# Donaldson.









### DUST, FUME & MIST

**COLLECTORS, FILTERS** & REPLACEMENT PARTS





### THE MARKET LEADER

### FOR LONG-TERM VALUE

For decades, Donaldson<sup>®</sup> Torit<sup>®</sup> has offered manufacturers advanced and reliable dust, fume and mist collectors and filters engineered to provide outstanding filtration efficiency and energy savings. The pairing of these industry-leading collectors and filters helps increase manufacturing efficiencies and cleaner environments for employees.

When efficiency is maximized and employees are at their peak, so is the manufacturer's productivity — and ultimately, its bottom line. Donaldson Torit products can help safeguard that bottom line with innovative collectors and filters, expertly engineered by its unparalleled team of R&D engineers to provide long-term value, rather than short-term savings.

No other dust collection manufacturer can match Donaldson Torit's filtration solutions in delivering clean air.

#### **SUPERIOR PERFORMANCE**

Integrated collectors and filter media work together to offer the highest levels of efficiency and maximize productivity.

### **CONTINUALLY EVOLVING FILTRATION SOLUTIONS**

1900	1980		1990	2000
ACQUISITIONS	<b>1974:</b> Donaldson Company, Inc. acquires the <b>Torit</b> <b>Corporation</b> , resulting in unparalleled filtration and cartridge expertise.	<b>1983:</b> The <b>Downflo® horizontal</b> <b>cartridge collector</b> is introduced, offering a higher efficiency and smaller footprint than any collector before it. Also offers up to 25% more airflow than TD.	portfolio is expanded by the acquisition	<b>2000:</b> Donaldson acquires <b>DCE</b> , expanding its baghouse portfolio.
<b>1915:</b> Frank Donaldson founds the Donaldson Company, a provider of filtration solutions.			Aercology	
TECHNOLOGY	<b>1975:</b> The <b>TD cartridge</b> <b>collector</b> is launched, the first vertical cartridge collector introduced to the dust collection market.	Donaldson Torit creates proprietary <b>Ultra-Web®</b> <b>fine fiber filter media</b> , increasing filtration efficiency, and filter	<b>1986:</b> Donaldson Torit expands its product line and expertise to baghouse collectors with the acquisition of <b>Carter Day</b> , another dust collection leader.	2000: Downflo® Oval 1 <sup>™</sup> is launched providing up to 25% more airflow than competing collectors and DFT.

### **ADVANCED TECHNOLOGY**

As the inventor of the cartridge collector, Donaldson<sup>®</sup> Torit<sup>®</sup> has led the way for continuous innovation with award-winning products such as Torit<sup>®</sup> PowerCore<sup>®</sup> dust collectors and filter packs.

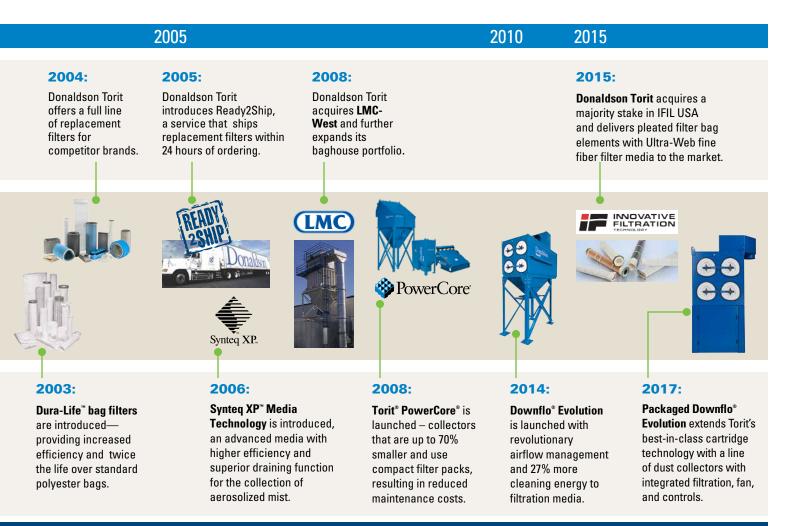
Proprietary Ultra-Web<sup>®</sup> fine fiber filter media – the first of its kind – was developed by Donaldson. On the market for three decades, this media technology increases filtration efficiency and simplifies maintenance.

### RELIABILITY

The leading worldwide provider of advanced filtration technology for almost 100 years.

