



LIFE SCIENCES

Fluid purity is your goal.
Performance optimization is ours.

HIGH QUALITY PROCESS FILTERS WITH PROVEN PERFORMANCE

- Sterilizing
- Bioburden Reduction
- Clarification
- Prefiltration
- Endotoxin Removal
- Tank Vents
- Process gases
- Process water
- Media
- Raw ingredients
- Intermediates
- Cleaning solutions



Lots of companies can sell you a filter.
We partner with you to create a unique filtration solution that is optimized for your operation.

The path to a great filtration solution starts with experienced Application Engineers understanding your performance goals.

When you contact Critical Process Filtration, our team will:

- INQUIRE about the liquids/process gases you're filtering and your filtration requirements
- RESEARCH our filter database of hundreds of configurations (type, pore size and layering of media) to identify products that will deliver the required volume, flow rate, throughput, retention and chemical compatibility for the fluids you process.
- TEST potential solutions with documented results
- RECOMMEND an optimal filtration solution
- SHIP the final solution in just weeks

After installation, our Application Engineers are available for questions, troubleshooting and further testing should something change in your process that impacts filtration. Our Customer Service Team is ready to answer your general filtration questions, follow up on orders and provide resources to keep your operation running smoothly.

Lead times

Filter lead times has long been an issue in the Life Sciences industry, and the pandemic's effect on the supply chain has challenged every business. At CPF, we strive to make that a non-issue for our customers. Moving product out the door quickly is our production team's number one goal. And we remain committed to delivering critical filtration supplies to you as fast as possible.

Lowering your filtration costs

Filter pricing is only one factor in lowering overall filtration costs, and CPF is very competitively priced compared to the larger vendors. However, companies see the greatest savings when filtration train design and lower prices meet. Some of our customers have realized a 30-50% reduction in overall filtration costs after working with us to fine tune their system with the correct filters, properly placed.

Filter equivalents

When vendor issues cause you to search for a better solution, there's a high probability that we'll have a like or equivalent filter that delivers the performance you require.

- Same media, pore size and device
- Same performance with different media
- Faster delivery
- Better price points and cost optimization
- Responsive technical service & support

How we compare to other vendors

	Product Configurability	Filter Performance Validation	Filter Pricing	Initial Presales Support	Filtration Expertise	Testing & Analysis Services	Custom Design Systems	Made in the USA
Popular Large Vendors	High	Yes	\$\$\$\$	Sales Reps	High	Yes	Yes	Some
Critical Process Filtration	High	Yes	\$\$\$	Application Engineers	High	Yes	Yes	All



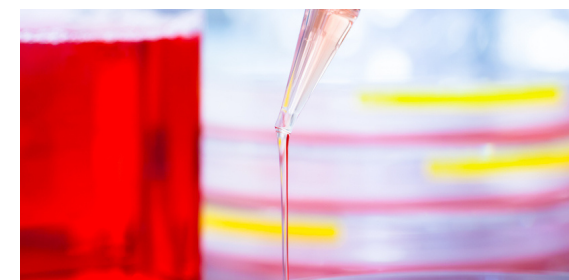
Biologics

Upstream CPF prefilters protect the bioreactor, while downstream final filters retain impurities before chromatography and assure sterility during final fill.



Buffers

Producing the highest quality buffers begins with validated bacteria retention filters from CPF that offer high flow rates and low pressure drops.



Cell Culture Media

Develop superior cell culture media with sterilizing and clarification filters that scale from lab to production.



Serum/Plasma

Installing the right prefilters and sterilizing filters based on the blood component's characteristics and bacteria load will assure product sterility before quality control testing.

