



'Damair' Pollution Control & Dust Collection System



Reverse Jet Dust Collectors



Wet Scrubbers



Cyclone Dust Collectors

Various Methods of Removing the Polluted Air in Industry.



Pollution Control and Dust Collection

“**Damair**” Pollution control engineering is your competent partner and the way towards a better Environment. An experience of more than a decade in manufacturing pollution control equipment and site erection, commissioning with fruitful results has contributed a lot to control the pollution in northern India.

Our special strength lies in expert consultation and the experience mature to observe the pollutants and their remedies. If desired, we analyze the pollutants load in laboratory, determine the actual operational data and on site pilot plants and specify the performance data of installation, optimally tuned to the individual case. Till the year 2000 more than 300 units enjoy our services.

Above all we have our own manufacturing facilities for following appliances with experienced team of people. Qualified personnel build and commission our plants at site.

- Cyclone Collectors
- Fog Scrubbers
- Venturi Scrubbers
- Shaking bag dust collectors
- Absolute filters
- Settling chambers
- Baffled Chambers
- Multi Cyclones
- Dynamic Collectors
- Induced draft fans
- Forced draft fans
- Pebble bed.

Dust collection the universal mode of collection of dust from the source of dust generation. Equipments are designed to suit the type and quantity of dust. Air and dust are sucked with suitable pressure without disturbing the working in the plant. The unit consist of medium to separate the dust from the air. The dust is collected in the limit and clean air is released to atmosphere.

Please contact factory for dust handling problems. The units can be suitable for multipoint dust collection. The units can be suitable for multipoint dust collection. The hoods are designed and manufactured or suggested to inflow the dust properly into the unit. The unit has very low maintenance and self cleaning arrangements.

A Quick LOOK ON THE SOLUTION FOR Pollution AND DUST COLLECTION is **GIVEN NEXT.**



Characteristics of Air Gas Cleaning Devices

1. The name of the classes and types have been selected on the basis of descriptiveness, conciseness-and common usage, however, there may be many equally acceptable alternate possibilities.
2. The descriptions of the devices are necessarily brief.
3. The suitability of a device for any application depends on the various factors listed in subsequent columns.
4. The contaminants listed can be removed by one but not necessarily all of the devices indicated by the brackets. For instance, tobacco smoke can be removed in an electrostatic precipitator but not in an air washer, which fact, could be deducted from the data on optimum particle size.
5. The optimum particle size for a device will vary insofar as the air velocity or other factors which determine it may vary. Typical values are listed together with indications of whether most values are larger or smaller. Devices most suitable for removing molecules are so- marked.
6. The optimum concentration for a device will vary with air velocity or other factors, particularly in atmospheric air cleaning where useful life and maintenance are closely related to concentration. In stack gas cleaning the influence of concentration on particle' conditioning is often important. Typical values are listed together with indications of whether most values are larger or smaller.
7. The gas temperature limits shown are typical only. The 40 deg. Lower limit for wet units should provide protection against freeze-up in almost all cases. The upper limit for most standard units may be raised in some cases by the use of special materials or in the case of wet units special provisions to insure shut down in case of water failure.
8. The water rate for wet units is the rate at which it is pumped (not blown down, evaporated, etc.) Recirculated water is generally used unless spray nozzle fouling, solution back pressure, thermal, or other conditions dictate otherwise. Power consumption is given in kilowatts for electrostatic precipitation and horse power for unit with integral fans.
9. The air resistance of a device will vary with velocity and the operating conditions. Typical values are listed together with indications of whether most values are larger or smaller.
10. The efficiency of a device will vary with particle size, connection, velocity, and other operating conditions. Typical values are listed together with indications of whether most values are larger or smaller. The effect of velocity is indicated. Values for air washers and scrubbers are for particle removal not molecule removal.
11. The disposition of the collected materials will vary for a single device, as indicated by the parenthetical notes, if the state of the dispersed material varies. For some devices the material collects first in one location and as indicated after the slant is subsequently removed.



