Super Fine

Melt-blown Filter Cartridges

True depth cartridges for a wide range of industrial, commercial, & domestic applications

Superior Filtration Technology

Super Fine

Superior filtration technology

Super Fine depth filter cartridges use a proprietary spun-bonding technology to offer:

- extended service life
- fewer filter change-outs
- consistent particle reduction
- increased surface area
- low initial pressure drop
- high particle reduction efficiencies
- high flow rates

Depth filter cartridges

The unique Super Fine filter manufacturing process combines process control with quality assurance enabled by an ISO 9001 certified quality system to provide consistent product performance. The proprietary manufacturing process provides a high degree of fiber-to-fiber thermal bonding, without the use of binders, to produce a rigid, core-less, filter structure with the following properties:

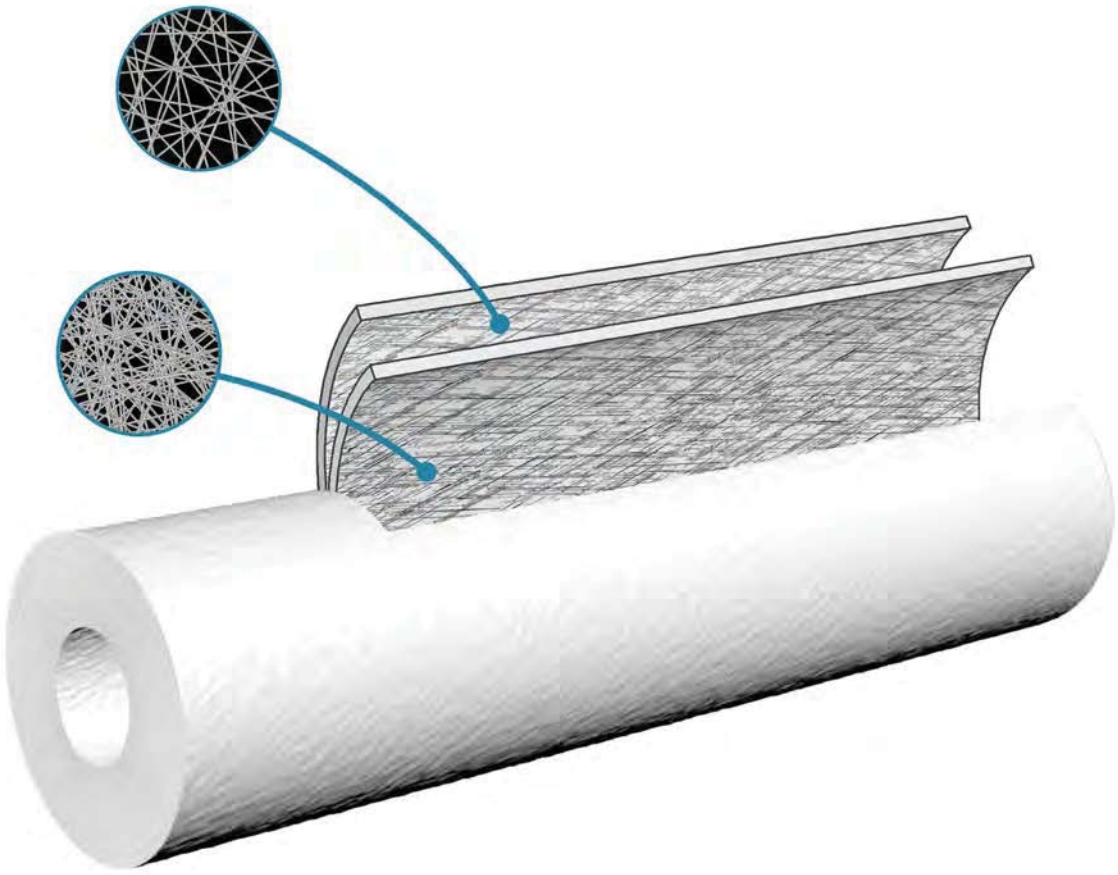
- does not unload contaminants with increasing differential pressure like typical spun-bonded filters
- exhibits exceptionally low differential pressure for a given filter rating

Consistent filtration throughout the service life of a depth-style filter depends on how well the filter's structure tolerates fluctuations in operating conditions - including contaminant loading and differential pressure. Flexible structures, such as those found in typical filters, tend to compress and change porosity with increased pressure, while rigid structures do not. Media compression can result in short filter life because the pores collapse and ultimately close. Media compression can also cause the filter to release already held particles.

