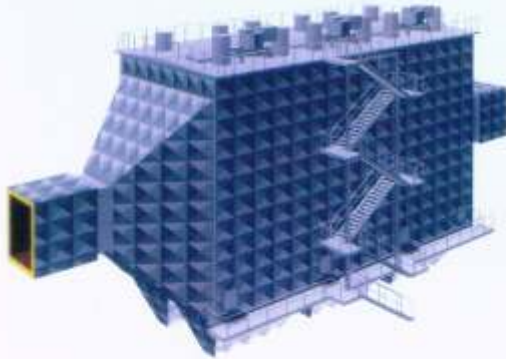




# Aditya Enterprises

## ADITYA ENTERPRISES - Excellent industrial gas cleaning since 2008



ADITYA ENTERPRISES is the globally recognised leader for the cleaning of industrial gases and recovery of reusable materials. Since 2008, more than 600 units have been installed worldwide, each designed to focus on specific customer needs. Depending on stated requirements, units are either completely manufactured by ADITYA ENTERPRISES or, within the parameters of project-related cooperation agreements, as new units or extensions to existing plants.

World-renowned ADITYA ENTERPRISES engineering has always been committed to highly innovative technology and to the reliability and longevity of its products. This balance guarantees outstanding cleaning of industrial gases across many decades. Unrivalled in quality, ADITYA ENTERPRISES remains innovative, at the very least, for the next 600 units.

## To us, quality means our customers can forget about us

Quality to us means not only perfect technology and reliable and durable products, but also the best possible service in all phases.

During the planning stage, we listen carefully and ask pertinent questions to present the customer with the best possible solution in the shortest time-frame and with the least effort on the customer's part. Our Swiss reliability ensures that everything will be carried out to your utmost satisfaction. Deadlines and costs will be adhered to, while the effects on your operations until handover of the plant will remain minimal.

Once a plant has been installed and the technical staff instructed by our engineers, our customers rarely need our support. You will have the same experience. However, should you need our help, for instance, for longer maintenance, upgrading with new components, or advice on plant modernisation, we will of course be at your service.

## ADITYA ENTERPRISES Electrostatic Precipitators

Electrostatic precipitators with their countless areas of application remain the most economical system for the removal of dust from industrial gases. Operating costs are reduced due to low energy consumption, and the cost of maintenance and spare parts is very low. In addition, the life expectancy of an electrostatic precipitator usually exceeds that of the upstream production units, such as kilns, mills, driers and coolers.

ADITYA ENTERPRISES electrostatic precipitators are capable of reducing dust content of more than 1,000 g/m<sup>3</sup> to any required residual dust content. More than 6,000 units installed worldwide since 2008 are proof of their efficiency and durability. The continuous and further development of all precipitator components using the most advanced technologies and the analysis and evaluation of measured results under various operating conditions have provided an immense pool of experience. When choosing on an ADITYA ENTERPRISES installation, customers benefit from unrivalled know-how.

### The typical applications for electrostatic precipitators are:

- Production plants for cement, limestone and gypsum (kilns, mills, driers and coolers)
- Coal- and biomass-fired steam boilers
- Refuse and sludge incinerators
- Iron and steel production (ore processing, blast furnaces, converters)
- Production plants in the non-ferrous metal industry
- Production plants in the pulp and paper industry



## Safety and trouble-free operation thanks to the best electrical components

A chain is as strong as its weakest link. In order to do justice to the high demands ADITYA ENTERPRISES makes on its installations, we only use quality components. Our precise knowledge of optimal sizing ensures that costs remain stable.

### The most important electro-technical components:

Microprocessor-controlled high-voltage rectifier

Control cabinet with automatic voltage control and thyristor with current-limiting reactor for:

Accurate recording of signal values, i.e. rapid and refined diagnosis of sparks and arcs

Control of signal values such that optimal suitability of the power supply to the continually changing electrical demands is guaranteed

Modulation of one or several half-waves for the purpose of high dust resistance and/or saving energy

Easy-to-understand failure diagnosis

Simple adaptation to new operating conditions

Hand-operated HT-disconnecting switches and, for certain applications, electromagnetically or pneumatically operated fast-response earth switches (These components can be located with the high-voltage equipment in the HV room or on the roof of the precipitator)

