



DALAMATIC[®] DUST COLLECTORS



Proven Performance and compact Design

Dust Collectors for almost any Industry and Application

The versatile Dalamatic® series of dust collectors deliver a powerful solution for nearly any dust filtration application. These collectors come in two models:

- The Dalamatic Cased (DLMC) is a stand alone collector that can be ducted to many different applications.
- The Dalamatic Insertable (DLMV) is a versatile collector that can be inserted into various applications, such as bins, silos, bunkers, storage vessels or transfer points.

Features and Benefits

- **Continuous collection**

Provides continuous filtration of high dust concentrations at high filtration velocities and constant levels of resistance in almost any industry and application.

- **Compact design**

Unique modular design allows for installation in the most space restricted areas. Envelope-shaped bags maximize the amount of media in a given space and allow for increased space between bags, minimizing the chances of bridging.

- **Fewer bag changes**

Proven envelope-shaped bags are scrim-supported singed polyester, promoting longer bag life.

- **Versatility**

A full range of sizes and types of bags are available for a wide variety of dust collection applications.

Both models are continuous-duty dust collectors designed to handle the most difficult product recovery applications.



DLMC 1/2/15



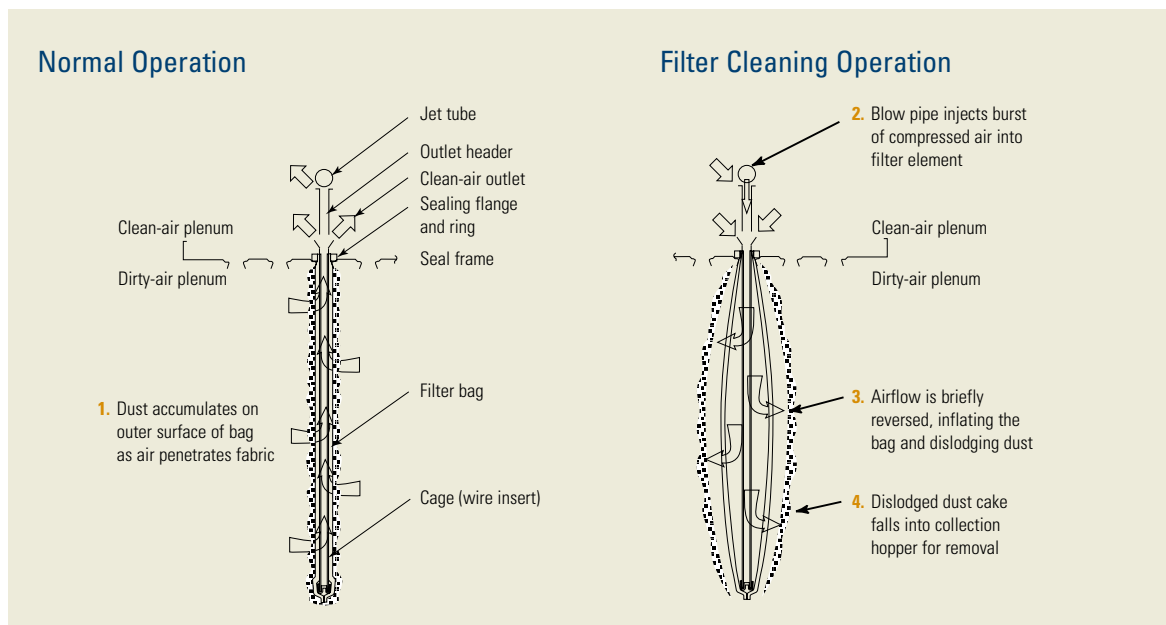
DLMV 45/15 FAD

Flexible and effective Filter Media

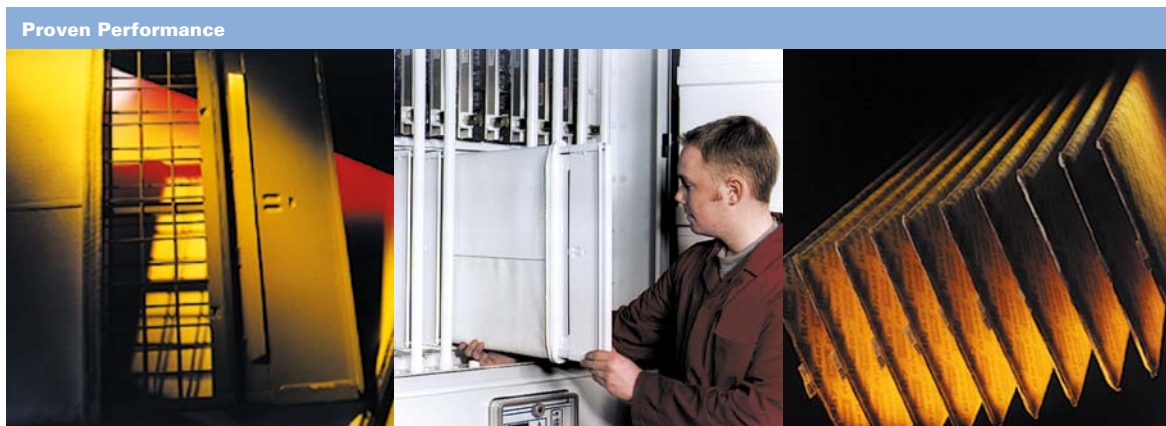
Efficient Media Design

Dalamatic® dust collectors use a proven filter media comprised of a flat fabric bag manufactured to the highest tolerances. The bag is mounted on a unique wire frame to ensure optimum airflow and thorough cleaning of the fabric.

