

Stainless Steel Filter Vessels



UFI Vessels offer the esthetics and operational durability of stainless steel at affordable prices. We offer a broad selection of vessels in 304 and 316 stainless steel for a wide variety of residential, commercial and industrial applications. From single cartridge and bag vessels with 3/4-inch or 1-inch FNPT connections to multiple cartridge and bag vessels with up to 4-inch FNPT connections in 10, 20, 30, or 40-inch lengths. These vessels are ideal for high flow and/or high contaminant load applications and where clean effluent is critical. They can provide up to 1200 GPM and 150psi.



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American Manufacturing with a Global Presence

Serving the Energy Industry with Filtration and Fluid Management Products for Over 40 Years



Wound Cartridge Filters

Polypropylene

Available in three grades:

- Standard Grade for general filtration.
 - FDA grade for Potable Water and liquids used for Food and Beverage applications.
 - NSF/ANSI 42/61 - When certifiable material content and traceability of materials of construction are required.
- All Polypropylene is compatible with most organic acids, alkalies, and chemical process applications. Very effective in low viscosity solutions. For use to 180°.

Fibrillated Polypropylene

Non-migrating silt film polypropylene free of extractable use in Ultra-Pure, Electronics, and Plating where non-leaching is critical. No extractable or sizing agents present. Chemical resistance equal to standard polypropylene. Low moisture adsorption and outstanding abrasion resistance. Lowest static propensity of any man-made fiber. High dry or wet strength. For use to 180°

Polyester

Chemical resistance similar to polypropylene, with higher temperature resistance. For use to 350°F.

Available in two grades:

- Natural Cotton for standard filtration applications to includes oils, water, paints, organic solvents, alcohols and petroleum.
 - Bleached Cotton meets FDA Food and Beverage Standards for Potable Water, Food and Beverage applications. Cotton has poor micro-organism resistance.
- For use to 300°.

Fiberglass

Available in two grades:

- Standard Grade for filtration of high concentrations of Organic Acids, Organic Solvents and Petroleum Solutions.
 - Heat Treatment removes residual material used in manufacture of yarn.
- For use to 750°F.

Similar chemical compatibility to both Nylon and Fiberglass. Excellent resistance to solvents and acids with exception of hot sulfuric and nitric acid. For use to 300°F.

Ryton

Similar chemical compatibility to both Nylon and Fiberglass. High resistance to Solvents and Acids, except for Hot Sulfuric and Nitric Acid. For use to 375°F.

Used for special process applications, concentrated alkalies, and hydrocarbons. Excellent micro-organism resistance. For use to 300°F.

Cotton

Rayon

Nylon

Filter Bags

Liquid Filter Bags are a cost effective alternative for most fluid applications. Manufactured using several media options to insure fluid compatibility these bags are available in 1 absolute to 1500 nominal micron ratings and are 100% interchangeable with all industry standard #1 through 9 filter bag housings. Used extensively in hydrocarbon and natural gas processes as well as RO pre-filters. Liquid filter bags offer ease of removal while containing contaminants for proper disposal.

Filter bag options:

Media:

- Polyester or polypropylene felts, nominally rated at 50% efficiency. Its cost effectiveness makes it ideal for applications up to 200° F.
- Polyester multifilament meshes, nominally rated at 90% efficiency.
- Polypropylene mesh similar to nylon mono filament mesh, which has better acid resistance than nylon and is more cost effective for temperatures up to 200° F.
- Nylon mono filament meshes, nominally rated at 90% efficiency.
- Polypropylene high efficiently micro fiber, nominally rated at 95% efficiency.
- Polypropylene oil removal, nominally rated at 95% efficiency.
- Polyester or polypropylene graded density, 99% absolute efficiency.
- Teflon, nominally rated at 95% efficiency.
- Cotton, nominally rated at 90% efficiency.
- Oil-absorbing bags and inserts hold 25 times their own weight in oil/petrochemical.

Lifting Devices:

- Galvanized carbon steel.
- Stainless Steel.
- Molded plastic.
- Woven fabric.

Applications:

- Pre-RO membrane protection.
- Sand and algae, removal from sea water.
- Filtering amine, oil, gas, glycol, naphtha, waist vegetable oil and bio-diesel.
- Gas purification processes.
- Offshore filler stations.
- Food, beverage, potable water.
- Dairy processing.
- Pulp removal.
- Poultry and meat washing and packing.

