# Donaldson.



## RUGGED PLEAT BAGHOUSE DUST COLLECTOR

4490 FEWER FILTERS<sup>1</sup>

**S4.9**0 FEWER EMISSIONS<sup>2</sup>

100% MAINTENANCE FRIENDLY







<sup>1</sup>Compared to typical round baghouse collectors. <sup>2</sup>Compared to standard 16-oz. singed polyester bags.

# **MEET THE NEW STANDARD IN BAGHOUSE COLLECTORS**

The award winning Donaldson Rugged Pleat (RP) Baghouse sets a new standard for baghouse dust collector performance, combining innovative collector design with advanced filtration technology in our most maintenance-friendly design ever.

The Rugged Pleat Baghouse is ideal for the heavy and/or abrasive dust applications typically found in woodworking, mining, grain processing, and other industries.

Combining a cyclone pre-cleaner and baghouse into a single unit, the Rugged Pleat handles heavy dust loads and large air volumes, and utilizes a positive displacement (PD) pump to provide energy-efficient filter cleaning.

#### **UP TO 44% FEWER FILTERS\***

The Rugged Pleat filter design has been optimized to maximize the amount of media per filter. The result is a collector with up to 44% fewer filters to service.

## ADVANCED FILTRATION MEDIA

Ultra-Web® Spunbond media provides 94% fewer emissions than standard 16-oz. singed polyester felt and is more durable for abrasive dust applications.

## UNRIVALED PERFORMANCE

The PerfectPulse™ cleaning system increases pulse pressure longevity and focuses the cleaning energy directly over the filter to support world-class cleaning and long filter life.

### **ENERGY EFFICIENCY**

The combination of the PerfectPulse™ cleaning system and up to 100% more media for a given airflow which supports energy savings over the life of the collector.

#### RESULTS

A dependable, durable collector that supports energy savings and reduced maintenance time and costs.

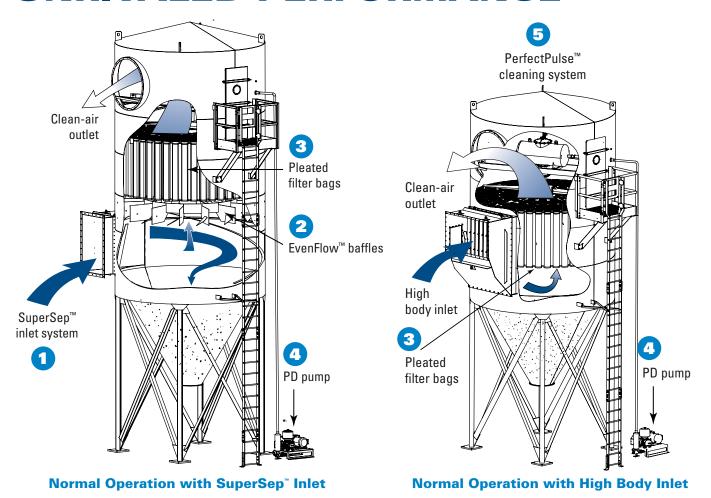


Compared to typical round baghouse collectors

### **DUST COLLECTION SYSTEMS**

While we're dedicated to building the world's finest dust collectors, our goal is to provide our customers with comprehensive dust collection solutions. From the initial process review and installation, through an unparalleled aftermarket inventory and technical support, we're with you every step of the way.

## UNRIVALED PERFORMANCE



The Donaldson Torit Rugged Pleat Baghouse provides the simplicity and cost savings of a single dirty-air inlet, single clean-air outlet and single hopper outlet and takes that proven innovation to the next level.

- SuperSep™ inlet system combines cyclonic pre-separation and a baghouse all in one collector, preseparating up to 97% of the dust so the filters stay clean longer.
- EvenFlow™ baffles reduce turbulence and evenly distribute airflow to all filters.
- Ultra-Web® Spunbond filters provide 94% fewer emissions than common felt bags and are durable enough to handle abrasive applications.
- PD pump comes with the collector and provides energy efficient pulse air with reduced condensation for fewer problems with moisture in the winter due to freeze-up.
- PerfectPulse™ cleaning system delivers every pulse directly over the filter to ensure more effective bag cleaning and longer filter life.
  - All-welded design comes complete with legs attached to reduce install time by as much as 50%.

### **ICUE™ CONNECTED FILTRATION SERVICE**

Available with Donaldson's iCue connected filtration service, an IoT-enabled service designed to prompt timely maintenance, to help improve your production uptime and reduce your operating cost.

