

# **SFC Series**DOWNWARD FLOW CARTRIDGE DUST COLLECTORS





ENGINEERING YOUR SUCCESS.



## **SFC Series**

High Performance, Energy Efficient Dust Collector The DustHog<sup>°</sup> SFC is a proven, high-quality downward flow cartridge dust collection system. With its patented pulse cleaning technology, greater air capacity and quick and easy maintenance, there's no better air filtration method for your manufacturing facility.

Our SFC unit removes harmful pollutants resulting from common manufacturing processes — such as grinding, welding, buffing and sanding. The result: a safer, cleaner environment for your employees. By using our SFC unit, you're virtually eliminating air quality concerns in the workplace. Plus, you're ensuring increased employee productivity, fewer absences and illnesses, more efficient cleaning, and significant operational savings.





## A Wide Range Of Applications

The high-performance SFC unit is ideal for all your dust and fume collection needs. Filtering out the polluted air that commonly occurs within a manufacturing environment, SFC's many industrial applications include grinding, welding, buffing, sanding, smelting, bulk powder handling, and more. Plus, our design allows for field expandability — so you can add modules and increase the capacity of your system at any time.



## Patented Pulse Cleaning Technology

At the heart of the SFC system is the industry's most advanced pulse cleaning system technology. In designing the SFC unit, Parker Hannifin engineers used Computational Fluid Dynamics computer modeling to develop the most effective system that "pulses off" dust from the filter greatly improving the cartridge cleaning power. Utilizing an optimized nozzle and venturi, air is pulsed at a precisely calculated distance through an unobstructed airway. The result: increased pulse cleaning energy, lower pressure drop and longer cartridge life. Plus, our patented pulse system cleans the full length of the cartridge. These unique, proprietary features assure years of dependable, efficient and cost effective performance.

## Extended Cartridge Life with More Power & Less Energy

Unlike competitors, the SFC system uses external filter tracks to support the filters instead of "yokes" that interfere with cleaning. This allows for unobstructed airflow and increased cleaning power with less energy. By designing the SFC with optimized cabinets that broaden the space between cartridges and sidewalls, we ensured lower velocities and reduced cartridge abrasion. The result: dramatically increased cartridge life.

## SFC Pulse Blast



At any point along the cartridge filter, the SFC unit provides 25% or more pulse cleaning power than the competition.

## Pulse Blast Benefits

Fewer pulses are needed to clean the cartridge filters, so less compressed air is used. This is a substantial cost savings for the customer over the life of the unit.

Filter life is increased because fewer pulse cycles mean less stress on the filter media. This equates to less frequent filter changes and significant reduction in operating costs.

Unobstructed airflow means there is more cleaning energy delivered to the filters to clean the entire length of the cartridge filter.

Optimized cleaning provides maximum filter efficiency with the lowest possible outlet emissions.

DUSTHOG

## Protura<sup>®</sup> Advanced Nanofiber Cartridge Filters

All SFC Series dust collectors come with the industry's best performing, most efficient standard cartridge filter. Independently certified at MERV 15\*, Protura Advanced Nanofiber cartridge filters last 50% longer than commodity filters, and are nearly 50% more efficient on sub-micron dust particles than MERV 13 filters.

Protura Advanced Nanofiber Filtration technology is proven to achieve higher efficiency, cleaner air, lower pressure drop, longer filter life and greater energy savings than any other standard cartridge filter media. And, when used with the SFC Series dust collector, the advantages quickly add up to unsurpassed bottom-line savings—the most efficient and best value dust collector available for industrial air cleaning processes today.

#### Surface Loading Is Key

Protura Advanced Nanofiber filters feature a special surface treatment of synthetic fibers so extremely fine, they are measured in fractions of a micron (nanometers). This ultra-thin layer traps dust and fume particulate on the surface of the filter before it can embed deeper in the media—leading to better cleaning efficiency with fewer pulses and significantly less compressed air use.

Our Protura Advanced Nanofiber filters (MERV 15) are more than 85% efficient in capturing sub-micron particles from a contaminated air stream. In contrast, conventional cartridge filters, or 80/20 cellulose filters (MERV 8-10), are not capable of capturing such small particles and often require the additional use of a costly HEPA filter to ensure a safe breathing environment. This adds to overall filter cost and system upkeep.



#### **Invest In The Best**

A cartridge dust collector is an important investment that impacts the performance of plant equipment and the health of your employees. To yield the best return and provide the safest work environment possible, it's important to choose a dust collector that utilizes an optimized pulse cleaning system to reap the full benefits of a nanofiber filter.