#### **CUSTOMER SUPPORT**

Unmatched service and support at all stages—from up-front engineering to knowledgeable field resources to after-sales service. Worldwide support to provide customers with advanced solutions and service, no matter the location.

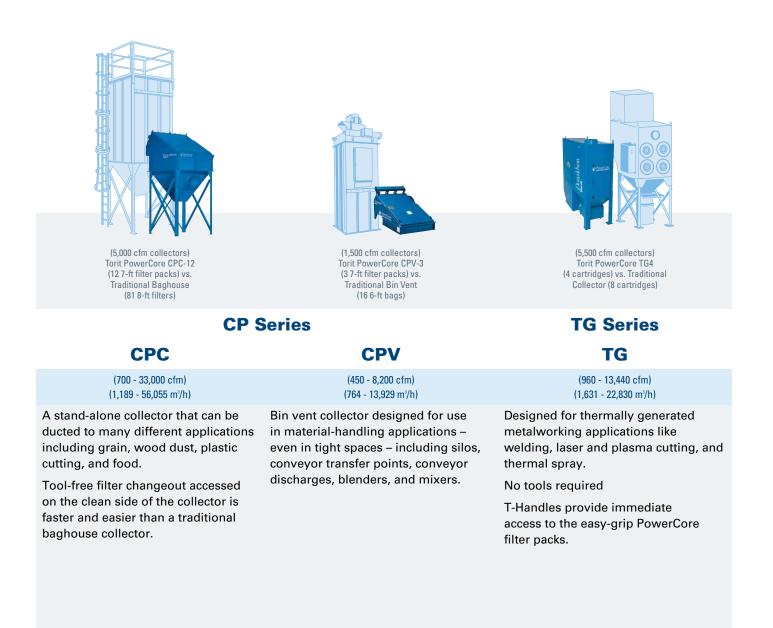


### **TORIT® POWERCORE® COLLECTORS**

### SMALLER. SMARTER.

Torit<sup>®</sup> PowerCore<sup>®</sup> dust collectors with PowerCore<sup>®</sup> filter packs solve the industry's need for better filtration, reduced operational cost, a smaller footprint and easier maintenance. Less steel and oil are required to manufacture and transport collectors that are 50 - 70 percent smaller than traditional collectors. Clean-side filter pack access and fewer, lighter filter packs mean faster, easier filter changes without tools or filter cages. An optimized airflow management system delivers optimal pulse cleaning while minimizing airflow restriction. Also, collectors are shipped with filter packs installed.

Additionally, smaller sized Torit<sup>®</sup> PowerCore<sup>®</sup> collectors can eliminate the need for complicated ductwork or a large, energy-consuming central dust collection system. With greater flexibility, manufacturers can now optimize space on the plant floor while containing costs. Innovative PowerCore<sup>®</sup> filtration technology means reduced freight and installation costs, fewer filter pack changeouts, lower maintenance costs, and no entry requirements for filter pack changes.



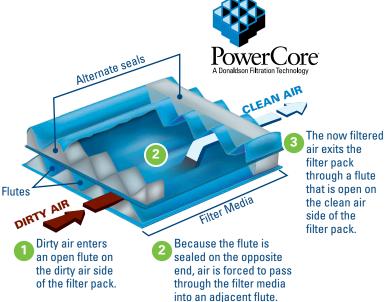
### **POWERCORE® MEDIA TECHNOLOGY**

### **LEADING THE WAY WITH POWERCORE**

PowerCore<sup>®</sup> media technology is integral to the dramatic downsizing of the Torit<sup>®</sup> PowerCore<sup>®</sup> collector. PowerCore<sup>®</sup> filter packs combine Ultra-Web<sup>®</sup> fine fiber technology with Donaldson's media configuration expertise, creating a new filtration structure unlike anything else in the industrial air filtration market. As a result, a more effective filtration area is packaged into smaller spaces. And just one Torit<sup>®</sup> PowerCore<sup>®</sup> filter pack replaces multiple cartridge or bag-style filters. With more media packed into a smaller space and a simplified airflow path, PowerCore<sup>®</sup> filter packs provide high performance with a low pressure drop.