Low-voltage switch-gear cabinet for the auxiliary equipment (e.g. rapping mechanisms, insulators, and hopper heating and dust-conveying equipment)

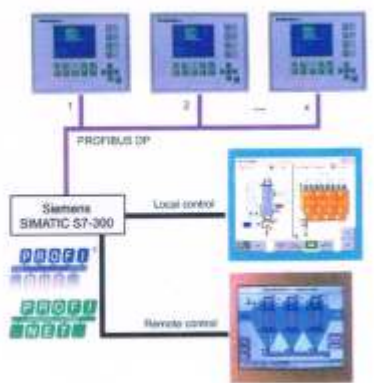
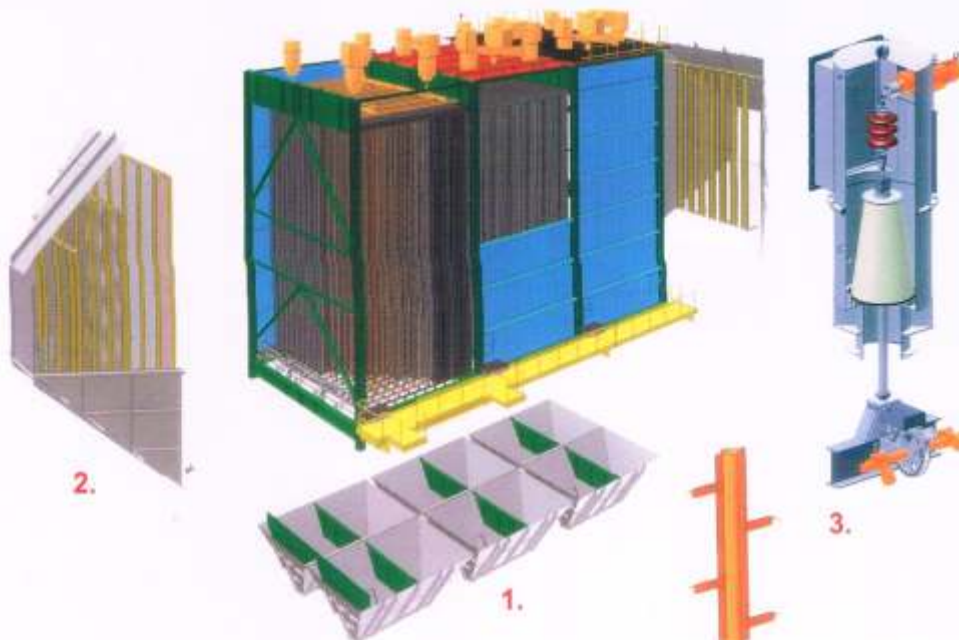
Individually controllable controls (so-called SPS) ensure an efficient connection to the microprocessor-controlled high-voltage equipment.



High-voltage control cabinets with microprocessor controls

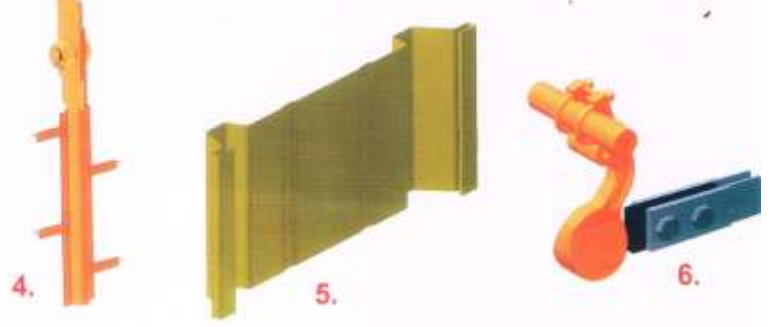


High-voltage rectifier



Connection of high-voltage control cabinets by means of bus systems

1. Dust Collection Hopper
2. Gas inlet with Gas Distribution
3. Discharge Electrode Rapping
4. Discharge Electrode
5. Collecting Electrode
6. Collecting Electrode Rapping



Fans for all applications

## High Efficiency Centrifugal Fans







**INDUCED DRAFT FAN  
HIGH VOLUME MEDIUM PRESSURE FAN**

For Boilers, induced Draft, Incinerators, Bag Houses, Sintering Machine and other industrial application. Fan available in heavy duty construction with or without inlet box.

