



# **Dust Collector**

**VENTCOOL SYSTEMS (P) LTD.** 



After having earned recognition as the leading player in engineering, fabrication and installation of high-performance, custom-designed ventilation and fume exhaust equipment and systems, Ventcool also offers dust collectors.

Dust collector is a device for suction of dust /fume particle from dust letting out source from different type of machines. This mainly consists of three parts: Top shell, center shell and hopper. In the center shell we provide the specific nos. of bags /cartridge filters for filtration of dusty air so that it should not pollute the environment.

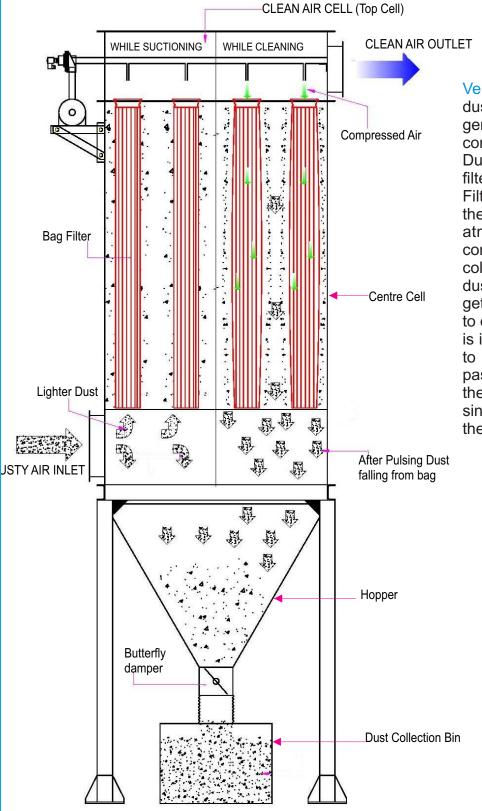
Dust is mostly collected in the dust bin which can be easily removed from the premises. We can design the dust collector taking correct static pressure, motor HP, correct thickness of material and supporting structure strength. We use imported filter / Indian filter by keeping the customers budget in mind.

Our systems incorporate a low pressure drop across the unit resulting in less energy consumption. Selection of blower is done professionally so that electricity consumption is optimum and proper air quantity is delivered.

Ventcool, with over 26 yrs of experience, offer customized Dust Collectors for our customers to meet their specific needs and applications. We design the dust collectors to suit space and operating requirements of the customers. This feature reduces maintenance requirements and lowers operating costs than traditional units for a cost-effective operation.

Ventcool has a complete range of Dust Collectors which are efficient, rugged and durable with minimum maintenance requirements. We offer only the highest quality products backed by advanced technology and outstanding technical support generating considerable added value to the customers.

Ventcool Dust Collector with high capacity filter bags and an optimized ratio of air flow versus filter surface area can be used as a central dust collector unit for multiple work stations or as a dust collector for large machines generating high volume of dust.



Ventcool Dust Collector extracts the dusty air/fumes from the dust/fume generating point through the duct connected to the Bag House of the Dust Collector. The dusty air is filtered in the Bag House. The Filtered air is exhausted at the top of the unit (Top Cell) and leaved in the atmosphere through the blower connected to chimney. The dusts are collected though the hopper in the dust bin. In this process filters do not get chocked, we use compressed air to clean the filters. The compress air is in the cylinder which is connected to solenoid valves. These Valves pass the compressed air thorough the G.I. pipe to filters when it got the single form electronic timer to pass the compressed air.



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Ventcool Dust Collectors can be broadly divided into following Categories

- I. PULSE JET TYPE DUST COLLECTORS
  - a) Pulse Pleat Type
  - b) Cartridge Type
  - c) Non-Woven Felt Type
- II. MECHANICAL SHAKING TYPE
- III. MANUAL SHAKING TYPE
- IV. CYCLONE DUST COLLECTORS

## PULSE JET TYPE DUST COLLECTORS

### Pulse Pleat Type

## Cartridge Type

Ventcool Pulse-Jet Dust Collectors with highperformance Pleated filters are used for applications with extremely strict filtration requirements or where large quantities of fine dust are generated. Dust Collector units of this type have an extremely large filter surface area consisting of pleated filter elements. Cartridge filter system for continuous duty extraction of dry, non-sticking dust with regular pulse jet cleaning of the filter cartridges. This type of dust collector can be used as a central dust collector in connection with a dust system from multiple work stations or as a single dust collector on large industrial equipment.

