MacDonald Steel Limited

Environmental Systems Division

Exhaust Systems - Dust Collector/Filtration Units – Balers – Fans – Shredders – Hogs

Collector/Filter ST Type

Features

- Automatic cleaning of the filter media by electrically operated mechanical shaker when the flow of air through the system is stopped.
- Available in a wide range of sizes
- Available in both Pull Thru (negative pressure) and Blo-Thru (positive pressure systems).
- Filter Bags are maintained from the clean air side of the filter; the employee works in safety under dust free conditions saving time and reducing maintenance costs.
- Conserves energy: reclaims heated/conditioned air.
- Available as a Storage Unit or Continuous Empting
- Heavy duty construction throughout the system.
- Rod End Bearings on the shaker frame.
- 9′ diameter bags for easy material release.

Construction

- Heavy gauge steel, all-welded Fabrication.
- Consists of three sections: separator, air filtration and bin storage
- Can be finished coated in a wide variety or colours

Operation

- Waste particles are drawn pneumatically from production machinery via ducting, entering the primary separation area where the heavier particles are deposited in the storage bin. The conveying air and fine dust moves upward to the filter section where the dust is filtered from the conveying air and clean returned to the plant or atmosphere. Material can then be collected in the bottom of the unit on a storage system or discharged out the bottom on a continuous emptying type system.
- Filter media is cleaned periodically by an automatic electrically operated mechanical shaker.
- Filter bags are complete with reinforced cuff and snap-in ring; no tools required for easy servicing.

