

Contaminant Reduction for Process Filtration Applications

Help protect process equipment from contaminants that can affect their performance and cause wear. Address fluid quality concerns. Choose 3M Solutions for efficient, reliable process fluid filtration.

The Goals

- Longer filter life
- Reduce filter change-out
- Increase throughput
- Provide cleaner, more consistent fluid
- Remove contaminants more efficiently
- Meet sustainability goals for reduced water consumption

The Contacts

- Process Engineer
- Plant Manager
- Manufacturing Engineer
- R&D Contacts
- Maintenance Manager

The Questions

1. What fluids are filtered in your plant? (coolant, process water, boiler condensate, paints/coatings, discharge water)
2. What type of housing and filter is used?
3. When do you change the filter? What determines the change (preventive maintenance schedule, differential pressure, etc.)
4. What production pain points or process improvement goals do you have related to process filtration? (i.e. defects, tooling wear and cost, quality complaints, nozzle protections issues, rework, abrasive loading issues, waste, downtime, water consumption or reuse)

Filtration & Separation



3M™ DF Series Filter Element

The 3M™ DF Series filter element is a proven alternative to most conventional bag filters. This filter is a true graded porosity media structure that provides a 62% increase in surface area compared to a standard #2 bag and up to 4 times more service life. DF bags are listed with the material of the media/ plastic components.

PP signifies polypro media and plastic components. EE signifies polyester media and plastic components.

Product ID	3M Global ID	Material	Nominal Micron Rating (um)	Max Flow Rate	Case Qty/ Units
DFG001PP2R	70020003367	Polypro/ Polypro	1	150 gpm	16 Each
DFG010PP2R	70020003441	Polypro/ Polypro	10	150 gpm	16 Each
DFG025PP2R	70020038934	Polypro/ Polypro	25	150 gpm	16 Each
DFG050PP1R	70020003490	Polypro/ Polypro	50	150 gpm	16 Each
DFG050PP2R	70020038991	Polypro/ Polypro	50	150 gpm	16 Each
DFG100PP2R	70020003540	Polypro/ Polypro	100	150 gpm	16 Each
DFG200EE1R	70020112564	Polyester/ Polyester	200	75 gpm	16 Each



3M™ NB Series Filter Bag

3M™ Series NB Polypropylene & Polyester bag filters leverage 3M's filtration experience and manufacturing expertise to provide cost effective solutions for applications where nominally rated bag filtration is appropriate. 3M™ Series NB bags are offered in Size #1 and #2 configurations in grades from 1 to 200 microns and fit into standard bag filter baskets and housings.

Product ID	3M Global ID	Material	Bag Size	Nominal Micron Rating (um)	Max Flow Rate	Case Qty/ Units
NB0005PPS2C	70020189463	Polypro/ Polypro	2	5	180 gpm	50 Each
NB0010PPS2C	70020189521	Polypro/ Polypro	2	10	180 gpm	50 Each
NB0050PPS2C	70020189646	Polypro/ Polypro	2	50	180 gpm	50 Each
NB0100PPS2C	70020189703	Polypro/ Polypro	2	100	180 gpm	50 Each
NB0025EES1C	70020189539	Polyester/ Polyester	1	25	90 gpm	50 Each
NB0050EES2C	70020189604	Polyester/ Polyester	2	50	180 gpm	50 Each
NB0100EES2C	70020189661	Polyester/ Polyester	2	100	180 gpm	50 Each



3M™ High Flow HFM Series Filter Cartridge

3M™ High Flow HFM series filters utilize a 3M microfiber media specifically designed for use in process fluid applications containing organic and/or biological contaminants. The media design enables an optimum combination of particle removal efficiency and contaminant holding capability. Additional sizes and configurations are available.

Product ID	3M Global ID	Material	Micron Rating (um)	Max Flow Rate	Case Qty/ Units
HFM10PPN05D	70020300680	Polypro	5 nominal	85 gpm	1 Each
HFM10PPA05D	70020338417	Polypro	5 absolute	85 gpm	1 Each
HFM10PPA10D	70020338383	Polypro	10 absolute	85 gpm	1 Each
HFM10PPA20D	70020338359	Polypro	20 absolute	85 gpm	1 Each
HFM40PPN05D	70020284363	Polypro	5 nominal	350 gpm	1 Each
HFM40PPA05D	70020338409	Polypro	5 absolute	350 gpm	1 Each
HFM40PPA20D	70020338342	Polypro	20 absolute	350 gpm	1 Each
HFM60PPN05D	70020295245	Polypro	5 nominal	500 gpm	1 Each
HFM60PPA20D	70020338334	Polypro	20 absolute	500 gpm	1 Each

Filtration & Separation (Continued)



3M™ High Flow Series Filter Cartridge

The 3M™ High Flow Filter System is a result of 3M's extensive filtration experience applied to delivering high flow filter technology in a compact design. 3M™ High Flow Filter Systems provide filtration efficiency and a small footprint. Additional sizes and configurations are available.

