

Donaldson®  
Torit®

## CARTRIDGE FILTERS



# HIGH EFFICIENCY NANOFIBER FILTERS BUILT TO LAST

Donaldson® Torit® filters keep dust collectors operating at peak performance. Offered for a full range of dust, fume and mist collection applications, Donaldson Torit filters—especially our proprietary Ultra-Web® filters — outperform and outlast other filters. When it comes to Ultra-Web filters, there is no equal in performance and value.

All filters are not alike. Equip a dust collector with a generic replacement filter and expect the performance of that collection system to decline. What’s worse, generic replacement filters selected for their initial lower purchase price often waste manufacturers’ time, productivity and money in the long run.

## Donaldson Torit Cartridge Filters Offer:

- Higher performance
- Increased efficiency
- Longer filter life
- Greater value

POWERED BY

**ULTRA-WEB®**  
High Efficiency Nanofiber Filters Built to Last

800.365.1331  
Reorder from  
[www.DonaldsonTorit.com](http://www.DonaldsonTorit.com)



**DOWNFLO® WORKSTATION DUST COLLECTOR**



**DOWNFLO® OVAL DUST COLLECTOR**



**WSO MIST COLLECTOR**

# THE VALUE OF ULTRA-WEB CARTRIDGE FILTERS

Don't be fooled by the initial lower purchase price of some cartridge filters. Using generic brand filters can be an expensive proposition. Conventional cartridge filters don't last as long and must be replaced more often than Donaldson Torit filters. And that means buying and replacing more filters, more often — which costs more money over time.

There is no comparison to Ultra-Web filters when it comes to quality and cost. Ultra-Web filters offer dramatic savings compared to generic cellulose and cellulose/synthetic fiber blend filters.

## TRUE COST OF REPLACEMENT FILTERS


Comparison Factors Over 30 Month Period	Generic Cellulose	Generic Cellulose/ Synthetic Fiber Blend	Ultra-Web®
Purchase price per cartridge	\$85	\$99	\$132
Filter life	8 months	9 months	12 months
Number of filter changes	3	3	2
Total purchase cost for filters	\$4,080	\$4,752	\$4,224
Disposal cost = \$50 per drum Total disposal cost for 16 filters after 30 months	\$2,400	\$2,400	\$1,600
Changeout cost (do-it-yourself) Total changeout cost for filters	\$450	\$450	\$300
<b>Total investment</b>	<b>\$6,930</b>	<b>\$7,602</b>	<b>\$6,124</b>

## TOTAL SAVINGS WITH ULTRA-WEB FILTERS

Ultra-Web Filter Costs Compared With Generic Filter Costs	Ultra-Web®
Generic cellulose total investment	\$6,930
Ultra-Web total investment	\$6,124
Ultra-Web Savings	\$806
Generic cellulose/synthetic fiber blend total investment	\$7,602
Ultra-Web total investment	\$6,124
Ultra-Web savings	\$1,478

This application example is based on a DFT 2-16 dust collection system and very fine, dry dust (submicron particles). Cartridge changeout takes 1 hour.

