

## **R** Rosedale High Efficiency Filter Bags

Our HI-E series of bag filters meets the most stringent needs for fine process, hydraulic fluid, and lubricant filtration. All are made of unique microfiber materials, designed to increase the efficiency and dirt-holding capacities of these bags.

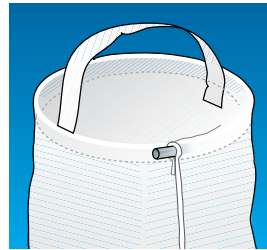
### **Microfiber Material Construction**

Polyester or polypropylene microfibers and standard fibers are variably calendered to produce a single layer of microfiber material. Our unique construction can provide filtration to a 1 micron rating. Polyester microfiber material should be used where oil adsorption is not desirable or where higher temperatures are required.

### **Filtration Level**

These bags have been tested by an independent laboratory to determine the filtration efficiency and dirt holding capabilities for each. They have been manufactured so that the efficiencies for both polyester and polypropylene are identical. See Filtration Efficiency Chart below.

### **HI-E Series Filter Bags Using Microfiber Construction**



**PEMF/POMF BAGS:** High Efficiency Filtration using a single layer of microfiber material. Excellent for general polishing applications with low dirt load.



**GRADED DENSITY BAGS:** High Efficiency Filtration with multiple layers of microfiber material and pre-filtration layers. Has 4 times the dirt holding capacity of the PEMF/POMF series bags.



**BAG-SIZE PLEATED CARTRIDGES:** High Efficiency Filtration with 12 times the dirt holding capacity and microfiber material supported by flow-enhancing mesh. The extra surface area greatly increases the dirt holding capacity.

### **Filtration Efficiency**

<b>Model Number</b>	<b>PEMF 1 POMF 1 523 PL PEMF 1 PL POMF 1</b>	<b>PEMF 3 POMF 3 525 PL PEMF 3 PL POMF 3</b>	<b>PEMF 8 POMF 8 527 PL PEMF 8 PL POMF 8</b>	<b>PEMF 19 POMF 19 529 PL PEMF 19 PL POMF 19</b>
<b>EFFICIENCY</b>	<b>MICRON RATING</b>			
95%	1.0	3.0	8.0	19.0
99%	2.0	5.0	19.0	25.0

\* This test was conducted using AC Fine Test dirt interfaced into water at 10 GPM, Single-Pass.

### PEMF/POMF Series

The microfiber bag is encased in spun-bonded material inside and out to prevent bag material migration into the fluid stream. Heavy-duty handles for ease in removal are a standard feature. The fully shaped bottoms enhance the pressure capacities of these bags. **THE PEMF/POMF SERIES HAS 4.4 SQ. FT. OF SURFACE AREA.**



### 500 Series, Graded Density Bags

The 500 Series FAT BAGS® have approximately four times the dirt-holding capacity of our PEMF/POMF series bags at equivalent filtration levels. You can now use bags, where performance levels previously required cartridges. These Graded Density Bags are made of multiple layers of microfibers and standard fibers variably calendered, providing filtration to 1 micron. Heavy-duty handles for ease in removal are a standard feature. The fully shaped bottoms enhance the pressure capacities of the bag. **THE 500 SERIES HAS 9 LAYERS OF MICROFIBER MATERIAL, EACH WITH 4.4 SQ. FT. OF SURFACE AREA.**



### Bag-Sized Pleated Cartridges

With the PL Series pleated cartridges, we've combined the best features of bags and cartridges into one. It has the advantages of a bag; low in cost, easy to handle, and contaminant is trapped inside, but with the greater surface area and dirt-loading capabilities of pleated cartridges. The seams in these filter elements are ultrasonically welded, eliminating the problems associated with sewn seams. The microfiber material is sandwiched between two flow-enhancing polypropylene mesh screens, then pleated. The cartridge bottom and top sealing ring are made of solid molded polypropylene and are welded to the ends of the pleated cylinder without the use of adhesive. The sealing ring is a pliable gasket, increasing the efficiency and integrity of the seal. **THE PL SERIES HAS 25 SQ. FT. OF SURFACE AREA.**



