CERTIFIED ISO 9001:2015 COMPANY

AIRFILT®
ANTIPOLLUTION SYSTEMS
SINCE 1996

Excellence in
DUST COLLECTION
&
INDUSTRIAL VENTILATION

Solutions Since 1996

- Dust Collector / Bag Filter / Air Pollution Control Systems
- Centrifugal Fans & Blowers
- Fume Exhaust Systems
- Axial Flow Fans
- Evaporative Air Cooling System
- Scrubber

CONTENTS

ABOUT US

- Dust is a major problem in any Wood Working Industry. It not only affects the health of the employees but also drastically reduces the life of machinery resulting in frequent breakdowns and eventually affecting the production.
- We started our operations in 1996. It was a very humble beginning and over the years the company has expanded its technological base, bringing a wide range of new products.
- Besides having fixed models, we specialise in providing tailor made solutions as per the clients requirement. Within a short span of time we have executed prestigious projects all over India & abroad.
- Our facilities include in-house designing, production, manufacturing, quality control, inspection and after sales services. We provide in-depth technical support both before and after the sale. Our main emphasis is on quality equipment & timely after sales support. We have separate dedicated teams for commissioning and after sales service.

STATE OF THE ART MANUFACTURING

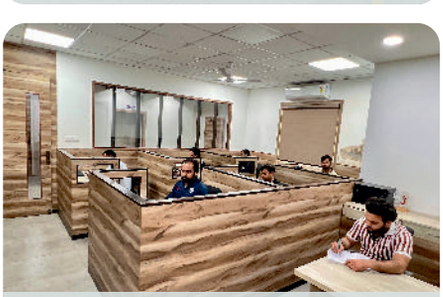
The company has a state of the art machinery and equipment spread over 75,000 sq. feet of area. We manufacture all types equipment for Air Pollution Control, Industrial Ventilation, Dust Control, Air Processing, Pneumatic Conveying, Material Handling & Processing. We have a dedicated design & engineering team to offer customised solutions. Also, we have a separate team to undertake on-site work and commissioning of the equipment.