# FILTER OPTIONS

	NANOFIBER FILTERS			
	 Ultra-Web®	 Ultra-Web® SB	 Fibra-Web®	 Thermo-Web™
<b>Base Media</b>	Cellulose with Nanofiber <sup>1</sup>	Spunbond polyester with Nanofiber <sup>1</sup>	Synthetic with Nanofiber <sup>1</sup>	Synthetic with Nanofiber <sup>1</sup>
<b>U.S. Efficiency Rating (MERV)<sup>2</sup></b>	15	15	14	14
<b>Maximum Operating Temperature</b>	180°F (82°C)	180°F (82°C)	180°F (82°C)	275°F (135°C)
<b>Abrasion Resistance</b>	Good	Excellent	Good	Good
<b>Chemical Tolerance</b>	Fair	Excellent	Good	Good
<b>Optional Flame Retardant Media (FR)</b>	Yes	No	Yes	No
<b>Special Characteristics</b>	Nanofiber media provides excellent surface loading and dust release capabilities.	Wide pleat spacing, abrasion resistive, moisture tolerant.	Wide pleat spacing provides thorough pulse cleaning of fibrous and agglomerative particles.	Excellent efficiency and surface loading capabilities at higher temperatures.
<b>Markets</b>	Metalizing, Pharmaceutical, General industrial, Paint pigments, Carbon black, Thermal spray, Welding	Chemical processing, General industrial, Surface blasting, Grinding, Polishing, Powder coating, Pharmaceutical, Food	Composite Grinding, Food processing, Grain handling, Metal buffing, Pharmaceutical, Textiles, Woodworking	Cement processing, Chemical processing, Metallurgical, Pharmaceutical
<b>Applications</b>	Premium performance on ambient, extremely fine and non-fibrous dust and some abrasive dust. High filtration efficiency on very fine particulate of <1 micron	Chemical processing, General industrial, Surface blasting, Grinding, Polishing, Powder coating	Excellent performance on combination fibrous and non-fibrous dust, and/or agglomerative dust	Metallurgical, Chemical and Industrial applications. Higher temperature applications.
<b>Dust Types</b>	Fumed silica, Metallic fume, Metallurgical powders, Oily weld fume, Pharmaceutical compounds	Ceramics, Cotton, Fiberglass, Tobacco, Metal grinding, Powder coating, Shot blast, Gypsum, Lime, Cement	Ceramics, Cotton, Fiberglass, Tobacco	Carbon, Cement, Foundry shakeout, Metal powders, Shot blast, Silica gel drying, Thermal spray
<b>Available for Collectors (see key at far right)</b>	AAT; AER; AT; AT-3000; CF; CX; DB; DCS; DF; DFE; DFO; DFT; DWS; ECB; ET; MTD; PB; PT; SDF; STD; T-2000; TBV; TD; WB	AER; AT; CF; CX; DB; DCS; DF; DFE; DFO; DFT; DWS; ECB; MTD; PB; SDF; STD; TBV; TD	AER; AT; CF; CX; DB; DCS; DF; DFE; DFO; DFT; DWS; ECB; MTD; PB; SDF; STD; TBV; TD	DCS; DF; DFE; DFO; DFT; DWS; ECB; STD; TBV; TD

Donaldson Torit cartridge filters are available for all other brands of cartridge collectors (see listing on page 5).

**SPECIALIZED FILTERS**

	<b>Ultra-Web® AS</b> 	<b>Torit-TEX™</b> 	<b>Torit-TEX CD™ Torit-TEX HCD™</b> 	<b>High Temp</b> 	<b>Dryflo®</b> 
	Carbon impregnated Cellulose with Nanofiber <sup>1</sup>	Spunbond polyester with Tetratex® PTFE membrane <sup>2</sup>	Carbon impregnated, Spunbond polyester with Tetratex® PTFE membrane <sup>2</sup>	Synthetic Kevlar/ <sup>4</sup> Nomex <sup>4</sup> formulation	Synthetic
	15	16	16	13	NA
	180°F (82°C)	200°F (93°C)	<b>CD:</b> 200°F (93°C) <b>HCD:</b> 275°F (135°C)	350°F (177°C)	150°F (66 °C)
	Good	Excellent	Excellent	Excellent	NA
	Fair	Excellent	Excellent	Good	Fair
	No	No	No	No	No
	Anti-static media, 10 <sup>11</sup> OHM resistance	Wide pleat spacing and smooth, hydrophobic, state-of-the-art PTFE membrane provides excellent particle release.	Conductive media with certified resistivity level of 10 <sup>11</sup> OHM.	Special gaskets and adhesives assure structural integrity and airtight sealing characteristics.	Prefilter coalesces smaller droplets into larger droplets.
	Chemical processing, General industrial, Pharmaceutical, Pulp and paper	Chemical processing, Food processing, General industrial	Chemical processing, General industrial, Pharmaceutical, Pulp and paper	Chemical processing, General industrial	Metalworking
	Applications where electrostatic charges can accumulate	Highly recommended for chemical, food, and industrial processing when product contamination must be minimized. Excellent performance on moist, hygroscopic, or agglomerative dust.	<b>CD:</b> Higher temperature applications where electrostatic charges can be dangerous <b>HCD:</b> Applications where electrostatic charges can be dangerous and with higher temperatures up to 275°F (135°C)	Metallurgical, Chemical and Industrial processes. Higher temperature applications up to 350°F (177°C)	Wet machining
	Coal, Plastics, Powdered materials, Carbon Black/Toner	Dextrose, Flour, Starch, Sugar, Whey	Coal, Plastics, Powdered materials, Prepared food	Cement, Coal/Coke, Ink, Paint pigment	Water soluble, straight oils
	DCS; DF; DFE; DFO; DFT; DWS; ECB; SDF; TBV; TD	AER; AT; CF; CX; DB; DCS; DF; DFE; DFO; DFT; DWS; ECB; MTD; PB; SD; SDF; STD; TBV; TD	DCS; DF; DFO; DFT; DWS; STD	AER, DCS; DF; DFE; DFO; DFT; DWS; ECB; MTD; PB; STD; TBV; TD	ADMC; C; D1-D10; DMC; DMC-MMA; MMB

