

Rosedale Products: Filter Media Guide





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FILTER PERFORMANCE GUIDE Determine the filter performance you require	APPLICATIONS	& FEATURES	4
	RPO FLANGE	ECONOMY	
STANDARD BAGS	FELT	1-100 MICRON	
High-capacity filter bags with ratings to 1 micron are available	MESH	50-800 MICRON	
in a wide range of sizes and materials for general use. Special-purpose bags for high-temperature service are also	OA	OIL ADSORBENT	6
available. Standard bag size chart available on page 6.	PTFE		
	NOMEX	HIGH TEMPERATURE	
HL SERIES FILTER BAGS HL Series Filter Bags have up to 3 times the dirt holding capacity of standard bags at the equivalent micron ratings.	GREATER DIRT HOLDING CAPACITY	20, 40, 70, AND 125 MICRON	7
OA OIL REMOVAL BAG All polypropylene filter bag is the perfect answer for removing trace oil and grease from an industrial stream of aqueous-based fluids.	TRACE OIL ADSORPTION	25 MICRON	7
OS SERIES FILTER BAGS AND PILLOWS This multi-layer bag/pillow is made of polypropylene media with Rosedale's proprietary polymer media layers for up to 10 times the hydrocarbon adsorption.	GREATER OIL ADSORPTION	25 MICRON	8
ACTIVATED CARBON FIBER FILTER BAGS The immense amount of surface area traps pollutants inside the carbon fibers removing them from the liquid.	ACTIVATED CARBON	5 MICRON	8
BETA BAGS® Meets the more exacting requirements of fine process filtration and hydraulic and lubricating fluid filtration. Rated by the multi-pass method of filter performance evaluation.	EXCELLENT FOR OIL AND GAS, HYDRAULIC AND LUBRICATION INDUSTRIES	8-47 MICRONS AT 98.7 EFFICIENCY	9
GRADED DENSITY BAGS Great dirt-carrying capacity is combined with fine filtration efficiency.	MEMBRANE PREFILTERS	1-19 MICRONS	9
X-TEND Rosedale offers the X-TEND filter bag as a balance between increased efficiency and capacity versus cost.	TWICE THE AREA OF STANDARD BAGS. FITS STANDARD HOUSING	INCREASE EFFICIENCY	10
SERIES OE (Oil/Water Separation Cartridge) The OE cartridges can be used as stand-alone oil water separators, or to enhance or protect other systems.	OIL / WATER SEPARATION	ENVIRONMENTAL APPLICATIONS	10
HIGH FLOW ELEMENTS Designed specifically for use with our High Flow Housing Systems. Elements in 40-inch and 60-inch lengths.	1 TO 31 ELEMENTS IN OUR HIGH FLOW HOUSINGS	UP TO 400 GPM PER ELEMENT	11
SURFACEMAXX High-performance cartridge provides up to 12 times more dirt-holding capacity.	SOLVENTS, ACIDS, CHEMICALS, WATER HYDROCARBONS	20 SQUARE FEET OF SURFACE AREA	11



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BAG SIZE PLEATED CARTRIDGES Combines the advantages of bags with the best features of cartridges. Like bags, contaminant is trapped inside. Pleated construction packs more surface area in less cubic space.	PLEATED BAG SIZED	1-110 MICRONS	12
DISPOSABLE PLEATED CARTRIDGES Easily installed in our housings, providing 10 times the surface area as standard filter bags.	DISPOSABLE PLEATED CARTRIDGES	LOW COST HIGH CAPACITY FILTRATION	12
PLATINUM SERIES Our line of absolute-rated filter cartridges offer maximum dirt holding capacity. Micron retention ratings to 0.5 at 99.98%	PLATINUM 500 PLATINUM 700 PLATINUM 900 PLATINUM 2040	12 LB CAPACITY 20 LB CAPACITY 100 LB CAPACITY 250 LB CAPACITY	13
STAINLESS STEEL FILTER ELEMENTS These stainless steel cartridge elements over-come the temperature and compatibility limitations of fabric or synthetic fiber cartridges.	STAINLESS STEEL	RATED 5-840 MICRONS	13
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WOUND CARTRIDGES Cartridges come in a wide range of materials, lengths, and micron retention ratings. Materials include cotton, acrylics, nylon, and polypropylene.	WOUND	ALL PURPOSE	14
GIARDIA AND CRYPTOSPORIDIUM REMOVAL Water filtration systems that meet protocols for many states.	NSF 61 CERTIFIED,	LT2 COMPLIENT	15
PERFORATED STRAINER & FILTER BAG BASKETS Rosedale manufactures replacement bag filter baskets as well as options for additional manufacturer filter housings.	PERFORATION DIAMETERS: MESH SIZES: 20, 30, 40,	15	

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BETA RATING

Use this chart to determine the filter performance you require. The product groups are listed on the left, micron sizes are listed within the chart, as well as corresponding Efficiency and Beta Rating at the top.

