



DFPRE SERIES

PACKAGED DUST & FUME COLLECTORS



**Smart
Collector**
Powered by iCue™ technology

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PACKAGED DUST & FUME COLLECTORS

The DFPRE was designed as a turnkey system to answer the industry demand for a compact, convenient and reliable filtration system that can maximize production uptime. The result is a highly adaptable, modular and easy-to-install dust collector with unrivaled filtration performance – delivering operational confidence in today's advanced manufacturing environment.

Built on more than 20 years of successful performance of the DFPRO, our next generation DFPRE dust and fume collector series offer a more efficient, compact and economical solution that can effectively support continuous manufacturing processes. This new powerful filtration system is equipped with our unique trigonal Evolution cartridges that are specifically designed for improved pulse cleaning, which results in increased airflow per cartridge and superior performance. This means less production downtime, and reduced energy consumption, operating and maintenance costs for your business.

With its more efficient cartridge filters and advanced downward airflow, the DFPRE system has fewer cartridges for the same filtration power, reducing filter replacement costs, maintenance and floor space requirements. This compact unit is easier to transport, relocate and install: It comes pre-assembled and requires minimal set-up.

The DFPRE is a flexible and modular product designed for a wide variety of applications, allowing you to easily customize your solution and further customize it with a broad selection of Donaldson filter media options.

FOR A WIDE VARIETY OF INDUSTRIES



— Metal & Machining



— Industrial Processing



— Waste & Recycling



— Mining & Mineral Processing



— Food & Agriculture



— Chemical & Petroleum Products



— Pharmaceuticals

QUALITY & EXPERTISE YOU CAN RELY ON

For over 100 years, Donaldson has helped solve some of the world's most complex filtration challenges.

We pride ourselves in producing efficient, high quality and reliable products that will help support modern day manufacturing processes.

You can always rely on Donaldson's advanced technology, extensive portfolio of filtration products, and unrivaled customer support to help you meet your unique operational needs.

PERFORMANCE PACKAGED FOR CONVENIENCE

The DFPRE dust collectors are compact units with a small footprint that come preassembled and pre-wired. Shipment, transportation and installation of this product is truly effortless.

EASY INSTALLATION

Our industry-leading filtration design positions more filtration media in beneficial locations and ensures easy, leak-free installation.

COMPACT UNIT, SMALLER FOOTPRINT

New generation cartridge design allows for a smaller, more compact unit for maximum space utilization, easy transport and less cartridges, which also means lower maintenance and operational costs.