## Non Woven Felt Type

Non-Woven Felt Type dust collector are used where dust is relatively course and and the system can be installed outdoor. The system requires low maintenance. 5the filters can be changed easily

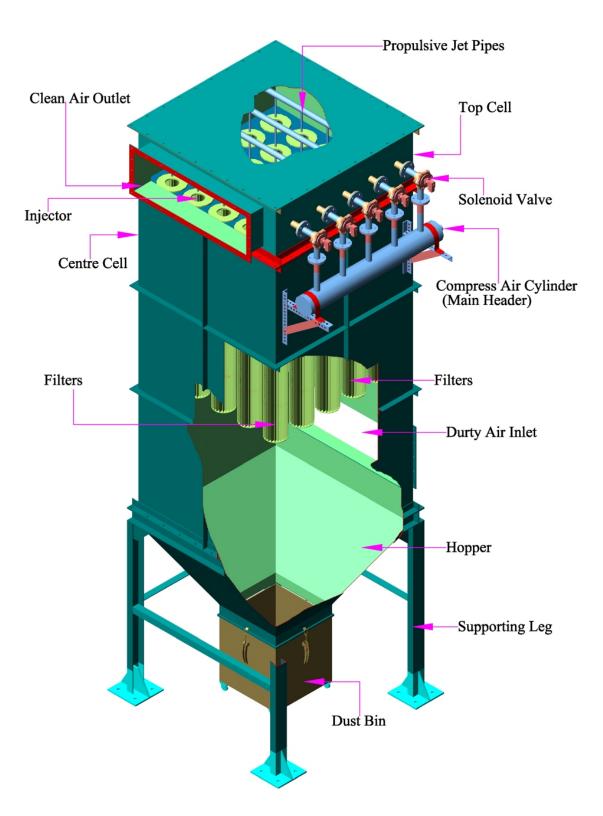
### ADVANTAGES OF BAG FILTER SYSTEM :

Low maintenance cost. Practical efficiency very high. Possibility of heat recovery very good. Effectiveness not affected by gas-dust composition.

## PERFORMANCE AND CHARACTERISTICS:

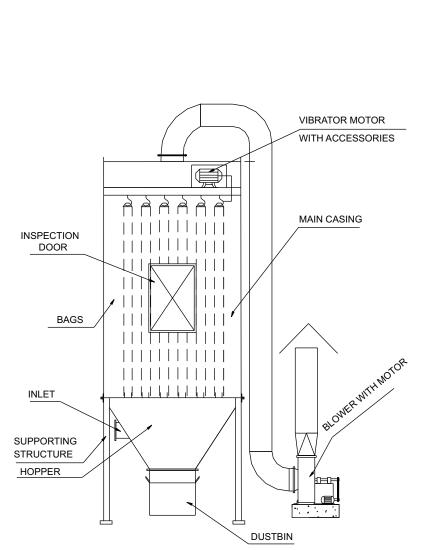
Compact Design High in collection efficiency Possible Stable Operation Low Noise Easily removable

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## PULSE JET TYPE DUST COLLECTOR





## **MECHANICAL SHAKING TYPE**

**Ventcool** Mechanical Dust Collector is characterized by a large pre-separator chamber in conjunction with an increased filter surface area and a vibrator motor for thorough cleaning of the high-capacity filter bag system. The result is an even finer dust filtration and greatly extended operating cycles between maintenance intervals.

The Mechanical Dust Collectors with high capacity filter bags and an optimized ratio of air flow versus filter surface area can be used as a central dust collection unit for multiple work stations or as a dust collector for large machines generating high volumes of dust.

The difference between Mechanical Dust Collectors is in the use of high-capacity bag filters, which have a considerably larger filter area than the Manual Dust Collector's and can therefore collect much higher quantities of dust.

The availability of this dust collector series in a wide range of configurations and with many options makes this model suitable for practically all types of industrial applications.

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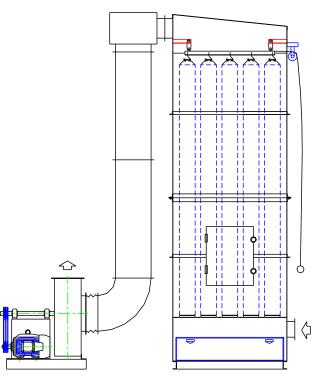
## **MANUAL SHAKING TYPE**

**Ventcool** Manual Dust Collector Series was purposely designed as single station dust extraction units. All mechanical parts are integrated into a heavy duty sheet metal housing which rests on a base with built-in vibration dampers.