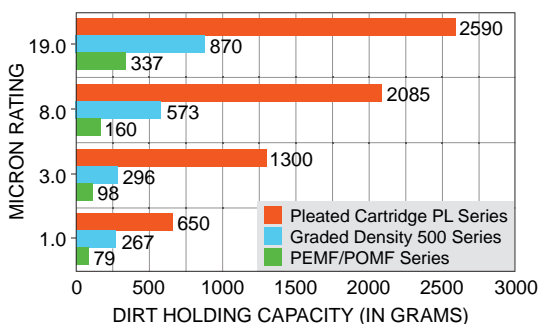
### Chemical Compatibilities

	EXCELLENT	GOOD	FAIR	POOR
	Bag Material (Fiber)			
	Nylon	Polyester	Polypropylene	
Organic Solvents	EXCELLENT	GOOD	FAIR	POOR
Animal /Vegetable and Petro Oils	EXCELLENT	GOOD	FAIR	POOR
Microorganisms	EXCELLENT	GOOD	FAIR	POOR
Alkalies	GOOD	GOOD	FAIR	POOR
Organic Acids	EXCELLENT	GOOD	FAIR	POOR
Oxidizing Agents	POOR	GOOD	GOOD	GOOD
Mineral Acids	POOR	GOOD	GOOD	GOOD

Temperature Limitations, 325°F for Nylon and Polyester, 225°F for Polypropylene.

Note: For more complete information on chemical compatibilities, refer to pages 222 through 231.

### Dirt Holding Capacity



### Pressure Drop

Total pressure drop is the sum of the filter housing pressure drop plus the pressure drop through the bag, and is a function of viscosity as well as flow rate.

Using water as the test media, the pressure drop for these high-efficiency bags is less than 0.5 psi.

Little or no pressure drop across the filter element at rated flow yields maximum dirt holding capacity (element life). Increases in the pressure drop are then due solely to the particulate accumulation.

# R How To Order

Build an ordering code as shown in these examples



## PEMF/POMF SERIES FILTER BAGS

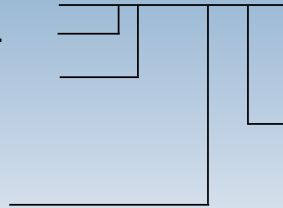
Example: PEMF - 3 - 2

### MICROFIBER MATERIAL

Polyester = **PEMF**  
Polypropylene = **POMF**

### MICRON RATING (95%)

1.0 micron = **1**  
3.0 micron = **3**  
8.0 micron = **8**  
19.0 micron = **19**



### BAG SIZE

(dimensions in inches)

Symbol	Dia.	x	Length
<b>1</b> =	7-1/16	x	16
<b>2</b> =	7-1/16	x	32
<b>3</b> =	4-1/8	x	8
<b>4</b> =	4-1/8	x	14
<b>7</b> =	5-5/8	x	15
<b>8</b> =	5-5/8	x	21
<b>9</b> =	5-5/8	x	32

## 500 SERIES GRADED DENSITY BAGS

Example: GD - PO - 523 - 1

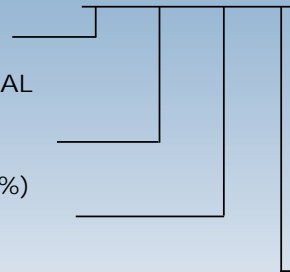
Graded Density Bag

### MICROFIBER MATERIAL

Polyester = **PE**  
Polypropylene = **PO**

### MICRON RATING (95%)

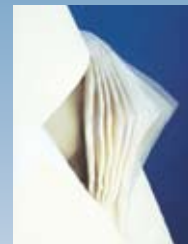
1.0 micron = **523**  
3.0 micron = **525**  
8.0 micron = **527**  
19.0 micron = **529**



### BAG SIZE

(dimensions in inches)

Symbol	Dia.	x	Length
<b>1</b> =	7-1/16	x	16
<b>2</b> =	7-1/16	x	32



## PLEATED CARTRIDGES

Example: PL- PEMF - R1 - 1 - P1

### MICROFIBER MATERIAL

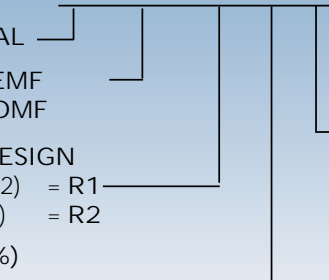
Polyester = **PL-PEMF**  
Polypropylene = **PL-POMF**

### TOP SEALING RING DESIGN

Flared Polypropylene (P1-P2) = **R1**  
Solid Polypropylene (P3-P9) = **R2**

### MICRON RATING (95%)

1.0 micron = **1**  
3.0 micron = **3**  
8.0 micron = **8**  
19.0 micron = **19**



### BAG SIZE

(dimensions in inches)

Symbol	Dia.	x	Length
<b>P1</b> =	7-1/16	x	11-1/8
<b>P2</b> =	7-1/16	x	26-1/8
<b>P3</b> =	4-1/8	x	5-1/16
<b>P4</b> =	4-1/8	x	11-1/16
<b>P7</b> =	5-5/8	x	10-3/4
<b>P8</b> =	5-5/8	x	16-1/8
<b>P9</b> =	5-5/8	x	26-3/4