**DISTINCTIVE FEATURES**

Range of impeller diameters for each size of fan matching required Flow & Pressure condition.  
Available in V-Belt drive / Direct Couple drive arrangement.  
Designed for direct conveyance of highly abrasive materials and heavy dust  
For handling fibrous materials, the fan is constructed with special impeller design.  
Designed for handling gases with high temperature (upto 400°C)-specially designed fans, to handle even higher temperature can be supplied.



**FORCED DRAFT FAN  
MEDIUM VOLUME MEDIUM PRESSURE FAN**

For supply of air for comdustion systems, Cooling, Drying, Conveying, Glass Blowing Burners,Cupolas and Other Industrial Application.

**DISTINCTIVE FEATURES**

Range of impeller diameters for each size of fan matching required Flow & Pressure condition. DIRECT DRIVE:  
Low running cost, Reliable operation, Modest space requirement, Low installation cost, Low maintenance cost, It can also be available in Coupling Drive or V-Belt Drive.  
Interchangeable impeller: Easy to adapt to altered Flow & Pressure requirements. Backward curved impeller for High efficiency.



**PRIMARY AIR FAN  
LOW VOLUME HIGH PRESSURE FAN**

For supply for comdustion, Burners, Pneumatic, Conveying etc. Available in SINGLE and MULTISTAGE designs.

**DISTINCTIVE FEATURES**

Range of impeller diameters for each size of fan matching required Flow & Pressure condition. DIRECT DRIVE:  
Low running cost, Reliable operation, Modest space requirement.  
Low installation cost, Low maintenance cost, It can also be available in Coupling Drive or V-Belt Drive. Interchangeable impeller: Easy to adapt to altered Flow & Pressure requirements. Backward curved impeller for High efficiency.



**DIDW FANS**

DIDW is a complete series of centrifugal fans designed for the following applications:

- As supply and exhaust fans in vantilation systems.
- In air handling units for air conditioning systems.
- In cold stoage plants
- For fume extraction in in industrial plants.

The inlets are aerodynamically shaped ensuring low pressure drop and sound level.

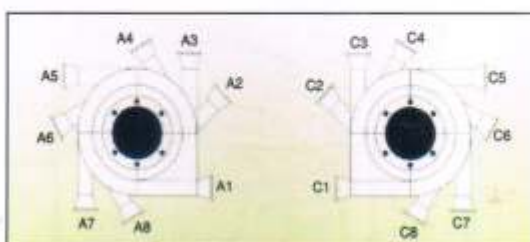
**DISTINCTIVE FEATURES**

High efficiency, Low sound level, Compact design, Large sizes can be dismantled, Several versions available, Incorporating guide vanes, spark proof, for smoke extraction



**AXIAL FLOW FANS**

Aditya Enterprises Axial Flow cover a wide range of air quantities and pressures and are suitable for common ventilation and Air Conditioning plants, Exhaust plants as well as special industrial installation.  
Aditya Enterprises Axial Flow Fan have cast Aluminium alloy impellers with high efficiency aerofoil section blades. They are designed for and optimum relation between air quantity, pressure and power consumption.  
Aditya Enterprises Axial Flow Fans are available in size 375mm to 1600m diameter and with an handling capacities ranging from 2500 CMH to 1,00,000 CMH at an operating pressure of 5 mm to 25 m water gauge static head.  
These fans are available with direct drive arrangements or V-belts drive arrangement. Also in direct drive for high temperature and toxic gases Bifurcatd type arrangement is availbte.



Anti-clockwise direction of rotation  
Viewed from suction end.

Clockwise direction of rotation  
Viewed from suction end.