#### **APPLICATIONS:-**

Dust Extraction and collection equipment for dust generating machines in applications such as:

- Grinding, polishing, milling and sharpening.
- Filling processes of granular or powder substances.
- Production and bottling of pills and tablets.
- Send blasting applications in the metalworking industry.
- Surface finishing applications.
- Machine building industry.
- Chemical industry.
- Electro-mechanical industry.



### CYCLONE DUST COLLECTOR

Ventcool Cyclone provides the ideal solution to the problem of collecting materials, both for exhausting dust and shavings and for conveying bark and chips. Centrifugal action causes the air and material to move round the inside wall of the cyclone from where the material drops by force of gravity to the bottom, leaving the air to escape through the top.

Cyclone Dust Collector is ideal for separation applications such as:

- Ø ideal for large particulate dust collection
- Ø product recovery
- Ø for pre-filtering for a media filter
- Þ low energy cost
- Þ available for explosive and high-sparking dusts
- Þ high dust loadings in woodworking environments
- Þ high temperatures
- highly abrasive wood shop dust Þ

#### **INDUSTRIES:**

- Chemical, composites
- Food Plastics Ŵ
- Þ Pharmaceuticals
- Þ Powder handling
- Ø Rock/Minerals
- Wood Þ
- Metal Working Þ
- Foundries

APPLICATIONS where we have expetise	SPECIALIZED IN FILTERING THESE TYPE OF DUST
<ul> <li>COLOR PIGMENTS</li> <li>WEIGHER AND MIXER BIND/HOPPER</li> <li>SYNTHETICS PROCESSING</li> <li>FOUNDRIES</li> <li>METAL SPRAYING</li> <li>ZINC SPRAYING</li> <li>ZINC SPRAYING</li> <li>METAL PROCESSING</li> <li>SAND BLASING</li> <li>WOOD PROCESSING</li> <li>PHARMACEUTICALS</li> <li>PNEUMATIC CONVEYING</li> <li>RECYCLING</li> <li>CEMENT INDUSTRIES</li> <li>POWER COATING</li> <li>FOOD PROCESSING</li> <li>SHOT BLASTING</li> </ul>	<ul> <li>ANIMAL FOOD</li> <li>ASBESTOS</li> <li>PHOTOCOPY POWDER</li> <li>PLASMA CUTTING SMOKE</li> <li>CEMENT</li> <li>PLASMA CUTTING SMOKE</li> <li>QUARTZ SAND</li> <li>QUARTZ SAND</li> <li>CHEMICAL DUST</li> <li>RUBBER</li> <li>CHALK</li> <li>SOOT</li> <li>ENAMEL PAINT</li> <li>FERTILISER</li> <li>FIRE EXTINGUISHING POWDER</li> <li>TALCUM</li> <li>GRAIN</li> <li>TABACCO</li> <li>WASHING POWDER</li> </ul>
<ul> <li>PHARMACEUTICALS</li> <li>CHEMICAL INDUSTRY</li> <li>SILO VENTILATION</li> </ul>	<ul> <li>► LEATHER</li> <li>► WELDING SMOKE</li> <li>► LIME</li> <li>► WOOD DUST</li> </ul>

► ZINC



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- ► MALT
- ► METAL DUST



## **PRODUCT RANGE**

- Dust Proofing
- Dust Scrubbers
- Combustion Fans
- Dust Collector
- Roof Extractor
- Paint Booths
- Bag Filters
- Axial Fans
- Centrifugal Blowers
- General Ventilation
- Fume/Dust Extractor System
- Air Cooling System
- Humidifier
- Cellulose Pad

The intention of this brochure is to introduce you to, and acquaint you with the capabilities of the Ventcool organization in the offered product areas. It will not answer all your immediate questions, and indeed, it will no doubt raise others. We welcome your interest in our products and shall be very pleased to provide further information.

#### GUARANTEE

Ventcool guarantees its products to be free of defects in materials and workmanship for a period of one year from the date of delivery from the factory, provided motors are properly installed with overload protector. Ventcool agrees to repair or replace defective parts or part to be returned to the factory, all transportation charges prepaid. Ventcool does not guarantee against abrasion, corrosion or erosion. Ventcool shall not be held responsible for any charges in connection with the removal or replacement of alleged defective equipment nor for incidental consequential damages.

In accordance with our policy of continual improvement in design, we reserve the right to depart from the details given in this brochure.

# VENTCOOL SYSTEMS (P) LTD.

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