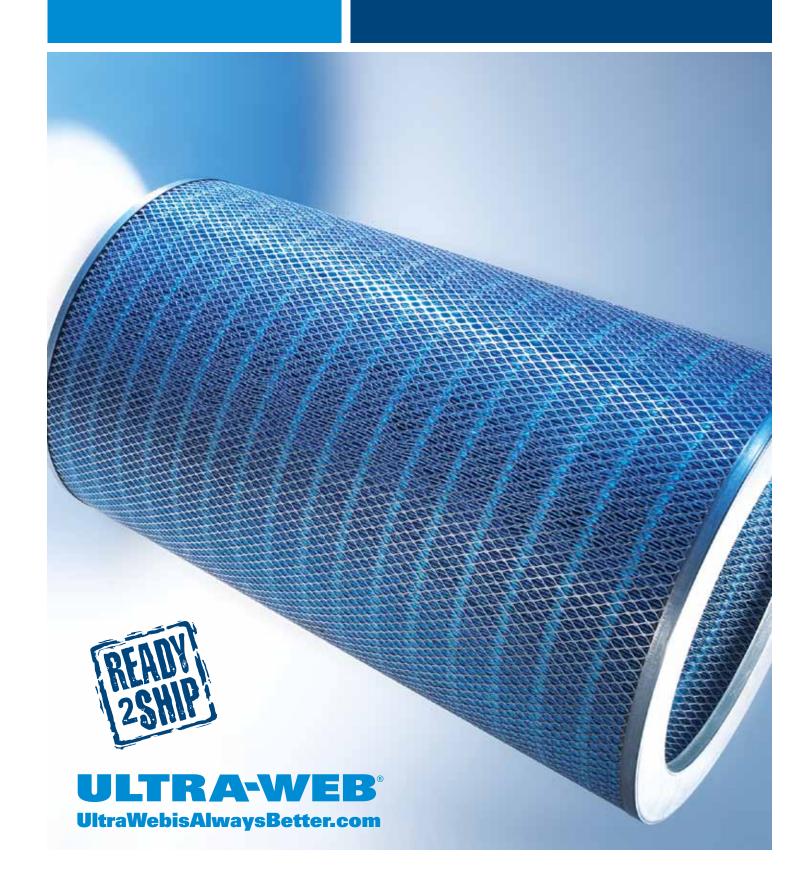
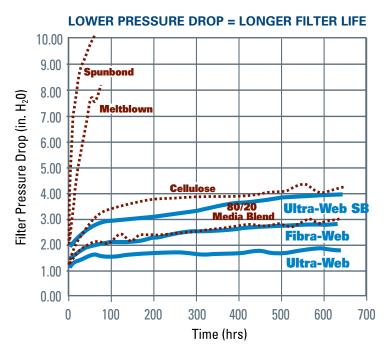
# Donaldson. Torit

**ULTRA-WEB®** 



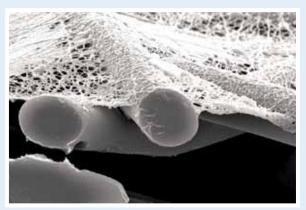
## 3 Decades of Longer Filter Life

For more than three decades, DonaldsonTorit has advanced our Ultra-Web technology to provide a complete line of cartridge filters that last up to twice as long as commodity cellulose and cellulose/ synthetic (80/20) blend medias. Pressure drop starts high and rises quickly with depth-loading commodity filters, resulting in shorter filter life and greater energy use. Ultra-Web's surface loading technology is scientifically proven to provide lower operating pressure drop over a longer period of time, which allows the filter to last longer while requiring less energy.



Results were derived testing Atomite test dust in an 8-cartridge collector @1.0 gr./cu.ft, Goyen Millennium valves, 90 psi cleaning pressure, 100ms on time 10 second off time. Airflow goal = 4064 scfm.

#### **CLEAN ULTRA-WEB FILTER**



# SURFACE-LOADED ULTRA-WEB FILTER (SUBSTRATE STILL CLEAN)

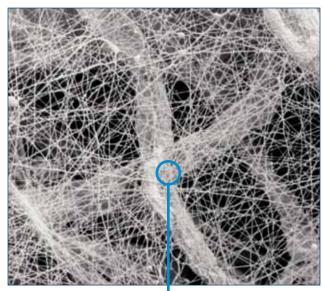


Ultra-Web nanofiber media is loaded with ISO fine dust. Dust particles collect on the surface of the media and clean off easily while the substrate stays clean. A depth-loading filter would allow dust particles to penetrate deeply into the substrate where they build up and choke off the airflow.

# **Proprietary Technology That Performs**

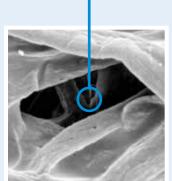
Proven and proprietary Ultra-Web® technology delivers longer filter life, cleaner air and greater cost savings than other types of cartridge filter media. Made with an electrospinning process that produces a very fine, continuous, resilient fiber of 0.2-0.3 micron in diameter, Ultra-Web forms a permanent nanofiber web with very fine interfiber spaces that trap dust on the surface of the media.