Characteristics of Air Gas Cleaning Devices

NAME OF DEVICE		DESCRIPTION OF DEVICE (for each specific type or variation thereof)
General Class	Specific Type	
Odor Absorbers		Activated Charcoal beds in cells or cartridges
Air Washers Air Fillers, Viscous Coated Air Filters Dry Fiber	Spray Chamber Wet Cell Throwaway Washable 5-10 micron 2-5 micron	One or two coarse spray banks followed by bent plate eliminators Wetted glass or synthetic fiber cells followed by bent eliminators Deep bed of coarse glass, vegetable or synthetic fibers in cells Deep bed of metal wires, screens or dibbons in cells Porous mat or 5-10 micron glass or synthetic fibers pleated into cells Porous mat of 2-5 micron glass or synthetic fibers pleated into cells
Absotute Filters	Paper	Porous paper of $\lt; \text{micron}$ glass, ceramic or other fibers pleated into cells.
Industrial Filters Cleanable	Low Air to Cloth High Air to Cloth	Cloth bags or envelopes cleaned by mechanical shaking and/or reverse flow. Cloth tubes or bags cleaned by traversing reverse-jet or pluse-jet
Dry Inertial Collectors	Settling Chamber Baffled Chamber Skimming Chamber Cyclone Multiple-cyclone Impingement Dynamic	Straight horizontal chamber - some with shelves Chamber with one baffle or numerous baffles in parallel Scroll Shaped chamber with peripheral slots Chamber with provisions for spiral flow Numerous small cyclones in parallel Alternative stage of nozzles and baffles Power driven centrifugal fan with skimming slot
Scrubbers	Cyclone Impingement Dynamic Fog Pebble Bed Multi-Dynamic Venturi Submerged Nozzle Jet	Cyclone collector with coarse radial sprays Impingement collector with wetted baffles Dynamic collector with coarse sprays Cyclone collector with fine tangential sprays Tower with counter-currently wetted coarse packing Power driven normal and reverse flow fan stages with coarse sprays Venturi with coarse sprays at throat Nozzle partially submerged in water Water activated jet pump
Incinerators	Direct Catelytic	Combustion Chamber with supplemental fuel firing Combustion chamber with catalyst plus supplemental fuel
Gas Absorbers	Spray Tower Packed Column Fiber Cell	Vertical-up air flow chamber with downward sprays Tower with counter currently wetted Raising rings. Bed Saddles, etc. One or more stages of co-currently wetted fiber cells.
Gas Absorbers	Deep Bed	Activated charcoal beds in regenerative-recovery equipment.

