Donaldson®
Torit®

Torit-Built®
Filter Cartridges

Donaldson

Torit-Built® Filter Cartridges

Ultra-Web® Filters Have No Equal

Torit-Built® filters keep dust collectors operating at peak performance. Offered for a full range of dust, fume and mist collection applications, Torit-Built filters—especially our patented Ultra-Web® filters—outperform and outlast other filters. When it comes to Torit-Built 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.

Torit-Built filters offer:

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

Dryflo® Mist Collector

Environmental Control Booth

Downflo® Oval 1™ Dust Collector

Torit-Built® Filter Cartridges

The Value of Ultra-Web® Filters

Don't be fooled by the initial lower purchase price of will-fit cartridge filters. Using generic brand filters can be an expensive proposition. Will-fit filter cartridges don't last as long and must be replaced more often than Torit-Built filters. And that means buying and replacing more filters, more often—which costs more 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 will-fit 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® EZ	Ultra-Web®
Purchase price per cartridge	$59	$70	$94	$94
Filter life	8 months	9 months	12 months	12 months
Number of filter changes	3	3	2	2
Total purchase cost for filters	$2,832	$3,360	$3,008	$3,008
Disposal cost = $50 per drum Total disposal cost for 16 filters after 30 months	$2,400	$2,400	$ 600*	$1,600
Changeout cost (do-it-yourself) Total changeout cost for filters	$ 450	$ 450	$ 300	$ 300
Total investment	**$5,682**	**$6,210**	**$3,908**	**$4,908**

Total Savings With Ultra-Web Filters

Ultra-Web Filter Costs Compared With Generic Filter Costs	Ultra-Web EZ	Ultra-Web
Generic cellulose total investment	$5,682	$5,682
Ultra-Web total investment	(3,908)	(4,908)
Ultra-Web savings	**$1,774**	**$ 774**
Generic cellulose/synthetic fiber blend total investment	$6,210	$6,210
Ultra-Web total investment	(3,908)	(4,908)
Ultra-Web savings	**$2,302**	**$1,302**

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.

*Ultra-Web EZ filters are crushable to fit three filters in one drum for reduced disposal requirements and costs.

Torit-Built® Filter Cartridges

Filter Options

	Ultra-Web® 	Ultra-Web® NL 	Ultra-Web® EZ 	Fibra-Web® 
Base media	Cellulose	Cellulose	Cellulose	Synthetic
Superior particle release	Nanofiber[1]	Nanofiber	Nanofiber	Nanofiber
BIA C[3] –High initial efficiency of 99.9% on 0.2-2 micron	Yes	Yes	Yes	Yes
Operating efficiency	99.999% on 0.5 micron	99.999% on 0.5 micron	99.999% on 0.5 micron	99.999% on 0.5 micron
Washable	1 time	1 time	1 time	Up to 3 times
Maximum operating temperature	150˚F / 65˚C	150˚F / 65˚C	150˚F / 65˚C	150˚F / 65˚C
Abrasion resistance	Good	Good	Good	Excellent
Chemical tolerance	Fair	Fair	Fair	Good
Optional flame retardant media (FR)	Yes	Yes	Yes	Yes
Special characteristics	Highest efficiency similar to membrane products at a much lower price.	Construction without outer liner enhances performance on agglomerative dusts.	Provides compact disposal - saves 67% of disposal costs.	Wide pleat spacing provides thorough pulse cleaning of fibrous and agglomerative particles.
Markets	Metalizing, Pharmaceutical, Thermal Spray, Welding	Dry chemical processing, Pharmaceutical, Powder coating	Battery recycling, Foundry, Mining, Welding	Composite grinding, Food processing, Grain handling, Metal buffing, Pharmaceutical, Textiles, Woodworking
Applications	Premium performance on ambient, extremely fine and non-fibrous dust and some abrasive dust. High filtration efficiency on very fine particulate of <1 micron.	Premium performance on ambient, extremely fine and non-fibrous dust. High filtration efficiency. Enhanced dust release.	Premium performance on ambient, extremely fine and non-fibrous dust. Light weight, compact, and crushable filters reduce disposal costs by 67%.	Excellent performance on combination fibrous and non-fibrous dust, and/or agglomerative dust.
Dust types	Fumed silica, Metallic fume, Metallurgical powders, Oily weld fume	Activated carbon, Pharmaceutical dust, Powder paint	Cadmium, Chromium, Lead, Silver	Ceramics, Cotton, Fiberglass, Tobacco
Available for collectors (see key at far right)	AAT; AT-3000; DB; DFO; DFT; ECB; ET; PT; SDF; T-2000; TBV; TD; WB	DFO; DFT; ECB; TBV; TD	DB; DFT	DFO; DFT; ECB; SDF; TBV; TD

Color Chart		
Nanofiber Filters	Specialty Filters	Standard Filters

*Dust Hog and SupraBlast are registered trademarks of United Air Specialists.
Mactiflo is a registered trademark of MAC, Inc.
Optiflo is a registered trademark of American Air Filter.
Tenkay is a registered trademark of FARR Inc.
Kevlar/Nomex are registered trademarks of E.I. Dupont de Nemours & Co., Inc.

