OptiFlo DustCatcher™

The Complete In-Plant
Dust and Fume Collector



E R E T Т AIR I S 0 U R В U SI N S S® E



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Meet tomorrow's tougher ambient air quality standards today with the latest industrial filtration system from AAF International, the OptiFlo DustCatcher. Everything you need to improve industrial air quality has been built into this powerful, compact dust and fume collector. The DustCatcher arrives at your plant fully wired and ready to go to work providing a healthier and safer environment for your people as well as clean air for your processes.

Designed to control dust and fume from a single source or system, the high performing DustCatcher picks up even sub-micron particulate allowing the cleaned plant air to be recirculated to reduce exhaust and energy costs.



With over 75 years of experience, AAF developed many of the original air pollution control technologies. But we went back to the drawing board to reinvent a small dust collector to meet the high efficiency filtration demands of more stringent regulations and the rigors of today's global manufacturing environment.

During the entire production process, our operations are governed by our ISO 9001 certified system.

Each DustCatcher is manufactured and tested according to our ISO 9001 quality system.



PACKED FULL OF VALUE

Available in three sizes for small to medium volume dust problems, the DustCatcher contains an enclosed fan with built-in silencer, self-cleaning cartridge filters, wired control panel, and a quick connect dust disposal pail. With four air inlet openings to choose from, the DustCatcher will fit in tight spaces most anywhere in your plant.

Constructed from 11-gauge welded steel panels, this small collector has been designed to handle the stress of pulse-jet cleaning. Numerous options, including source capture arms, casters, explosion vent, HEPA afterfilters, and a 55-gallon drum adapter help you tailor the DustCatcher to your specific application needs.

OPTIFLO DUSTCATCHER™ FEATURES Lift-Off Panel Adjustable Outlet Damper Backwardatcher **Inclined Fan OptiKlean**™ 3/4" Pulse Valve **Filter Cartridge Compressed Air Supply Manifold Tamper-Proof Cartridge Seal Hopper** Quick-Release Latch Control **Panel**

Disconnect

Lever

5-Gallon Pail

DustCatcher Options

Source Capture Arm

Alternate Voltages - 208, 230, 460, or 575

Casters for DustCatcher 2

AstroCel® HEPA Afterfilter

Explosion Vent

Explosion-Proof Motor and AMCA C Fan

Pressure Demand Control with Rotary Disconnect Switch

55-Gallon Drum Adapter

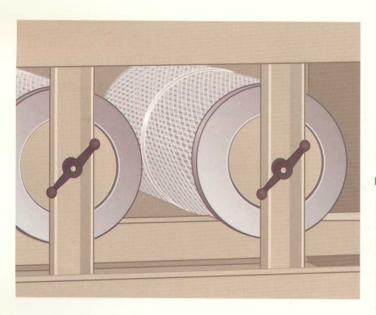
Wide Variety of Cartridge Filter Media

UNIQUE FILTRATION DESIGN

AAF pioneered the downflow air principle, which we incorporated into the DustCatcher design. However, we knew this feature alone would not ensure proper filter cleaning in a small cartridge collector. Tight restricted spacing between the cartridge filters and the walls of the housing and abrupt changes in the cross section of the incoming air passage can interfere with the cleaning system. To avoid these problems, we designed a very open cartridge filter section. This unique design prevents re-entrainment of dust during the cleaning cycle.

The oversized cartridge access door makes it easy to properly clean the collector for process recovery applications and reduced maintenance.

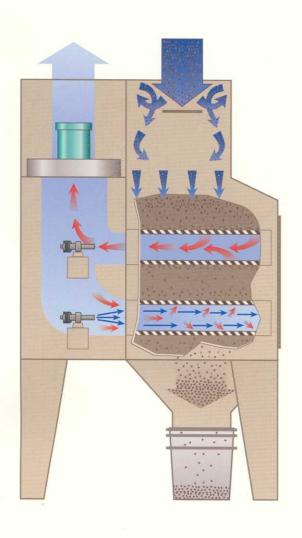
Our patent-pending, tamper-proof cartridge filter seal eliminates leakage and dirty air bypass, resulting from periodic maintenance or inspection of the unit's interior. No tools needed; quick-release latches make filter changes simple and fast. An internal baffle deflects heavier particulate directly into the collection hopper.