		,			,			,		
	EFFICIENCY % BETA RATING	PAGE NO.	30 1.5	50 2	66 3	80 5	90 10	95 20	98 50	98.7 75
PLATINUM 500	PS-520 PS-521 PS-523 PS-525 PS-527 PS-528 PS-529									
PLATINUM 700 / 40" HIGH FLOW	PS-740 PS-741 PS-743 PS-745 PS-747 PS-748 PS-749									
PLATINUM 900	PS-940 PS-941 PS-943 PS-945 PS-947 PS-948 PS-949									
PLEATED HI-E	PL-PEMF/POMF-1 PL-PEMF/POMF-3 PL-PEMF/POMF-8 PL-PEMF/POMF-19						1	1 3 8 19		
PLEATED STANDARD	PL-PE/PO-35 (1 NOM.) PL-PE/PO-48 (5 NOM.) PL-PE/PO-55 (10 NOM.) PL-PE/PO-70 (25 NOM.)							35 48 55 70 90		
HI-E	PEMF/POMF-1 PEMF/POMF-3 PEMF/POMF-8 PEMF/POMF-19						1	1 3 8 19		
STANDARD	PE/PO-1 PE/PO-5 PE/PO-10 PE/PO-25 PE/PO-50		10 40		20	30	30	35 48 55 70 90	40	
GRADED DENSITY	GD-523 GD-525 GD-527 GD-529							1 3 8 19		
ВЕТА	BB-1 BB-10 BB-12			1 10 12			3	4 16 37		8 20 47
GIARDIA	PS-520-PPP-241 GLR-825 PS-740-PPP-356									
SURFACEMAXX	PLJRPE-10-2								10	



98.75 80	99 100	99.8 500	99.9 1000	99.95 2000	99.98 5000	99.99 10000	ELEMENT AREA FT²	FLOW RATE GPM*	DIRT HOLDING CAP. (LBS)
	0.25 0.9 1.6 2 9 18 40		<0.5 1.4 2 6.5 17 30 60		0.5 2 5 10 20 40 70		85	30	8 8 8 10 10 12 12
	0.25 0.9 1.6 2 9 18 40		<0.5 1.4 2 6.5 17 30 60		0.5 2 5 10 20 40 70		120	50	12 15 15 17 18 20 20
	0.25 0.9 1.6 2 9 18 40		<0.5 1.4 2 6.5 17 30 60		0.5 2 5 10 20 40 70		600	200	55 75 75 85 90 100 100
	2 5 19 25					10	25	35	1.5 3 5 6
							25	50	7.5 8 9 10 11
	2 5 19 25					10	4.4 SINGLE LAYER	20	0.2 0.25 0.35 0.75
							4.4 SINGLE LAYER	50	.25 .30 .35 .40
	2 5 19 25		20	30		40	4.4 SINGLE LAYER	20	0.6 0.65 1.25 2
10							4.4 SINGLE LAYER	20	0.15 0.35 0.6
				3			4.4 TWENTY SIX LAYER	10	0.5
20	30						20	50	2.8



STANDARD BAGS

- Available in sizes 1, 2, 3, 4, 7, 8, 9, 11, and 12
- Ratings to 1 micron
- Sealing styles include: Galvanized steel ring (standard), Rosedale molded Polyester or Polypropylene flange, Stainless steel or Polypropylene rings, plus additional manufacturer options
- · Lifting handles are standard
- Plain (standard) or glazed finish
- Sewn (standard) or welded construction
- Materials include: Polyester or Polypropylene Felt, Polyester or Nylon Monofilament Mesh, Polypropylene High-Efficiency Microfiber



Bag with Metal Ring



Bag with Molded Rosedale RPO Flange



STANDARD BAG SIZES

Bag Sizes (Inches)					
Diameter	Length	Size			
7.2	16	1			
7.2	32	2			
4.3	8	3			
4.3	14	4			
5.7	15	7			
5.7	21	8			
5.7	32	9			
8.4	16.5	11			
8.4	34	12			







HL SERIES FILTER BAGS

These bags have 5 layers of filter material, each with 4.4 square feet of surface area. HL bags have a molded flange or stainless steel ring to ensure a positive seal with the filter housing. They are constructed with gradient layers of polypropylene or polyester felt separated by a transfer/caking filter layer. The initial layer is for pre-filtration and the final layer is an anti media migration layer.