High Surface Area Pleated Cartridges to Retrofit Bag Filters:

- High flow and contaminant-holding capacity.
- Proprietary filter media delivers highly consistent performance.
- Fixed pore construction – resists contaminant unloading at maximum differential pressure.
- Inside-out flow traps dirt inside the cartridge Eliminating Downstream Contamination.
- Available to fit most size 1 and size 2 bag housings with no hardware changes.
- Polypropylene construction – inert to many process fluids ensuring wide chemical compatibility.
- Cartridges can be manufactured to retrofit unique bag lengths.
- Manufactured in a class 1,000 clean room and under an ISO 9001 Quality System



Pleated Filter Bags

Nomenclature ex: UP10R10PVSOCISWL

U	P	10	R	10	P	V	SOC	ISW	L
United Type	UFI Media	Micron Rating	OD*	Lengths	Core Material	Core Cover	End Treatment	Packaging	Label
U - Standard	U - Natural Cotton	0.5	T - 2"	3.75"	T - Tin Plated Steel	No Symbol None	(P)E - Poly Core Insert	IW - Individual Bag	Individual Label
	CCU - Industrial White Cotton	1	E - 2-1/4"	4"	P - Polypropylene	V - Specific Core Cover	(S)E - 316SS Insert	ISW - Individual Shrink Wrap	
	C - FDA Bleach Cotton	3	F - 2-3/8"	5"	A - 316 Stainless Steel		EC - Extended Crimped Core		
	P - Industrial Polypropylene	5	R - 2-1/2"	6"	S - 304 Stainless Steel		SOC - 222 O-Ring & Cap		
	PDN - FDA, Polypropylene	10	H - 2-5/8"	7"	TW - Tin Steel Wild Cat		SOF - 222 O-Ring & Fin		
	UPDN-NSF42/61 Polypropylene	15	H - 2-5/8"	8"	PW - Polypro Wild Cat		06C - 226 O-Ring & Cap		
	R - Rayon (Viscose)	20	S - 2-3/4"	9"	SW - 304SS Wild Cat		06F - 226 O-Ring & Fin		
	K - Polyester	25	L - 2-7/8"	9.75"			L - Poly spring		
	N - Nylon	30	P - 3"	10"			PM - Poly Cap & Metal Spring		
	G - Fiberglass	40	BB - 4"	12"			B - Buna Gasket		
	GH - Baked Fiberglass	50	J - 4-1/2"	12.50"			CSA - Stad. 316SS Cap & Spring		
	F - Fibrillated	75	K - 4-5/8"	18"			W - Wildcat Cap & Spring		
	RT - Ryton	100	X - Special	19.50"			ACS - 3" Tin Cap & Spring		
		125		19.75"					
		150		20"					
		200		29.50"					
				30"					
				36"					
				39"					
				40"					
				50"					
				60"					
				70"					
				72"					



Resin-Pur Filter

Features and benefits:

- Two-stage filtration with an outer, spiral wrap that collects large particles, loose debris, and agglomerates, while inner layers control particle removal at rated size.
- Extra-long acrylic fibers provide added strength, resist breakage and migration.
- Available in eight removal ratings from 2- to 150-micron ratings with multiple end treatment options.
- Phenolic resin impregnation strengthens cartridge for use with fluid viscosities up to 15,000 SSU (3200cks).
- Withstands pressure surges up to 150 psi across cartridge (depending on fluid temperature).
- One-piece construction eliminates bypass concerns with multi-length cartridges and eases change out.
- Silicone-free construction ensures no contamination to adversely affect adhesion properties of coatings.

Applications:

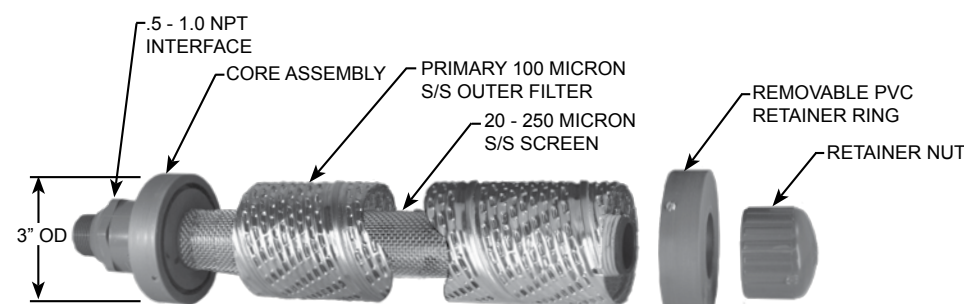
- Paints and Coatings
- Petroleum Products
- Oil Field Fluids
- Printing Inks
- Process Water
- Adhesives
- Resins
- Animal Oils
- Emulsions
- Waxes
- Plasticizers
- Organic Solvents

Scavenger Filter

Series UDH

Features and benefits:

- Available in 18 to 72-inch lengths
- Double open ended/Buna available
- 150 psi differential operating pressure
- Available in 20 to 250-micron nominal micron ratings
- Housing interface of .5-inch, .75-inch and 1.0-inch NPT/DOE
- No tools required for field cleaning and parts replacement
- All stainless steel/PVC construction for fluid compatibility
- Cleanable without tools



UCP UCP Pleated Carbon/Polypropylene. Engineered carbon/polypropylene felt that provides all of the benefits of a non-woven filter with the absorption characteristic of carbon. These units are used to remove chlorine, organics, silt and odor.

