



COMPLETE DUST CONTROL & VENTILATION SOLUTIONS



AIRFILT TECHNOLOGIES PVT. LTD.

Works

Khasra No. 154/1, 2/1, Min
Revenue Estate of Village Rohad,
Bahadurgarh, Distt. Jhajjar,
Haryana - 124501 (INDIA)

Office

C-51, Bali Nagar, New Delhi - 110015

Mobile

+91 98100 22367

E-mail & Website

info@airfilt.net | www.airfilt.net





Thorough
Engineering

Customized
Solutions

Improving
Indoor
Air Quality
of Your Work
Environment

| 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.

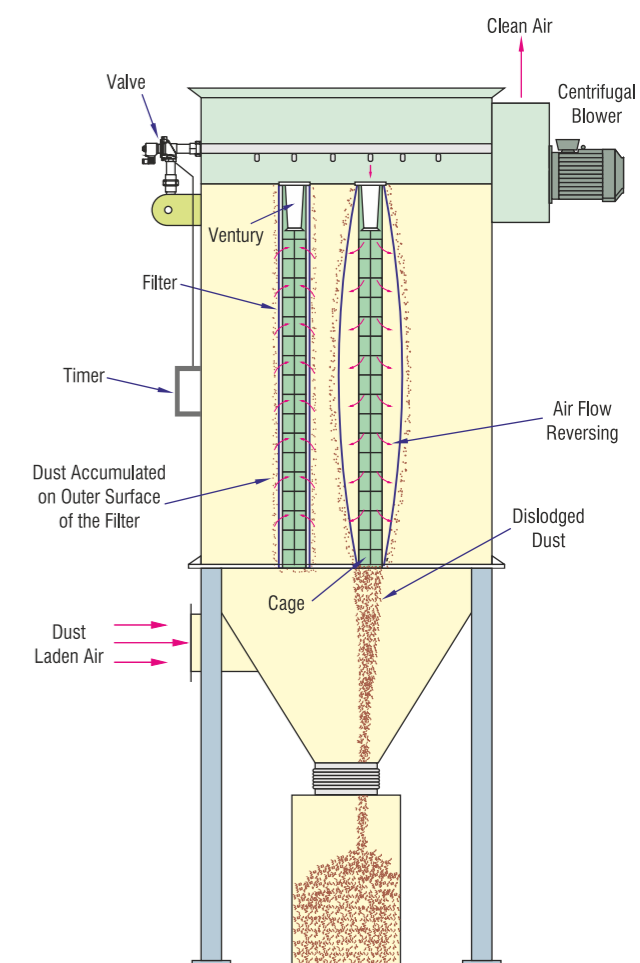
We have a dedicated design & engineering team to offer customised solutions. Also, we have a separate team to undertake on-site work and commissioning of the equipment.

- 2 About Us
- 4 Working Principle
- 6 Dust Collectors For Wide Belt Sanding Machines & Laminate Sanding Machines
- 8 Dust Collection System For DD Saw | Chain Saw | Side Sanding
- 9 Fume Exhaust System
Manual Dust Collection System
- 10 Centralized Dust Collection Systems For MDF & Particle Board
- 12 Paint Booth
- 14 Evaporative Cooling
High Volume Exhaust Fan
Plate Cooling Fan
- 15 Our Presence



WORKING PRINCIPLE

- The dust laden air enters the Pulse Jet Filter 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 outside of the filter bags. Each filter bag is regularly 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 cycle.
- 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