The unique operation of the bag helps achieve high filtration efficiencies. First, dust accumulates on the outer surface of the bag as air penetrates the fabric. Next, the blow pipe (jet tube) injects a burst of compressed air into the filter bag. Airflow is then briefly reversed, inflating the bag and dislodging dust. Finally, the dislodged dust cake falls into the collection hopper for final removal or directly back into the process.



Principle of filtration



The proven filter media is designed with a compact, envelope shape. Each polyester bag is scrim-supported and singed for more surface loading and longer life.

Cased Sizes and Operations

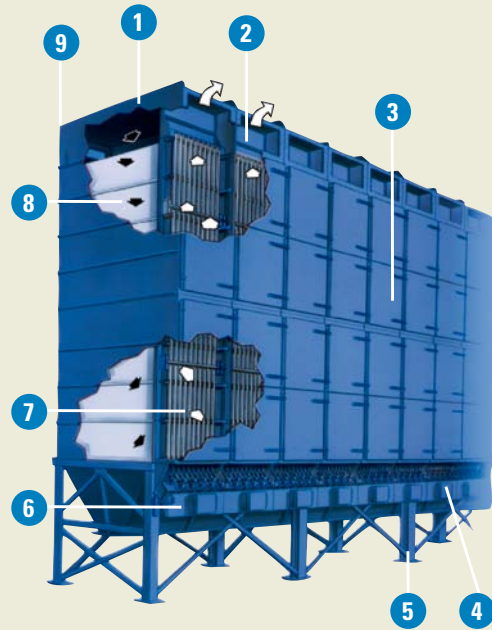
Dalamatic® Cased multi-module dust collectors contain filter media from 30 to 12,000 square meters. Using a basic module size with 15 square meters of media, each collector is built in banks and tiers to provide the capacity and configuration required to filter air volumes ranging from 2,550 up to 130,000 m³/h.

The DLMC dust collectors can also be installed face to face (double-banked), which reduces required platforms and ductwork, retains the advantages of easy access for maintenance and permits even more flexibility in making the best use of available space.

Features and Benefits

- Envelope-shaped bags provide maximum filter area per given space and ensure efficient cleaning
- Standard units are equipped with bags and horizontal bag removal
- Modular design gives dimensional and capacity flexibility
- Downward airflow pattern minimizes dust re-entrainment
- Support structures available to meet local site conditions

Equipment Dalamatic® Cased Dust Collector



- | | |
|----------------------------------|---------------------------|
| 1 Optional Side Inlet and Outlet | 6 Compressed Air Manifold |
| 2 Front Outlet | 7 Jet Tube |
| 3 Clean-Air Plenum | 8 Envelope-Shaped Bags |
| 4 Cleaning Controls | 9 Rear Inlet |
| 5 Support Structure | |