Note: Optional stainless steel construction available on all cartridges.

<sup>1</sup> Nanofiber technology reduces initial penetration by as much as 90% versus conventional media by utilizing a unique layer of submicron fibers on the media's surface.

<sup>2</sup> Tetratex® PTFE membrane is comprised of millions of small, randomly connected fibers that create extremely small pore sizes to repel water while allowing air and moisture vapor to pass.

<sup>3</sup> Minimum Efficiency Reporting Value of this cartridge has been determined through independent laboratory testing using ASHRAE 52.2 test standards.

<sup>4</sup> Kevlar & Nomex are registered trademarks of E.I. DuPont de Nemours & Co., Inc.

STANDARD FILTERS				
WSO 	Vibra-Shake™ 	Ultra-Tek® 	Endura-Tek™ 	Cellulex™ 
Polyester and Glass	Cellulose	Synthetic	Cellulose and Synthetic fibers	Cellulose
NA	10	12	10	10
150°F (66°C)	150°F (66°C)	180°F (82°C)	180°F (82°C)	180°F (82°C)
NA	Good	Good	Good	Good
Good	Fair	Good	Fair	Fair
No	No	Yes	Yes	Yes
Proprietary bonding system stabilizes pore structure for optimum performance.	Pre-filter wrap sieves larger particulate.	Proprietary blend of fibers and wide pleat spacing reduce pressure drop and increase airflow.	Delivers extended filter life over traditional untreated cellulose media.	Enhanced performance due to a unique combination of fiber sizes and a more uniform fiber distribution
Metalworking	Grinding and polishing, Bag dumping	Composite grinding, Grain handling, Textiles, Woodworking	Humid climates	Superior to felts, fabrics, cotton cloths, and similar media
Metal Cutting, Grinding, Forming	Higher efficiency and easier maintenance for applications where envelope filters are typically used. Intermittent duty applications and machining	Applications with fibrous dusts of >10 micron particulate	Ambient, non-fibrous dust applications under humid conditions. Economical choice for operations with forced or cyclical filter replacement (independent of pressure drop)	Applications with dry, coarse particulate. Economical choice for operations with forced or cyclical filter replacement (independent of pressure drop)
Water soluble, straight oils and Oily smoke	Metal grinding, Carbon dust, Graphite dust	Ceramics, Composites, Fiberglass, Wood dust	Gypsum, Lime, Shot blast	Various
WSO-10; WSO-15; WSO-20; WSO-25	RVS; SP; VS	AER; AT; CX; DB; DCS; DF; DFO; DFT; DWS; ECB; MTD; PB; SDF; TBV; TD	AER; AT; CF; CX; DB; DCS; DF; DFO; DFT; DWS; ECB; MTD; PB; STD; TD	AER; AT; CX; DB; DCS; DF; DFO; DFT; DWS; ECB; MTD; PB; SDF; STD; TBV; TD