200 Avenue Road Cambridge, Ontario Canada N1R 8H5 Phone 519-620-0500
www.macdonaldsteel-esi.com

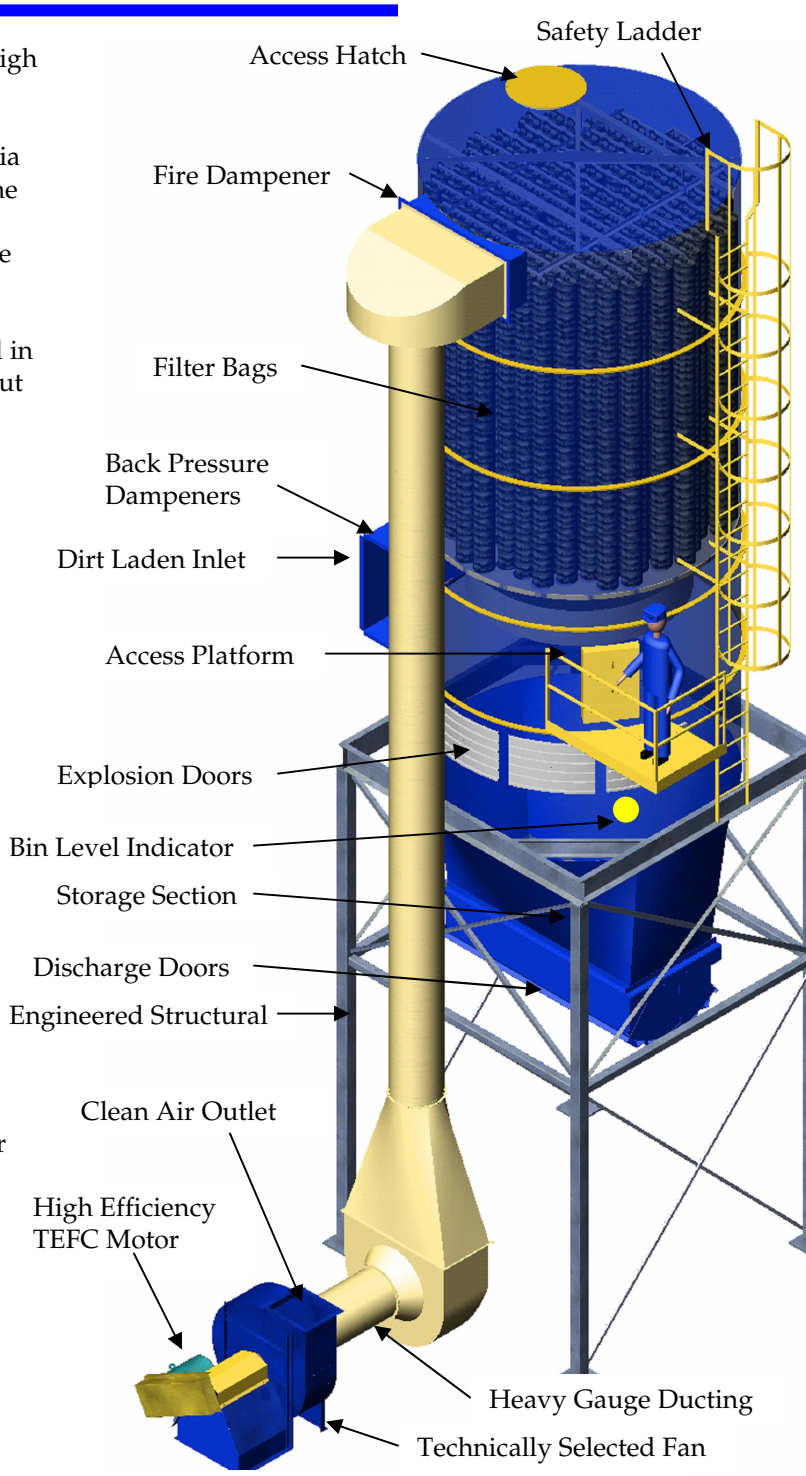
MacDonald Steel Limited

Environmental Systems Division

Exhaust Systems - Dust Collector/Filtration Units – Balers – Fans – Shredders – Hogs

The *MacDonald Steel* Shaker Type collector/filter is a high quality dust filtration system that allows very little down time to clean the bags. Dust laden air enters the separator section below the filter bags, passes through the filter media with dust being captured and deposited on the inside of the individual filter tubes. The clean air progresses upward through the filter tubes and past the shaker assembly to the clean air outlet. The filter tubes are physically shaken to dislodge the dust, which is activated every time the collector/filter is shut down Material can then be collected in the bottom of the unit on a storage system or discharged out the bottom on a continuous emptying type system.

Capacity Max	99,000 cubic ft / min
Size	7'-8" to 21' Diameter
System Style	Blow Thru or Pull Thru
Bag Specifications	
Size	9" Diameter
Length	3ft - 14ft
Material	T-100 or T-150 Polyester



Standard Equipment

- Exhauster Fan with High Efficiency TEFC Motor
- Bearing mounted Shaker Frames for long life
- Storage Bin for truck loading with 12' clearance
- Large Clam gate discharge doors (Storage Systems)
- Safety Hoop Access Ladder and Platforms
- Engineered Structural Support
- Counter Balanced Back Pressure dampers which seals inlet when air flow is stopped in the unit.
- Fire Dampener on Return-Air line outlet equipped with fusible link.
- Prewired Automatic Shaker Control Panel to effect the automatic cleaning of the filters whenever the air flow to the unit is stopped.
- Aquastat Thermal Control to allow for automatic shutdown in case of fire and lockout shaker panel.
- Easy Access to filter bags for cleaning or replacing.
- Electronically operated mechanical shaker for periodic cleaning of the filter media
- Heavy Gauge Steel construction through out
- Bin Level Indicator (On Storage Systems)
- Access Doors to the filter and Storage Sections

Optional Equipment

- A Variety Of Filter Media To Suit The Application
- Inlet Manifold To Allow For Multiple Lines
- Pressure Differential Gauge
- Electrical Or Manual Diverter
- Spark Detection And Extinguishing
- Deluge System
- Explosion Relief Venting
- Electrical Control Panel
- Deluge Systems
- Silencer For Return Airline
- Rotary Air Locks
- Bin Covers

200 Avenue Road Cambridge, Ontario Canada N1R 8H5 Phone 519-620-0500
www.macdonaldsteel-esi.com