Cement



Chemical



Food and Beverage



Foundry



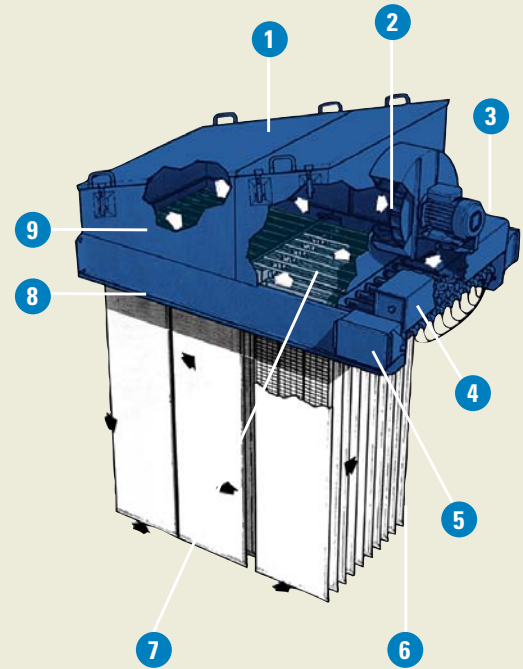
Insertable Sizes and Operations

Dalamatic® Insertable dust collectors are designed to handle high dust concentrations and filter velocities in bins, silos, bunkers and other storage vessels. Simply inserted into a storage vessel or silo, it provides continuous filtration of conveying or displaced air and maintains a high collection efficiency at constant system resistance. The DLMV collectors are available for a wide variety of applications in the handling, processing and storage of bulk materials and powders.

Features and Benefits

- Seven configurations to suit most process applications
- Uses positive pressure of the conveying air or can be fan powered to generate airflow into the dust collector where a negative pressure exists in the process
- Bags can be installed hanging vertically, horizontally or any angle in between
- Can be inserted into hood enclosures at belt transfer points, bucket elevator casings, ribbon blenders and receiving hoppers
- Insertable approach reduces or eliminates ducting costs; minimized ducting can also result in reduced energy costs

Equipment Dalamatic® Insertable



- | | |
|---------------------------------|------------------------|
| 1 Clean-Air Plenum Access Cover | 5 Cleaning Controls |
| 2 Backward Curved Fan | 6 Envelope-Shaped Bags |
| 3 Fan Motor | 7 Jet Tube |
| 4 Compressed Air Manifold | 8 Mounting Flange |
| | 9 Clean-Air Plenum |

Glass



Metal



Pharmaceutical



Pigment

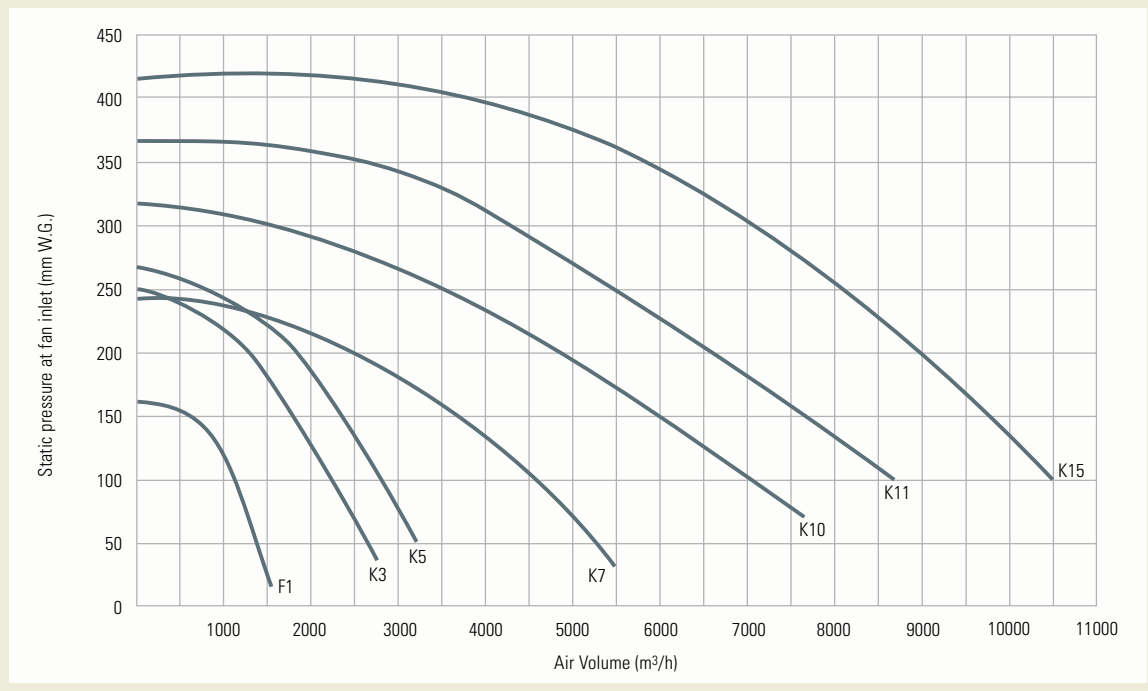


Insertable Performance Selections

To select the most suitable Fan for your Applications

1. Determine the air volume flow (m³/h) needed to give effective venting and dust control
2. Estimate pressure or suction (mm W.G.) in the housing in which the dust filter is inserted
3. Assess the operational pressure drop (mm W.G.) across the clean side and dirty side of the filtering element – usually between 25 to 100 mm W.G.
4. The sum of 2 and 3 gives the pressure (mm W.G.) required for fan selection purposes
5. Consult graph for fan performance available