**COLLECTOR NAME GUIDE**

AAT..... Ambient Air Tubesheet	DFT..... Downflo II	RVS..... Round Vibra Shake
ADMC..... Advanced Dryflo® Mist Collector	DMC; C; D1-D10..... Dryflo® Mist Collector	SDF..... Downflo SDF
AER..... AerBooth™	DMC-MMA; MMB..... Dryflo Machine-Mountable	SP..... ShopPro™
AT..... AerTable™	DWS..... Downflo WorkStation	STD..... Small TD
AT-3000..... Ambient System	ET..... Environmental Control Booth	T-2000..... Trunk 2000®
CF..... CF Series	ET..... Easy-Trunk®	TBV..... Torit® Bin Vent
CX..... CX Series	MTD..... MTD	TD..... Large TD
DB..... Downdraft Bench	PB..... ProBooth™	VS..... Vibra Shake™
DCS..... Downflo® Containment System	PT..... Porta-Trunk®	WB..... Weld Bench
DFE..... Downflo Evolution		
DFO..... Downflo Oval		

# CARTRIDGE FILTER BREAKTHROUGHS

## UNPARALLELED TECHNOLOGY

As the world leader in air filtration for nearly 100 years, Donaldson Company continually strives to engineer filters that outperform all others. Donaldson Company set the standard in cartridge filter technology with innovations like our proprietary nanofiber filter media.

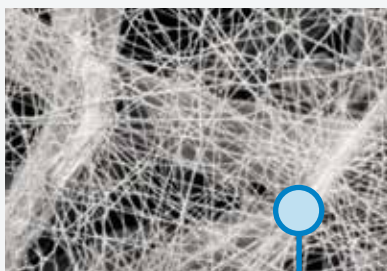
Nanofiber media is the most efficient and cost-effective choice available for most dust, fume and mist collection processes. Donaldson Torit offers a full range of high performance cartridges for almost any application.

## EXPERIENCE THE NANOFIBER ADVANTAGE

- Increased surface loading
- Captures submicron contaminants
- Enhances dust cake release
- Better cleaning efficiency
- Lower cost per cubic foot of air per minute
- Lower energy cost

### NANOFIBER FILTER MEDIA

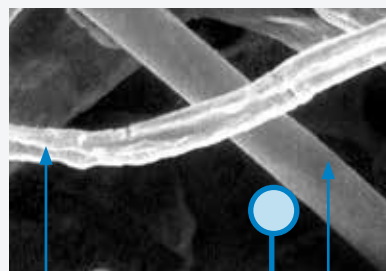
The distinguishing factor in our Ultra-Web<sup>®</sup>, Ultra-Web<sup>®</sup> SB, Fibra-Web<sup>®</sup>, Thermo-Web<sup>®</sup>, and Ultra-Web<sup>®</sup> AS filters is nanofiber filtration technology. It uses a layer of fibers 0.2 to 0.3 microns in diameter to capture contaminants less than one micron in size. With nanofiber filters, dust particles rapidly accumulate on the filter surface to build a thin, permeable dust-stopping cake. As a result, Ultra-Web, Ultra-Web SB, Fibra-Web, Thermo-Web, and Ultra-Web AS filters offer the highest filtration efficiency by eliminating premature filter plugging and allowing the dust cake's release during the collector's cleaning cycle.