Product ID	3M Global ID	Material	Absolute Micron Rating (um)	Max Flow Rate	Case Qty/ Units
HF10PP001A01	70020234632	Polypro	1	85 gpm	1 Each
HF10PP002A01	70020255876	Polypro	2	85 gpm	1 Each
HF10PP010C01	70020255918	Polypro	10	85 gpm	1 Each
HF10PP025A01	70020249515	Polypro	25	85 gpm	1 Each
HF10PP070A01	70020255967	Polypro	70	85 gpm	1 Each
HF40PP001C01	70020155605	Polypro	1	350 gpm	1 Each
HF40PP002B01	70020155662	Polypro	2	350 gpm	1 Each
HF40PP005A01	70020155720	Polypro	5	350 gpm	1 Each
HF40PP005B01	70020155746	Polypro	5	350 gpm	1 Each
HF40PP010D01	70020155860	Polypro	10	350 gpm	1 Each
HF40PP040A01	70020156041	Polypro	40	350 gpm	1 Each
HF40PP040C01	70020156082	Polypro	40	350 gpm	1 Each
HF40PP040D01	70020156108	Polypro	40	350 gpm	1 Each
HF40PP070B01	70020156140	Polypro	70	350 gpm	1 Each
HF60PP001C01	70020156249	Polypro	1	500 gpm	1 Each
HF60PP005A01	70020156363	Polypro	5	500 gpm	1 Each
HF60PP005B01	70020156389	Polypro	5	500 gpm	1 Each
HF60PP005C01	70020156405	Polypro	5	500 gpm	1 Each
HF60PP010A01	70020156447	Polypro	10	500 gpm	1 Each
HF60PP010B01	70020156462	Polypro	10	500 gpm	1 Each
HF60PP025B01	70020156611	Polypro	25	500 gpm	1 Each
HF60PP040A01	70020156678	Polypro	40	500 gpm	1 Each
HF60PP040B01	70020156694	Polypro	40	500 gpm	1 Each

Filtration & Separation (Continued)



3M™ Micro-Klean™ CS Series Filter Cartridge

3M™ Micro-Klean™ CS series filters represent an improved cartridge manufacturing process that eliminates “joints” found in conventional multiple length cartridges. This eliminates problems of by-pass, restricted flow, and inconsistent micron retention. Additional configurations are available in several lengths, with polypropylene or metal cores, and with several options of standard media: bleached cotton, unbleached cotton, and polypropylene.

Product ID	3M Global ID	Material/ Core Material	Nominal Micron Rating (um)	Max Flow Rate	Case Qty/ Units
CS09QCSN	70020013929	Bleached cotton/ 304 SS	75	6 gpm	30 Each
CS09VCPN	70020006402	Bleached cotton/ Polypro	100	6 gpm	30 Each
CS09WPPN	70020013986	Polypro/ Polypro	350	6 gpm	30 Each
CS29FNPN	70020244391	Unbleached cotton/ Polypro	25	18 gpm	15 Each
CS30YPPN	70020037845	Polypro/ Polypro	1	3 gpm	15 Each
CS30BPPN	70020006436	Polypro/ Polypro	5	12 gpm	15 Each
CS30WPPN	70020164839	Polypro/ Polypro	350	18 gpm	15 Each
CS40YPPN	70020154251	Polypro/ Polypro	1	4 gpm	15 Each



3M™ Micro-Klean™ RT Series Depth Filter Cartridge

3M™ Micro Klean™ RT series filters are all polypropylene depth filter cartridges offering consistent particle reduction efficiencies, increased service life, low initial pressure drop and high particle reduction efficiencies. Extended service life of the filter results in fewer filter change-outs. Multiple end-cap options are available. Currently featured are the no end modification (NN) option or 226 Silicone O-ring and Spear (BA).

Product ID	3M Global ID	Material	Nominal Micron Rating (um)	Max Flow Rate	Case Qty/ Units
RT29B16G20NN	70020046366	Polypropylene	5	1-5 gpm	25 Each
RT29C16G20NN	70020046374	Polypropylene	10	1-5 gpm	25 Each
RT29L16G20NN	70020046390	Polypropylene	50	1-5 gpm	25 Each
RT30B16G20NN	70020046424	Polypropylene	5	1-5 gpm	25 Each
RT30C16G20NN	70020046440	Polypropylene	10	1-5 gpm	25 Each
RT30Y16G20NN	70020046515	Polypropylene	1	1-5 gpm	25 Each
RT39B16G20NN	70020046523	Polypropylene	5	1-5 gpm	25 Each
RT40B16G20NN	70020046556	Polypropylene	5	1-5 gpm	25 Each
RT40Y16G20NN	70020046598	Polypropylene	1	1-5 gpm	25 Each
RT30B16G20BA	70020138080	Polypropylene	5	1-5 gpm	25 Each

Product Opportunities for Shutdowns

Product Solution	Construction	Applications	Filtration Benefits
 3M™ DF Series Filter Bag	Polyester, polypropylene	• Retrofit for GAF, FSI, Hayward, Rosedale, and other bag housings • Oil & Gas • Chemical processing • Particle reduction (Pre RO)	Long service life. More value than a nominal bag.
 3M™ NB Series Filter Bag	Polypropylene, Polyester	• General industrial filtration • Raw materials • Oil & Gas • Particle reduction (Pre Filtration)	Low initial pressure drop.
 3M™ High Flow Series Filter Cartridge	Polypropylene, compound radial pleat design	• Broad range of industrial fluids • Process cooling water • Condensing water • Coolants	Broad chemical compatibility, high filter loading capacity.
 3M™ Micro-Klean™ CS Series Filter Cartridge	Cotton, bleached cotton or polypropylene	• Variety of chemical and water processes • Oil & Gas plant rework • Provides flow pipe scale reduction	Eliminates issues of by-pass, restricted flow, and inconsistent micron retention.
 3M™ Micro-Klean™ RT Series Filter Cartridge	All polypropylene construction	• Pre RO • Process cooling water • Utility water • Blowdowns in descaling process	Enhanced contaminant holding capacity for fewer filter changeouts, rigid depth filter.

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