FiberFlo® MicroFiber Cartridge Filters

- ✔ Increased Dirt Holding Capacity
- ✔ Low Initial Pressure Drops
- ✔ Maximum Throughput
- ✔ Long Service Life
- ✔ Comprehensive Selection of Pore Sizes

Unique Manufacturing Process Gives Superior Structure

Every cartridge is individually embossed with its micron rating.

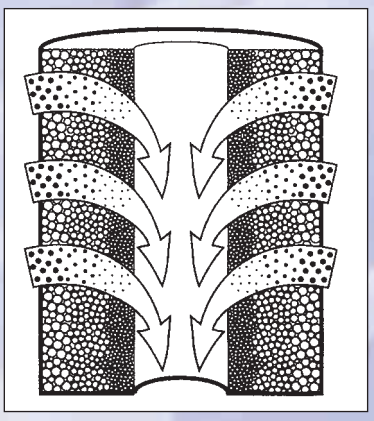
Using a numerically controlled process, molten polypropylene is extruded into highly porous cartridges. The microfibers weld together as they cool. The result is a dimensionally stable filter media that resists distortion during increased fluid pressure.

True Gradient Pore Size Distribution

Micron ratings represent the smallest size particle that can be trapped at an efficiency of 98% or better in a single pass with end cap seals.

FiberFlo MicroFiber cartridges contain void spaces that are far more accessible to dirt particles than those filters using graded density construction. The proprietary melt blown process develops a filter with enormous quantities of progressively smaller pores without significantly increasing bulk density. Porosity remains uniform, from coarse to fine, throughout the cartridge wall providing maximum throughput and extended service life.

In contrast, graded density is a relatively unsophisticated method that compresses more fiber into a fixed volume to achieve smaller voids and pores. This can cause a dramatic reduction in percentage of void volume resulting in excessive pressure drop and shortened service life.



The true gradient density of these filters results in particle entrapment throughout the depth of the media, reducing surface blinding and providing increased filter life and dirt holding capacity.

Free From Extractables

FiberFlo MicroFiber filter surfaces are free from lubricants, surfactants or antisatic chemicals so they will not cause foaming or other contamination. Polypropylene microfiber is suitable for potable water filtration and food processing applications. The polypropylene cartridges are suitable for filtering a variety of industrial chemicals.

Homogenous Materials for Easier Disposal

The MicroFiber filter media is composed of a single material for easier pulverization or incineration. This efficiency in waste volume reduction can lead to a direct cost savings in disposal. In addition, polypropylene provides 2,000 BTU/ LB of heat energy for any process that uses it as a fuel.

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Features	Benefits
Greater void volume than resin bonded or wound cartridge.	Increased dirt-holding capacity. Longer service life. Lower initial pressure drop.
Homogeneous high purity media. Fibers free of residual extrusion oils, surfactants, antistatic agents and resin binders.	Meets FDA requirements for food contact. Will not cause foaming in process stream.
Fibers thermally bonded - dimensionally stable filter media.	Reduced fiber migration. Micron rating not altered as differential pressure increases. Rigid, highly porous cartridge does not require a support core.
Stratified pore structure allows separation of solids along a size gradient.	Results in particle entrapment throughout depth of media reducing surface blinding and increasing dirt holding capacity.
Hydrophobic media.	Filter will absorb undissolved and non-emulsified oil out of liquid, air or gas streams.
High efficiency media.	Will filter out large percentage of contaminant on a single pass. Not dependent on the filter "cake" to improve particle retention.
Easily ground into powder or incinerated.	Reduced waste volume.

Micron Ratings

1	50
3	75
5	100
10	150
25	

Lengths (in inches)

9 3/4, 10, 19 3/4, 20
29 1/4, 30, 39, 40

0-Ring or Flat Gaskets

Silicone	Viton	Buna-N
ERR	Neoprene	

End Fitting/Sealing Options

SOE-222 0-Ring/Solid End Cap	(Code 3)
SOE-222 0-Ring/Fin	(Code 8)
SOE-226 0-Ring/Fin	(Code 7)
DOE-Flat Gasket/Flat Gasket	(Code DOE)
DOE -Standard (X Model)	(No end caps)