Fan Performance Curve



Insertable weighted Sound Pressure Levels

All readings were taken in semi-reverberant surroundings 1.0 m radius from the equipment housing and 1.6 m above base level, using a precision sound level meter and octave filter.

Weighted Sound Pressure Levels

	With acoustic diffuser*	Without acoustic diffuser
F1 (0.75 kW)	76 dB(A)	91 dB(A)
K3 (1.5 kW)	73 dB(A)	89 dB(A)
K5 (2.2 kW)	74 dB(A)	92 dB(A)
K7 (3.0 kW)	76 dB(A)	93 dB(A)
K10 (5.5 kW)	79 dB(A)**	94 dB(A)
K11 (7.5 kW)	84 dB(A)	97 dB(A)
K15 (11 kW)	85 dB(A)	99 dB(A)

Noise measurements of installed equipment may vary due to site conditions

* These measurements refer to standard outlet position

** Estimated data

Standard Features and Options

Standard Features for DLMC:

- Factory-installed 540 g/m² scrim-supported, singed polyester filter bags
- Range of support structures to suit local site conditions
- Trough hopper, bin hopper, pyramid hopper, or two and three bank single outlet hopper

Equipment Options for DLMC:

- Antistatic filter bags
- Variety of bag media options
- Stainless-steel construction
- High temperature modifications up to 200 °C
- IPC Delta P controller
- Moisture separator and pressure regulator package
- Quick-release filter clamps
- Rear dirty air plenum access door
- Explosion relief vents (top or rear mounted)
- Sprinklers
- Pneumatically operated PT controller for hazardous areas
- High suction version

Standard Features for DLMV:

- 540 g/m² scrim-supported, singed polyester filter bags
- IPC controller for accurate control of media cleaning and valves mounted in a Type 4 enclosure

Equipment Options for DLMV:

- Antistatic filter bags
- Variety of bag media options
- Acoustic diffuser (Silencer)
- Stainless-steel construction
- High temperature modifications up to 200 °C (some models)
- IPC Delta P controller
- Moisture separator and pressure regulator package
- Quick-release filter clamps
- Range of fan and motors to suit most working environments
- Vertical or horizontal upstands
- Stiffening for explosion applications
- High negative pressure version (0.5 bar)



DLMC 1/2/15



DLMV 45/15 FAD

Working together for a cleaner World

Donaldson fulfills your Needs

Look to Donaldson for all of your air filtration needs. Although you may not always see our products, you can breathe easier knowing we're there.

Customer Support

For nearly 95 years, Donaldson has been a leading innovator of air filtration solutions that make manufacturing plants a cleaner, safer environment for employees the world over. Driven by an unwavering commitment to customer support, Donaldson is the name more manufacturers around the globe trust to deliver the most efficient and productive dust, mist and fume collectors and filter media.

Global Reach

Donaldson manufactures and markets its filtration products throughout the world. As more manufacturers continue to expand and grow their operations globally, Donaldson will be there to serve and support our customers' needs.

Unparalleled Innovation

Whether our customers need a single collector or a multi-faceted collection system, Donaldson has the solution. The expanse of Donaldson's innovative product line is unmatched, offering unparalleled filtration systems, ancillary parts and replacement filters. From central, source and ambient systems to baghouse, envelope and cartridge technologies, Donaldson has the expertise to provide filtration solutions for virtually any application.

Rely on the Industry Leader

When it comes to air filtration, you need a partner you can trust.

Rely on a world leader in air filtration – Donaldson.

Donaldson.
Torit® DCE®



Donaldson.
FILTRATION SOLUTIONS

Dust and Fume Removal · Oil Mist Separation

Total Filtration Management

Donaldson offers a wide variety of solutions to reduce your energy costs, improve your productivity, guarantee production quality and help protect the environment.

Total Filtration Service

A comprehensive range of services especially designed to keep your production at peak performance and at the lowest total cost of ownership.

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