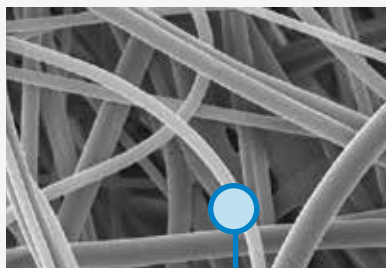
10 Micron  
Nanofiber Technology (600x)



10 Micron  
Cellulose Media (600x)



10 Micron  
Cellulose/Synthetic Media Blend (600x)



10 Micron  
Meltblown Media (600x)



10 Micron  
Spunbond Media (600x)

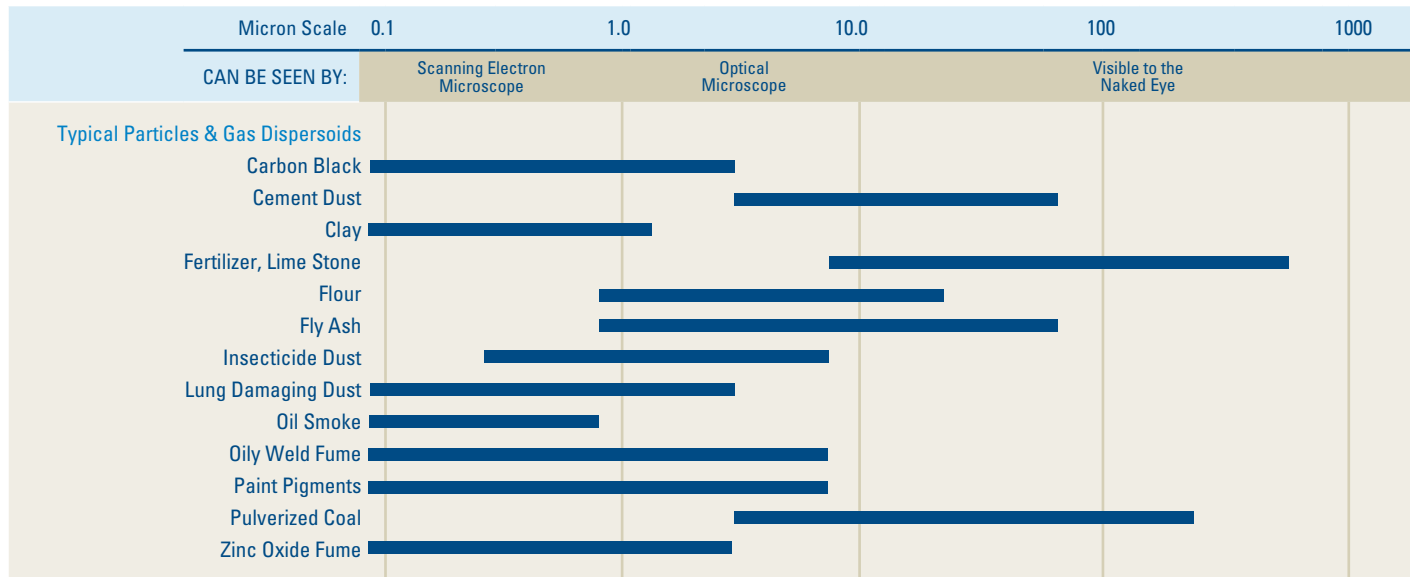
1 micron = 1/25,400 of an inch  
(1/1,000 of a millimeter)