Choose from a wide selection of end caps and O-rings

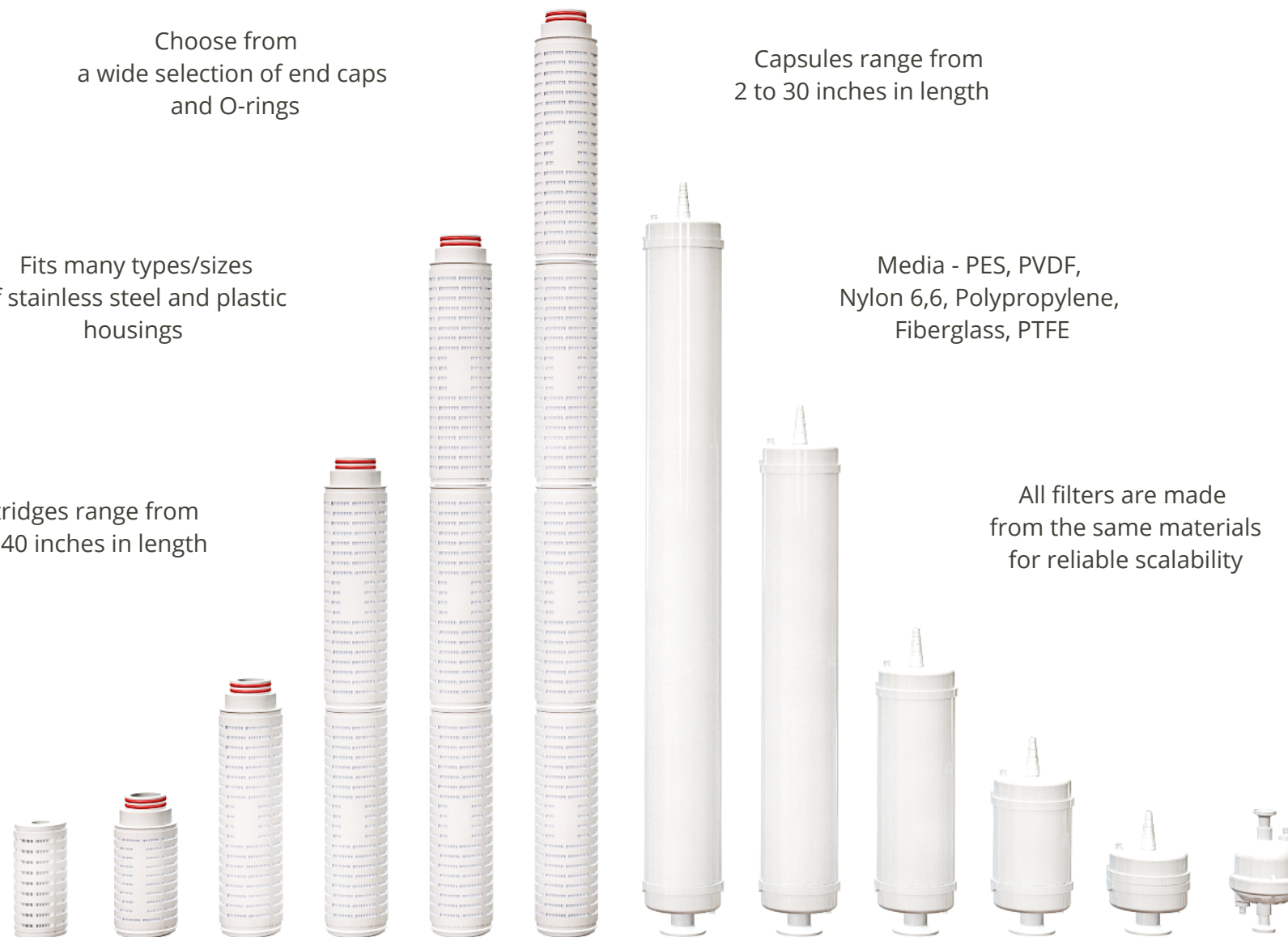
Capsules range from 2 to 30 inches in length

Fits many types/sizes of stainless steel and plastic housings

Media - PES, PVDF, Nylon 6,6, Polypropylene, Fiberglass, PTFE

Cartridges range from 5 to 40 inches in length

All filters are made from the same materials for reliable scalability



Cartridge Filters

Designed and manufactured by Critical Process Filtration, these cartridge filters can be direct replacements for existing systems and housings. CPF's highly durable cartridge filters stand up to the rigors of steam-in-place (SIP) and clean-in-place (CIP) operations. Depth media and membrane cartridges are also available in high area and high temperature configurations.

Capsule Filters

Suitable for process development, pilot-scale, and small to medium applications. Capsule filters protect operators and the environment during setup, production, and cleaning, while delivering high performance to your filtration system and single use applications. Available pre-sterilized.

Mini-Capsule Filters

Perfect for small volume applications such as sample prep, venting and process development. Made with the same high standards and materials as our larger capsule filters. Available pre-sterilized.

CPF delivers proven products, technical services & support, short lead times and competitive pricing.



Pharmaceuticals

Remove particles, bacteria, mycoplasma and endotoxins from upstream to downstream with CPF's depth media and sterilizing membrane filter products.



Reagents & Standards

Formulate accurate, consistent products with CPF sterilizing filters for water and chemicals.



Assay Components - COVID-19 Test Kits

Produce stable assay components with consistent filter performance to assure test results are reliable and repeatable.



Viral Transport Media (VTM)

Ensure a successful sterility check and avoid disposing of a valuable batch of media with CPF sterilizing filters.

Product Assurance

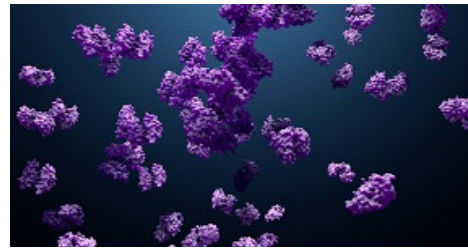
Critical process applications demand filter quality and proven performance.

Since 1998, Critical Process Filtration has been delivering filtration solutions that meet the requirements of critical applications. Our proprietary manufacturing process has multiple verification checkpoints from start to finish, ensuring quality and maintaining lot traceability. From Quality Control's rigorous inspection of raw materials, to production in a clean room environment, to post assembly inspection for Quality Assurance, all under a certified ISO 9001:2015 Quality Management System - CPF products are safe and perform as promised.