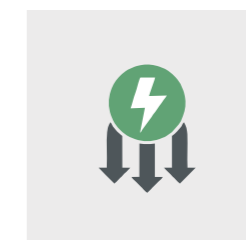
SALIENT FEATURES



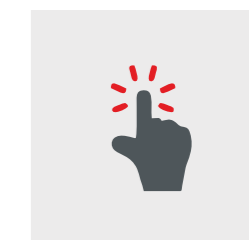
Auto Filter
Cleaning Mechanism



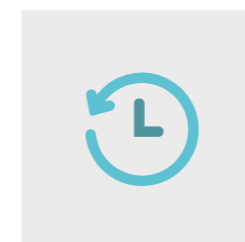
Fire Retardant
Design



Low Power
Consumption



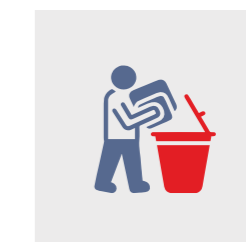
Easy to
Operate



Long
Filter Life



Dust Free
Environment



Clutter
Free Floor

DUST COLLECTORS FOR WIDE BELT SANDING MACHINES & LAMINATE SANDING MACHINES

The dust generated in the Wide Belt Sander is very fine. Its removal and collection is very important for trouble free working of the machine. The fine dust if not removed effectively, reduces the finish of the final product and causes lot of wear and tear of the components resulting in frequent breakdowns.

The dust collector offered by us takes care of all these problems. The dust collection system designed for the wide belt sanders has the Reverse Pulse Jet Technology. The suction is done through an arrangement of duct which is connected to the machine with the flexible pipes. The air suction is controlled with the help of the dampers. The same system can also be used for Calibrator and Laminate Sanding Machines.



AIRFILT 2515B

Applications

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



AIRFILT 3620B

Applications

- Wide Belt Sanding
- WBS With Calibrator
- Automatic DD Saw
- Edgbanding Machine
- Router Machine



AIRFILT 4925B

Applications

- Laminate Sanding
- Both Side Calibrator
- Both Side Sanding
- Laminate Side Cutting
- Furniture Manufacturing

| Model No. | Dimensions (WxDxH) MM | Air Volume | Filtration Area | ACR m ³ /min/m ² | Power in HP | RPM |
|---------------|-----------------------|------------|-----------------|--|-------------|------|
| AIRFILT 2515B | 1100 x 1100 x 3700 | 3000 CMH | 20 M2 | 2.5 | 5 | 2900 |
| AIRFILT 3620B | 1250 x 1250 x 4750 | 6000 CMH | 36 M2 | 2.75 | 10 | 2900 |
| AIRFILT 4925B | 1500 x 1500 x 5250 | 10000 CMH | 62 M2 | 2.7 | 15 | 2900 |



Dust Collector on CNC Router (Biesse)



Dust Collector on Brushing & Sanding Machines



Dust Collector on Laminate Sanding

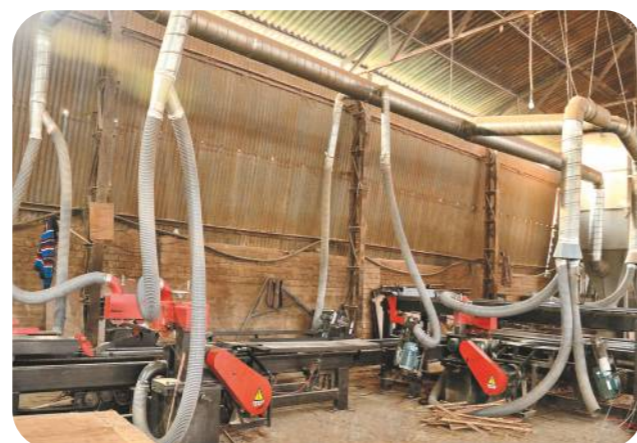


Dust Collector on Panel Saw

DUST COLLECTION SYSTEM FOR DD SAW | CHAIN SAW | SIDE SANDING

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.



Centralized Dust Collection System for Automatic DD Saw

FUME EXHAUST SYSTEM

The exhaust system installed over the presses takes care of the fumes generated from the presses. It comprises of the Hood, Suction Duct and Axial Flow Fan.

The main feature is the design of the fan which does not get affected with the fumes.



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.



CENTRALIZED DUST COLLECTION SYSTEMS FOR MDF & PARTICLE BOARD

We at Airfilt undertake the designing and commissioning of the Centralized Dust Collection Systems on turnkey basis. It has a very wide application in the Particle Board, MDF and Furniture Manufacturing Units. We have executed a number of projects in India and abroad.