# **INTELLIGENT FILTER DESIGN**

When the time finally comes to replace the filters in your Rugged Pleat Baghouse, you will appreciate the advantages the collector's combination of performance and convenience provides.

The advanced construction and optimally-sized pleated filters enable the collector to provide the same airflow capacity as traditional round baghouses with up to 44% fewer filters. With fewer filters, the downtime needed for change-outs can be reduced.

Laboratory tests have shown that pleated filters with the convenient Donaldson Seal Lock design can withstand 100% more sideload pressure and can take up to 50% less time to replace than the traditional snap-in felt bag and cage configuration.\*

**Built-in venturi and tertiary** holes increase pulse pressure longevity to improve pulse effectiveness and filter cleaning without creating dead space just below the tubesheet.

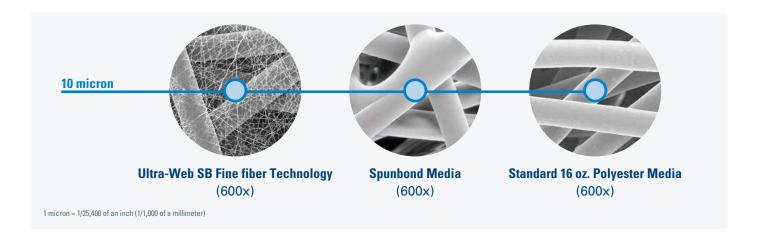


\*Based on 44% fewer filters, observational studies indicating that replacing Rugged Pleat filters takes 50% less time than traditional snap-in bag and cage filters.



## ADVANCED FILTER TECHNOLOGY

Donaldson has continually advanced our proven Ultra-Web® fine fiber technology. Ultra-Web media provides a very fine, continuous fiber of 0.2-0.3 microns 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 Spunbond pleated bag filters provide longer life, reduced downtime and help minimize emissions compared to felt media.

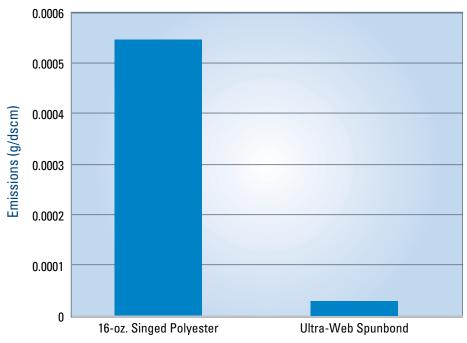


## **ULTRA-WEB SPUNBOND PLEATED BAG BENEFITS\***

- Media is more efficient in capturing submicron dust particles (0.3 micron and larger)
- Longer filter life and better pulse cleaning due to surface loading technology
- Lower energy use with better pulse cleaning and lower operating pressure drop
- Cleaner air, longer filter life, and greater cost savings

\* Over singed polyester

## 94% FEWER EMISSIONS



## SIMPLIFIED MAINTENANCE

With fewer, easier-to-handle filters the new Rugged Pleat Baghouse can help reduce maintenance labor costs and change-out times by up to 72%.\*

- Innovative Ultra-Web Spunbond filters provide the same airflow capacity as traditional round baghouses with as many as 44% fewer filters to replace.
- Filters with the intelligent Donaldson
  Seal Lock design take 50% less time to replace
  than typical snap-in felt bags and cages which
  helps to reduce downtime and labor hours.
- Rugged Pleat filters are only 5 feet tall so they are much easier to handle than conventional 8-, 10- or 12-foot bags and cages.
- The Rugged Pleat Baghouse has a shorter profile than most round collectors to help improve maintenance accessibility and help meet code requirements.

'Compared to typical round baghouse collectors.

\*Based on 44% fewer filters, observational studies indicating that replacing Rugged Pleat filters takes 50% less time than traditional snap-in bag and cage filters.



