.04 inches aperture size

If you have any more questions, require technical assistance or would like a quotation, please contact us.

Providing Machine Tool Coolant Filtration and Handling Solutions Since 1962!

www.mscfiltertech.com  sales@mscfiltertech.com

While every effort has been made to ensure the accuracy of the information in this publication please note that specifications may change without notice.

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