The robust Super Fine filter captures and retains contaminant within its rigid filter matrix, even under increasing differential pressure. The unique depth filter structure of the Super Fine filter provides a significant increase in contaminant holding capacity and provides greater flow capacity at a given pressure.

Features

- 100% polypropylene – inert food grade material, excellent micro-organism resistance.
- Chemical-free manufacturing ensures zero contamination.
  Rigid filter structure results in greater resistance to particle unloading and hence more consistent performance.
- No media migration with structural stability and excellent knife-edge sealing.
- True graded density – denser grading in inner layers and coarser grading in outer layers.
- High dirt holding capacity and longer life as particles are trapped throughout the depth of the filter.
- Better performance – random depth structure captures more particles compared to conventional filters.
- High bulk media having improved void to solid ratio gives higher flow rates with low pressure drop.
- Core-less structure incinerates to trace ash with no hazardous volatiles for environmentally friendly disposal.



True graded density structure of Super Fine depth filter cartridges ensure higher dirt holding capacity, longer service life, and fewer change outs.

Surface finishing

Standard performance

Pure polypropylene Super Fine filter cartridges are free from any extractable and contain no lubricants, wetting agents, emulsifiers, ant-oxidants or anti-static agents, etc. Available in up to 50 inch (1270 mm) length and up to 4.5 inch (114.5 mm) diameter. Super Fine Plain finish cartridges are constructed in a graded manner that inner layers comprises of the fine fibers and outer layer is made up of coarse fibers giving higher dirt holding capacity and longer service life.

High performance orange peel

Super Fine orange peel filter cartridges are manufactured by improved thermally bonded depth filtering technology, the surface is made wrinkled finish, looks like orange peel that enlarge the surface filtration area, larger particles are trapped to make better filtration efficiency. These cartridges are harder than Normal PP Spun filter cartridges, the stronger ability to work under pressure, gives the longer service life resulting in high efficiency particulate removing.

Mini-groove

Super Fine Lined finish Cartridges are effective and efficient for removal of silt, sand, rust and other suspended particles. The mini grove design is machined into the upstream surface, without tearing or melting the filter structure providing increased and effective surface area for filtration.

Dotted

Super Fine Dotted spun filter cartridges are designed to satisfy the market requirement with exceptional dirt holding capability. Surface cavity structure provide a longer service life, higher efficiency and low pressure drop. The surface pore structure spreads water flow to reduce pressure drop, increases the capacity of particle filtration giving in value to domestic and industrial filtration applications.

Groove

Super Fine grooved melt-blown cartridges manufactured from FDA approved food grade polypropylene. A cut groove process maintains open pore construction, effectively doubles the usable surface area providing lower clean pressure drop, increased dirt holding capacity and longer life. All these qualities resulting in a lower cost of ownership.

End adapters

Polypropylene end adapters are thermally-welded to the pure polypropylene Super Fine depth filter cartridge. The positive weld assures bypass-proof performance and structural integrity without adhesives or additives, maintaining cartridge purity. All adapters are molded of the same polypropylene as the cartridge for chemical compatibility and ease of disposal.

Polypropylene molded adapter with “222” O-rings

Polypropylene closed end cap

Reusable knife-edge seal end cap with stainless steel spring

Polypropylene molded fin end cap

Polypropylene molded spring

Chemical compatibility

100% virgin homopolymer polypropylene, without any chemical additives such as adhesives, binders, or lubricants for compatibility in a wide range of applications and operating conditions. Please consult our Chemical Resistance Guide for chemical compatibility information on our filter media and core material.

Food grade compliance

Super Fine filter cartridges meet requirements for food, beverages and drinking water. They are certified by NSF of USA to NSF/ANSI standard 61.

Applications

Super Fine cartridges are ideally suited for applications such as RO pre-filtration, electronics manufacture, deep well injection & gas purification, ED automotive paint, electroplating, pharmaceuticals & healthcare, chemical industry, metal working, industrial process water, drinking water, food & beverage, residential water and more...