Manufacturing Bay

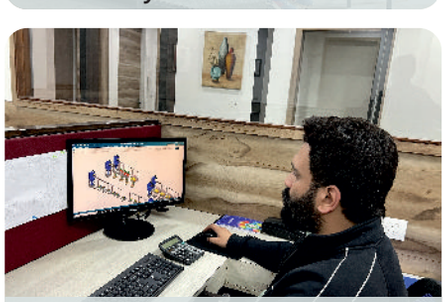
CNC Laser Machine

CNC Hydraulic Press Brake

Dynamic Balancing Machine

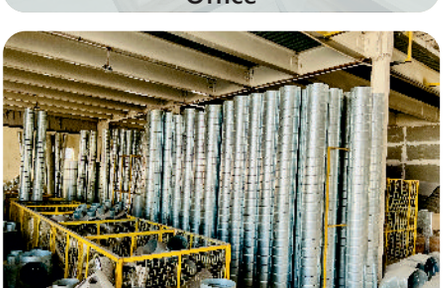


Office



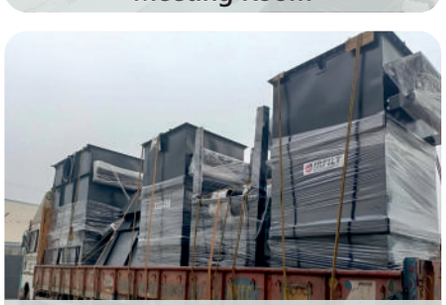
Design & Analysis Through 3D

Meeting Room



Store Area - 1

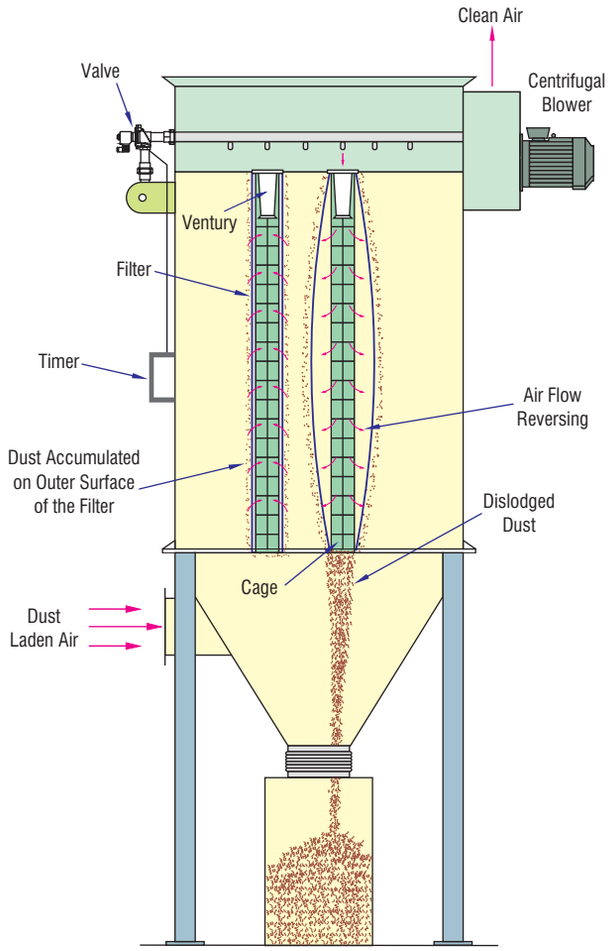
Store Area - 2



Dispatch

WORKING PRINCIPLE

- The dust laden air enters the Dust Collector at the dusty air plenum where it expands and the air velocity drops. This results in optimum air and dust distribution.
- Heavy particles are collected in the hopper of the dusty air plenum. The fine dust laden air then passes through the filter media, depositing the fine dust on the outer surface of the filter bags. Each filter bag is periodically cleaned by a reverse jet of compressed air.
- The filter bag is supported by a cage and has an integrated ventury. A timer activates the valves at pre-determined intervals on a continuous basis.
- A short burst of compressed air is released and injected by the jet tube into the filter bag. This causes a brief controlled inflation of the filter to dislodge the accumulated dust cake into the collection facility.
- The dust is collected in the dust receptacle. A Rotary Air Valve (RAV) can be provided at the bottom.



Cross Section of Filter Unit
Showing Principle of Operation

SALIENT FEATURES

Auto Filter Cleaning Mechanism

Fire Retardant Design

Low Power Consumption

Easy to Operate

Long Filter Life

Dust Free Environment

Clutter Free Floor

DUST COLLECTION & VENTILATION SOLUTIONS FOR THE PLYWOOD INDUSTRY

Over the period of time, The Plywood Industry has gone through rapid changes. The Industry has adopted lot of automation in the production of plywood. Modernisation was the need of the hour. Hand sanding machines were replaced with wide belt sanding machines. The manual chain saw was replaced with Auto DD Saw. Due to this modernisation, there was a new challenge to effectively handle the dust being generated. The industry was looking for a very cost effective and efficient dust collection system. We at Airfilt with an experience of more than 30 years provided a very cost effective solution to the plywood industry. We offer standard models and also customised dust collection systems.

DUST COLLECTORS FOR WBS/CALIBRATOR/BRUSHING MACHINES

Model No. : AIRFILT 2515B
Air Volume : 3000 CMH
Power : 5 HP

Applications
- Brushing Machine
- Single Head Calibrator
- Side Sanding
- Single DD Saw
- Panel Saw Router

Model No. : AIRFILT 3620B
Air Volume : 6000 CMH
Power : 10 HP

Applications
- Wide Belt Sanding
- WBS With Calibrator
- Automatic DD Saw
- Edge Banding Machine
- Router Machine

Model No. : AIRFILT 4925B
Air Volume : 10000 CMH
Power : 15 HP

Applications
- Laminate Sanding
- Both Side Calibrator
- Both Side Sanding
- Laminate Side Cutting
- Furniture Industry

Model No. : AIRFILT 6425B
Air Volume : 12000 CMH
Power : 20 HP

Applications
- Laminate Sanding
- Both Side Calibrator
- Both Side Sanding
- Both Side Calibrator & Sanding
- Furniture Manufacturing

Dust Collector on SUFOMA Calibrator

DUST COLLECTION SYSTEM FOR DD SAW | CHAIN SAW

Unlike the dust of the Wide Belt Sander, the dust generated through the DD Saw / Chain Saw is very coarse. The dust is generated in large quantities and fly all over the space spoiling the entire working environment. Now with the new improved version of DD Saw, which run at very high RPM, the quantity of dust generated is even more.