# High PERFORMANCE Full Performance One Torit PowerCore filter pack replaces multiple cartridge or bag-style filters Fast and easy filter pack changes Reduced maintenance High filtration efficiency for reduced emissions

- · Reduced freight & installation costs
- Technology proven in field applications for more than 10 years



### **ONE POWERCORE** FILTER PACK **REPLACES** TO



**SIX** 8-ft. long bag filters



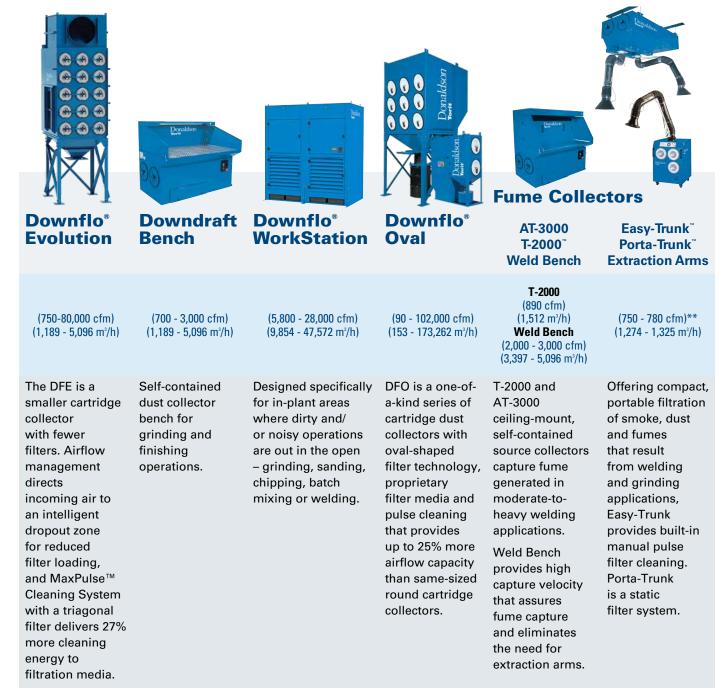


# **CARTRIDGE COLLECTORS**

### THE INVENTOR OF THE CARTRIDGE COLLECTOR

As the inventor of the cartridge collector, Donaldson<sup>®</sup> Torit<sup>®</sup> has led the way with continuous innovation, such as the award-winning Downflo<sup>®</sup> Oval dust collection technology. No other manufacturer comes close to matching the innovation and breadth of technical expertise that Donaldson Torit incorporates into its cartridge collectors.

Donaldson Torit engineers its cartridge collectors to capture the broad spectrum of dust particles that can inhibit the production environment. From portable to central collectors, to source and ambient collectors, to booth-type collectors and weld benches, Donaldson Torit provides the most complete range of cartridge collectors that cost-effectively enhance productivity and manufacturing efficiency.



## **ULTRA-WEB® MEDIA TECHNOLOGY**

#### THE INVENTOR OF ULTRA-WEB

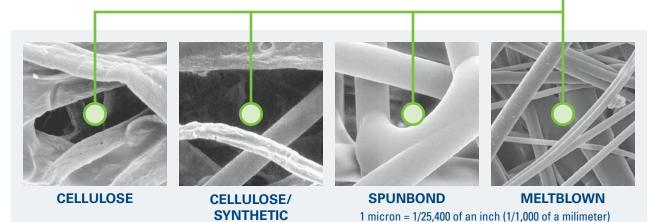
Proven for 30 years, advanced and improved many times over, proprietary Ultra-Web is the fine fiber media technology that outperforms all others; it delivers longer filter life, cleaner air, and greater savings.

Donaldson<sup>®</sup> Torit<sup>®</sup> offers a complete line of Ultra-Web cartridge filters that last twice as long as or more than commodity cellulose and cellulose/ synthetic (80/20) blend medias. The Ultra-Web surface-loading technology is scientifically proven to provide a lower operating pressure drop over a longer period of time, which allows the filter to last longer while requiring less energy.

#### ULTRA-WEB OUTPERFORMS ALL OTHERS



10 Micron Particulate at 600X



Ultra-Web fine fiber media is the most optimized and cost-effective choice available for most all dust and fume collection applications. Experience the Ultra-Web advantage:

- Increased surface loading
- Enhanced dust cake release
- Better cleaning efficiency
- Lower cost per cfm
- Available for all popular brands of dust collectors