FLEXIBLE DESIGN

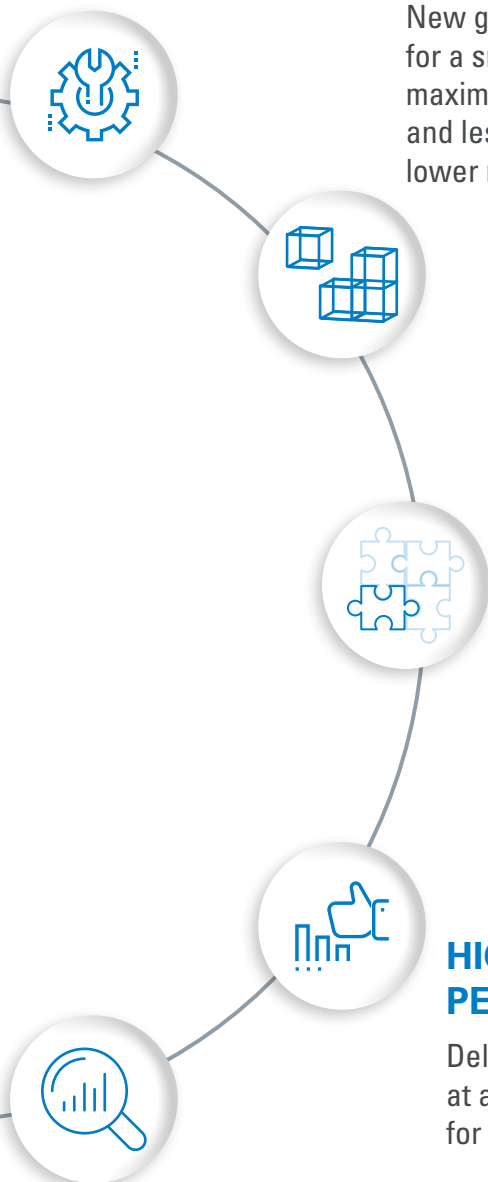
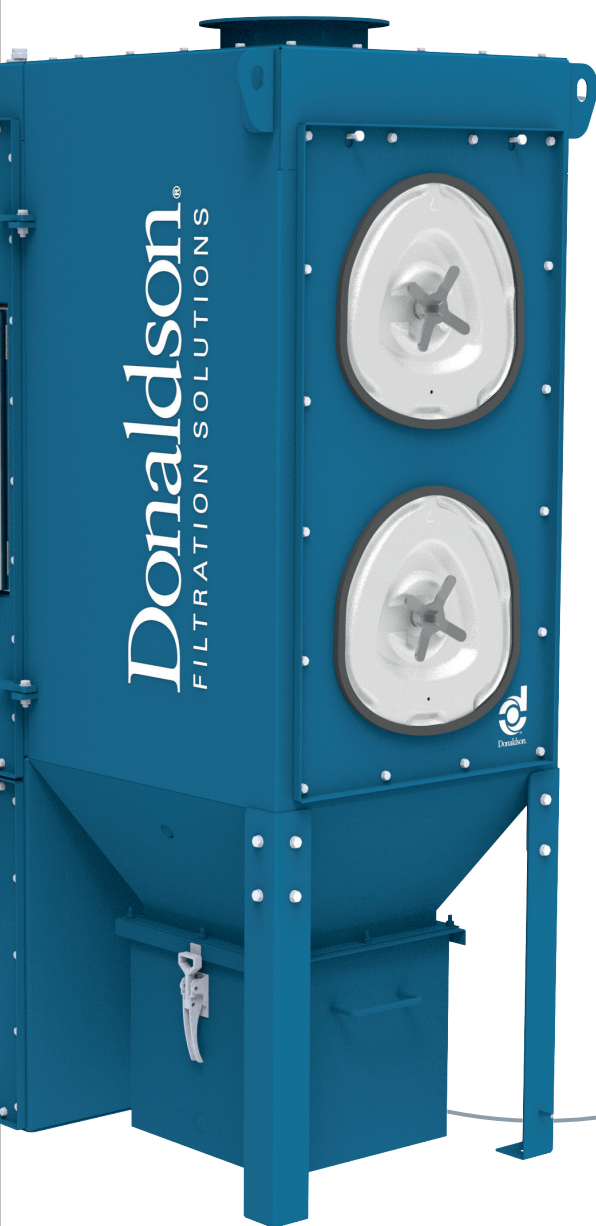
Easily customized modular design adaptable for many applications and special operational needs

HIGHER FILTRATION PERFORMANCE

Delivering higher air volume per hour at a reduced cost, maximizing value for every cubic meter.

SMART COLLECTOR

Equipped with iCue™ Connected Filtration Technology, your Smart Collector monitors your equipment and provides operational insights through automated alerts and a dashboard that's accessible from your computer or smart devices.



DESIGNED FOR SUPERIOR PERFORMANCE

The DFPRE series features Donaldson's latest solutions that include enhanced downward airflow design, trigonal filter shape, and industry-leading filtration medias designed to maximize filtration performance. The DFPRE series have a nominal airflow capacity of between 1500 to 15000 m³/hr*.

STEP 1

EFFICIENT CONTAMINANT EXTRACTION

- Contaminated air is drawn through the collector by the fan, where airflow is directed, causing heavier particulates to fall directly into the hopper.

STEP 2

PRECISION FILTRATION PROCESS

- Dust generated at the source is pulled into a pre-separator to effectively mitigate the following issues: reducing dust load to acceptable levels, minimizing the abrasive effects of dust, mitigating the risk of fire, and ensuring even distribution of airflow.