We offer two type of solutions for this application. The Reverse Pulse Jet Filter Unit and a Manual Filter Unit. The Reverse Pulse Jet Filter Unit is an effective system which can be used for multiple machines at the same time.

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PRESS & DRYER EXHAUST SYSTEM FOR PLYWOOD INDUSTRY

DUST COLLECTION SYSTEM FOR RIP-SAW MACHINE

Dust collection for ripsaw machine is essential to maintain a safe and clean workspace. These machines can create a significant amount of wood dust and debris, which not only poses health risks but can also be a fire hazard and reduce machine performance over time. A well-designed dust collection system helps to mitigate these risks and improve the work environment.

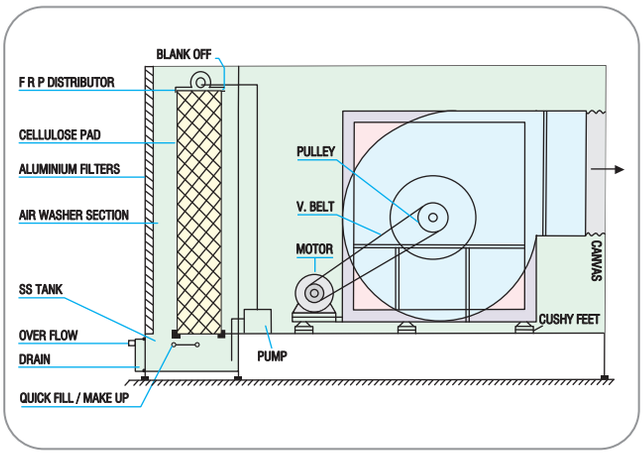
PLATE COOLING FAN

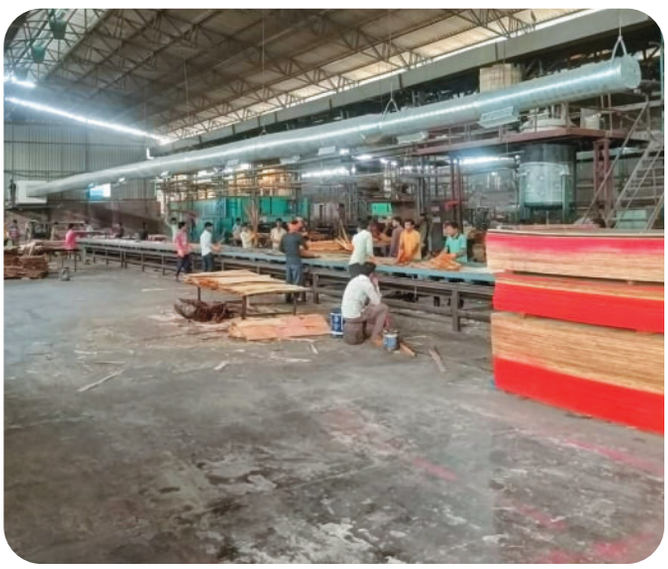
Plate Cooling system consists of an Axial Flow Fan. The air flow has been optimized with regards to its power consumption. The main feature of the fan is its low noise. To control the noise, we offer an acoustic silencer in front of the fan. This reduces the noise to a great extent. A water sprinkling system can also be attached to the fan which sends a mist of water with the air stream.

EVAPORATIVE COOLERS

Features:

- Capacity 3,000 CFM to 60,000 CFM
- Induces cool fresh filtered air into the area of application.
- Air tight construction with negligible leakage.
- Odourless air
- Option of Double Skin or Single Skin construction





DUST COLLECTION SYSTEM FOR LAMINATE SANDING MACHINE

A dust collection system for a laminate sanding machine is an essential piece of equipment to manage and remove the dust generated during the sanding process. Laminate sanding produces fine dust particles that can be harmful to health and can also create a mess or clog machinery. A good dust collector will improve air quality, enhance the working environment, and protect both workers and equipment.