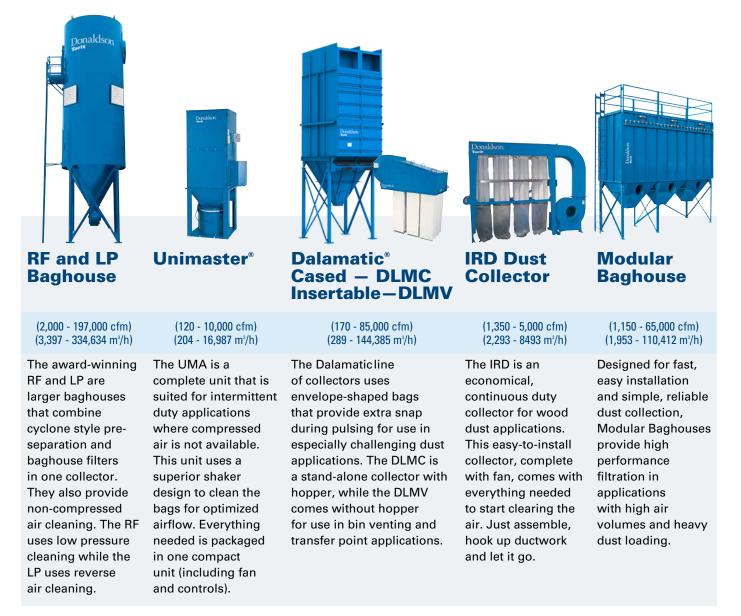
### **ULTRA-WEB** 3 DECADES OF LEADERSHIP & OVER 5 MILLION FILTERS SOLD

### BAGHOUSE COLLECTORS

### THE RIGHT BAGHOUSE FOR THE APPLICATION

Donaldson<sup>®</sup> Torit<sup>®</sup> offers a complete line of dependable, rugged baghouse dust collectors ranging from small Cyclones and Unimaster<sup>®</sup> collectors that handle as low as 120 cfm to large RFs and LPs that handle up to 197,000 cfm. Donaldson Torit also offers unique collectors like the Dalamatic<sup>®</sup>, which feature envelope-shaped bags for improved pulse cleaning of especially challenging dusts, and **clean side access** to filters to make changeouts easier.

In addition to offering the best baghouses on the market, Donaldson Torit continually develops industryleading technologies such as Dura-Life<sup>®</sup> bag filters that provide longer filter life, increased efficiency, and reduced operating costs.



### TWO BREAKTHROUGH FILTER OPTIONS FOR YOUR BAGHOUSE



#### DURA-LIFE FILTER BAGS PROVIDE TWICE THE LIFE OVER STANDARD 16 OZ POLYESTER BAGS

Traditional 16 oz polyester bags are produced via a needling process that creates larger pores where dust can embed into the fabric, inhibiting cleaning and reducing bag life. Dura-Life bags are engineered with a unique hydroentanglement process that uses water jets to blend the fibers. This process creates a felt with smaller pores which keeps more dust on the surface of the filter resulting in better pulse cleaning and longer bag life.

#### **DURA-LIFE BENEFITS**

- Up to two times longer bag life
- Energy savings due to lower pressure drop
- Reduced replacement bag and maintenance costs due to longer bag life



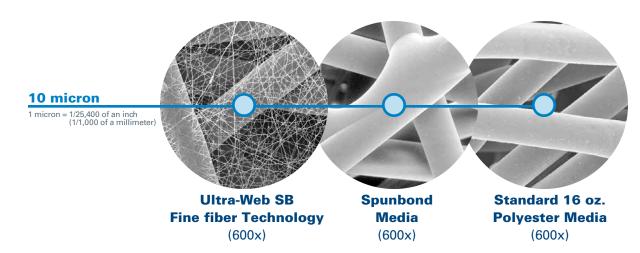
#### PLEATED BAGS WITH ULTRA-WEB SB PROVIDE LONGER LIFE AND REDUCED EMISSIONS

For more than two decades, Donaldson Torit has advanced the proven Ultra-Web fine fiber technology. Ultra-Web provides a very fine, continuous fiber of 0.2-0.3 micron in diameter to form a web-like net that traps dust on the surface of the media. Combining Ultra-Web technology with a sturdy spunbond polyester substrate, Ultra-Web SB pleated bag filters provide longer life, reduced downtime and reduced emissions.

### **ULTRA-WEB SB PLEATED BAG BENEFITS**

- Up to two times longer filter life
- · Energy savings due to lower pressure drop
- Reduced maintenance and downtime costs
- Reduced emissions





### **MIST COLLECTORS**

### **A COMPREHENSIVE RANGE**

High performance mist collection is a must for manufacturers that generate coolant and machining oil mist in their applications. Uncollected mist leaves condensation and residue on floors, machines, walls and ceilings, creating a potentially unsafe and unclean manufacturing environment.