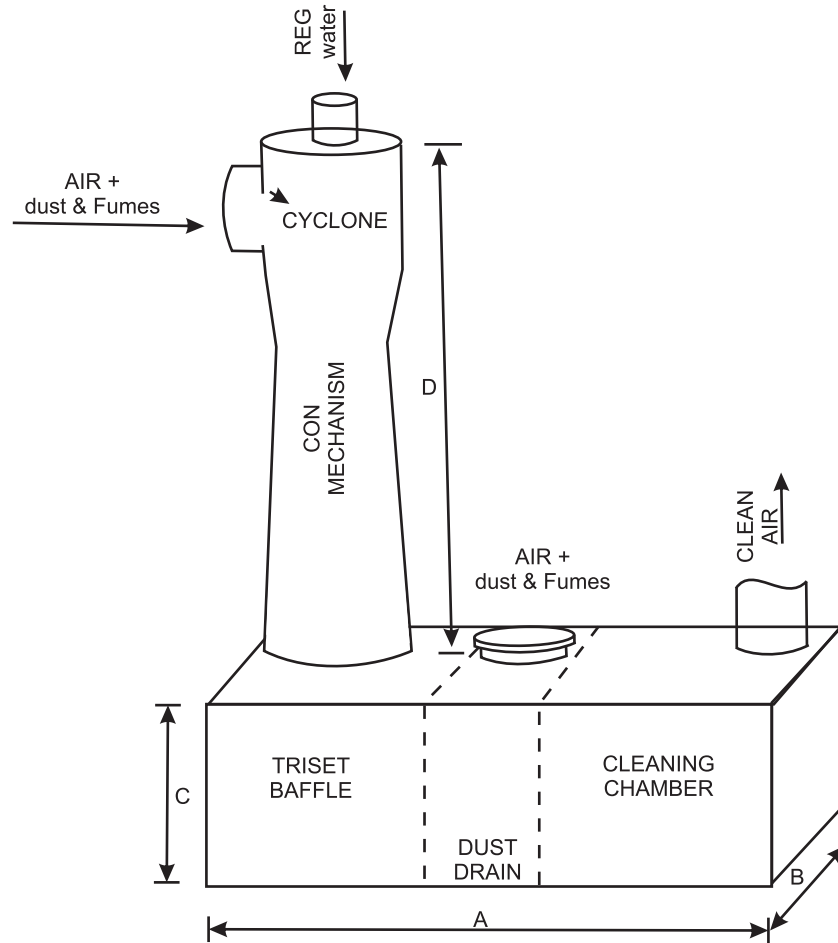


Technical Details of Shacking Bag Dust Collector Model With Built in Suction Blower

Model	Capacity	No. Of Bags	Motor	Dimensions	Weight	Filter Area
SBDC - 1s	300 CFM / 170mm WC	4	1 HP/2800	2ft x 2ft x 6ft (H)	200 kg.	1.32 sq. Mtr.
SBDC - 1.5s	600 CFM / 170mm WC	6	1.5 HP/2800	2.5ft x 2ft x 6ft (H)	300 Kg.	1.98 sq. Mtr.
SBDC - 2s	900 CFM / 170mm WC	9	2 HP/2800	3ft x 3ft x 6ft (H)	350 kg.	2.97 sq. Mtr.
SBDC - 3s	1200 CFM / 170mm WC	12	3 HP/2800	3.5ft x 4.5ft x 6ft	425 kg.	3.96 sq. Mtr.
SBDC - 5s	2000 CFM / 170mm WC	20	5 HP/2800	4.5ft x 4.5ft x 6ft	500 kg.	6.6 sq. Mtr.
SBDC - 7.5s	3200 CFM / 170mm WC	30	7.5 HP/2800	5ft x 5ft x 6ft	800 kg.	9.9 sq. Mtr.
SBDC - 10s	4200 CFM / 170mm WC	40	10 HP/2800	6ft x 6ft x 6ft	1200 kg.	13.2 sq. Mtr.

Note :

Selection at other capacity contact our technical department
standard models with automatic filter cleaning arrangement available
WIDE RANGE & APPLICATION SUITABLE EQUIPMENTS FOR POLLUTION CONTROL
DETAILS CAN BE AVAILABLE FROM FACTORY. PLEASE CONVEY THE EXACT APPLICATION
REFER CHARACTERISTIC CHART AVAILABLE



**WET SCRUBBER SUITABLE FOR REMOVING CONTAMINANTS IS
DUST, FUMES, SMOKE, MALODORS**

S. No.	Cap. of Air	Cap. of Pump	Optimum Concentration	Limit of Gas Temp.	Water Reqd.	Face Velocity FPM	Dimension in mm			
							A	B	C	D
1	3000 cfm	0.1 Hp	>0.2grs/cu ft	40-700° F	10.5 gph	2000-6000	1500	600	600	2100
2	5000 cfm	0.25 Hp	>0.2grs/cu ft	40-700° F	17.5 gph	2000-6000	2000	750	600	2350
3	8000 cfm	0.25 Hp	>0.2grs/cu ft	40-700° F	29 gph	2000-6000	2000	1000	750	2500
4	10000 cfm	0.5 Hp	>0.2grs/cu ft	40-700° F	35 gph	2000-6000	2500	1000	750	2750
5	15000 cfm	0.5 Hp	>0.2grs/cu ft	40-700° F	52.5 gph	2000-6000	2500	1250	1000	3250
6	20000 cfm	1.0 Hp	>0.2grs/cu ft	40-700° F	70 gph	2000-6000	3000	1250	1000	3600



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