Torit-Built® Filter Cartridges

Filter Options

	Ultra-Web® CE 	Torit-Tex™ 	Torit-Tex™ CD 	Torit-Tex™ HCD 	Kevlar*/ Nomex* 	Thermo-Tek® 
	Cellulose	Calendered, Spunbond polyester	Carbon impregnated, Calendered, Spunbond polyester	Carbon impregnated, Calendered, Spunbond polyester	Synthetic	Synthetic
	Nanofiber	Tetratex® PTFE Membrane[2]	Tetratex® PTFE Membrane[2]	Tetratex® PTFE Membrane[2]		
	No	Yes	Yes	Yes	No	No
	99.999% on 0.5 micron	99.999% on 0.5 micron	99.999% on 0.5 micron	99.999% on 0.5 micron	99.99% on 1-10 micron	99.99% on 1 micron
	1 time	Several times	Several times	Several times	None	Up to 3 times
	150˚F / 65˚C	200˚F / 93˚C	200˚F / 93˚C	275˚F / 135˚C	350˚F / 177˚C	275˚F / 135˚C
	Good	Excellent	Excellent	Excellent	Excellent	Excellent
	Fair	Excellent	Excellent	Excellent	Good	Excellent
	Yes	No	No	No	No	No
	Enhanced performance due to improved efficiency and dust cake release during pulse cleaning.	Wide pleat spacing and smooth, hydrophobic, state-of-the-art PTFE membrane provides excellent particle release.	Conductive media with certified resistivity level of 10^4 OHM.	Conductive media with certified resistivity level of 10^4 OHM.	Special gaskets and adhesives assure structural integrity and airtight sealing characteristics.	Excellent chemical tolerance—stainless steel option only.
	Retrofit, superior to cellulex and cellulex/ synthetic blend filter media.	Chemical processing, Food processing, General industrial	Chemical processing, General industrial, Pharmaceutical, Pulp and paper	Chemical processing, General industrial, Pharmaceutical, Pulp and paper	Chemical processing, General industrial	Cement processing, Chemical processing, Metallurgical, Pharmaceutical
	Retrofit for use in Dust Hog®*; SupraBlast®*; Mactiflo™*; Optiflo®*; Tenkay®*, Wheelabrator, and others.	Highly recommended for chemical, food, and industrial processing when product contamination must be minimized. Excellent performance on moist, hygroscopic, or agglomerative dust.	Applications where electrostatic charges can be dangerous.	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.	Metallurgical, Chemical, and Industrial applications. Higher temperature applications.
	Various	Dextrose, Flour, Starch, Sugar, Whey	Coal, Plastics, Powdered materials, Prepared food	Coal, Plastics, Powdered materials, Prepared food	Cement, Coal/Coke, Ink, Paint pigment	Carbon, Cement, Foundry shakeout, Metal powders, Shot blast, Silica gel drying, Thermal spray
	Competitive brand equipment	DFO; DFT; ECB; SDF; TBV; TD	DFT	DFT	DFT; ECB; TBV; TD	DFO; DFT; ECB; TBV; TD

Note: Optional stainless steel construction available on all cartridges.

1. Nanofiber technology provides an initial filtration efficiency of up to 10 times greater than conventional media by utilizing a unique layer of submicron fibers on the media's surface.
2. 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.
3. BIA C-certificate available upon request. BIA C certifies initial efficiency.