Donaldson<sup>®</sup> Torit<sup>®</sup> provides a comprehensive range of mist collectors, each providing the peace of mind manufacturers need to be productive and efficient.

Rely on Donaldson Torit for the most advanced mist collection technology.



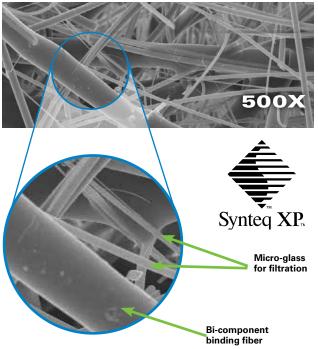
filter. Designed to collect watersoluble coolant, straight oil, and the most challenging – oily smoke – from a variety of machining operations and other industrial processes. The WSO design has several configurations such as machine mountable, stand mount, ducted cellular and central system to meet your plant requirements. Modular MediaFilter provides flexible, high performance mist collection for applications such as grinding, wet grinding, wet machining, rubber machining, die casting and soldering. Available in vertical and horizontal models, Modular MediaFilter collectors are expandable to adapt to changing needs such as smoke, dust and fume filtration, saving the cost of a new filtration system. Designed to collect coolant mists from CNC machining, grinding, turning, milling and drilling operations, compact Mini-Mist collectors are effective alone or can be integrated into larger machining operations.

offer compact, high efficiency and economical mist collection. They can be used to reclaim mist in applications that process petrochemicals or synthetic coolants. They are particularly effective at handling very heavy mist loading concentrations.

### SYNTEQ XP<sup>TT</sup> MEDIA TECHNOLOGY

### **ADVANCED FILTER MEDIA FOR MIST**

Proprietary Synteq XP is a revolutionary and proprietary media for mist collection that provides higher efficiency, low operating pressure drop, and longer filter life when compared to traditional media.

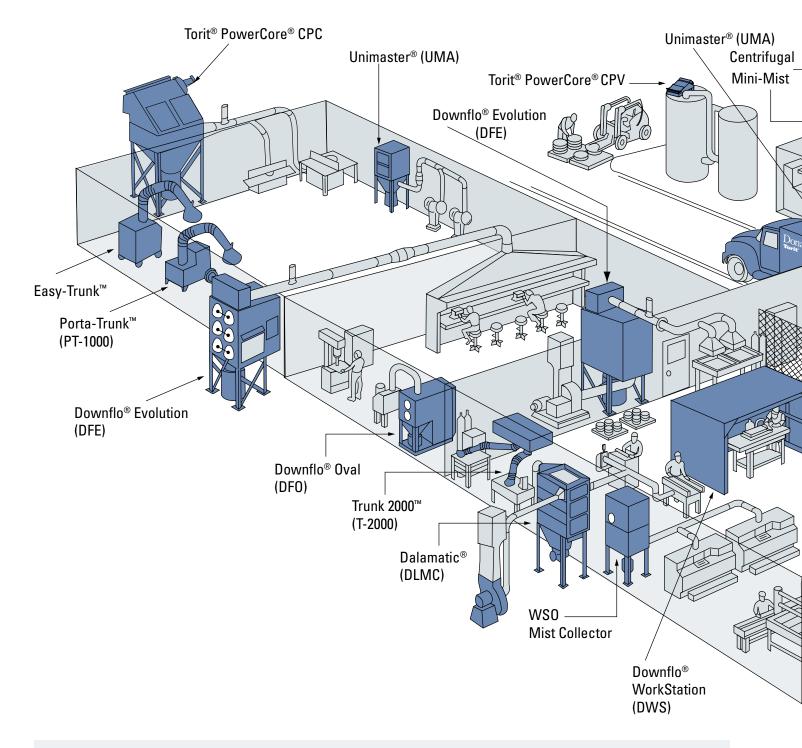


SYNTEQ XP MEDIA WITH RESIN-FREE BINDING FIBERS

- Fast and easy filter pack changes
- Engineered blend of small and large fibers, with proprietary, resin-free bonding system
- Small fibers are scientifically proven to increase efficiency through superior draining
- Large fibers provide structural support and clear drain channels to sustain performance in the most challenging applications
- Proprietary bonding system stabilizes pore structure for optimum performance and longer life
- Available for many brands of mist collectors