EXHAUST SYSTEM FOR LAMINATE DRYER

In the and laminate industry, a dryer exhaust system plays a crucial role in ensuring the proper expulsion of heat, moisture, and fumes generated during the drying processes. An effective exhaust system is essential not only for safety but also for operational efficiency, quality control, and compliance with environmental regulations.

DUST COLLECTION SYSTEM FOR FURNITURE INDUSTRY

The dust generated in the furniture industry is very fine. Its removal and collection is very important for trouble free working of the machine. The fine dust if not removed properly, reduces the finish of the final product and causes lot of wear and tear of the crucial components.

Dust Collector on Edge Banding Machine

Dust Collector on Panel Saw

Dust Collector on CNC Rover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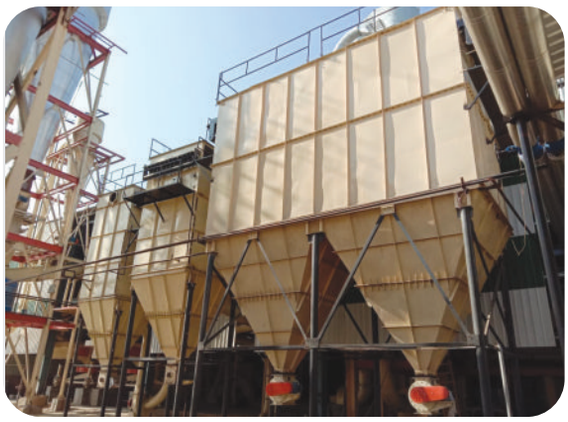
DUST COLLECTION SYSTEMS FOR VARIOUS APPLICATIONS

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MANUAL DUST COLLECTOR

The Manual Dust Collector is a cost effective solution & is widely used for small wood-working machines. It has vertical filter bags and has a manual shaking device to clean the filters. It is widely used for DD Saw and Side Sanding machines.

Its low capital cost and ease of operation is the reason for its popularity. The unit has a small inbuilt cyclone which injects the heavy dust into the collection bags. The fine dust is filtered through the vertical filter bags.

The dust collection systems can be provided with the overhead suction duct to give a clutter and obstruction free floor for ease of operation. It is available in different capacities ranging from 1HP to 10HP.

Model No.	Capacity	Filters	Filtration Area	Power in HP	RPM
AFTMT01	750 CMH	600 x 1000 x 2	3.8 M^2	1	2900
AFTMT02	1500 CMH	600 x 1000 x 2	3.8 M^2	2	2900
AFTMT03	2000 CMH	600 x 1000 x 4	7.6 M^2	3	2900
AFTMT05	3000 CMH	600 x 1000 x 4	7.6 M^2	5	2900
AFTMT7.5	5000 CMH	600 x 1000 x 4	7.6 M^2	7.5	2900
AFTMT10	6000 CMH	160 x 1500 x 14	14 M^2	10	2900

AXIAL FLOW FANS

The axial flow fans manufactured by Airfilt covers a wide range of air quantities and pressure. These fans have cast aluminium alloy impeller with high efficiency blades. They are designed for an optimum relation between air quantity pressure and power consumption.

CYCLONE SEPARATORS

Cyclone type dust collectors is a very cost-effective solution to trap the dust particles. A typical cyclone has a cylindrical and a conical portion. Dust laden air enters the cyclone tangentially and makes several revolutions in the body and the conical portion. Cyclone separators make use of centrifugal force for the separation of particles. Due to the centrifugal force, the dust particles tend to concentrate next to the cyclone wall. A tangential velocity is imparted to the dust which converts the axial flow into a spiral flow. The dust particles are subjected to tangential, axial and radial forces and the dust is separated at the bottom and clean air passes from the top.

SCRUBBER

A scrubber system, primarily a "wet scrubber," controls pollution by forcing a contaminated gas stream to pass through a liquid spray, where pollutants are captured by colliding with and being absorbed into the liquid droplets, effectively "washing" the contaminants out of the gas before it is released into the atmosphere; this process relies on the principle of mass transfer, where pollutants move from the gas phase to the liquid phase due to contact with the scrubbing liquid.

Wet scrubbers are used to scrub the gases with the use of a liquid stream to recover small particles from a gaseous flow. Its use is to purify a process stream or to remove pollutants from gases before being emitted to the atmosphere. They can handle moist gases and high temperature gases very easily.