FEATURES

- Available in sizes 1, 2, 3, and 4
- Polyester or Polypropylene material
- Micron ratings: 20, 40, 70, 125
- Available tops: Rosedale molded polyester or polypropylene flange, 304 stainless steel ring

HL Series (Nominal)	>95% Efficiency
1	20um
10	40um
50	70um
100	125um

OA OIL REMOVAL BAGS

Our OA polypropylene bag is ideal for removing trace oil and grease from an industrial stream of aqueous-based fluids.

OA Bag Size	Micron Rating	Efficiency
All	25	Nominal

OA Bag Size	Oil Adsorbed (L)	Recommended Flow (GPM)
All	Trace	5-15

FEATURES

- Available in sizes 1, 2, 3, 4, 7, 8, 9, and 12
- 25 Micron
- Tops include the 304 stainless steel ring or Rosedale's molded polypropylene flange

OA & OS FILTER BAG APPLICATIONS

- Machine Coolant (Tramp Oils)
- Parts Washers
- Petrochemical
- Automotive
- Bilae Water
- OWS Polishing
- Deck Runoff
- Ballast Water
- Process Water
- Wastewater
- RO/UF DI Pre-Filter



OS OIL ADSORPTION BAGS

The OS bag is used for many oil (hydrocarbon) adsorption applications. This multi-layer bag is made of polypropylene media with Rosedale's proprietary polymer for up to 10 times the hydrocarbon adsorption. The OS series is capable of removing free and dispersed oils as well as oil emulsions

OS Bag Size	Micron Rating	Efficiency
All	25	Nominal

OS Bag Size	Oil Adsorbed (L)	Recommended Flow (GPM)
4	.34	<5
2	1.42	5-10
12	1.95	10-15

OS OIL ADSORPTION PILLOWS Our OS oil adsorption pillows are excellent for machine tool coolant applications. These pillow

machine tool coolant applications. These pillows are easy and convenient to use. Simply set them in the coolant tray and let them adsorb the oil that has separated from the coolant. They are made with the same Rosedale proprietary polymer and filter media as our OS filter bags.





ACTIVATED CARBON FELT FILTER BAGS

Activated carbon traps pollutants inside pore structures removing contaminants and impurities in the liquid.

CONSTRUCTION DETAILS

ACF bags are constructed with 11 layers consisting of 3 layers of polypropylene microfiber material, 2 layers of activated carbon fiber, 4 microfiber carbon containment layers, along with a liner and a cover. Available flanges for this bag include the Rosedale RPO style, stainless steel rings, or Poly-Lock® top.



FEATURES

- Immense surface area
- Two activated carbon fiber layers
- Contaminant and impurity removal
- Easy to handle
- Not messy during change-out



BETA BAGS®

These bags are made of a unique multilayer polyester felt encased in spun-bonded nylon to prevent possible migration of bag material into the fluid system. Beta bags® are excellent for use in the process, oil and gas, hydraulic and lubrication industries.

FEATURES

Beta Bags® are fitted into and supported by perforated-metal baskets, therefore there is no concern with filter collapse, flow fatigue, or filter end-load problems.

Polyester/nylon bag materials are more resistant to the chemical additives in today's hydraulic and lubricant fluids as well as the chemicals below.



Bag Materials (Fiber)	Organic Solvents	Animal, Vegetable, & Petro Oils	Micro- Organisms	Alkalies	Organic Acids	Oxidizing Agents	Mineral Acids	Temperature Limitations (Max. °F)
Polyester	Excellent	Excellent	Excellent	Good	Good	Good	Good	325
Nylon	Excellent	Excellent	Excellent	Good	Fair	Poor	Poor	325

GRADED DENSITY

Graded Density Fat Bags® have up to 4 times the dirt holding capacity of standard bags at equivalent filtration levels. They have 9 layers of material, each with 4.4 square feet of surface area.