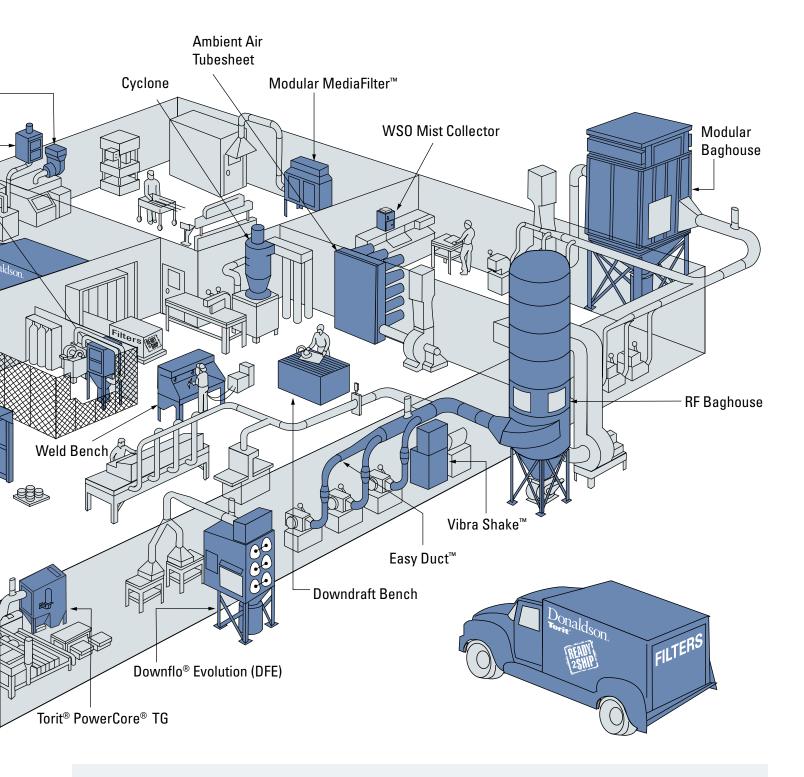
## **A RANGE OF COLLECTORS**



### **OSHA & NFPA REQUIREMENTS**

Donaldson<sup>®</sup> Torit<sup>®</sup> offers a variety of dust collectors, options, and accessories to help manufacturers comply with the collector sections of NFPA/OSHA standards on combustible dust. Contact a local Donaldson Representative, or call 800-365-1331, to schedule an on-site review of your filtration needs, and to determine what filtration equipment will support your course of action for NFPA/OSHA compliance on combustible dust.

### **HELP PROTECTYOUR BOTTOM LINE**



When employees are at their peak, so is productivity—and ultimately, a manufacturer's bottom line. Collectors and filters, expertly engineered by Donaldson Torit's unparalleled team of R&D engineers, provide long-term value rather than short-term savings.

### **METALWORKING APPLICATIONS**



TG on Plasma Cutting 2,300 cfm (3,90 m<sup>3</sup>/h)



**DFO on Grinding** 74,000 cfm (125,700 m³/h)



DFO on Plasma Cutting 5,000 cfm (8,493 m<sup>3</sup>/h)



DWS on Custom Hand Grinding 38,500 cfm (65,398 m<sup>3</sup>/h)



DFO on Welding Fumes 53,000 cfm (90,028 m³/h) Left: outside Right: inside





TG on Plasma Cutting 3,400 cfm (5,775 m<sup>3</sup>/h)



DFO on Laser Cutting 3,100 cfm (5,266 m<sup>3</sup>/h)



DFO on Metal Grinding 31,000 cfm (52,658 m<sup>3</sup>/h)



DFO & Cyclone on Thermal Spray 4,800 cfm (8,154 m³/h)



DFO on Metallizing Powder Flame 20,500 cfm (34,822 m³/h)

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DFO on Thermal Spray 8,500 cfm (14,439 m³/h)

### **MIST APPLICATIONS**



DMC on Wet Machining 390 cfm (662 m³/h)



WSO - Horizontal Grinder 850 cfm (1,444 m³/h)



Modular Mediafilter" on Grinding 2,000 cfm (3,397 m<sup>3</sup>/h)



DMC on Machining 800 cfm (1,359 m³/h)