Grasp insert

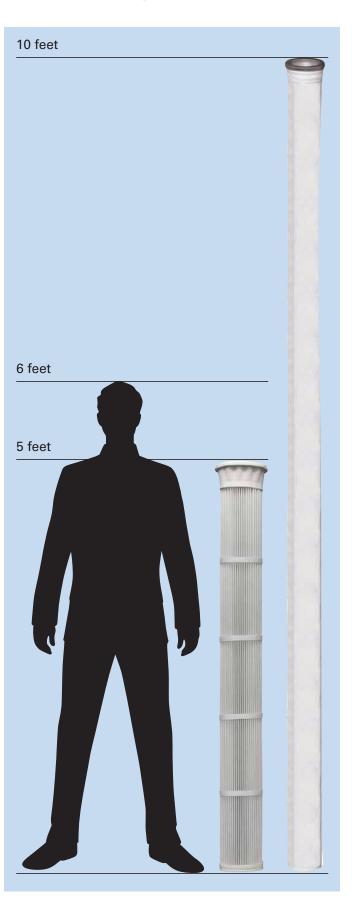
Remove insert





Grasp filter

Remove filter



## PERFECTPULSE CLEANING SYSTEM

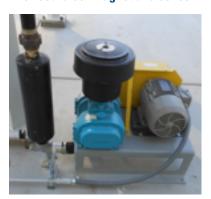
The PerfectPulse cleaning system utilizes a sensor that verifies pulsenozzle location during cleaning to ensure the cleaning pulse is sent precisely to each filter once every four minutes. Cleaning air is provided by a PD pump, which provides powerful, high-volume, mediumpressure pulses during the cleaning process.

Unlike compressed air, medium-pressure cleaning air generates less moisture, which can cause valve freeze-up in cooler environments. That allows the Rugged Pleat to be placed in harsh environments without concerns about issues related to compressed air generation, piping, or maintenance.

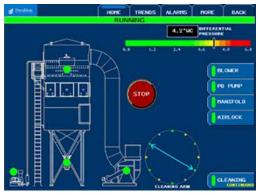
The PD pump operates at lower horse-power, providing greater energy efficiency compared to compressed air or reverse air cleaning systems, helping to save you money.



PerfectPulse™ magnet and sensor



**PD Pump** 



**Rugged Pleat Control Panel** 

## RUGGED PLEAT CONTROL PANEL

The Rugged Pleat baghouse also offers a new, easy-to-use control panel. It provides at-a-glance monitoring of the complete system, so you know that your Rugged Pleat collector is running at optimal performance.

It also offers features such as an airflow controller which can increase fan speed as filter life progresses and help your system run more efficiently to help lower your energy costs.

## **DONALDSON iCue™ CONNECTED FILTRATION SERVICE**

The Rugged Pleat Baghouse comes standard with iCue™ Connected Filtration Service. This service tracks your Rugged Pleat collector's performance, stores historical data and alerts you if an alarm is generated. This allows you to monitor your collector via an online dashboard on your computer or mobile device.

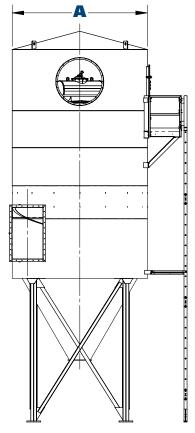




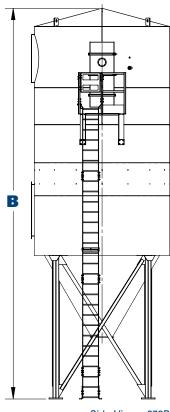
**Donaldson iCue™ Connected Filtration Service** 

# **DIMENSIONS & SPECIFICATIONS**

## **MODEL 272RP (SUPERSEP™ INLET)**

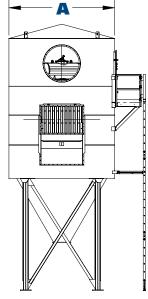




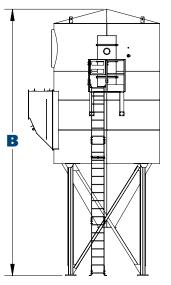


Side View - 272RP

## **MODEL 258RPH (HIGH BODY INLET)**



Front View - 258RPH



Side View - 258RPH

# **DIMENSIONS & SPECIFICATIONS**

Model*	Dimensions										
	А		В		No. of Filters	Ultra-Web Filter Area		Approx. Shipping Weight			
	in	mm	in	mm	ivo. of Fillers	Ft²	m²	lb	Kg		
66RPH	96.0	2,438.4	345.7	8,780.8	66	2,435.4	226.3	8,256.0	3,745.0		
70RP	96.0	2,438.4	371.3	9,431.0	70	2,583.0	240.0	8,670.0	3,933.0		
86RPH	96.0	2,438.4	345.7	8,780.8	86	3,173.4	294.8	8,256.0	3,745.0		
92RP	96.0	2,438.4	371.3	9,431.0	92	3,394.8	315.4	8,670.0	3,933.0		
132RPH	123.0	3,124.2	394.3	10,015.2	132	4,870.8	452.5	11,136.0	5,051.0		
136RP	123.0	3,124.2	410.6	10,429.2	136	5,018.4	466.2	11,367.0	5,156.0		
150RPH	123.0	3,124.2	394.3	10,015.2	150	5,535.0	514.2	11,136.0	5,051.0		
156RP	123.0	3,124.2	410.6	10,429.2	156	5,756.4	534.8	11,367.0	5,156.0		
188RPH	139.6	3,545.8	403.6	10,251.4	188	6,937.2	644.5	12,647.0	5,737.0		
200RP	139.6	3,545.8	434.5	11,036.3	200	7,380.0	685.6	13,854.0	6,284.0		
258RPH	157.6	4,003.0	418.8	10,637.5	258	9,520.2	884.5	15,875.0	7,201.0		
272RP	157.6	4,003.0	455.6	11,572.2	272	10,036.8	932.4	16,400.0	7,439.0		