RP-531 CERTIFIED HIGH EFFICIENCY OPTIKLEAN™ FILTERS

Efficient on even health damaging, sub-micron, fine particles, OptiKlean cartridge filters have been certified by an independent test laboratory to provide the highest levels of cartridge filter cleaning efficiency (99.999% average efficiency on 0.8 micron particulate). Tests were performed in accordance with RP-531 test procedures.

OptiKlean cartridge filters are standard on DustCatcher collectors. For special applications, a wide variety of additional media is also available.



HOW THE DUSTCATCHER OPERATES

Dust laden air enters the DustCatcher through one of the four inlets and moves in a true downflow direction through the cartridge filters. An internal baffle distributes the airflow and absorbs the momentum of heavy dust particles. The downward airflow moves the heavier dust directly into the collection hopper.

Lighter dust particles are collected on the outer surfaces of the filter elements. Clean air flows through the center of the cartridge filters and discharges through the outlet.

At timed intervals, the cartridge filters are cleaned with pulses of compressed air.

A solid-state timer energizes air valves attached to the compressed air supply manifold. This burst of compressed air is released through the pulse valves as a shock wave which dislodges the particulate from the cartridge filters. This dislodged dust falls into the collection hopper for easy removal.

BUILT-IN SILENCER FOR QUIET OPERATION

Precision engineered for dependable, quiet operation, the direct-drive, backward-inclined fan and motor are enclosed in the collector. The housing interior is lined with sound-absorbing material to reduce noise and vibration levels. The fan discharges cleaned air through the top of the enclosure via an adjustable outlet damper.

The DustCatcher was designed for convenient service access. A handy lift-off panel provides access to both the fan and motor.



THE DUSTCATCHER CONTROL SYSTEM PUTS YOU IN CONTROL

The DustCatcher control ships prewired in a NEMA 12 enclosure. Conveniently located for quick and easy access, both the control panel and push-button controls are assembled with off-the-shelf UL or CSA approved electrical components for ease of replacement. An adjustable solid-state timer initiates the cleaning system. Pulse frequency and duration are field adjustable. Positioned for effortless monitoring, a pressure gauge provides direct read-out of pressure drop across the cartridge filters. Capability for remote start/stop is also included.





DUST DISPOSAL IS A SNAP

Dust disposal or recovery of process materials is a snap with the unique, heavy-duty, snap-in-place five gallon container that is attached to the outside of the hopper. Secured in position by a quick disconnect lever and located outside the collector for maximum accessibility and visibility, it takes only seconds to empty the container. A lid and handle are included to eliminate spillage. Since collected dust is isolated outside the hopper and collector, the potential for re-entrainment is greatly reduced.

TYPICAL APPLICATIONS

Pharmaceutical

- · Pill/Tablet Presses
 - · Pill Coating
 - · Packaging
 - Material Handling

Metalworking

- · Battery Manufacturing
- Grinding/Polishing
- Abrasive Cleaning Sandblasting
- Metallizing/ Thermal Spray (Arc, Plasma & Flame Spray, HVOF)
- · Laser Cutting
- · Weld Fume

Industrial Processes

- · Inorganic Chemicals
- · Pesticides/Fertilizer
- · Material Handling
- Plastics & Rubber (Molding & Grinding)
- Food Processing
- · Paint Pigments
- Powder Paint
- Asbestos
- Tobacco

Woodworking

- School Wood Shops
- Furniture Manufacturing
- · Cabinetry



SPECIFICATIONS

Dimensions and Operating/Shipping Weights

	DustCatcher 2	DustCatcher 4	DustCatcher 6
Width	41"	41"	41"
Depth	48"	48"	48"
Height	82"	101"	120"
Operating weight			
(less collected dust) (lb.)	600	700	800
Shipping weight (lb.)	650	800	900

	Number of Filters	Total Filter Area (sq. ft.)
DustCatcher 2	2	330
DustCatcher 4	4	660
DustCatcher 6	6	990

Standard Nominal Fan Performance*

Size	Nominal Airflow (CFM)	External Static Pressure (Inches W.G.)
DustCatcher 2	400-800	12.5-9.4
DustCatcher 4	800-1600	12.3-5.6
DustCatcher 6	1300-2200	12.0-6.9

^{*} Assumes an average internal pressure loss across the filter cartridges and housing of 4 in.w.g. See fan curve for full fan performance.



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