

More Airflow, less Filter Media

Simply the best dust collectors available

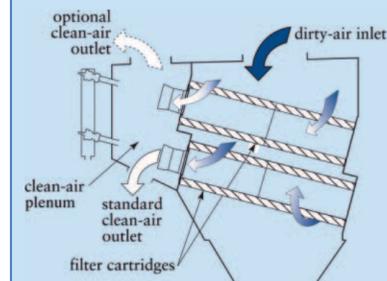
The full line of DFO collectors offer a variety of benefits that distinguish them from all other collectors available in the market today.

- ▶ Easy to use Quick-release handles provide easy cover removal and faster filter access (for temperatures below 80°C).
- ▶ Compact smaller footprints for applications that require maximum cleaning efficiency in even smaller spaces.
- ▶ Powerful DFO collectors provide 25% more capacity than same-sized dust collectors.

25%
more capacity

- ▶ Cost effective The patented ExtraLife™ Filter Cleaning System averages up to 30% increase in pulse cleaning energy for unmatched cleaning ability.

Normal Operations for Models 2-8 to 4-128



- ▶ Innovative unique oval-shaped Ultra-Web® cartridge filters provide the longest filter life and highest filtration efficiency - which lowers cost.



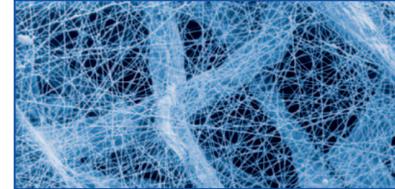
DFO Models 2-8 to 4-128

- ▶ 23 standard model sizes
- ▶ Customised sizes available
- ▶ Many options and accessories
- ▶ Exceptionally compact design

The Remarkable Story of DFO Began with the Oval Cartridge Filter Itself

- ▶ **Ultra-Web® Nanofibre Media.** A dramatic departure from traditional circular-shaped cartridge filters, DFO's oval-shaped filters, in conjunction with our patented nanofibre filter media, trap more dust on the surface of the filter than conventional commodity types of filter media such as depth-loading cellulose, polyester or cellulose/polyester blend.

ULTRA-WEB FILTER MEDIA (600X)



COMMODITY FILTER MEDIA (600X)



The innovation continued with DFO's Shorter, Stiffer Filter Pleats

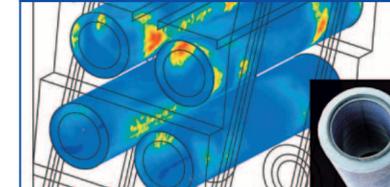
- ▶ **DFO Filter Media Pleats.** Shorter and stiffer filter pleats help minimise dust entrapment and simplify filter cleaning. By reducing the height of the filter pleats from the standard 50mm to 38mm, the pleat wall is less likely to collapse or bend, an event which can encapsulate dust and prevent its expulsion.



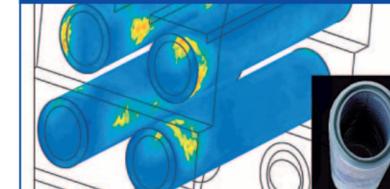
New Oval Shape Contributed to Higher Airflow Capacity

- ▶ **High Performance Filters.** The Downflo Oval filter design is a reflection of Donaldson's commitment to technical research and development. Oval-shaped filters handle up to 25 percent more airflow without increasing velocities, which can cause filter abrasion. Sophisticated Fluent® airflow modelling software revealed that oval-shaped cartridge filters have fewer areas of high velocity, resulting in a lower potential for media abrasion and increased filter life.

STANDARD COLLECTOR: 12430 m³/hr



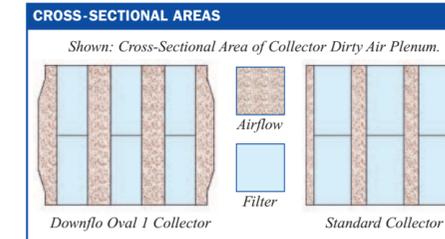
DOWNFLO OVAL COLLECTOR: 15540 m³/hr



Better Filtration, Prolonged Filter Life

Technical Discoveries improved Filtration Performance and prolonged Filter Life

- ▶ **Convex Side Walls.** A new casing design with convex side walls streamlined the airflow path and increased the casing's cross-sectional area. The convex side walls provided more space between filters, lowered internal velocities and reduced the potential for media abrasion.



Cross-sectional area of collector dirty air

- ▶ **Pulse Cleaning Technology.** ExtraLife Filter Cleaning System uses proprietary, computer-modelled pulse cleaning technology to easily "pulse off"

dust from the surface of the filter, improving filtration efficiency and prolonging filter life. The red lines in the illustration show the increased pressure at the front of the Downflo filter generated by the ExtraLife system. The blue line shows the pulse signature of a standard cartridge collector.

