

***AIR POLLUTION CONTROL  
SYSTEMS & EQUIPMENTS***



**GTS Enviro India Pvt Ltd**  
Unit of M/s, GTS PROJECTS



## AIR POLLUTION CONTROL SYSTEMS & EQUIPMENTS

We offer a comprehensive range of air pollution control systems, which are designed by us using cutting edge technology. Available in standard as well as customized specifications, these systems meet the varied requirements of air handling applications in various industries like: Pharmaceutical Industries, Textile, Power Plants, Foundries, Chemical Industries and Automobile industries and Cement Engineering. Under this air pollution control system, we offer a wide range of technologies to rigorously meet clean air norms. These s Air pollution control technologies are enlisted below:

### WET SCRUBBER

#### TYPES :

PACKED BED WET SCRUBBER  
VENTURI SCRUBBER  
FUME EXTRACTOR  
BAFFLE TYPE IMPINGEMENT  
JET VENTURI SCRUBBER  
PACKED BED CUM  
VENTURI SCRUBBER  
STRIPPER COLUMNS



#### APPLICATIONS:

Foundries, Boiler Flue gas filtration, DG set, Metal finshing, Powder coating , Anodizing Industries, Chemical and Petro chemicals, Cement, Sugar, Paper and pulp, Ceramic and Automobile industries.



## FEATURES:

Capacity ranges from 2000 cu.m/hr to 4,00,000 cu.m/hr ; Pressure ranges from 100 mm to 1000 mm head. Material of Construction : Systems available in SS/FRP/PP/MS EPOXY/ MS RUBBER LINED according to the applications.

## OPERATION:

### PACKED BED WET SCRUBBER:

*Utilizing the most current packing designs to provide contact between gas and liquid streams, the Packed Bed Scrubber achieves the extremely low toxic gas discharge limits required to meet emission standards.*

### HIGH EFFICIENCY VENTURI SCRUBBER:

Energy from the high-velocity contaminated gas stream laden with sub-micron dust particles and toxic gases is used to atomize the scrubber

liquid. Intense liquid/gas mixing occurs in the HE Venturi throat, scrubbing the toxic gases and encapsulating the dust in the liquid. Proprietary gas flow patterns in the separator efficiently separate the liquid droplets from the clean gas. The clean gas exits to atmosphere while the scrubber liquid is returned to the sump.

### COMPONENTS OF WET SCRUBBER SYSTEM :

Wet scrubber chamber or packing tower, Venturi Throat portion, Manhole/handhole , Shells, heads, skirt/leg/lug/saddle supports and anchor chairs. Internal distributor /pipe, vortex breaker, baffle plate, Support for internals and other parts Water distributor and packing.

Induced draft blower with motor, belt, pulley and belt guard Air flow Capacity control equipment (VFD), Vibration isolator, Water recirculation pump,



jackscrews (Optional) Spare parts and Special tools if customer required. Painting- anticorrosive Noise control Foundation and all necessary piping, instruments.

### **FUME EXTRACTORS / CHEMICAL CLEANING STRIPPERS**

Chemical cleaning strippers/ Fume extractors are used to remove chemical constituents like acid fume or other chemical compounds present in the process gas stream. Suitable solvents are used to scrub or strip the constituent to remove from the process stream. Selection of the system depends on the raw process stream parameters test report and required percentage of removal of component, availability of space , power and

discharge limits as per Statutory standards. Post treatment of the solvents will be required to extract the constituent stripped off or neutralising the solvent or circulating medium.

### **CENTRIFUGAL BLWERS (INDUCED DRAFT FAN/ FORCED DRAFT FAN)**

We have in store for our clients, a technically upgraded assortment of induced draft fans with Backward curve Backward inclined and Radial blades to serve the operational requirements.

Features:

Capacity ranges from 2000 cu.m/hr to 4,00,000 cu.m/hr; pressure ranges from 100 mm to 1000 mm head. Blowers are available in SS/FRP/PP/MS EPOXY according to the applications. Drive arrangements: Electric Motors are connect as Direct coupled thru type coupling/ Belt driven/ Impellor mounted at flanged motor shaft.



**DAMPERS:** Flow control done by using automatic/ manual dampers

## **DUST COLLECTOR SYSTEM**

GTS Enviro India P Ltd offers Dust collector systems in varies capacities of dust ladden air flow rate, varoius temperature and different concentration of Dust particles.

