Extraction & Dust Collecting System

For the necessary ventilation of spray booths and cabins, compressed air-cleaned dust collectors are the best solution. We offer a complete dust collector line together with high efficiency centrifugal fans. Depending on the kind of spraying process in combination with the required metal wires or powders, a selection is made to ensure optimal removal of dust during spray operation. At the same time generated heat is also removed from the cabin. The unit can be installed inside the factory or outdoors.

Specification

Housing
- The Pat-Jet Easy Access filter is constructed of 5 mm thick steel S235JR (1.0037)
- Door(s), hopper(s), inlet and panels are 3 mm thick steel S235JR (1.0037)
- Hopper has standard 50° slope with 150 mm discharge, unless otherwise specified.
- Baked on powder coat paint. All carbon steel components are shot-blasted prior to powder coating for maximum adhesion of the paint.
- Painted inside and outside for weather/corrosion resistance, unless otherwise specified.

Automatic Filter Cleaning
- Filters are automatically back-flush cleaned with periodic pulses of compressed air.
- Vertical design of the cartridges provides more efficient pulsing of dust, thus eliminating uneven dust loading associated with horizontally mounted cartridges
- Powerful cleaning system, including 6" manifold, nozzled purge pipes, diaphragms and solenoid valves in ATEX execution.

Filter Cartridges
- The filter material is a blended Cellulose Filter with a lamination of NANO fibers. This filter material has a very high efficiency for fine particles due to the lamination of polyester NANO fibers.
- Flame retardant filter material.
- BIA Filter Classification: M
- Multiple filter media options and pleat spacing are available to best suit your specific application and dust

Filter access
- Tool-less quick-open access door(s) to super-fast cartridge change-out system that does not require entry into the collector.
- Cam-operated clamp bars provide easy filter clamping and sealing.
Fan & E-motor
- Chicago Blower fan is mounted on top of the filter housing or beside the filter when insufficient height is available.
- Direct driven impellers
- E-Motors IE3 or frequency controlled
- Spark resistant inner side of the fan, according to AMCA-C
- The air is blown out horizontally or vertically

Options

ATEX Safety
- When required a non-return valve at the inlet of the filter is situated. This non-return valve is designed to prevent propagation of the pressure wave and the flame which is caused by deflagration. In such a manner, it is possible to isolate volumes from one another in a process. This non-return valve is of the passive type. It has no control, monitoring and functional indications necessary.
- Filter installations with pneumatic cleaning systems and a very high vacuum operation require an explosion vent that withstands vacuum and positive pressure cycling for a long time. For such requirements we use a domed design which enables negative pressure resistance without the need for an extra vacuum support.

Safety Filter
On the outlet of the fan it is possible to mount a safety filter with fine filters F9 or HEPA filters H13. The filter housing is side accessed for maintenance. Includes 1 analogue pressure gauge 0-500 Pa.

Silencer
On the outlet of the fan a silencer is mounted, with a transition piece. The outlet is provided with a beveled discharge duct with bird netting.

Heat Recovery
Heat recovery system, designed to re-use the heat generated by the process.
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