#### The result is:

#### Less Energy Use

The SFC's patented pulse cleaning system actually uses less compressed air—a costly but necessary utility expense. This is achieved through the combination of increased power behind each pulse blast and the superior surface-loading ability of nanofiber filters. Each cleaning cycle is much more effective in removing dust from cartridge filters than other downflow collectors.

#### Longer Filter Life

With less pulsing needed to clean surface-loading nanofiber cartridges, stress on the filters is minimized, resulting in double the filter life of a commodity filter.

#### A Smaller Dust Collection System Footprint

The combination of the SFC's patented pulse cleaning system and nanofiber cartridge filters also allow for higher air-to-media ratios, potentially reducing the size of the dust collector and number of cartridges needed for your facility—a significant cost savings overall.





#### Advanced Nanofiber at 600x

80/20 Cellulose at 600x

\* Minimum Efficiency Reporting Value (MERV) is based on ASHRAE Standard 52.2-1999, and has been deemed the most accurate scale for determining a filter's efficiency and ability to filter submicron dust particles. MERV 15 efficiency has been tested per this standard by independent lab testing.

## **Features and Benefits**

#### Heavy-duty Lifting Lugs

Ensure safe and secure support during installation.

#### Modular Design

Provides flexibility to increase unit capacity by adding modules at your facility.

#### Optimized Cartridge Cleaning System

Springless pulse valves and patented nozzle/venturi offer maximized cleaning power.

#### **Horizontal Filters**

Quick and easy access when replacing filters.

#### **Heavy-duty Construction**

Designed and manufactured to meet Seismic Zone 4 and 100 mph wind load structural rating.

## **Options and Accessories**



#### Bag-In / Bag-Out Option

provides clean, safe, easy removal of fine, hazardous or difficult-tohandle dusts.



Digital Pressure Control / Digital Pressure Monitor allows users to program dust collector for continuous or on-demand pulse

cleaning.





### All components have

**Powder Coated Finish** 

electrostatically applied paint applied inside and out that prevents fading and chalking.

#### Quick & Easy Maintenance

With one simple movement of the handle, the SFC's "Quickseal" release door provides extremely fast filter removal and maintenance.



#### Explosion Relief Vents

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help ensure facility and worker safety in the unlikely event of an explosion that may result when collecting explosive dusts.

#### Direct Drive Blowers

Fans integrally mounted to the dust collector saving floor space and easy installation.

## Add-Ons

- VFDs
- Abrasive Inlet
- Safety After-Filters
- Fan
- Fan Silencers
- Drum Lid Latch Kit
- Short Drums
- Drawer Base
- Service Platforms
- Control Panels
- Pneumatic Valve
  Assemblies
- Sprinkler Heads Additional options and accessories available.







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SFC8-2 And Larger With Drum (H55)





SFC2-2, 4-2 and 6-3 with Dust Drawer (DD) (SFC2-2 Shown)



