

# SMART FLO DUST COLLECTORS

VERTICAL CARTRIDGE TYPE

FOR DUST, MIST & FUMES





### **SMART FLO DUST COLLECTORS**





### VERTICAL CARTRIDGE COLLECTORS

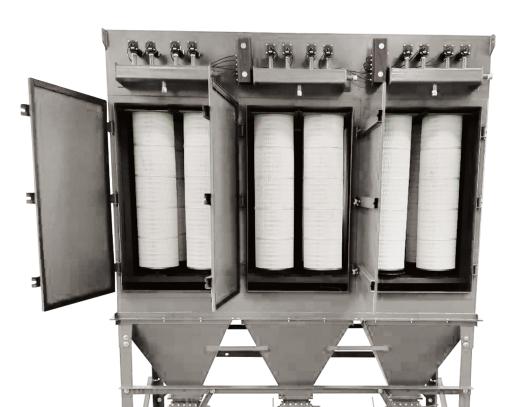
**SmartFlo** Cartridge Dust Collector is a continuous operation system, modular vertical cartridge type style, which uses the principle of rear / lateral dirty air inlet to minimize re trapped material during pulse cleaning with compressed air.

The original design of the **SmartFlo** Collector with vertical filters makes this type of collector offer savings in operating and maintenance costs because the filters only need to be slid over the independent media, making during the maintenance time of each replenishment be lower and costs are minimal saving your money.

**SmartFlo** Vertical Dust Collectors are modular in design and each standard module there are two or four cartridges in deep.

The unit model describes module configuration such as FV2 & FV4 indicating the number of deep filters and the next shows the total number of filters in the equipment.

For example FV4-16 is four filters deep and has 16 filters total. The model FV2 has only one door which is frontal and the FV4 has two doors in front and rear sides to access the filters.



## **SMART FLO DUST COLLECTORS**

### **VERTICAL CARTRIDGE COLLECTORS**

The SmartFlo Vertical Dust Collector has several component options and configurations that make them versatile for any type of application, these options include:

Anti-Abrasion Inlet

• Dirty Air Plenum Extensions

Air Modules (AAM)

Explosion Vents

 Big Hoppers, Among Others...

Hoppers can be configurable to have a free download bridge with all sides greater than 60° slope.

To maximize the cleaning system with bursts of compressed air, the equipment has blower tubes at the correct distance form the tube sheet to clean even closer to the tube sheet area.



### **SMART FLO DUST COLLECTORS**

#### **OPERATION**

**Normal Operation:** As the stream of dirty air enters through the filters area, the air stream is directed down through the collector causing much of the load of dust and coarse go directly to the discharge hopper under the filters; fines particles are filtered by the cartridges which are vertical, and the clean filtered air through the clean air plenum of the collector on the top. Cartridges are the heart of this equipment and are **SmartFlo** products specifically for your application.

Cleaning Filters: Cleaning the system is accompanied by pulses of compressed air, a solenoid valve connected to a diaphragm valve will each row of filters for air pulse and the pulse sequence is designed to clean the sequencially The filter element can be inspected and removed from inside of the equipment; just open the front / rear door of each row of filters and sliding on the horizontal supports.

#### **APPLICATIONS**

The **SmartFlo** vertical Dust Collector is very competitive to others Cartridge Dust Collectors and Bags Dust Collectors for continuous operation and many alternative applications.

The equipment is designed to operate online using pulses of compressed air for cleaning automatic allowing the equipment to maintain the air flow from the system while the filters are being cleaned.

The collector is designed for online trading by short bursts of compressed air at 90-100 psig. **SmartFlo** Vertical Dust Collectors are used in sanitary applications and fugitive dust; The high operating efficiency with these Dust Collectors compared with Bags Dust Collectors is especially beneficial to return filtered air to the workspace. We have to take special attention in processes where high temperature and humidity are present. When this is present in the application you must make modifications to the collector as an alternative to resist.

# **STANDARD FEATURES**

#### SIZE SELECTION

This type of equipment are selected by Air-Media-Ratio. Based on our experience we have list of recommended maximum values for each type of contaminant.

To determine the number of filters required, we use the following formula: Number of filters = CFM / Air-Media - Ratio / Ft<sup>2</sup> per cartridge Filter

Once the number of filters has been defined, the configuration of the unit can be selected according to the user's needs.

CHARACTERISTICS	ADVANTAGES	BENEFITS
<ul> <li>Modular design with different height (low profile) options.</li> </ul>	Allows flexibility in system design.	Adaptable to space limitations.
Airflow Pattern	Improvements in filtration, and filter cleaning	<ul> <li>Lower operating pressure drops to a given airflow through the filter.</li> <li>Higher airflows per filter for a given pressure drop.</li> </ul>
<ul> <li>Multiple cartridge filter options for fine, fibrous, non-fibrous, agglomerated, and high temperature applications.</li> </ul>	<ul> <li>Excellent Cartridge Filter</li> <li>Specific execution for each application.</li> </ul>	<ul> <li>High Filtration Efficiency</li> <li>Low Pressure Drop (Operating Costs)</li> <li>Longer Filter Life</li> <li>Less Maintenance</li> </ul>
<ul> <li>Mount filters &amp; accessibility:</li> <li>Vertical Filter Support</li> <li>No tool required for service.</li> <li>Front &amp; rear doors for quick access.</li> </ul>	<ul> <li>Easy to service the filters.</li> <li>There is no tool that can be dropped, lost or broken.</li> </ul>	<ul><li>Less time to change filters.</li><li>Less exposure to collected dust.</li><li>Easy to Maintain</li></ul>
Factory assembled with filters installed.	Easy to Install	Low Installation Costs
<ul> <li>Cleaning system:</li> <li>Each module has its own air manifold with solenoids and diaphragms.</li> <li>A solenoid-diaphragm filter row.</li> <li>Solenoids, diaphragms and timers are standard.</li> <li>Mass Flow Hoppers</li> </ul>	<ul> <li>Modular Design</li> <li>Superior Cleaning System</li> <li>Standard Components</li> </ul>	Easy to Service     Longer Filter Life





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