STEP 3

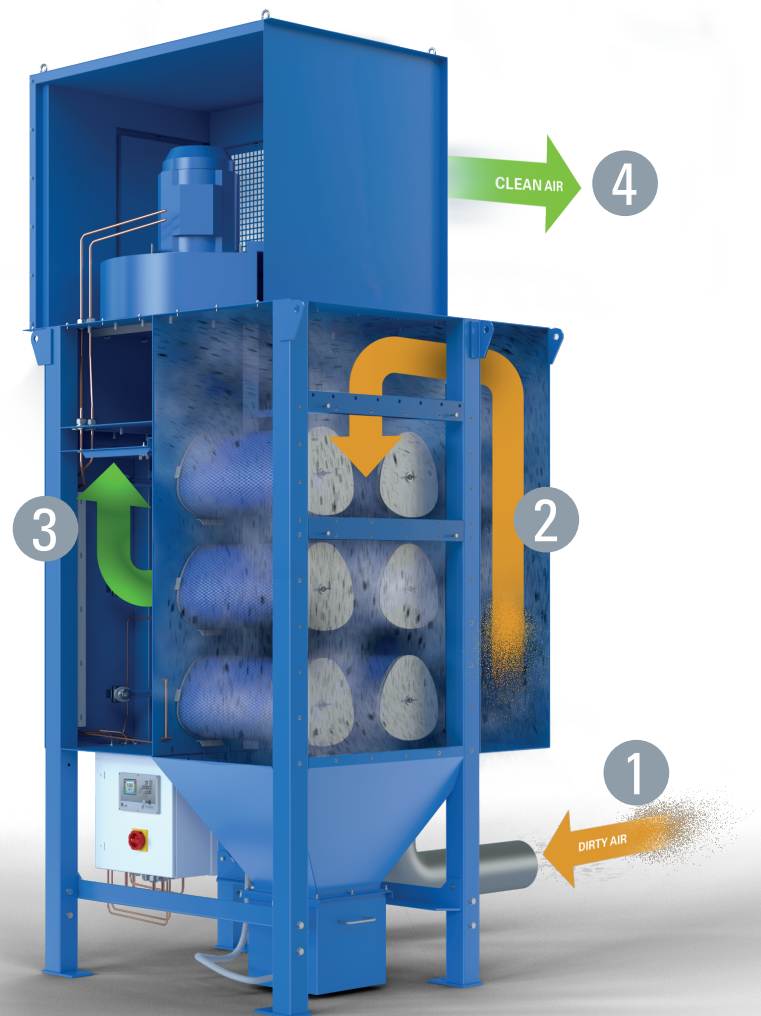
ADVANCED CARTRIDGE SYSTEM

- The cartridges effectively capture fine particulates, allowing only clean, filtered air to pass through into the clean air chamber. With efficient pulse cleaning, it helps increase the lifespan of a cartridge, allowing you to lower your operational costs due to energy consumption, filter changes and maintenance.

STEP 4

FINAL AIR TREATMENT AND DISCHARGE

- Cleaned air is discharged through the air outlet for either recirculation indoors or evacuation outside, with the option for additional filtration, such as a secondary HEPA filter, to ensure optimal indoor air quality in certain scenarios.



SEE DFPRE
IN-ACTION



[DONALDSON.COM/DFPRE](https://donaldson.com/dfpre)

MAKE YOUR COLLECTOR SMARTER

Upgrade with iCue™ Connected Filtration Technology



DIFFERENTIAL PRESSURE

- Eliminate manual dP data collection
- Enable scheduled change-outs

AIRFLOW

- Prevent dust from settling in ducts
- Minimize employee exposure risks

COMPRESSED AIR PRESSURE

- Alert if there is a lack of compressed air
- Reduce premature filter changes

DRUM LEVEL

- Eliminate manual fill-level checks
- Help prevent drum overflows

HOPPER PLUG/POINT LEVEL

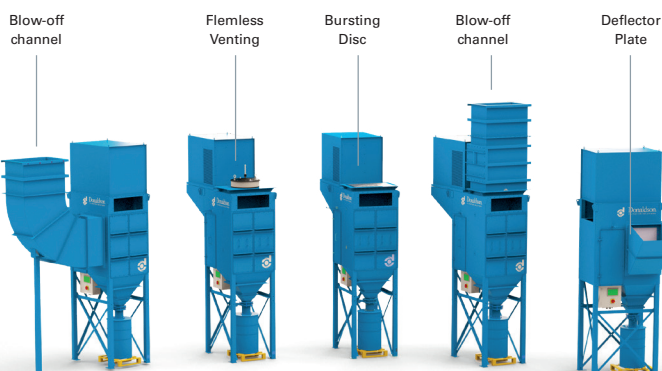
- Identify dust bridging in hopper
- Designed for agglomerative dust applications

PARTICULATE TREND

- Aid in environmental compliance reporting
- Early detection of filter leaks

COMBUSTIBLE DUST

We offer specific product offerings for fire and explosion protection to be integrated in your DFPRE Dust Collectors.