## **Dimensions and Specifications**

SFC Models	Filter Quantity	Total Filter Media Area (FT)	Valve Quantity	Module Quantity	Appox. Weight	Compressed Air Consumption		Height	Width	Depth
					(LBS)	SFC/ PULSE	SCFM 6P/Min	neight	Width	Deptil
SFC 2 - 2 - SD	2	510	1	1	954	1.7	10.2	7' 8"	2' 1"	5' 1"
SFC 4 - 2 - SD	4	1,020	1	1	1,317	1.7	10.2	8' 7"	3' 9"	5' 1"
SFC 6 - 2 - SD	6	1,530	1	1	1,726	1.7	10.2	7' 8"	5' 4"	5' 1"
SFC 2 - 2 - DD	2	510	1	1	890	1.7	10.2	5' 4"	2' 1"	5' 1"
SFC 4 - 2 - DD	4	1,020	1	1	1,197	1.7	10.2	4' 3"	3' 9"	5' 1"
SFC 6 - 3 - DD	6	1,530	1	1	2,020	1.7	10.2	7' 10"	3' 9"	5' 1"
SFC 6 - 3 - SD	6	1,530	1	1	1,726	1.7	10.2	9' 4"	3' 9"	5' 1"
SFC 2L - 2 - H55	2	768	2	1	1,225	1.7	10.2	9' 1"	3' 9"	6' 2"
SFC 4L - 2 - H55	4	1,536	4	1	1,600	1.7	10.2	9' 1"	3' 9"	6' 2"
SFC 6L - 3 - H55	6	2,304	6	1	2,000	1.7	10.2	11' 6"	3' 9"	6' 2"
SFC 8L - 4 - H55	8	3,072	8	1	2,500	1.7	10.2	13' 2"	3' 9"	6' 2"
SFC 8 - 2 - H55	8	2,040	1	1	1,922	1.7	10.2	10' 3"	3' 9"	7' 3"
SFC 16 - 2 - H55	16	4,080	2	2	3,237	3.4	20.4	10' 3"	7' 6"	7' 3"
SFC 24 - 2 - H55	24	6,120	3	3	4,552	5.1	30.6	10' 3"	11'3'	7' 3"
SFC 32 - 2 - H55	32	8,160	4	4	5,947	6.8	40.8	10' 3"	15' 0"	7' 3"
SFC 12 - 3 - H55	12	3,060	1	1	2,420	1.7	10.2	11' 11"	3' 9"	7' 3"
SFC 24 - 3 - H55	24	6,120	2	2	4,016	3.4	20.4	11' 11"	7' 6"	7' 3"
SFC 36 - 3 - H55	36	9,180	3	3	5,612	5.1	30.6	11' 11"	11' 3"	7' 3"
SFC 48 - 3 - H55	48	12,240	4	4	7,288	6.8	40.8	11' 11"	15' 0"	7' 3"
SFC 60 - 3 - H55	60	15,300	5	5	8,884	8.5	51.0	11' 11"	18' 9"	7' 3"
SFC 72 - 3 - H55	72	18,360	6	6	10,480	10.2	61.2	11' 11"	22' 6"	7' 3"
SFC 16 - 4 - H55	16	4,080	1	1	2,873	1.7	10.2	13' 7"	3' 9"	7' 3"
SFC 32 - 4 - H55	32	8,160	2	2	4,762	3.4	20.4	13' 7"	7' 6"	7' 3"
SFC 48 - 4 - H55	48	12,240	3	3	6,651	5.1	30.6	13' 7"	11' 3"	7' 3"
SFC 64 - 4 - H55	64	16,320	4	4	8,620	6.8	40.8	13' 7"	15' 0"	7' 3"
SFC 80 - 4 - H55	80	20,400	5	5	10,509	8.5	51.0	13' 7"	18' 9"	7' 3"
SFC 96 - 4 - H55	96	24,480	6	6	12,398	10.2	61.2	13' 7"	22' 6"	7' 3"
SFC 112 - 4 - H55	112	28,560	7	7	14,367	11.9	71.4	13' 7"	26' 3"	7' 3"
SFC 128 - 4 - H55	128	32,640	8	8	16,256	13.6	81.6	13' 7"	30' 0"	7' 3"
SFC 20 - 5 - H55	20	5,100	1	1	3,400	1.7	10.2	17' 6"	3' 9"	7' 3"
SFC 40 - 5 - H55	40	10,200	2	2	5,700	3.4	20.4	17' 6"	7' 6"	7' 3"
SFC 60 - 5 - H55	60	15,300	3	3	7,900	5.1	30.6	17' 6"	11' 3"	7' 3"
SFC 80 - 5 - H55	80	20,400	4	4	10,250	6.8	40.8	17' 6"	15' 0"	7' 3"
SFC 100 - 5 - H55	100	25,500	5	5	12,600	8.5	51.0	17' 6"	18' 9"	7' 3"
SFC 120 - 5 - H55	120	30,600	6	6	14,950	10.2	61.2	17' 6"	22' 6"	7' 3"

Short Drum (SD) units available in SFC 8 and larger. Subtract 16" from height. Additional models and hopper configurations are available



Parker Hannifin is committed to providing clean air solutions that protect your employees, improve plant performance and enable you to realize your operating goals.

Our commitment is backed by continuous investment in research, leading-edge technology and product development, our people whom are the most knowledgeable in the industry, and a product portfolio that is proven to deliver results. We have been solving problems for you, our customers across the globe for over 50 years.

## **Industrial Applications**

- Abrasive Blasting
- Grinding
- Powder Coating
  Welding

- Batch Mixing
- Metal Working
- Sanding

**Important** – Understand and follow NFPA guidance in selecting equipment for your intended application, including required safety devices and testing your dust to determine combustion hazards. At your election, we can coordinate sample collection and testing.

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