



## **Go Twice the Distance With Donaldson Endurance™ Air Filters**

**With Ultra-Web® Nanofiber Filtration Technology**



**Donaldson Endurance extended service air filters increase engine protection with high efficiency filtration, extend service intervals, and at the end of the day ... reduce your fleet's maintenance costs.**

Donaldson®

# Donaldson Endurance™ Air Filters Can Reduce Maintenance Costs

Donaldson Endurance™ air filters, made using Donaldson's advanced Ultra-Web® nanofiber technology, deliver cost saving benefits:

- Longer filter life with submicron contaminant
- Ideal for extended maintenance intervals
- Longer engine life

So whether you want to extend maintenance intervals to the limit or extend engine life, the use of Donaldson Endurance high efficiency filters can lower your total operating costs.



There are over thirty Donaldson Endurance™ air filters available for popular Donaldson air cleaner housings models.

## Ultra-Web® Nano

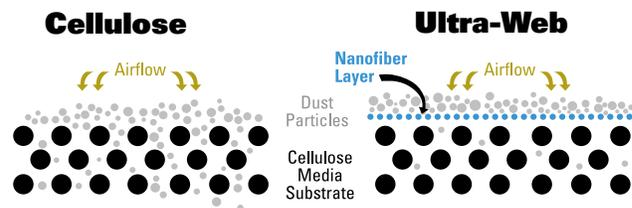
Ultra-Web® nanofiber technology causes submicron contaminant to load on the surface rather than dispersing throughout the depth of the filter where there is less area for the air to flow. Therefore, in

on highway applications, where the contaminant is primarily submicron in size, Donaldson Endurance filters with Ultra-Web

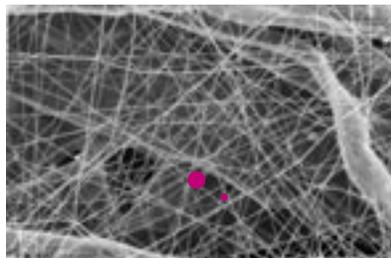
### Ultra-Web® by Donaldson

technology cause less restriction than conventional filters with cellulose media. The smaller, interfiber spaces of Ultra-Web nanofiber technology have higher efficiency and capture more contaminant.

#### Media Comparative Cross Section

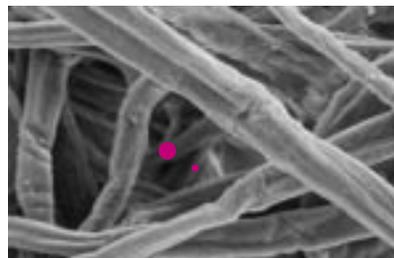


#### Ultra-Web and Cellulose Photos at Same Magnification



Ultra-Web nanofibers have submicron diameters and small interfiber spaces, which result in more contaminant being captured on the surface of the media and lower restriction.

Gold circles represent the diameter of a 2µ and a 5µ particle.



Cellulose fibers are larger than Ultra-Web® nanofibers, and have larger spaces between the fibers, causing contaminant to load in the depth of the media and plug the airflow path; resulting in higher restriction and less capacity.

# Nanofiber Filtration

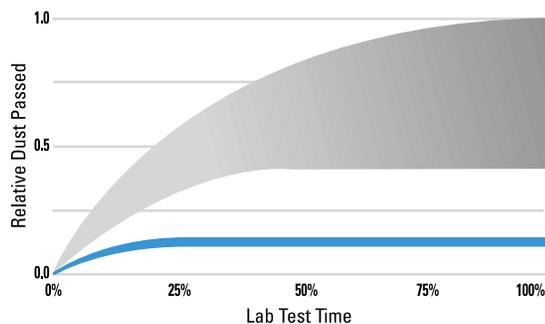
## Ultra-Web® vs. Conventional Cellulose

### Longer Engine Life

In laboratory and field tests, Donaldson Endurance™ air filters provided better engine protection by allowing less contaminant to pass through the media than cellulose air filters. Donaldson Endurance air filters also reach a 99.99% initial efficiency faster than cellulose filters.

#### Efficiency (Tested with Submicron Particles)

■ Donaldson Endurance with Ultra-Web  
■ Range of Conventional Cellulose Media

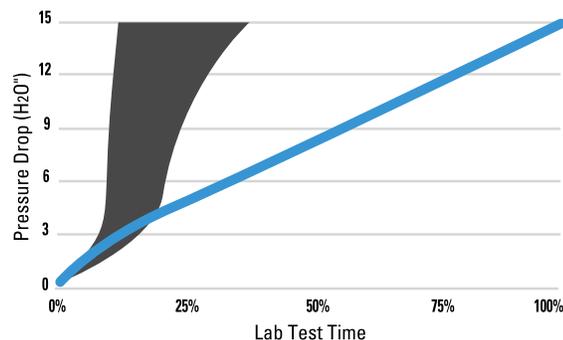


### Longer Filter Life

Donaldson Endurance™ air filters hold up to five times more contaminant than cellulose air filters, making them ideal for extended maintenance intervals for on highway trucks.

#### Capacity (Tested with Submicron Particles)

■ Donaldson Endurance with Ultra-Web  
■ Range of Conventional Cellulose Media



## Success Stories

- B & B Transport in Michigan extended their air filter change interval from 150,000 to 300,000+ miles.
- Jack Cooper Transport in Missouri reduced silicate in their engine oil with the use of Donaldson Endurance air filters.
- In field tests with large fleets, Donaldson Endurance air filters have reached over 400,000 miles with their intake restriction still within acceptable limits.



M-1 tank in desert operation. Ultra-Web nanofiber technology is currently in use on M-1 tanks extending operating time in high dust desert conditions.

# Donaldson® Endurance

**Air Filters are built to go the distance. Ask about our "Twice the Distance Guarantee!"**

## Get the Most of Your Air Filter

Air filter service indicators help to maximize filter life. For ease of maintenance, we recommend the continuous reading devices: The Informer™ or the service gauge for your instrument panel.

Donaldson air restriction indicators and gauges are resistant to vibration, breakage, weather, corrosion, dust and dirt. For more information, regarding servicing by restriction, contact Donaldson or your local Donaldson distributor.



## Donaldson Endurance Lube Filters

Donaldson Endurance® lube filters are available for many popular heavy-duty engines. These filters can either extend your filter life or with Donaldson Endurance Plus - extend your oil drain intervals.

The Synteq™ Media Technology in Donaldson Endurance lube filters have higher dirt holding capacity at the same pressure differential and higher efficiency compared to conventional cellulose filters.



Donaldson®

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