Torit-Built® Filter Cartridges

Filter Options

Dryflo® 	Vibra Shake™ 	Ultra-Tek® 	BonDura™ 	Endura-Tek™ 	Cellulex™ 
Synthetic	Cellulose	Synthetic	Calendered, Spunbond polyester	Cellulose and Synthetic fibers	Cellulose
No	No	No	No	No	No
98% on 1.8 micron	99.99% on 0.5 micron	99.99% on 5 micron	99.99% on 1-10 micron	99.99% on 0.5 micron	99.99% on 0.5 micron
None	None	Up to 3 times	Several times	Up to 3 times	None
150˚F / 65˚C	150˚F / 65˚C	150˚F / 65˚C	200˚F / 93˚C	150˚F / 65˚C	150˚F / 65˚C
N/A	Good	Excellent	Excellent	Good	Good
Fair	Fair	Good	Excellent	Fair	Fair
No	No	Yes	No	Yes	Yes
Prefilter coalesces smaller droplets into larger droplets.	Prefilter sieves larger particulate.	Proprietary blend of fibers and wide pleat spacing reduce pressure drop and increase airflow.	Excellent moisture resistance and dust release properties.	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	Surface blasting, Grinding and polishing, Powder coating	Humid climates, Retrofit	Retrofit, superior to felts, fabrics, cotton cloths, and similar media
Wet machining	Higher efficiency and easier maintenance for applications where envelop filters are typically used. Intermittent duty applications and machining.	Applications with fibrous dusts of >10 micron particulate. Washable applications.	Very good performance on surface treatment applications and abrasive dust. Very good in high moisture and on agglomerative dust.	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, Semi-synthetic and synthetic coolants	Metal grinding, Carbon dust, Graphite dust.	Ceramics, Composites, Fiberglass, Wood dust	Metal grinding, Powder coating, Shot blast	Gypsum, Lime, Shot blast	Various
ADMC; DMC-MMA; MMB; DMC; C; D1-D10	RVS; VS	DFO; DFT; ECB; SDF; TBV; TD	DFT; ECB; SDF; TBV; TD	DFT; ECB; TD	DFT: ECB TBV; TD

Collector Acronym	Collector Name	Collector Acronym	Collector Name	Collector Acronym	Collector Name
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
AT-3000	Ambient System	DMC-MMA; MMB	Dryflo- Machine Mountable	TBV	Torit Bin Vent
DB	Downdraft Bench	ECB	Environmental Control Booth	T-2000	Trunk 2000
DFO	Downflo Oval I	ET	Easy-Trunk	VS	Vibra Shake
		PT	Porta-Trunk	WB	Weld Bench

Cartridge Filter Breakthroughs

Unparalleled Technology As the world leader in air filtration for nearly 90 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.

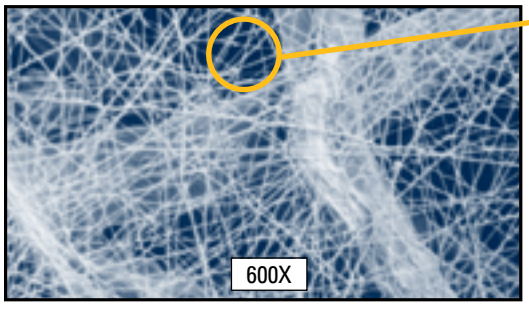
Nanofiber media is the most efficient and cost-effective choice available for most dust, fume and mist collection processes. Donaldson Torit offers a full range of high performance cartridges for almost any application.

Experience the Nanofiber Advantage

- Increased surface loading
- Captures sub-micron contaminants
- Enhances dust cake release
- Better cleaning efficiency
- Lower cost per cubic foot of air per minute (cfm)
- Lower energy cost

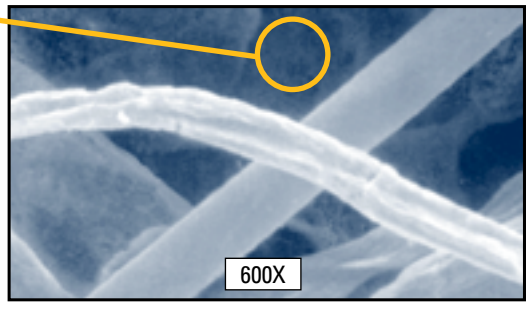
Nanofiber Filter Media The distinguishing factor in our Ultra-Web and Fibra-Web filters is nanofiber filtration technology. It uses a layer of fibers 0.2 to 0.3 microns in diameter to capture contaminants less than one micron in size. With nanofiber filters, dust particles rapidly accumulate on the filter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

Nanofiber Media



Nanofiber technology is available in all Ultra-Web and Fibra-Web replacement filter cartridges.