Dirt Holding Capacity

Micron Rating (95%)	Model	Dirt Holding Capacity (grams)
1.0	523	267
3.0	525	296
8.0	527	573
19.0	529	870





X-TEND

These bags offer additional surface area, approximately double that of a standard bag. A cone basket is required to support the inner layer, ensuring the full surface area is utilized.

FEATURES

- Plastic flange and felt is sonically welded
- Lifting handles
- Felt has a glazed finish
- Available in standard bag sizes

Micron Rating	Efficiency
1, 3, 8, 19, 35, 48, 55, 65, 70, 90, 110	95%





SERIES OE

Oil/Water Separation Cartridge

Oil Eliminator cartridges utilize media that can economically reduce hydrocarbon contamination in aqueous solutions. Our radial flow designs provide the largest possible surface area. This series is capable of removing very high concentrations of free and dispersed oil, as well as surfactant based emulsions, and dissolved hydrocarbons to non-detectable levels.

Available in 3 styles: The Oil Eliminator OE™, The ECO™, and The Oil Eliminator NF™

FEATURES

- Meets governmental regulations
- Reduced maintenance due to fouling
- · Can be incinerated
- Minimal pressure drop
- · Withstands harsh environments



- Industry standard sizes and end caps
- Operating temperature to 65°C (149°F)
- Withstands high Dp up to 5 bar (15 PSID)
- Typically removes better than 99% in a single pass



HIGH FLOW ELEMENTS Designed specifically for use with our High Flow Housing Systems

The housings are available in a variety of sizes to accommodate from 1 to 31 filter elements in 40-inch and 60-inch lengths.

FEATURES

- Flow rates up to 400 GPM per element
- Removal Rating (microns) 0.5, 1, 5, 10, 20, 40, 70 @ Beta 500 (99.8% efficiency)
- Maximum operating temperature 160°F (71°C)
- Maximum differential pressure 50 psid @ 68°F (3.4 bar @ 20°C)
- Recommended change out:
 Differential pressure
 35 psid @ 68°F (2.4 bar @ 20°C)
- Bag restrainer expands bag fully during filtration



SURFACEMAXX

High-performance cartridge provides up to 12 times more dirt-holding capacity.

The Surfacemaxx traps contaminants inside, preventing "wash off" when removing spent or dirty cartridges. They provide larger surface areas and greater dirt holding capacities than standard bags.

CONSTRUCTION

These cartridges contain 20 square feet of high efficiency polyester material pleated in a supported construction. This ensures flow cannot be pinched off. It also greatly strengthens the overall integrity of the element. The top sealing ring and cartridge bottom are made of polyester.





BAG SIZED PLEATED CARTRIDGES

Absolute rated units provide up to 12 times more dirt-holding capacity.

These combine the best features of filter bags and cartridges into one single unit. Like bags, they are easy to handle and trap contaminant inside to prevent "wash off." Like cartridges, they provide larger surface areas and greater dirt-holding capacities than standard bags.

Flow Enhancing Mesh



FEATURES

- Eleven micron retention ratings from 1 to 110 at 95% efficiency available
- Three different top sealing ring designs one to fit your needs
- Available in standard bag sizes 1 and 2, to fit housings 8-15 and 8-30
- Low pressure drop

DISPOSABLE BAG-SIZED PLEATED CARTRIDGES

These elements are easily installed in standard housings. The PLRICU cellulose filter provides 10 times the surface area and the PLRIPF polyester felt provides 6 times the area. They are low cost elements with filtration performance as high as 99% efficiency.

FEATURES

- Over 50 square feet of surface area
- Beta 100 (99%) Retention Levels
- Longer Element Life provides improved system efficiency

BENEFITS

- Fewer change-outs required
- Less downtime
- Lower maintenance and labor costs
- · Reduced operator exposure
- Recycling with no metal (optional)







PLATINUM SERIES

ABSOLUTE-RATED BAG-SIZED CARTRIDGES MAXIMUM DIRT-HOLDING CAPACITY

These absolute-rated filter cartridges offer maximum dirt holding capacity coupled with micron retention ratings to 0.5 at 99.98% efficiency.