**WSO on Oil Mist** 20,000 cfm (33,973 m<sup>3</sup>/h)



WSO at M3 Achining Center 1,200 cfm (2,038 m³/h)



WSO on Cold Forming 1,200 cfm (2,038 m<sup>3</sup>/h)

### **PROCESSING/POWDER & BULK APPLICATIONS**



**DFE on Rubber Hose Cutting** 2,800 cfm (4,757m<sup>3</sup>/h)



**DFO on Paint & Pigment** 1,200 cfm (2,038 m<sup>3</sup>/h)



**MB on Glass Processing** 25,000 cfm (42,466 m<sup>3</sup>/h)



**CPC on Milk Powder** 1,200 cfm (2,038 m<sup>3</sup>/h)



**DFO on Plastics Routing** 16,000 cfm (27,184 m<sup>3</sup>/h)



**DWS on Granite Finishing** 22,000 cfm (37,370 m<sup>3</sup>/h)



**DLMC on Rock Crushing** 41,000 cfm (69,645 m<sup>3</sup>/h)





**DLMC on Paper Dust** 27,000 cfm (45,864 m<sup>3</sup>/h)

## **GRAIN & NUT APPLICATIONS**



CPV - Direct Bin Venting Distributor Head 2,400 cfm (4,077 m<sup>3</sup>/h)



**LP on Almond Dust** 300,000 cfm (509,595 m<sup>3</sup>/h)



CPC - Grain Tripper Conveyor 18,700 cfm (31,765 m³/h)



**RF - Grain Terminal** 34,000 cfm (57,754 m<sup>3</sup>/h)



**LP on Nut Dust** 280,000 cfm (475,622 m³/h)



DFO on Corn Husking & Sorting 28,500 cfm (48,412 m³/h)



**RF - Grain Terminal** 61,000 cfm (103,618 m<sup>3</sup>/h)

### **CEMENT APPLICATIONS**



CPV - Weigh Belt Feeder 800 cfm (1,359 m³/h)



CPV - Feed Hopper 350 cfm (595 m<sup>3</sup>/h)



DFO - Concrete Roof Manufacturer 3,000 cfm (5,096 m<sup>3</sup>/h)



CPV - Pneumatically Filled Storage Bin 1,200 cfm (2,038 m<sup>3</sup>/h)



CPV - Multiple Cement Silos 4,800 cfm (8,154 m³/h)



CPV - Multiple Cement Silos 4,800 cfm (8,154 m³/h)



CPV - Bucket Elevator 1,200 cfm (2,038 m<sup>3</sup>/h)

### **WOODWORKING APPLICATIONS**



**FS on Woodworking** 20,000 cfm (33,973 m<sup>3</sup>/h)



CPC - Furniture Manufacturing 5,400 cfm (9,173 m<sup>3</sup>/h)



UMA - School Wood Shop 2,000 cfm (3,397 m<sup>3</sup>/h)



**RF - Cabinet Shop** 48,500 cfm (82,385 m³/h)



**LP on Wood Dust** 160,000 cfm (271,784 m³/h)



DFO on Sawdust 57,500 cfm (97,692 m³/h)



**IRD** - **Wood Shop** 5,000 cfm (8,493 m³/h)



RF - Wood Furniture Facility 403,000 cfm (684,556 m³/h)

### ORIGINAL EQUIPMENT MANUFACTURERS

### **CUSTOM SOLUTIONS FOR OEMS**

OEMs have come to rely on Donaldson<sup>®</sup> Torit<sup>®</sup> to solve their filtration issues. Donaldson Torit offers flexible solutions customized to OEMs across a wide range of industries.

Donaldson Torit's reputation has been built on its problem solving, quality solutions, and commitment to customers' satisfaction even after the sale. And Donaldson Torit's worldwide network allows it to provide local support that's responsive and comprehensive – no matter where it's needed.

A dedicated team of OEM account managers and engineers stands ready to solve even the most complex filtration issue.



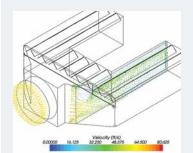
#### MOBILE MINING APPLICATION

Donaldson Torit can design solutions to accommodate customer space constraints and integrate additional filtration technologies tailored to customer needs.



### RAIL GRINDING

Custom designs that accommodate unique customer space constraints are available.





#### AIRFLOW MODELING ABRASION MODELING STRUCTURAL ANALYSIS

Only Donaldson Torit provides sophisticated engineering analysis tools to ensure proper airflow management, extended filter life, and reduced maintenance costs.