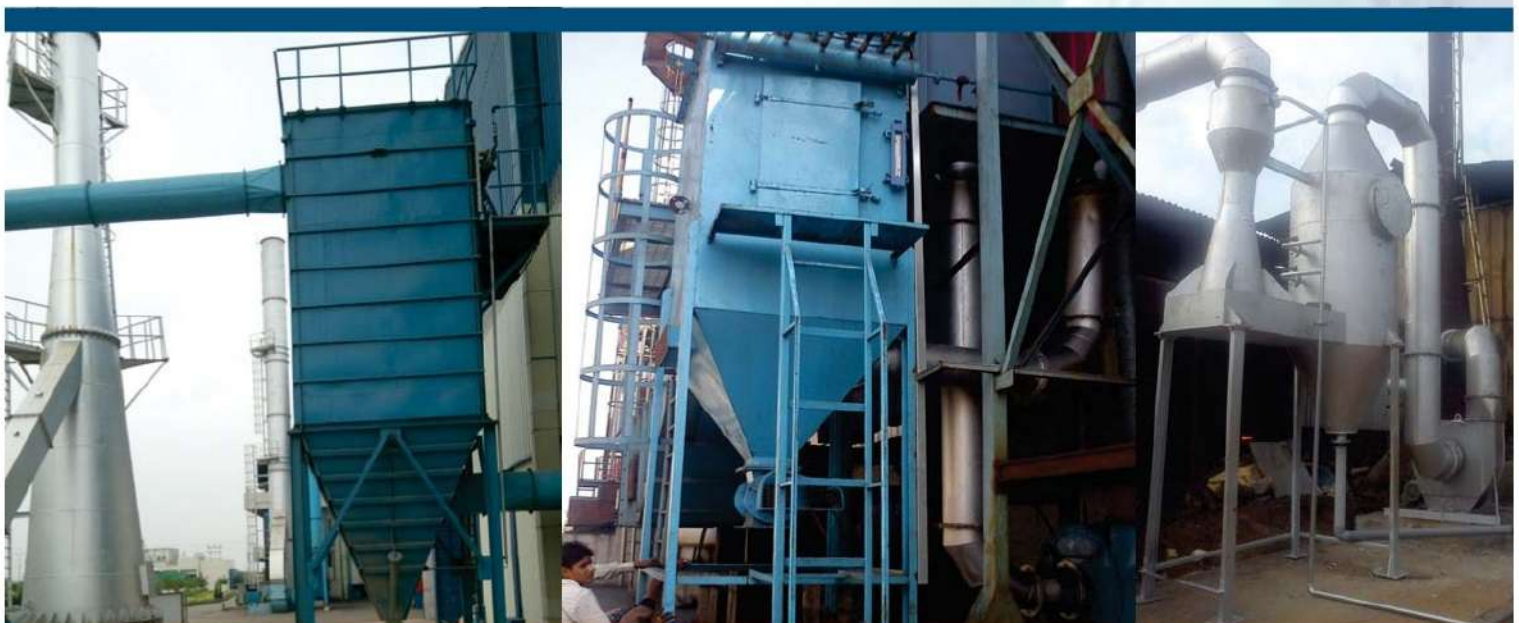
The bag filter cloths are selected based on the temperature, type and particle size of dust and SPM particles present in the air stream.

## **BAG FILTER – REVERSE PULSE JET**

GTS Enviro India P Ltd offers Reverse pulse jat bag filter or it is called as Dust Extraction system in varies capacities of dust ladden air flow rate, varoius temperature and different concentration of Dust particles. The bag filter cloths are selected based on the temperature, type and particle size of dust and SPM particles present in the air stream.

### **The system consist of the following components:**

- ▶ Cassettes - polyester Needle felt
- ▶ Distant Mats
- ▶ Bag Support Assembly
- ▶ Supporting Structures
- ▶ Double Flap Valve
- ▶ U-Tube Manometer
- ▶ Junction Box on the filter chamber wired upto solenoid Valve.
- ▶ Spring Clips
- ▶ Segment Frames
- ▶ Pyramidal Hopper
- ▶ Platform with railing and Ladder
- ▶ Induced Draft Fan Assembly
- ▶ Air compressor to suply instrument air



## DRY SCRUBBER FOR ODOUR REMOVAL

We manufacture/ fabricate of dry scrubber (high efficiency) which is mainly used for oil removal, odour removal and other adsorption purpose. The system provided with the following components:



- ▶ Induced Draft Fan
- ▶ Dry Scrubber Chamber
- ▶ Packing Material (Adsorption Purpose)
- ▶ Ducting, Chimney and Suction Hoods.



## GRAVITY SETTLING CHAMBERS

Gravity settling chambers are used for pre-cleaning of high dust laden gases. They work on the principle of removing dust by reducing the velocity of gas (or) air stream. The gas is directed from the dust generating equipment into the large volume settling chamber, where the velocity drops low enough to let large dust particles drop out by gravity. Dust settling chambers are sometimes equipped with deflectors, to change the direction of gas flow and so to shorten the settling path of particles, improving collection efficiency.



**FEATURES:** Simple construction, lowest in cost, Heavy particle/ dust collection device. Efficiency shall be 30- 60%

## CYCLONE SEPARATOR

GTS Enviro India Pv Ltd offers Cyclone Separator in simple, low cost and efficient and high performance. These are generally used for removing dry solid particle from air without the use of filters through vortex separation. GTS offers high quality Cyclone in two types: Single cyclone and Multiple cyclone.



**OPERATION:** High speed rotating (air) flow is established within a cylinder and conical container to separate mixtures of solids and fluids. Air flows in a spiral pattern, beginning at the top inside the cylindrical shape and ending at the bottom inside the conical shape. Solid particle losses its velocity before exiting the cyclone from the top and solid particle gets collected at the bottom , only clean air exit from the center.

## HOODS/ DUCTING/ DAMPER/ AUTOMATION AND CONTROL OF APC SYSTEMS



GTS Enviro India Pvt Ltd offers various kind of ducting works in SS,MS,PP,FRP and GI materials.



GTS offer Automatic dampers and auto controlled ETP for scrubber effluent.



## CHIMNEY- FABRICATION AND ON- SITE ERECTION WORK



GTS Enviro India Pvt Ltd Undertake Fabrication, Supply, Erection and Commissioning of various types and size of Chimney and Stack. We undertake site fabrication, civil works and installation.



## ROTARY AIR LOCK, BUCKET ELEVATOR, SCREW CONVEYOR/ FEEDER

GTS Enviro India Pvt Ltd Undertake Fabrication, supply, erection and commissioning of various types and size of Chimney and Stack. We undertake site fabrication, civil works and installation.



**G. THIRUGNAMAM**  
Managing Director

*Engineering for  
sustainable environment...*



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