Differential Pressure

Maximum Recommended Change-Out	50 PSIG
Initial	10-15 PSIG
	1-3 PSIG

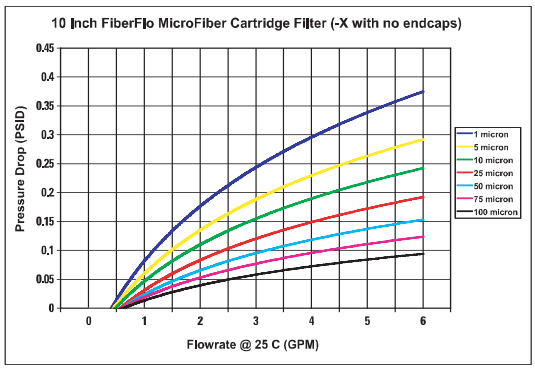
Operating Temperature

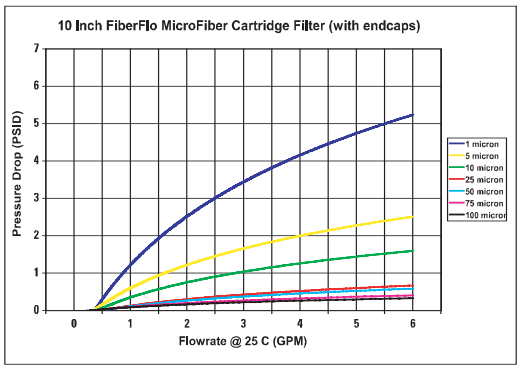
Maximum Continuous 200°F

MicroFiber Cartridge Filters

Performance Attributes

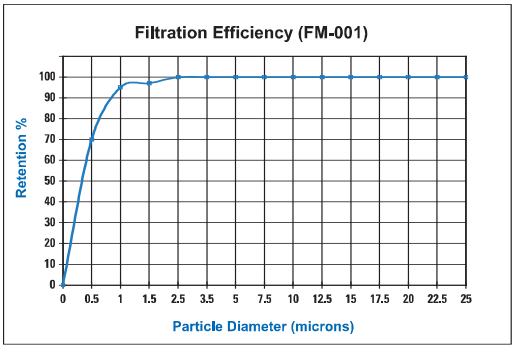
Flow Rates

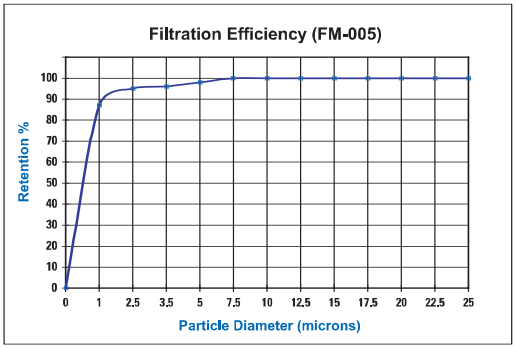




Cartridges are challenged at 3 to 5 GPM/10" on a single pass with a water based slurry of either SAE-Fine or SAE-Coarse test dust depending on the micron rating. The efficiencies are derived by measuring the ratio of upstream versus downstream particle counts taken on an automated particle counter.

Filtration Efficiency (examples)





Other efficiency charts available upon request.

Compliance of Polypropylene MicroFiber Cartridges

FDA

Minntech Corporation, Filtration Technologies Group, polypropylene microfiber media, using a base homopolymer resin, is in compliance with the appropriate guidelines outlined by the U.S. Food and Drug Administration. Construction components meet the FDA requirement outlined in the Code of Federal Regulations, Title 21, Section 177.1520 (a), (1) and Section 177.1520 (c), (1.1).

Guidance in the proper use of polymers is set forth by appropriate government regulation and must be determined by the end user. End users are encouraged to consult the Code of Federal Regulation in determining acceptable use for polypropylene homopolymers (Ref...Title 21, Section 176.170).

NSF

FiberFlo MicroFiber Cartridges with and without end caps, are certified by NSF International under ANSI/NSF Standard 42 for replacement parts.

USP

FiberFlo MicroFiber Cartridges meet the requirement of the USP Class VI plastics test as demonstrated by USP Biological Reactivity Tests, In Vivo.

Chemical Compatibility

MicroFiber Cartridges are suitable for these chemicals (based on temperature of 70˚F)