**To enable us to select the right fan for your requirement, please send the following information to our office.**

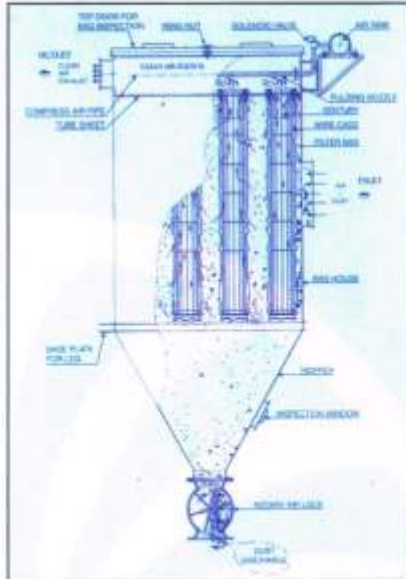
- Application • Type of gas • Gas flow rate • Static pressure • Total pressure
- Gas density • Temperature Dust content and type of dust • Discharge direction • Any special requirement



Aditya Enterprises is technologically & principally committed to pollution control to minimize environmental hazards. People are need to tackle after affects of industrial pollution with the need voluntarily addressed in international standards like ISO 14000. This still is insufficient as pollution control has been vieweasa dead investment eating away the profit margins & its returns in terms of reduced absenteeism & higher productivity are grossly overlooked.

More & More customers are availing of ISO 1400 & coaxing their supplies to adopt the same to fulfill their social responsibility. It is a matter of time after which this standard will be a mandatory part of the industry.

Pollution control is an customized affair which involves feability study, problem analysis & sturdy system with minimum requirement of maintenance. This calls for experienced engineers & resources to ensure smooth custom designed solutions right from fabrication, installation & commissioning. We at Aditya Enterprises offer you a single source to nullify your environmental pollution woes.



## MAJOR EFFECTS OF POLLUTION

Deposition of solid particles, grit & coarses dust Fall relatively close to the chimney whilst fine dust and smoke are more widely dispersed. Deposition of tarry liquids and tarry smoke. Blackening of buildings and clothes by smoke & soot E.G. Taj Mahal Health problems like cancer, silicosis, filorosis due to inhalation of harmful gases. damage to plants, particulars matter, animals & crops.



## SAG FILTER

It is available in multitude of types, they are selected on basis of application but are generally used to segregate smoke & dust particles resulting in air filtration.



## VENTURI & CAGES

Sam action lock (Snap Type). Unique design to facilitate quick removal of bags from top clean in pentium. Available in various materials of construction.

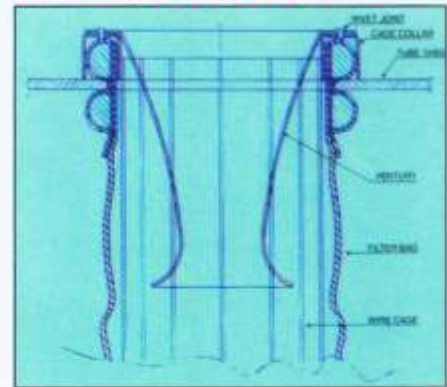


## SOLENOID VALVE

Solddiaphragm Solenoid valve Assembly.

Compact and reliable design eliminating flexible tube and reducing maintenance costs. Available in family proof enclosures also.

## SIMPLE SAG REPLACEMENT

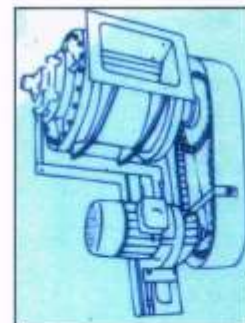


## SEQUENCE TIMER



Solid state timer compatible to ADITYA 4 / IP 55 codes with adjustable pulse duration and interval. Suitable for 110V / 230V AC. Available in flame proof enclosures also.

## ROTARY AIRLOCK



Consists of a cylindrical housing advanced rotor and a drive. Rotor fits snugly into the housing, minimizing gas leakage while effectively

discharging the material. Available in various mate als of construction.



## MULTI CLONE FLY ASH COLLECTOR

Introduction : Coal/Bagger husk fired boilers have maximum ash flying in operation. Fly ash being light weight appears at chimney discharge in considerable quantity, this airborne gets carried away and settles down over a large area and is a dangerous hazard to residents nearby and covering miles together. **Aditya Enterprises** latest design with efficiency fly ash collectors introduced after considerable chimney. Its function is to remove fly ash from flue gases and allow cleaner discharge to be omitted from chimney, complete surrounding of factory.