UGACR UGACR Catalytic Carbon GAC. Utilizing Granular Catalytic Coconut Shell Carbon contained within GAC housings these cartridges act as chloramine "grabbers". They were specifically designed to address consumers wanting immediate reduction of chloramines from their drinking water.

UPC UPC Polypropylene/Carbon Blended Yarn. Manufactured using a proprietary 50/50 blend of coconut based carbon locked into polypropylene fiber these units were designed for general-purpose water filtration as well as process and industrial applications.

UGAC UGAC Granular Carbon GAC. These filter cartridges offer longer fluid contact time with the granular carbon content resulting in improved chlorine reduction and odor removal from drinking water. The internal downstream filter pad precludes downstream carbon fine migration.

UCB UCB Carbon Block with Protective Outer Wrap. Made with washed coconut carbon nominally rated at 1 micron these filters will remove unwanted taste, color and chlorine from potable water sources. The outer wrap prolongs filter life.

UFMC/UFMC-S UFMC/UFMC-S Carbon Impregnated Polyester Wrap. Food and beverage grade coconut carbon matrix locked into polyester nonwoven media felt wrapped over a polypropylene core. Option Stainless steel core recommended for high pressure applications. This product was designed for applications not compatible with cellulose.

UPPGC UPPGC Pleated Polyester/Granular Carbon. These pleated polyester cartridges are back filled with coconut based granular carbon. These filters offer long life sediment filtration combined with chlorine reduction.

UPACG UPACG Radial Flow Carbon Shell. Granular coconut carbon encapsulated with a porous synthetic polymer outer shell. These filters reduce chlorine, trace amounts of organics to include oil mist, water vapor and fine dust, scale, and smoke particles. This unit has excellent coalescing properties and is cleanable.

UPACM UPACM Ultra Clean, Polyolefin Impregnated Carbon Block. This cellulose-free carbon block features patented carbon locked into a long polyolefin fiber matrix to prevent premature clogging. These filters are ideally suited for food, beverage applications as well as process fluids.

UPAMC UPAMC Carbon Impregnated Cellulose Wrap. Carbon impregnated cellulose media wrapped around a polypropylene core. Economically priced filter suited for sediment, taste and odor reduction.

UPACP UPACP String, Carbon/Cellulose, with integrated upstream & down stream string media. This 3-stage filter integrates carbon impregnated cellulose media with pre-stage and post-stage wound yarn filtration. This single cartridge provides pre-filtration, carbon polishing, and final filtration in a single cartridge.

UPAGC UPAGC String, Granular Carbon/Polyester with integrated upstream & down stream string media. This 3-stage filter integrates carbon impregnated polyester media with pre-stage and post stage wound yarn filtration. This single cartridge provides pre-filtration, carbon polishing, and final filtration in a single cartridge.

Not for use with fluids that are microbiologically unsafe or unknown without adequate upstream or down stream

Nomenclature ex: UGAC1BBS = (Granular Carbon, 10", Big Blue, 304 SS)				
(Pleated Carbon/Polypropylene)	UCP	1-1/2 = 5"	NO Symbol = Std 2-3/4"	NO symbol = Polypro
(Catalytic Carbon GAC)	UGACR	1 = 10"	BB = 4-1/2"OD	T = Tin Steel
(Carbon/Polypropylene Yarn)	UPC	2 = 20"		S = 304 SS
(Granular Carbon, GAC)	UGAC	3 = 30"		A = 316 SS
(Carbon Block with Protective Outer Wrap)	UCB	93 = 9-3/4"		
(Carbon Impregnated Polyester Wrap, S/S Core)	UFMC-S			
(Carbon Impregnated Polyester Wrap, Poly Core)	UFMC			
(Pleated Polyester/Granular Carbon)	UPPGC			
(Radial Flow Carbon Shell)	UPACG			
(Ultra Clean, Polyolefin Impregnated Carbon Block)	UPACM			
(Carbon Impregnated Cellulose Wrap)	UPAMC			
(String, Carbon/Cellulose, String Tri-Filter)	UPACP			
(String, Granular, String Tri-Filter)	UPAGC			

Pleated Filter Cartridges

Cellulose - UC

Series UC cellulose filter cartridges are designed for general water filtration purposes. They are economical, yet highly effective, at reducing sediment particulates down to nominal 1 micron in size. The pleated corrugated media provides increased surface area and strength, which results in extended life. End caps are fused to the cellulose media preventing bypass and forming a gasket sealing area.

