



**UNITED FILTERS
INTERNATIONAL**

Wound Cartridge Filters



Recommended Applications:

- Coatings
- Oil Patch
- Waste Water
- Potable Water
- Process Water
- Pharmaceutical
- Photo Emulsions
- Photo Processing
- Electronics/Plating
- Magnetic Coatings
- Food and Beverage
- Chemical Processing

Features:

- True Depth Filtration
- Wide Choice of Porosities
- Various Core and Wind Material
- Chemical and Temperature Compatibility

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	S - 2-3/4"	8"	PW - Polypro Wild Cat		O6C - 226 O-Ring & Cap		
	R - Rayon (Viscose)	20	L - 2-7/8"	9"	SW - 304SS Wild Cat		O6F - 226 O-Ring & Fin		
	K - Polyester	25	P - 3"	9.75"			PS - Poly spring		
	N - Nylon	30	BB - 4"	10"			PM - Poly Cap & Metal Spring		
	G - Fiberglass	40	J - 4-1/2"	12"			B - Buna Gasket		
	GH - Baked Fiberglass	50	K - 4-5/8"	18"			CSA - Stad. 316SS Cap & Spring		
	F - Fibrillated	75	X - Special	19.50"			W - Wildcat Cap & Spring		
	RT - Rylton	100		19.75"			ACS - 3" Tin Cap & Spring		
		125		20"					
		150		20.50"					
		200		30"					
				36"					
				39"					
				40"					
				50"					
				60"					
				70"					
				72"					



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Mineral Acids	Oxidizing Agents
Organic Solvents	Alkalies
Zinc Chloride	Organic Acids
Caustic Soda	Portable Water
Ferric Hydroxide	Demineralized Water
Planting Solutions	Photographic Solutions
Animal, Petroleum and Vegetable Oils	Ethyl Alcohol
	Pre-membrane Filtration

Standard Polypropylene

Recommended for concentrated acids and alkalies, strong oxidizing agents, corrosive fluids, and gases. FDA and Non-FDA available -- Consult factory. Easily incinerated to traces of ash. Excellent micro-organism resistance. For use to 200°F.

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Fibrillated Polypropylene - "Electronic Grade"

Non-migrating slit film polypropylene free of extractables recommended for use in ultra-pure liquids, electronics, and plating where non-leaching is critical. No extractables 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.

Strong Acids	Diluted Acids
Concentrated Alkalies	Animal, Petroleum and Vegetable Oils
Oxidizing Agents	
Organic Acids	

Modacrylic

For strong acids, concentrated alkalies, and oxidizing agents. For use to 200°F. Not recommended for organic solvents.

Organic Solvents	Organic Acids
Alkalies	Animal, Petroleum and Vegetable Oils
Dilute Acids	
Strong Acids	

Polyester

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



Vegetable Oils - Fatty Acids
 Beverages - Citric Acids
 Hydrocarbons - Alcohols
 Demineralized Water
 Photographic Solutions
 Organic Solvents
 Animal, Petroleum and Vegetable Oils

Bleached Cotton

Bleached to meet FDA standards for distilled water, beverages, vegetable oils, petroleum, fatty acids, and alcohols. For use to 300°F. Poor micro-organism resistance.

Vegetable Oils - Fatty Acids	Paints
Beverages - Citric Acids	Organic Solvents
Hydrocarbons - Alcohols	Petroleum Oils
Process Water	

Natural Cotton

For oils, water, paints, organic solvents, alcohols, and petroleum. Non-FDA applications. For use to 300°F.

Oxalic Acid	Organic Solvents
Phosphoric Acid	Oils
Sulfuric Acid	Organic Acids
Oxidizing Agents	Strong Acids
Sodium Cyanide	Dilute Acids
Nitric Acid	

Heat Cleaned Glass Fiber

Traces of oil sizing removed by heat cleaning, yielding virgin glass fiber. Recommended for high temperatures and high corrosion applications. For use to 750°F.

Organic Solvents	Oils
Organic Acids	Alkalies
Alcohols - Hydrocarbons	Fatty Acids

Rayon

Fluid compatibility similar to bleached cotton, but with more coarse fibers, and less absorbent than cotton. Swells in aqueous solutions. For use to 300°F.

Organic Solvents	Alkalies
Process Water	Hydrocarbons

Nylon

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



Wound Cartridge Filters Guides

Core Selection Guide

Media Type	Description
Polypropylene	Economical core of choice for most applications in water and corrosives to 200° F. FDA material.
Tin Plated Steel	General purpose metal core for oils, solvents, paints, and other non-FDA applications. For use to 400° F. These cores are vapor de-greased to remove trace amounts of oil or residue prior to winding.
304 SS	For high temperature applications on diluted acids and moderately corrosive fluids. FDA applications. For use to 750° F. These cores are vapor helically-welded to eliminate a possible source of filtrate contamination and vapor-degreased to remove trace amounts of oil or residue prior to winding.
316SS	For high temperature applications on strong acids and highly corrosive fluids. FDA applications. For use to 750° F. These cores are vapor helically-welded to eliminate a possible source of filtrate contamination and vapor-degreased to remove trace amounts of oil or residue prior to winding.
Core Cover	For fiber migration control. Core material compatible with and/or equal to the resistance of the fiber is standard. Materials include voile, polypropylene, nylon, polyester, fiberglass, etc.
End Treatment	For additional fiber migration protection. End treatment is compatible with and/or equal to the resistance of the fiber medium.
Extended Core	Available in polypropylene and 316SS only. Extended cores eliminate chamber V-posts and increase cartridge change-out time.

General Cartridge Filtration Guide

1. Cartridge filtration is favored in systems where the contaminant levels are less than 0.01% by weight (<100ppm)
2. Cartridges need to be replaced when the differential pressure (AP) approaches 35 psid.
3. Never exceed a differential pressure (AP) of 75 psid because the cartridge could collapse or "unload" the contaminants.
4. Clean initial pressure drop in liquid applications should be a differential pressure of 2-5 psid.
5. The cost of filtration increases as the micron rating of the cartridge decreases. "Never do a better job of filtration than you must or than is required."
6. The lower the flow rate, the greater the contaminate-holding capacity of the filter tube. Flows in excess of 5 gpm per 10" tube are not recommended, with 2.5-3 gpm being preferred.
7. Over sizing your cartridge vessel will help minimize the flow rate per cartridge. We recommend a minimum of 1-10" cartridge per 50 gallons of solution to be filtered. When 2-10" cartridges per 50 gallons are employed, cartridge consumption is reduced by approximately 29%. When 4-10" cartridges per 50 gallons are employed, cartridge consumption is reduced by approximately 50%.
8. Also, over sizing by a factor of 4 doubles the dirt holding capacity per cartridge as well. Consider series filtration in lieu of single.