- Superior media is more efficient in capturing submicron dust particles
- Longer filter life and better pulse cleaning due to surface loading technology
- Lower energy and less compressed air use with better pulse cleaning and lower operating pressure drop
- MERV 15, 14 and 13 filtration efficiencies to meet specific application needs

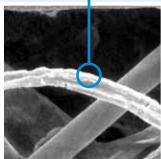


ULTRA-WEB TECHNOLOGY

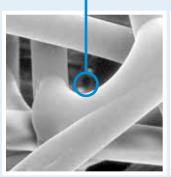
10 Micron
Particulate
At 600X



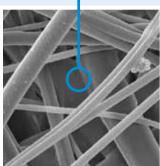
CELLULOSE



**CELLULOSE/SYNTHETIC** 



**SPUNBOND** 



**MELTBLOWN** 



# **Engineered to Perfection**

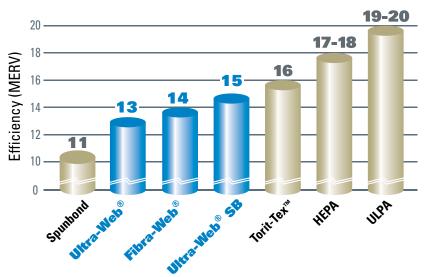
A filter must be rated at least a MERV 13 on the ASHRAE 20-point scale to effectively filter submicron dust particles. Donaldson® Torit® has perfected our standard pre-HEPA MERV 13-rated Ultra-Web cartridge filters to optimize filtration without sacrificing filter life or increasing pressure drop.

For applications that require even higher efficiency, there's an Ultra-Web filter to meet your needs.

CARTRIDGE FILTER	MERV	3-10 μm	1-3 µm	0.3-1 μm
Ultra-Web SB	15	✓	✓	✓
Fibra-Web	14	<b>√</b>	✓	✓
Ultra-Web	13	✓	✓	✓
Typical Spunbond	11	✓	✓	<b>*</b> *
Typical Cellulose	10	✓	✓	<b>*</b>
Typical 80/20 Blend	10	✓	✓	<b>X</b> *

Ultra-Web efficiently captures submicron dust particulate. Cellulose and 80/20 blend media are not efficient enough to rate on submicron dust particulate. Typical cellulose and 80/20 blend media are rated to capture 1-3 micron dust particles and some competitive 80/20 blend media is only rated to capture larger 3-10 micron particulate.

#### **HIGHER EFFICIENCY = CLEANER AIR**



Ultra-Web MERV 13, 14, 15 efficiency has been certified by independent lab tests and tested per the ASHRAE Standard 52.2-2007, the most current industry accepted test method used to evaluate filter performance.

<sup>\*</sup> Not efficient enough to rate

### **Count on Significant Savings**

Savvy engineers with their eye on the bottom line know that Ultra-Web equals significant cost savings. Ultra-Web filters last longer, resulting in fewer filter changes, lower replacement and labor costs, and less production downtime. With lower pressure drop due to surface loading of dust, the energy and compressed air costs are also dramatically lower. For proven technology that delivers energy, maintenance and filter cost savings, there's only one solution—Ultra-Web.

#### **LOWER PRESSURE DROP SAVES ENERGY**

	80/20 Media Blend	Ultra-Web Nanofiber Media
Cartridge Filter	24	24
Airflow ACFM	18,000	18,000
Operating Delta P	4"	2"
Motor HP	50	40
Brake HP	42.1	35.2
Kilowatt Hours	51,400	25,700
Annual Energy Usage (in dollars)	\$5,140	\$2,570
Ultra-Web Savings	NA	\$2,570

# ULTRA-WEB® CUTS ENERGY COSTS IN HALF



This is one example of energy savings due to lower pressure drop. Energy savings can further increase with larger collectors. These energy savings are calculated based on the following assumptions: Cartridge collector running 4000 hours per year and energy costs are 10 cents per kilowatt hour.

#### FEWER CHANGEOUTS SAVE ENERGY, MAINTENANCE & FILTER COSTS

Number of Ultra-Web Cartridges	Annual Maintenance & Filter Cost Savings	Annual Compressed Air Savings	Annual Energy Savings	Total Annual Savings
8	\$713	\$560	\$857	\$2,130
12	\$1,069	\$560	\$1,285	\$2,914
24	\$2,139	\$672	\$2,570	\$5,381
36	\$3,208	\$1,008	\$3,855	\$8,071
48	\$4,278	\$672	\$5,140	\$10,090
72	\$6,417	\$1,008	\$7,710	\$15,135
96	\$8,556	\$1,120	\$10,280	\$19,956
128	\$11,408	\$1,120	\$13,707	\$26,235

Maintenance and filter replacement calculations are based on a comparison of 80/20 media blend cartridges and Ultra-Web nanofiber cartridges. 80/20 media filters are replaced after six months. Ultra-Web filters provide twice the life of 80/20 media filters. 80/20 media filters are priced at \$80 each, Ultra-Web filters are \$124 each. Labor rate equals \$50 per hour, filters are replaced at a rate of 16 filters/hour and disposal costs are \$50/drum.



#### WITHOUT A DOUBT, **ULTRA-WEB IS ALWAYS BETTER**

Ultra-Web filters ship in 24 hours and are available for all popular collectors.

- Micro Air®
- Nordson
- Pneumafil
- Robovent®
- Steelcraft<sup>®</sup>
- Trion®
- UAS®
- Wheelabrator
- + Many others

#### **UltraWebisAlwaysBetter.com**

Significantly improve the performance of your collector with genuine Donaldson Torit replacement filters and parts. Browse our catalog at donaldsontorit.com



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Brochure Ultra-Web (03/11)

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