- Type: Pleated Cellulose
- Construction: Resin Impregnated Cellulose Media
- Vinyl Plastisol End Caps Available in Multiple Colors
- Polypropylene Core
- Operating Temperature Range: 40°F (4.4°C) to 145°F (63°C)
- Micron Rating: Nominal 1, 5, 10, 20

Polyester - UPE

The chemical and bacteria resistance of the Series PE polyester media makes these cartridges suitable for potable water, most light industrial applications, swimming pool and spa, and well water applications. The durable, non-woven polyester fabric is reusable, while being pleated to maximize its dirt holding capacity and extending the time period between changes.

- Type: Pleated Non-Woven Polyester
- Construction: Non-Woven Polyester Fabric Media
- Vinyl Plastisol End Caps Available in Multiple Colors
- Polypropylene Core
- Operating Temperature Range: 40°F (4.4°C) to 125°F (52°C)
- Micron Rating: Nominal .25, .50, 1, 5, 10, 20, 30, 50

Polypropylene - UPP

Series UPP polypropylene cartridges are designed for residential, commercial, and industrial filtration applications. Constructed of durable, chemical resistant polypropylene media, they can be employed on many acids, alkalis, plating solutions, water remediation, and saline solutions. The cartridge filters employ a five (5) layered, high porosity.

- Type: Pleated Bi-Component Polypropylene
- Construction: Bi-Component Polypropylene Media
- Vinyl Plastisol End Caps Available in Multiple Colors
- Polypropylene Core
- Polypropylene Outer Netting
- Operating Temperature Range: 40°F (4.4°C) to 145°F (63°C)
- Micron Rating: Nominal 1, 5, 10, 20, 30, 50

Applications:

- Water Treatment
- Colloid Removal
- Pharmaceuticals
- Food and Beverages
- Surface Finishing Solutions, Etchants
- Printed Circuit Boards
- Esters, Alcohols, Bases, and Solvents
- Magnetic Coatings
- Microorganisms/Bacteria Retention

Nomenclature ex: UC1X10BB			
Filter Media	Micron Rating	Length	Tube O.D.
UPP - Polypropylene	1	9-3/4"	All filters are standard 2-5/8" O.D. unless otherwise specified. BB = 4-1/2"
UPE - Polyester	5	10"	
UC - Cellulose	10	19-1/2"	
	20	20"	
	30	30"	
	50	40"	

Melt Blown Filter Cartridges



UFI's Melt Blown Cartridges is manufactured from 100% Polypropylene construction offering excellent filtration and good thermal stability. The unique density gradient construction maximizes efficiency and minimizes pressure drop. This filter will not impart taste, odor, or color to the filtered product and has superior chemical resistance for process fluid applications. Grooving option effectively doubles the surface area providing lower clean pressure drop, increased dirt holding capacity and longer life. All these qualities resulting in a lower cost of ownership.

Cartridges are available in one to 50-micron ratings, 2.5-inch and 4.5-inch outside widths and 4-inch to 50-inch lengths, and various end cap configurations (see below) for a broad array of applications.

Specifications:

- Construction: 100% Polypropylene Media
- Maximum Temperature: 140°F (60°C)
- Maximum Differential Pressure: 50 PSID
- Multiple End Treatment Options
- Custom Lengths

Applications:

- Pre Filters for RO Systems
- Home Water Filtration
- Swimming Pools
- High Efficiency

Multiple End Treatment Options



UFI provides 12 different end caps to all of their filter lines. The diversity of these end caps provides an endless variety of filtration needs for every industry.

We can provide the following end caps:

- Polypro-226
- PolyPro Core Extender
- Open End Stainless Steel-222
- Flat Open End Gasket
- Custom End Cap
- Closed End Stainless Steel-222
- Stainless Steel Core Extender
- Flat / Closed
- Poly-222
- Fin
- Flat / Open
- Plastisol Molded

Core Options

Description	Max Temp	Characteristics
Polypropylene	120°F (49°C)	For lower temperature applications of corrosive fluids and gases. Easily incinerated to a trace of ash.
Tin Plated Steel	400°F (204°C)	General purpose applications.
304SS	750°F (399°C)	For high temperature dilute acids and moderately corrosive fluids.
316SS	750°F (399°C)	For high temperature applications and highly corrosive fluids.