#### PLASMA CUTTING

Donaldson Torit engineers can provide a unique, integral pre-separator for spark reduction in laser and plasma cutting.

### ANCILLARY PRODUCTS & REPLACEMENT PARTS

### **COMPLETING THE FILTRATION SYSTEM**

Donaldson<sup>®</sup> Torit<sup>®</sup> understands that high performance dust, fume and mist collectors are just the first step in keeping plants cleaner and more productive. Donaldson Torit's high performance ancillary products quickly and cost-effectively complete the system, whether a manufacturer is installing a new filtration system or expanding an existing filtration line.



Easy Duct

Easy Duct ductwork eliminates time-consuming operations like riveting, cutting, brazing, and welding for standard length piping. Easy Duct can be assembled and taken apart with no special tools, saving ducting each time a floor plan changes.



#### Delta P and Delta P Plus Controls

Delta P or Delta P Plus Controls are a key element of dust collector maintenance, measuring pressure drop across the filters to determine when servicing is needed. Recommended for all continuousduty dust collection systems, Delta P monitors pressure drop so that filters are cleaned only when necessary, reducing compressed air usage and prolonging filter life.



#### HEPA & 95% DOP Filters

Providing a high filtration efficiency of 99.97% at 0.3 microns, HEPA filters can be used as afterfilters for dust, fume and mist collection. Also available are panel filters with 95% DOP media or 95% ASHRAE media.



### **Rotary Valves**

Rotary Valves offer an economical solution for automated handling of most discharge dust. Available in three models: high pressure, low pressure, and sweeper valves. Rotary valves provide continuous dust disposal that keeps hoppers and collectors operating at peak performance, thereby reducing dust collector maintenance time and cost.

#### Fans

#### **Torit Backward Inclined (TBI)**

direct drive fans are available in sizes ranging from 3 hp to 30 hp. The TBI fan mounts directly to the clean-air plenum of the dust collector, eliminating costly transition ducting. **Torit Radial Blade (TRB)** fans are an economical, dependable radial fan with a direct-drive design to eliminate maintenance on fan bearings and belts. The TRB is available in sizes from 1 hp to 10 hp.



#### Cages

Replacement cages are available for Donaldson Torit baghouse collectors as well as many other popular makes and models. Cages are available in galvanized or stainless steel for ambient, high temperature, or highly corrosive environments.

### **REPLACEMENT FILTERS**

### COMPREHENSIVE OFFERING FOR A VARIETY OF EQUIPMENT BRANDS



**DURA-LIFE** for baghouse collectors

- AZO®
- Buhler
- Carter Day
- DCE
- Flex-Kleen
- Golfetto
- Kice
- MAC
- MikroPul
- Murphy
- Pneumafil
- Steelcraft<sup>®</sup>
- Wheelabrator
- + Many others



Using Donaldson<sup>®</sup> Torit<sup>®</sup> replacement filters can significantly improve the performance of dust collectors. Uniquely engineered for longer filter life and higher filtration efficiency, Donaldson Torit cartridge and bag filters are the most cost-effective choice for any collector and any application.

Rely on Donaldson Torit for all popular brands of collectors. With hundreds of varieties to choose from and all in-stock orders shipped within 24 hours, Donaldson Torit has exactly what you need when you need it!

No other filter manufacturer can match Donaldson Torit's technical expertise and commitment. For knowledgeable support and to determine the right filters for a specific application, call Donaldson Torit's customer service representatives at 800-365-1331 or visit www.donaldsontorit.com

#### ULTRA-WEB for cartridge collectors

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

### CALL 800-365-1331 FOR LIVE SUPPORT VISIT DONALDSONTORIT.COM

#### **Industry-Leading Technology**

- Advanced filtration technology for optimal performance
- Reduced energy consumption and cost of ownership
- Advanced design and testing capabilities

#### **The Most Filters and Parts**

- For every brand and style of collector
- Wide range of filtration media for any application
- 90,000 filters and parts in stock and ready to ship

#### **Unparalleled Support**

- Live technical specialists
- Comprehensive pre- and post-sale support
- 40 manufacturing plants and 14 distribution centers worldwide

Significantly improve the performance of your collector with genuine Donaldson Torit replacement filters and parts

#### Important Notice

Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, product specifications, availability and data are subject to change without notice, and may vary by region or country.