## TESTING FACILITY

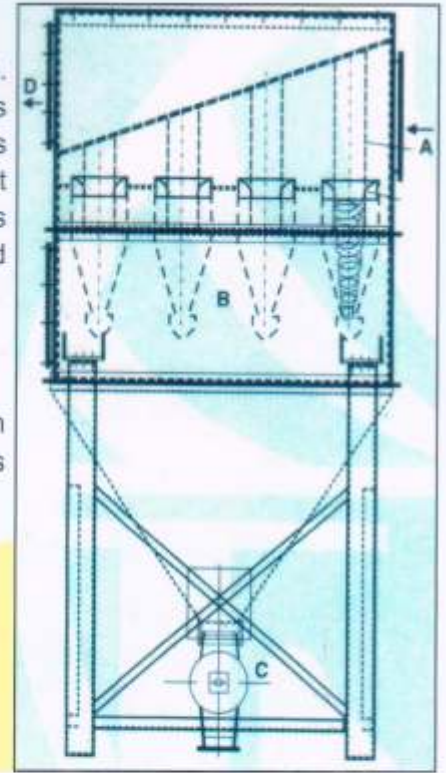
Performance test as per different standards namely IS-4894, BS-848, AMCA-210 can be done. Fan sound and vibration can also be measured at Adity Enterprises workshop or at site depending on suitability.

## CUSTOMER TO SPECIFY ORIENTATION DURING ORDER PLACEMENT

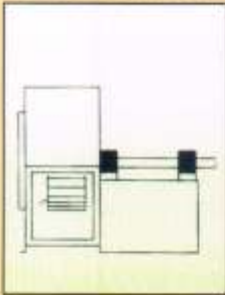
### APPLICATION OF CYCLOPACS:

- Sugar Factories
- Paper Mills
- Steel Mills
- Steam Boilers
- Wood & Paper Board
- Drying Kilns

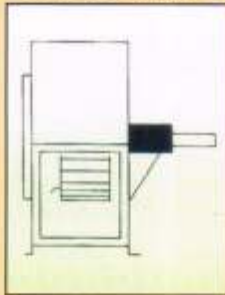
- A - Air inlet from Boiler/Theimopak
- B - Air Circulation
- C - Dust Collection
- D - Air Outlet Exhaust - Chimney



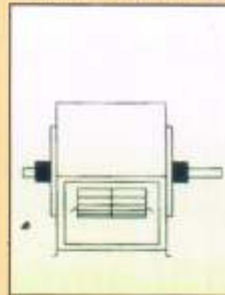
ARRANGEMENT 1



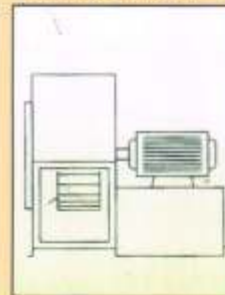
ARRANGEMENT 2



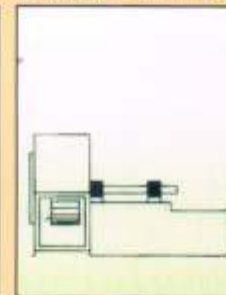
ARRANGEMENT 3



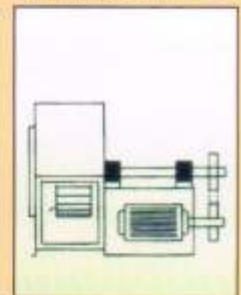
ARRANGEMENT 4



ARRANGEMENT 5



ARRANGEMENT 6



## HOW TO ORDER OF PULSE JET SAG FILTER

Type of application.

Temperature of gas to be cleaned.

Purpose of installation (Reclamation pollution control etc)

Method of dust disposal.

Type of dust to be handled.

Dust content of gas and particle analysis.

Physical restriction of space, location etc.

Hopper capacity and storage time

# Aditya Enterprises

**Mfgs.: ESP. Industrial Blower & Dust Collector Systems**

Plot No. A2/35, G.I.D.C., Killa Pardi - 396 125, Dist. Valsad (Gujarat). • Tel.: 9979895770 / 9904504957

Email: sales@aditya-enterprises.com, info@aditya-enterprises.com, response@aditya-enterprises.com

Website : www.aditya-enterprises.com