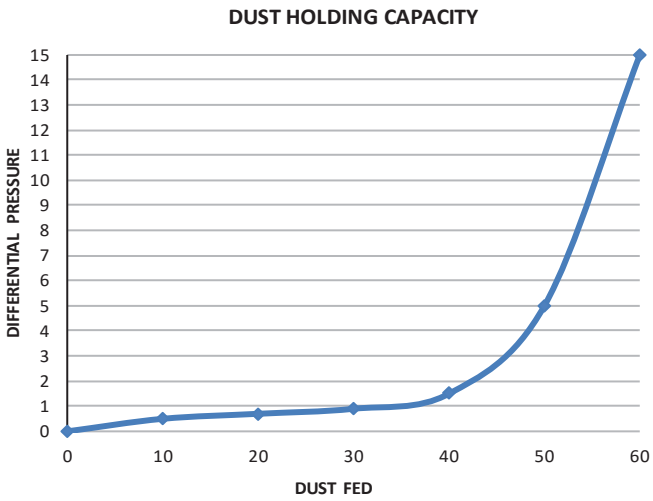
ISO 9001:2015 certified

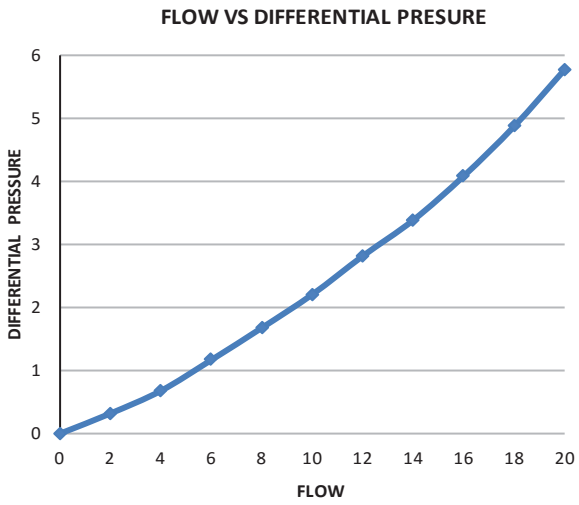
Super Fine Cartridges are manufactured by Syntech Fibres (Pvt) Ltd., Filtration Products Division, an ISO 9001:2015 Certified Company.

Standard 61

High performance filtration

Initial efficiency of cartridge is rated on 85% and above. Final efficiency reaches to 99.9% as per ASTM F795 standard.





Ratings are based on laboratory tests for 10 inch cartridges as per ASTM F795 standard at ambient temperature and 3 gpm (US) water flow rate. Flow rate vs. pressure drop data is based on clean water at an ambient temperature of 25 °C. Results in actual use will be influenced by the type of fluid and contaminant as well as flow rate and temperature.

Customers can count on our continued commitment to research and development.

We provide active support to customers towards the development and improvement of filter cartridges to meet process requirements. Our research and development efforts are to continuously improve our products. Our test laboratory enables us to provide customers with tailor made cartridges.

We conduct testing at our own in-house laboratory. Our laboratory is equipped with a filter cartridge test rig, laser particle counter, digital microscope, turbidity measuring instrument, SDI measurement instruments, microbiological and chemical test equipments.

Ordering information

Super Fine filter cartridges can be made to order in custom sizes (custom lengths, inner diameter and outer diameter) in various filter media and core material, and tailored density gradings.

Length (inch)	Outer Diameter (inch)	Number per box (standard packing)	Gross weight per box (kg)	Quantity in 20 ft. Container load (without pallets)	(without pallets)
10”	2 ½“	50/100	7.5/14	25,200	19,500
20”	2 ½“	25/40	7.5/11.5	12,600	9,750
30”	2 ½“	30	12	8,400	6,480
40”	2 ½“	20	12.5	6,600	5,120
50”	2 ½“	20	14.5	5,040	3,900

When ordering for the first time, please specify all details in writing. Media, actual length, micron rating, outer and inner diameters, and core material are required. End adapters are optional. Contact us for further information.
stocks are maintained in our warehouse for prompt deliveries. Packaging is in top-loading box-board cartons. Both palletized and non-palletized deliveries are available.

PPF - 254 - 63 - 125 - P - E

Length		Outer Diameter (mm)	Surface Finish	End Adaptes
Inch	mm			
10”	254	60	P: Plain	None = No end adapters (double open end — DOE)
20”	508	63	L: Lined	E222/C = Two end caps, one with double 222 O-rings (E222), Other end flat closed (EC)
30”	762	65	D: Dotted	E222 = Double 222 O-rings end cap
40”	1016	68	G: Grooved	EC = Closed end cap
50”	1270	74		ER = Reusable stainless steel spring
		110		EA = Polypropylene molded Spring
		114		EF = Polypropylene molded fin end cap
Custom lengths are available up to full 50 inches.Length does not include end adapter length. if any		Customized outer diameters available up to 114 mm.		

For a standard PPF 40 inch long (nominal) filter cartridge, the product code will be PPF-1016-63-510-P.

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Super Fine *Superior filtration technology*

Certified by NSF International to NSF/ANSI Standard 61

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