

# **AmericanAirFilter**

# **Millennium**<sup>™</sup>

Pulse-Jet Fabric **Dust Collector** 

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#### Pulse-Jet Fabric Dust Collector

The Millennium offers a flexible design that reduces freight and erection costs, fits tight quarters, is easy to install and service, and meets the stringent efficiency requirements mandated by today's tougher regulations.



Each Millennium is constructed of 10 gauge steel and designed to withstand 100 mph wind exposure or Universal Building Code Zone 4 earthquakes. The standard Millennium will withstand a negative pressure of up to 20" water column. Rated for temperatures up to 180 degrees, higher temperature versions are also available.

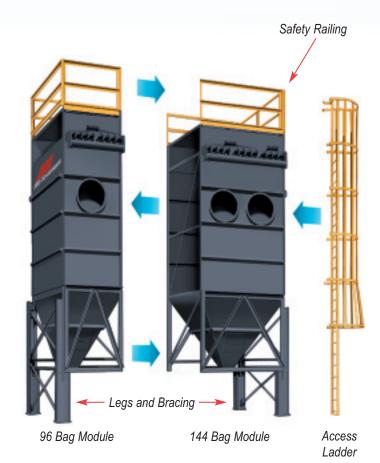
The Millennium is supplied with a two-coat enamel paint on the outside and a coat of primer on the inside.

#### Fits Anywhere - Sized to Meet All Process Needs

Available in two module sizes, one Millennium module contains 96 bags and the other module contains 144 bags. Each module is available in four heights and can accommodate fabric bag lengths of 8, 10, 12, or 14 feet long, as well as pleated bags. Since each Millennium will be constructed from a combination of these two basic modules, there is almost no limit to the size of the collector.

With a wide range of media fabrics to choose from, we can cost-effectively design a dust collection system to meet the needs of any industrial process and install it in virtually any plant location. For processes with low headroom, limited access, restricted space, or small footprint requirements, the Millennium offers a customized solution with off-the-shelf pricing. Best of all, you get maximum filter area in a minimum size house.

Designed to adapt to changes in emission regulations, if your process changes, so can the Millennium. Just use the flexibility of bolt-together assembly and modular construction to connect, dismantle, or add units without obtaining new operating permits.



### Reduced Installation Costs

Single modules ship fully assembled and ready to install. Multiple modules can also ship with the individual modules fully assembled or knocked-down for field assembly to reduce freight cost. Simply bolt the modules together and assembly is complete. Only four support legs are required for collectors containing up to five modules. Intermediate legs are supplied on collectors larger than five modules. This eliminates most of the foundation and anchoring preparation that is necessary with conventional baghouses. The result is reduced cost and installation time.



Continuous operation and self-cleaning bags extend the service life of the media, resulting in less frequent change-outs and reduced replacement and disposal costs. The Millennium also has an elevated inlet and diffusion baffle which divert heavier dust directly to the hopper.

A hinged access hatch is included with the standard pyramid hopper, which is convenient when accessing the hopper or when removing the filter bags during a change-out. Just drop the dirty bags through the tube sheet and remove them from the hopper. Lift off access doors in the roof of the Millennium provide easy access to the bags and the clean air plenum.

Check out these other super features that are standard on the Millennium.

- Access ladder and protective handrails which meet OSHA safety requirements.
- Exposed manifold and pulse valves with quick disconnect piping; very easy to service.
- Manifold connection kit to connect multiple modules which often reduces field piping to only a single connection.
- Proven control technology using a simple solid-state control timer which eliminates replacing difficult-to-find, complex electronic components.
- Discharge hopper which can utilize an airtight rotary lock for discharge of dust to sealed drums or containers, thus eliminating concerns about secondary dust contamination.

# Solenoid Valves in NEMA 4 Enclosure Safety Railing Compressed Air Surge Tank Diaphragm Clean Air Valves Plenum Outlet Flange Inlet Flange 60° Sloped Hopper Hopper Access Door 12" x 12" Legs and Bracing

Hopper

Outlet

## **Energy Efficient**

The solid-state timer that initiates pulse-jet cleaning of the filters is adjustable for both pulse interval and duration. An electronic differential pressure switch is also available which initiates cleaning when the pressure drop reaches a preset level. This minimizes compressed air usage and maximizes bag life. The pressure control is also available with an after-shift pulse option.

Normally, less than 1.0 SCFM of clean, dry compressed air will be required for each 1,000 CFM of dust-laden air. Actual requirements will vary with the dust loading, air-to-cloth ratio, and specifics of the application. Air-to-cloth ratios normally vary between 3:1 and 15:1 depending on the physical and chemical properties of the dust.

Pressure drop across the collector is fairly constant as a result of continuous cleaning of the bags. Pressure drop will vary with the air-to-cloth ratio, temperature of the gas stream, dust loading, and characteristics of the dust. Normally, pressure drop will range from 3" to 6" w.g.

Access Ladder

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#### **Typical Applications**

#### **Foundries**

- Shake Outs
- · Sand Handling
- Transfer Points
- · Furnace Fume
- Reclaim
- · Pour Floor Fume

#### Cement

- · Rotary Kiln
- Bagging
- · Cement Block

#### **Metal Working**

- · Abrasive Blasting
- · Cutting, Grinding & Polishing
- · Metalizing
- · Weld Fume
- · Arc Gouging
- · Battery Manufacturing

#### **Chemical & Pharmaceutical**

- · Material Handling
- · Bulk Mixing
- Packaging
- · Paper Dust

#### Woodworking

- Furniture Manufacturing
- Cabinetry

#### **Industrial Processes**

- · Plastic & Rubber
- · Rock & Related Products
- · Coal Dust
- Powder Paint
- · Pesticides & Fertilizer
- Tobacco
- Carbon Black
- Fumed Silica
- Aluminum Casting
- · Ceramics
- Printing
- · Power Plants

#### **Food Processing**

- Cereals
- · Dog & Cat Food
- Sugar
- · Milk Solids
- Candy
- · Nut Shells
- · Chocolate
- Starch
- · Flour & Mixes

#### Municipal

- · Refuse Transfer Stations
- Incineration
- Composting

#### **Available Options for Customized Needs**

The standard Millennium is a versatile, high-performance dust collector that has been designed to meet the needs of most industrial applications. For customers with special requirements, we offer the following design change options:

#### **General Options**

- · Poke hole and strike plate
- Support legs for 6, 8, and 10 foot hopper clearance
- High pressure design
- · Walk-in clean air plenum
- · Access platform
- · Solenoid valve
- · Explosion vents and vent cages

#### **Bag and Cage Options**

 Various bag and cage materials and styles

#### **Control Options**

- Pressure demand control
- · After-shift pulse

#### **Elevated Temperature Options**

• Designs for up to 400° F

#### **Ancillary Equipment**

- Rotary lock/s
- Discharge conveyor
- · Solenoid valve heaters
- Sprinkler systems for fire protection
- · Hopper vibrators

#### **Paint Options**

 Specially selected coatings for severe duty



Standard and pleated bags are available to meet specific application needs.



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AAF has a policy of continuous product research and improvement and reserves the right to change design and specifications without notice.

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