For the most critical applications, you can be assured of filtration performance through our verification/validation service - the documented results of testing your process stream with our products.



Case Studies



Biopharmaceutical company chooses CPF bioburden solution that outperforms other vendors.

A biopharmaceutical company was filtering an intermediate enzyme solution with high levels of particulate, turbidity and bioburden. The filtration solution required that the particle removal and bioburden control could not affect protein levels or protein activity of the solution. A number of filter suppliers were approached and asked to perform tests and recommend the filtration steps to meet the manufacturer's specifications. Testing was to be done at laboratory scale to support the scale-up of the process to full production volumes. In the end, Critical Process Filtration's 3-stage filtration process was chosen.

[Read Full Case Study](#)



Pharmaceutical company chooses CPF bioburden solution and lowered costs by 15%.

A pharmaceutical manufacturer was evaluating their filtration processes used for bioburden reduction of various saline solutions. Their aim was to improve throughput and reduce filtration cost. Critical Process Filtration was asked to help in this evaluation, and to recommend the appropriate filter to meet their goals. After testing multiple PES membranes, the customer switched to using the specified BPS filters (0.22 µm PES membrane filter with 0.5 µm High Capacity PES pre-filter) for all of their saline solution filtration. As a result of the improved throughput, the customer uses fewer filters, and has reduced their saline solution filtration cost by approximately 15%.

[Read Full Case Study](#)



Serum processing company chooses CPF as sole vendor for prefiltration and sterilizing filters based on performance.

An animal serum processing company was experiencing low flow and extended processing times during upstream prefiltration of their product, which led to multiple, mid-batch filter changes and product loss. To address these issues, the company chose to redesign their filtration process and desired to work with a single supplier to assure product consistency and provide qualification testing. Based on comparative review and testing, Critical Process filters met customer specifications, exceeded competitive product performance and CPF was awarded the business.

[Read Full Case Study](#)

Sterilizing

Filtration Need	Filter	Media
Retention security for a critical application	PPS Filter	PES
Increased capacity for high particle load	HPPS Filter	PES
High flow rate	SPS Filter	PES
Chemical compatibility	PNM Filter	Nylon 6,6
Tank vent & process gas: hydrophobic with chemical compatibility	PTM Filter	PTFE
Tank vent & process gas: hydrophobic with high air flow and low pressure drops	PTR Filter	PTFE

Bioburden Control

Reduce microbials in fluid with high particle count	BPS Filter	PES
Microbial reduction in solvents and chemicals	BNM Filter	Nylon 6,6
Reduce bioburden in tank vents & process gas	BTM Filter	PTFE

Endotoxin Removal

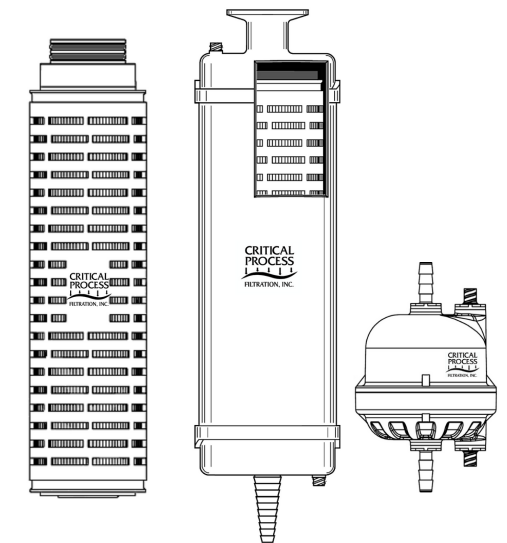
Sterilizing and endotoxin removal	PPC Filter	PES
High flow, sterilizing and endotoxin removal	SPC Filter	PES
Sterilizing and endotoxin removal with chemical compatibility	PNC Filter	Nylon 6,6
General endotoxin removal	GPC Filter	PES
General endotoxin removal	GNC Filter	Nylon 6,6

Tank Vent & Process Gas

Hydrophobic sterilizing filter with high air flow and low pressure drops	PTR Filter	PTFE
Hydrophobic sterilizing filter with chemical compatibility	PTM Filter	PTFE
Hydrophobic bioburden reduction with high flow and throughput	BTM Filter	PTFE

Clarification/Prefiltration

Reduce particles in critical applications	BCWPS Filter	PES
High contaminant holding, high flow rates	PGD Filter	Fiberglass
Fine particle retention for water, solvents and chemicals	PPD Filter	Polypro Depth
High capacity of fine particle retention	HLP Filter	Polypro Depth
Carbon fines and resin trap removal	GDMB Filter	Meltblown Polypro
Carbon fines and resin trap, high retention and throughput	NSPD Filter	Nanospun Polypro



Flat Disc Filters

Media disc filters make testing for compatibility and efficiency simpler for researchers in early stage product development.

General Service Filters

Critical Process Filtration offers economical, general service versions of the products listed above which can lower the total cost of filtration from simple to the most complex applications.



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