- ATEX compliance and certification
- Covering ST1 to ST3 dusts
- Mitigation options:
 - Bursting disc
 - Flameless venting
 - Suppression system
 - Non-return valve
 - Blow-off channel (top or side)
 - Deflector plate
 - Sprinklers
 - Containment

INDUSTRY LEADING FILTRATION DESIGN

The unique trigonal design allows the DFPRE to achieve a higher dust collection capacity while using fewer cartridges. This reduces your operational expenses by saving manufacturing space and reducing the number of filters to maintain. DFPRE filters are highly efficient while having a smaller size, making filter maintenance quick and easy.



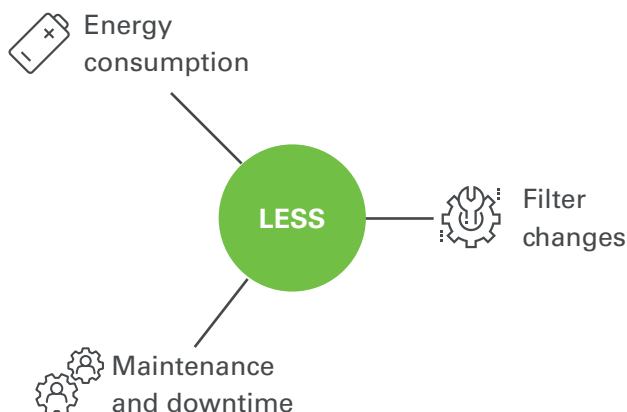
At the bottom of the cartridge, the trigonal shape allows for more dust to be accumulated on the bottom of the filter and is helped by gravity to achieve superior pulse cleaning performance.

PACKAGED TO PERFORM

With more efficient cartridge filters and advanced downward airflow, the DFPRE Series requires fewer filters for the same filtration power, resulting in:

- Reduced filter replacement costs
- Reduced maintenance
- Reduced floor space requirements

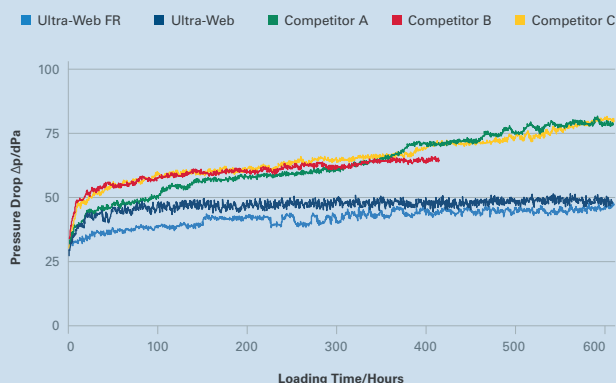
Efficient pulse cleaning helps increase the lifespan of a cartridge, helping you to lower your operational costs due to:



LONGER LASTING FILTERS, LOWER ENERGY USE

Long-term tests under the same harsh conditions (5200 m³/h, 70g/m³) show that Donaldson's Ultra-Web filters maintain a lower pressure drop than the filters offered by major competitors. Lower operating pressure drop results in higher airflow, less energy usage, and longer filter life with Ultra-Web filters compared to competitive cartridge filters.

Donaldson Dust Rejection Test
600 Hours at 254g/min (70g/m³)



The Dust Rejection test was conducted over a 600-hour period per filter using calcium carbonate dust under controlled conditions (7100 m³/h airflow, 70 g/m³ dust concentration, 10-second pulse intervals) to compare Donaldson

filters made with Cellulose and Ultra-Web against competitor media with 80/20 Fine Fiber Technologies. The tests were performed in-house using a sample size of eight filters per manufacturer with DFT type dust collector.

CASE STUDY

Ultra-Web® Cartridge Filters cut maintenance costs while cutting steel.

PLASMA CUTTER APPLICATION

Dust collector energy consumption and filter maintenance time were substantially reduced by replacing the Farr GoldCone filters with Donaldson Torit Ultra-Web filters.

INDUSTRY

Metalworking - cutting 3/4" steel with a plasma cutter.

PROBLEM

Short life (3 to 6 weeks) from alternative filters.

SOLUTION

Donaldson Torit Ultra-Web filters, with patented fine fibers, help them cut costs while they cut steel.

SELECT THE PERFECT MEDIA FOR CARTRIDGE FILTERS



What is the operating temperature?

< 80°C

Is there a need for high efficiency?

YES

Is the dust agglomerative?

YES

Does the application create static charge?

YES



Ultra-Web® on Spunbond Anti-Static

NO



Ultra-Web® on Spunbond

NO

Does the application create static charge?

YES

Is there moisture present?