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 as follows:

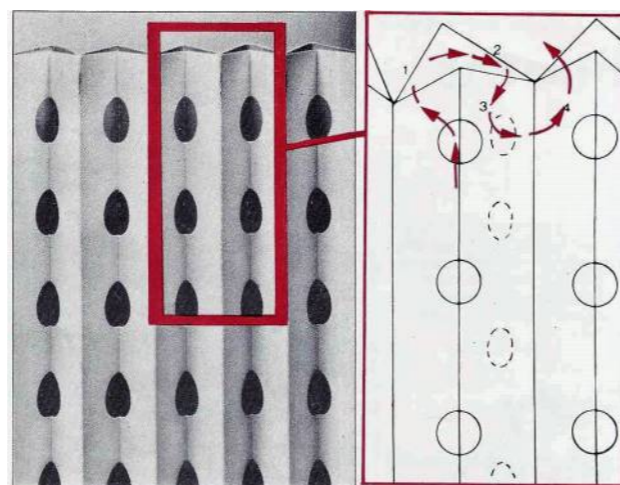
DRY PAINT BOOTH

As the name suggests, in Dry Paint Booth the overspray passes through the media filter. Various type of filter media can be used depending on the application. A washable baffle filter can also be used in front the filter media to reduce the load on the main filter. The suction system can comprise of the Centrifugal Blower or Axial Flow Fans depending on the pressure drop.



WORKING PRINCIPLE

The Andrea Filter media (shown in the picture on the right) is very widely used in the industry. It is made of a special paper media and is easily disposable. The overspray passes through a series of the holes cutout which are placed in a zigzag fashion in the pleated media. Due to the change in direction of the airflow the paint particles get trapped in the media and clean air is exhausted out through the fan mounted on top.



WATER WASH PAINT BOOTH

Water Wash Paint Booths has a vertical water screen to catch overspray. The overspray hits the water falling on the vertical water screen where it gets mixed with the water and falls down in the tank below. The water in the tank is recirculated through an arrangement of pump, nozzles and pipework. Before recirculating the water, it gets filtered in the filter box and relatively clean water is recirculated. The tank is added with an alkali mixture to break down sticky overspray resins. The broken-down resin is collected in the tank. The air is further passed through the series of baffle plates placed in the zig zag fashion where it catches the fine paint particles which escape the water screen. The air is finally passed through the centrifugal blower mounted on top.



Water Wash Paint Booth With Control Panel

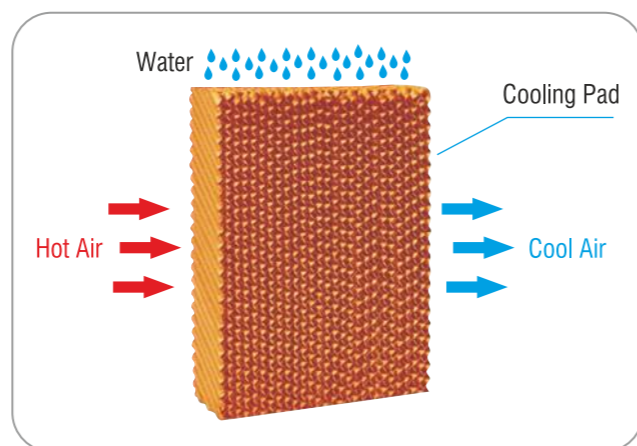
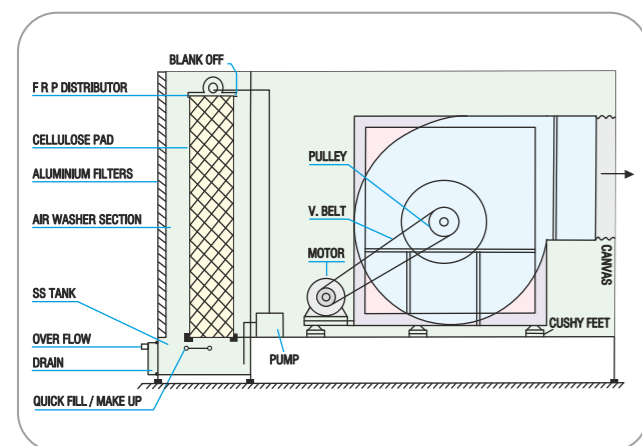


Inside View with Water Screen

EVAPORATIVE COOLING

Features:

- Capacity 3,000 CFM to 60 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



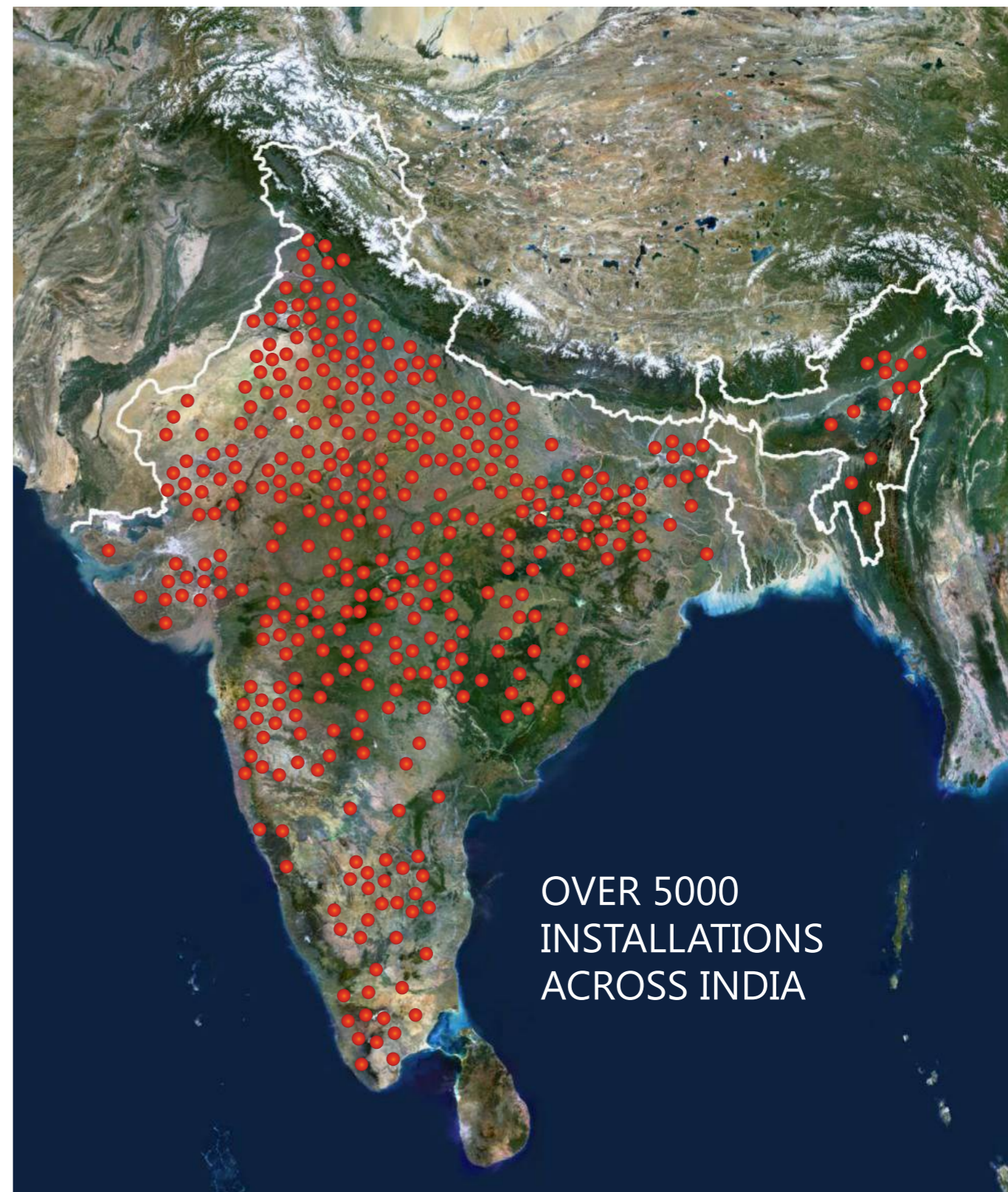
HIGH VOLUME EXHAUST FAN

| 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 |



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.



OVER 5000
INSTALLATIONS
ACROSS INDIA

EXPORTS