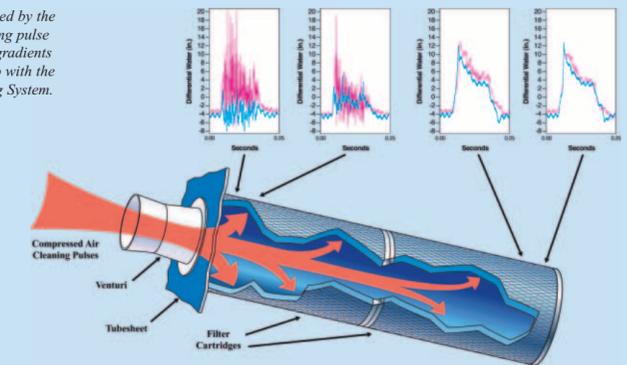
Operating Advantages & Conditions

- ▶ **Easy Maintenance.** With the new design of the DFO's quick-release access handles, filter removal and maintenance is extremely fast with one simple movement of the clamp. On high temperature versions an alternative high temperature knob and double cover is used.



DOWNFLO PULSE PRESSURE GRADIENTS

Pulse gradients produced by the standard Downflo during pulse cleaning compared to gradients produced by a Downflo with the new ExtraLife Cleaning System.



DFO Cartridge Filters

DFO dust collectors' patented downward airflow design delivers highest filtration efficiency while using less energy. The DFO collector, patented ExtraLife filter cleaning and Donaldson's unique oval-shaped filter cartridges are an unbeatable system. Choose from our superior line of filters to complete the most powerful dust collection solution available.



Ultra-Web®

▶ Featuring patented nanofibre technology, Ultra-Web cartridges



provide unequalled filtration efficiency of 99.999% on 0.5 micron particles. This advanced surface filtration technology ensures longest filter life and lowest operating pressure drop in a full range of cartridges:

- ▶ Ultra-Web
- ▶ Ultra-Web FR (flame retardant)

Fibra-Web®

▶ Featuring patented nanofibre technology, the Fibra-Web filter features an open washable design for easy cleaning in both fibrous and non-fibrous (agglomerative) applications. A proprietary blend of synthetic fibers in the base media and even wider pleat spacing provide filtration efficiency of 99.999% on 0.5 micron particles in two cartridge choices:

- ▶ Fibra-Web
- ▶ Fibra-Web FR (flame retardant)

Torit-Tex™

▶ With a high tolerance for moisture, Torit-Tex filter cartridges provide exceptional filtration efficiency of 99.999% on 0.5 micron particles in moist, hygroscopic and agglomerative applications. Its flexing media and quick-release



Tetratex® PTFE membrane consists of extremely small pore sizes, allowing air and moisture vapour to pass efficiently, resulting in long filter life, even in difficult applications.

Thermo-Tek®

▶ Designed for high-temperature applications, Thermo-Tek filters have a proprietary media that offers exceptional filtration efficiency of 99.99% on



1 micron particles. Special heat-resistant construction and gaskets maintain seal strength and integrity at temperatures up to 135° C (275° F).

Equipment Options For DFO 2-8 Through 4-128

- ▶ Abrasion Resistant Inlets
- ▶ Air Management Module
- ▶ Extended Dirty Air Plenum
- ▶ Direct Drive Fans
- ▶ Chamber and Exhaust Silencers
- ▶ Steep-Sided Hoppers
- ▶ Explosion Vents
- ▶ Magnehelic®* Gauge
- ▶ Rotary Valves and Transitions
- ▶ Slide Gates
- ▶ Service Platform (available on large units)
- ▶ Solenoid Enclosure
- ▶ Hostile Environment Paint
- ▶ Lined Clean Air Plenum (for pulsing noise)
- ▶ Afterfilters

Standard Features For DFO 2-8 Through 4-128

- ▶ Ultra-Web Filters
- ▶ ExtraLife Filter Cleaning System
- ▶ Total Control Board
- ▶ Quick-Removal Access Covers
- ▶ Ledge-Free Hopper

DFO Offers:

- ▶ Lower initial cost per cubic metre of air per hour (m3/hr)
- ▶ Fewer filter changeouts
- ▶ Reduced filter disposal cost
- ▶ Easy system set-up
- ▶ Less maintenance

Donaldson. And everything just got better.

Total Filtration Management

▶ Donaldson offers a wide variety of solutions to reduce your energy costs, improve your productivity, guarantee production quality and help preserve the environment.

Compressed Air Filtration, Sterile Filtration, Process Filtration, Refrigerant Drying, Adsorption Drying, Condensate Drains, Condensate Purification Systems, Water Chillers, Air / Oil Separation, Dust and Fume Removal, Process Air and Gas Processing, Oil Mist Separation

Total Filtration Service

▶ A comprehensive range of services especially designed to keep your production at peak performance and at the lowest total cost of ownership.

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Dust Collectors Downflo® Oval 1™