These elements are manufactured in a unique "Y" pleat arrangement that optimizes its physical size and maximizes effective surface area. A low fluid flux rate maximizes surface area. A low fluid flux rate maximizes dirt containment. This means element life is extended and productivity is increased, resulting in fewer cartridge change-outs, less labor, and lower replacement costs.



- 68ft² of surface area maximum
- Approx. 12 lbs dirt carrying capacity

Platinum 700

- 100ft² of surface area maximum
- Approx. 20 lbs dirt carrying capacity



Platinum 900

- 400ft² of surface area maximum
- Approx. 100 lbs dirt carrying capacity

Platinum 2040

- 1150ft² of surface area maximum
- Approx. 250 lbs dirt carrying capacity

STAINLESS STEEL FILTER CARTRIDGES

Stainless steel cartridges overcome the temperature and compatibility limitations of fabric or synthetic fiber cartridges. They are good up to 500°F and are unaffected by most caustic fluids.

These elements are made entirely of 304 or 316 stainless steel, they are cleanable and reusable, and can withstand differential pressures up to 60 psi. Element surfaces can be plain cylindrical or pleated to increase surface area.

STANDARD END CONFIGURATIONS

- Double-open end, with grommet-type seals
- Single-open end, with female NPT connection
- Single-open end, with grommet-type seals
- Single-open end, with 222 o-rings
- Single-open end, with male NPT connection

PLEAT PROTECTORS

Pleat protectors prevent accidental denting that reduces the filter area.







ABSOLUTE PLEATED CARTRIDGES

High efficiency cartridges - Long service life

AB Series cartridges provide efficient solids removal and have absolute ratings that range from 0.5 to 70 microns.

Each cartridge has pleated, fixed pore media to maximize surface area, prevent particle unloading, and fiber migration. Media selections include cellulose, fiberglass, polyester, and polypropylene.

The wide range of material, filter sizes, and end cap configurations provide customers with the preferred cartridge for their specific application.



WOUND CARTRIDGE ELEMENTS

All purpose elements have high dirt-holding capacity

Continuous-wound cartridge elements are offered in a wide range of materials, lengths, and micron retention ratings. A highly innovative single-core design is used, eliminating the "joints" common in other manufacturers' elements at 10" intervals. Materials of these elements include cotton, nylon, glass, and polypropylene. Their lengths range from 9 3/4 inches to 40 inches, fitting most cartridge housings in the field. Micron retention ratings are from 200 down to 0.5 microns. These elements offer true depth filtration, higher efficiency, lower pressure drop, and greater solids holding capacity than standard elements.

A full range of center core materials are offered to meet specific filtration requirements. The center core covering, for reducing fiber migration, is compatible with and equivalent in ratings to the micron rating of the filter element.





GIARDIA / CRYPTOSPORIDIUM REMOVAL

PS-740-PPP-356 Filter Cartridge Maximize dirt-holding capacity and meet LT2 Requirements

These elements are manufactured in a unique "Y" pleat arrangement that optimizes physical size and maximizes effective surface area. The large surface area provides a low fluid flux rate maximizing dirt containment.

FEATURES

- 100 ft² of surface area maximum
- 11 lbs (approx.) of dirt carrying capacity
- 2 log cryptosporidium credit
- Flow rates to 10 gpm
- 6.25 inch diameter and 35 inch length
- Fits into standard Rosedale Model NCO8135 and 8302P
- Double o-ring seals
- NSF ⁶¹ Certified





RETROFIT CURRENT SITES

Existing installations using the Rosedale 8302P and PS-520-PPP-241 or GLR-PO-825-2 can easily convert to a single housing by installing the PS 740 adaptor basket. The solid side basket accepts the new PS 740 cartridge and directs the flow through the unit.

PERFORATED STRAINER AND FILTER BAG BASKETS

For cleanable basket strainers, choose from the following perforation diameters: 1/4, 3/16, 9/64, 3/32, or 1/16 inch. For mesh lined strainer and filter bag baskets, choose from the following mesh sizes: 20, 30, 40, 50, 60, 70, 80, 100, or 150. Custom baskets can also be manufactured as well as replacement baskets for other manufacturer housings.



WIRE MESH BASKET ADVANTAGES

- Fiber migration is minimized
- In the unlikely event of bag rupture, the wire mesh contains the contaminant
- Bag material cannot become "lodged" in the perforations due to extreme pressure differential
- Flow characteristics are enhanced when using monofilament bags







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