## **THREE OPTIONAL FILTER DESIGNS**

- Snap-in design for tool free installation
- Fully synthetic snap-in design eliminates the need to provide bonding points
- Bolt safe design for higher temperature applications, or for bonding



Snap-in



**Fully Synthetic Snap-in** 



**Bolt-Safe** 

# **APPLICATIONS & INDUSTRIES**



200RP at Skateboard Manufacturing Facility



136RP at Millwork Manufacturing Facility



272RP at Onion Processing Facility



200RP at Display Manufacturing Plant



Grain



Wood



Mining



**Fabricated Metals** 



Chemical



Cement/Gypsum

# **STANDARD FEATURES** & AVAILABLE OPTIONS

Collector Design	Std	Opt			
All-Welded 10 ga (minimum) Construction	X				
Heavy-Duty 1/4-in (6.4 mm) Tubesheet Construction	X				
PD Pump (TEFC Motor Drive) for Cleaning System	X				
1/3 HP TEFC Motor* for Manifold Drive	X				
SuperSep <sup>™</sup> Inlet System	X				
EvenFlow <sup>™</sup> baffles (with SuperSep <sup>™</sup> Inlet)	X				
Round Outlet	X				
Rectangular Outlet		X			
High Body Inlet		X			
Ladder & Platform Assemblies		X			
Stainless Steel Construction		X			
Internal Service Light		X			
Pleated Bag Filters					
Ultra-Web® Spunbond Pleated Bags with Donaldson Seal-Lock Snap-In Top	X				
Fully Synthetic Pleated bags with Seal-Lock Snap-In Top		X			
Pleated Bags with Boltsafe <sup>™</sup> Hardware Top		X			
Variety of Media Options		X			
Hopper Design					
60° Conical Hoppers	X				
Hopper Access Cover	X				
Outlet Transitions for various Airlock Sizes		X			
Outlet Transition for Live Bottom Hopper		X			
Hopper Service Port		X			
Hopper Level Indicators		X			
3" (76.2 mm) Hopper Water Overflow Check Valve		X			

Support Structure <sup>†</sup>	Std	Opt			
Steel Support Legs Shipped Installed		X			
Electrical Controls, Gauges and Enclosures					
Magnehelic®** Gauge Standard	X				
RP PerfectPulse™ Timer PLC in NEMA 4 Enclosure	X				
Pulse Solenoid Valve in NEMA 9 Enclosure	X				
iCue <sup>™</sup> Connected Filtration Hardware and 1 Year Service Agreement	X				
RP PerfectPulse <sup>™</sup> Controller with HMI Screen in NEMA 12 Enclosure		X			
RP PerfectPulse <sup>™</sup> Control Panel with HMI Screen, Motor Starters in NEMA 12 Enclosure		X			
Safety Features					
Sprinkler Taps		X			
Explosion Vents		X			
Ladder Safety System		X			
Paint System					
Prime Coated Interior	X				
Textured Multi-Coat Paint Finish with 2,000-Hour Salt Spray Performance	X				
Premium Duty Finish		X			
Custom Colors		X			
Warranty					
10-Year Warranty	X				

 $<sup>\</sup>ensuremath{^{**}}$  Magnehelic is registered trademarks of Dwyer Instruments, Inc.

<sup>\*</sup> All 60 Hz motors 1 HP and above are EISA compliant and considered NEMA Premium® per Table 12-12. NEMA Premium is a registered trademark of National Electrical Manufacturers Association.

 $<sup>\</sup>verb|^{\dagger} Donaldson Torit equipment| is designed to IBC guidelines for specific wind speed exposure and seismic$  $spectral\ acceleration\ at\ grade\ level.\ Contact\ your\ Donaldson\ Torit\ representative\ for\ detailed\ information$ available on the equipment's Spec Control drawings. Equipment may be customized to meet unique, customer-specified site requirements.

## **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.