CENTRIFUGAL BLOWERS

The centrifugal blower uses high speed impellers or blades to impart velocity to air or other gases. They can be single or multi-stage units. Like fans, centrifugal blowers offer a number of blade orientations, including backward curved, forward curved, and radial. Blowers can be multi- or variable speed units. They are usually driven by electric motors, often through a belt and sheave arrangement, but some centrifugal blowers are directly coupled to drive motors. Fan speed can be changed to vary flow rates by resizing sheaves, using variable frequency drives but dampers are even more common as a means of adjusting flow.

PAINT BOOTH

Paint Booth is an essential equipment for containing the overspray and safeguarding the health of the work force. It finds a very wide application in the industry where various paint finishes has to be given to the wooden products. It not only protects manpower from the harmful effects of the overspray but also saves the environment. A paint booth ensures a dust free area for painting and good product finish. Broadly the Paint Booths can be categorized into two types namely: Water Wash Paint Booth, Dry Paint Booth.

HIGH VOLUME EXHAUST FAN

Model No.	AF-VF 800	AF-VF 1000	AF-VF 1300	AF-VF 1500
Blade	800	1000	1380	1530
Blade Speed	600	600	440	440
Motor Speed (r/min)	1400	1400	1400	1400
Air Flow (m/hr)	28000	32000	44000	55800
Pa	70	70	56	60
Noise (Db)	70	70	70	70
Input Power (w)	550	550	1100	1500
Voltage (V)	380	380	380	380
L (mm)	900	1000	1380	1530
W (mm)	900	1000	1380	1530
D (mm)	400	400	400	400

EXPORTS

USA

Nepal

UAE

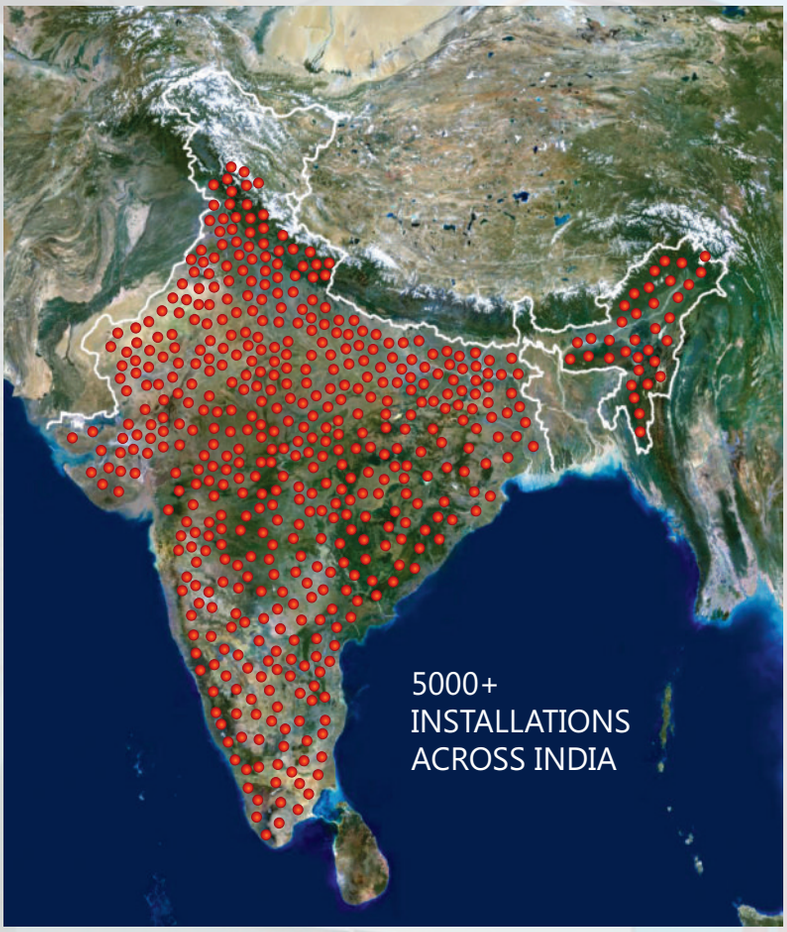
Russia

Saudi Arabia

Malaysia

Bangladesh

Gabon



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