YES



Ultra-Web® on Spunbond Anti-Static

NO



Ultra-Web® Anti-Static Flame Retardant

NO

Is there moisture present?

YES



Ultra-Web® on Spunbond

NO



Ultra-Web® (Flame Retardant)

NO

Is the dust agglomerative?

YES

Does the application create static charge?

YES



Polyester Anti-Static

NO



Standard Polyester

NO

Does the application create static charge?

YES



Polyester Anti-Static

NO

Is there moisture present?

YES



Standard Polyester

NO



Cellulex® (Flame Retardant)

MAYBE

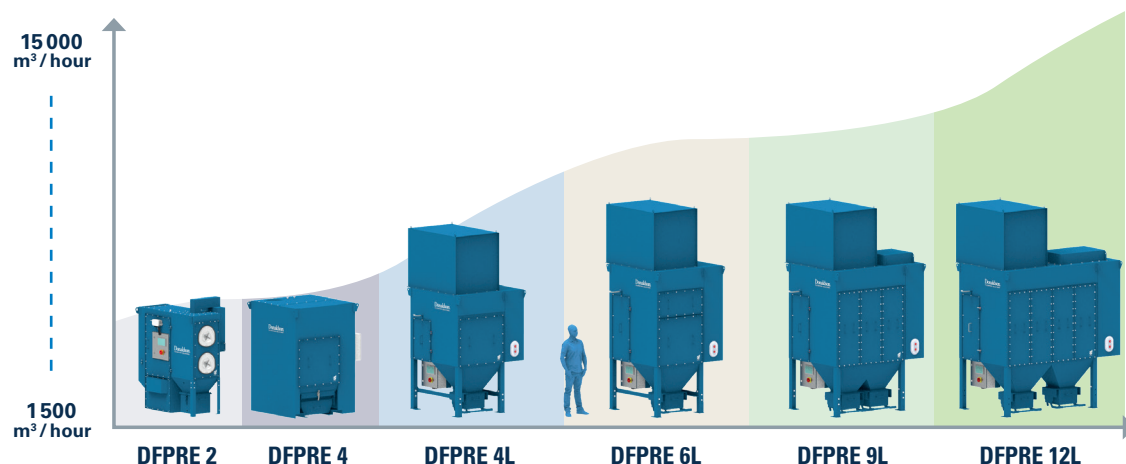


Blended 80/20 and 90/10 Flame Retardant

Contact us to discover customized filtration solutions

TECHNICAL SPECIFICATIONS

Full product range and detailed technical specifications are available on donaldson.com/dfpre



Key Features & Benefits

- For easy installation and operation.
- Flexible and modular design available in different sizes and configurations.
- Compact unit, smaller footprint for maximum space utilization, easy transport and less cartridges.
- Higher filtration performance thanks to enhanced downward airflow design triangular filter shape.

Model	No. of filter elements	No. of valves	Dimensions (mm)*			Weight (kg)**
			Width A	Height B	Depth F	
DFPRE 2	2	2	829	1963	1705	424
DFPRE 2 Sparktrap Top				2188	2112	460
DFPRE 4	4	4	1439	2109	1559	650
DFPRE 4 Sparktrap			1741			750
DFPRE 4L	4	4	1291	2632	1730	1025
DFPRE 4L Sparktrap			1741	-	-	1143
DFPRE 4L Cyclopeel			2143	4538	2080	1306
DFPRE 6L	6	6	1291	3082	1730	1143
DFPRE 6L Sparktrap			1771	-	-	1337
DFPRE 6L Cyclopeel			2351	4987	2079	1465
DFPRE 9L	9	9	1789	3106	1730	1375
DFPRE 9L Sparktrap			2227	-	-	1621
DFPRE 9L Cyclopeel			3067	4991	2079	1833
DFPRE 12L	12	12	2299	3106	1730	1582
DFPRE 12L Sparktrap			2832	-	-	1860
DFPRE 12L Cyclopeel			3827	4991	2079	2095



* Dimensions & Weights depend on the options chosen.

** Weights include filter cartridges and are for collectors prior to first use, i.e. with no dust collected. Excludes shipped loose items like fan set, fan box, legs, and dust disposal system.

DISCOVER SUPERIOR DUST, FUME AND MIST FILTRATION SOLUTIONS WITH DONALDSON.
VISIT [DONALDSON.COM](https://donaldson.com) TO LEARN MORE TODAY!



Discover our range on www.donaldson.com
 Shop for filters the easier way at shop.donaldson.com
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