Standard Cellulose Media



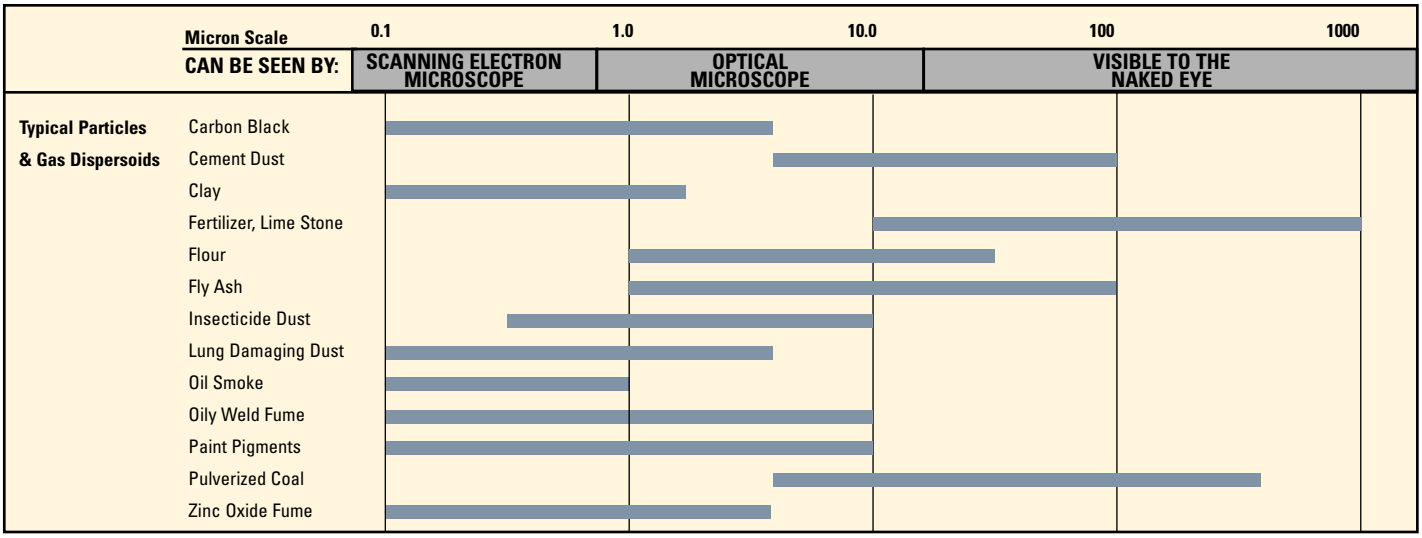
Conventional cellulose media has spaces of up to 60 microns between fibers, allowing dust to become deeply imbedded.

Torit-Built® Filter Cartridges

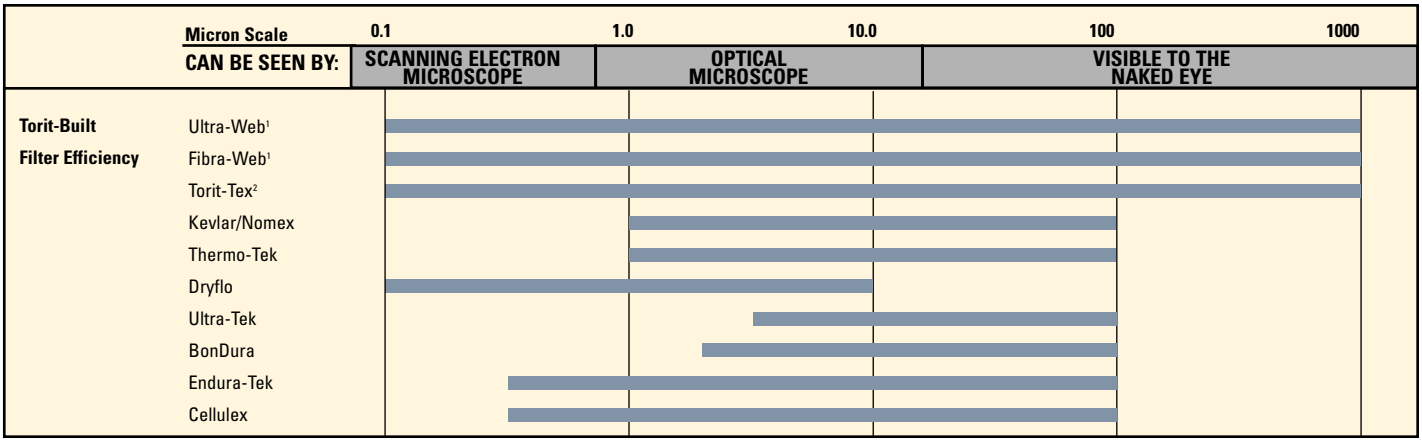
Operating Advantages

Donaldson Torit Filters Perform The world of air filtration revolves around Donaldson Torit. 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 filter cartridge models that provide the highest levels of performance on all types of dust, fume and mist.

Particle Size Range of Common Contaminants



Filter Cartridge Performance Scale



1. Ultra-Web and Fibra-Web filter cartridges use nanofiber technology to provide an initial filtration efficiency of up to 10 times greater than conventional media.

2. Torit-Tex filter cartridges use Tetratex® PTFE membrane, which repels water while allowing air and moisture vapor to pass through the membrane's extremely small pores.

Toll Free: (800) 495-2249

PROCESS ENVIRONMENTS

Air Filtration Systems for Industry

Dust Collection • Fume Extraction • Mist Control • General Ventilation
System Design • Ductwork • Sheet Metal Fabrication
Turn-Key Installations • Replacement Parts & Filters • Maintenance Contracts

Replacement filters for all types of dust, mist, and fume collectors.
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