# OPERATING ADVANTAGES

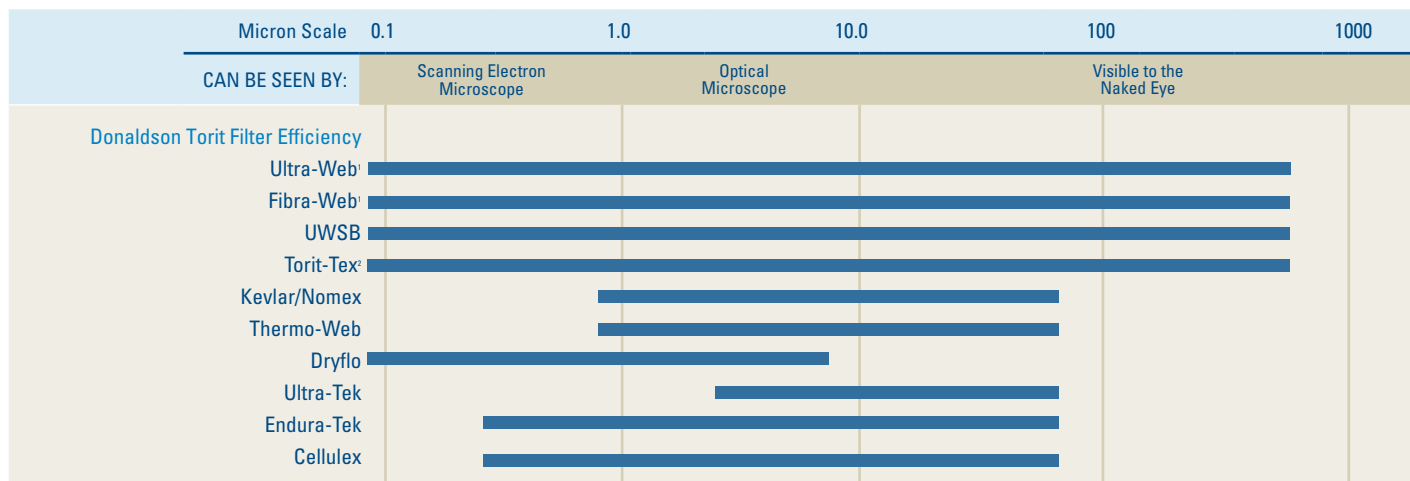
## DONALDSON TORIT FILTERS PERFORM

We are the world leader in filtration solution science and technology. We cover a wide range of industrial air filtration applications with a variety of cartridge filter models that provide the highest levels of performance on all types of dust, fume and mist.

## PARTICLE SIZE RANGE OF COMMON CONTAMINANTS



## CARTRIDGE FILTERS OPTIMUM PERFORMANCE SCALE



<sup>1</sup> Ultra-Web and Fibra-Web cartridge filters use nanofiber technology to provide an initial filtration efficiency of up to 10 times greater than conventional media.

<sup>2</sup> Torit-Tex cartridge filters use Tetratex<sup>®</sup> PTFE membrane, which repels water while allowing air and moisture vapor to pass through the membrane's extremely small pores.



# UNPARALLELED SERVICE & SUPPORT

## HERE TO SERVE YOU

Providing technically advanced filters with the longest filtration life is just one of Donaldson Torit's distinctions. When it comes to customer support, no other filter manufacturer can match Donaldson Torit's technical expertise and commitment. Rely on Donaldson Torit to help you choose the best filters for your applications.

## Full-Line Cartridge Filter Offering

With hundreds of varieties to choose from, Donaldson Torit offers the broadest selection of cartridge filters for all popular makes and models of cartridge collectors.

## Knowledgeable Support

Donaldson Torit aftermarket sales representatives and parts specialists help customers select the best filters for their application needs.

## Quick Delivery

All in-stock Donaldson Torit made filters are shipped within 24 hours of order placement.

## Product Support

Donaldson Torit filters are stocked and distributed quickly through two strategically located Product Distribution Centers. With more than 612,000 square feet of warehouse space, our distribution centers ensure that our filters arrive promptly at their destinations.

## Easy Access

Call Donaldson Torit customer service at [800-365-1331](tel:800-365-1331) or visit us at [donaldsontorit.com](http://donaldsontorit.com).

## ULTRA-WEB®

for cartridge collectors

- AAF®
- Aercology®
- Airflow® Systems
- Clemco®
- Environmental Systems Designs
- Farr
- Geoff
- MAC
- Micro Air®
- Nordson
- Pneumafil
- Robovent®
- Steelcraft®
- Trion®
- UAS®
- Wheelabrator
- + Many others



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## Global Support

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- Over 1,000 engineers and scientists worldwide
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- 100s of filter media formulations

## Experience and Service

- Technical expertise and support
- Ready-to-ship filters and parts within 24 hours

Call Donaldson® Torit® to get cleaner air today:

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**EXACTLY WHAT YOU NEED.™**

**Cartridge Filters (11/15)**  
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