Acetamide
Acetic Acid,Glacial
Acetophenone
Acrylonitrile
Adipic Acid
Alcohols
Aluminum Chloride 20%
Aluminum Fluoride
Aluminum Hydroxide
Aluminum Nitrate
Aluminum Potassium Sulfate (Alum)
Ammonia Anhydrous
Ammonia, Gas (cold)
Ammonia Liquids
Ammonia Nitrate
Ammonium Bifloride
Ammonium Chloride
Ammonium Hydroxide
Ammonium Nitrate
Ammonium Nirite
Ammonium Persulfate
Ammonium Phosphate, Monobasic
Ammonium Phosphate,Tribasic
Ammonium Sulfate
Amyl-Actate
Amyl-Alcohol
Aniline
Anti-Freeze
Aqua Regia (80%, HCl,20%,HNO)
Arsenic Acid
Asphalt
Barium Carbonate
Barium Chloride
Barium Cyandide
Barium Hydroxide
Barium Nitrate
Barium Sulfate
Beer
Beet Sugar Liquids
Benzoic Acid
Boric Acid
Bleach Solutions
Borax (Sodium Borate)
Brine
Butyric Acid,Aqueous
Calcium Disulfide
Calcium Carbonate
Calcium Chloride
Calcium Hydroxide
Calcium Hypochlorite
Calcium Nitrate
Calcium Sulfate
Calcium Sulfide
Calgon
Cane Sugar Liquors
Carbifol
Carbolic Acid (See Phenol)
Carbon Dioxide
Carbon Monoxide
Carbonate Water
Carbonic Acid
Catsup
Cellosolve
Chloros Bleach
Chocolate Syrup
Chromic Acid 5%
Chrome Plating Solutions
Citric Acid
Citric Oils
Colbalt
Chloride (2N)
Copper Nitrate
Copper Sulfate (5%Solution)
Cream
Cychlohesanol
Decalin (Deklin)
Decane
Denatured Alcohol
Detergents
O-Dichlorobenzene
Diesel Fuel
Diethyl Sebecate
Dimethyl Aniline
Dimethal Formamide
Dimethyl Phthalate
Epiclorohydrine
Epsom Salts (Magnesium Sulfate)
Ethyl Acetate
Ethylene Diamine
Ethylene Glycol
Fatty Acids
Ferric Chloride
Ferrous Sulfate
Fluoboric
Fluosilicic Acid
Formaldehyde
Formic Acid
Fruit Juice
Galic Acid
Gelatine
Glucose
Glue P.V.A.
Glycerine
Glycolic Acid
Glycols
Grape Juice
Green Sulfate Liquor
Honey
Hydrazine
Hydrobromic Acid
Hydrochloric Acid)20%)
Hydrochloric Acid (37%) (Cold)
Hydrocyanic Acid
Hydrofloric Acid (20%)
Hydrofloric Acid (50%)
Hydrofloric Acid (75%)
Hydrofluosilicic Acid (20%)
Hydrogen Gas
Hydrogen Peroxide
Hydrogen Sulfide (Wet) (Cold)
Hydrogen Sulfide (Wet) (Hot)
Hydrogen Sulfide Aqueous Solution
Hydroquinone
Hypochlorous Acid
Iodine (In Alcohol)
Isooctane
Lard
Latex Lead Acetate
Lead Sulfamate
Lime Bleach
Lime Sulfar
Linoleic Acid
Lubricants
Lubricating Oils (Petroleum)
Lye
Magnesium Carbonate
Magnesium Chloride
Magnesium Hydroxide
Magnesium Nitrate
Magnesium Sulfate
Maleic Acid
Malic Acid
Mayonaise
Mercuric Chloride (dilute solution)
Mercuric Cyanide
Mercury
Methane
Methanol (See Alcohol Methyl)
Methyl Cellosolve
Methyl Isobutyl Ketone
Methacrylate
Methyl Salicylate
Milk Molasses
Mustard
Napthalene
Natural Gas Nickel Chloride
Nickel Sulfate
Nitric Acid (5-10% Solution)
Nitric Acid (20% Solution)
Nitric Acid (50% Solution)
Nitobenzene
Nitrogen (Gas)
Oils-Aniline
Oleic Acid
Oxalic Acid (Cold)
Palmitic Acid
Paraffin
Perchloric Acid
Petrolatum
Petroleum-Below 250
Phenol (Carbolic Acid)
Phosphoric Acid (20%)
Phosphoric Acid (to 40% Solution)
Phosphoric Acid (45%)
Phosphoric Acid (40%- 100% Solution)
Photographic Developer
Picric Acid
Plating Solutions:
Polyvinyl Acetate Emulsion
Potash
Potassium Acetate
Potassium Bicarbonate
Potassium Bromide
Potassium Carbonate
Potassium Chlorate
Potassium Chloride
Potassium Chromate
Potassium Cyanide Solutions
Potassium Dichromate
Potassium Hydroxide
Potassium Nitrate
Potassium Permanganate
Potassium Sulfate
Propane (Liquified)
Propylene Glycol
Rosins
Rum
Rust Inhibitors
Salad Dressing
Salt Water
Sea Water
Sewage
Shellac (Bleached)
Shellac (Orange)
Silicone
Silver Nitrate
Soap Solutions
Sodium Acetate
Sodium Aluminate
Sodium Bicarbonate
Sodium Bisulfate
Sodium Borate
Sodium Carbonate
Sodium Chlorate
Sodium Chloride
Sodium Chromate
Sodium Cyanide
Sodium Hydroxide
Sodium Hypochlorite (To 20%)
Sodium Nitrate
Sodium Perborate
Sodium Peroxide
Sodium Phosphate
Sodium Polyphosphate (Mono,Di,Tribasic)
Sodium Silicate
Sodium Sulfide
Sodium Thiosulfate ("Hypo")
Stannic Chloride
Steric Acid
Stoddard Solvent
Sugar (Liquids)
Sulfate Liquors
Sulfar
Sulfar Dioxide
Sulfurous Acid
Syrup
Tallow
Tannio Acid
Tanning Liquors
Tartaric Acid
Teriary Butyl Alcohol
Tetraefhyl Lead
Tomato Juice
Transformer Oil
Vinegar
Varnish
Water, Acid, Mine
Water, Distilled, Lab Grade 7
Water, Fresh
Water, Salt
Whiskey and Wines
White Liquor (pulp Mill)
Zinc Chloride
Zinc Sulfate

Temperature Limits for Elastometers

Neoprene	0ºF to +200ºF
Buna-N	+10ºF to +180ºF
EPR,EPDM	-60ºF to +280ºF
Viton	-40ºF to +350ºF
Teflon	+500ºF
Silicone	+500ºF
Hypalon	+10ºF to +275ºF

NOTE: These are average temperatures. Chemicals and solvents can have an effect on temperature limits.

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FILTRATION TECHNOLOGIES GROUP

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