UNICON

BAG HOUSE

QA TECHNIC
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ISO 9001:2015

www.uniconinter.com

ABOUT US

Setting the standard for environmental protection. At UNICON we are constantly investing in resources for Product development with an objective to provide Market-leading products that reduce our customers Downtime as well as keeping the environment safe.

Delivering technology and services with more than 25 years of experience

Global presence over 20+ countries across the world

Our Strength is the vast pool of expertise already mobilized from various fields of Design, Manufacturing, Project management, Servicing, Up-gradation and Augmentation of Air Pollution Control equipments.

We have created our organization with a vision to provide world-class service to our clients in all the above areas where we are unquestionably strong. Our greatest strength lies in our highly skilled and committed work force.

VISION

To become the world-class Environmental protection industry by delivering Technology and Services

MISSION

Passionate commitment to provide cost-effective & world class manufacturing process and Services

QUALITY POLICY

Design, Engineering, Manufacture, Supply, Erection & Commissioning of Quality products on Time, Enhance the Customer satisfaction, Meet the needs and expectation of the organization & interested parties.

PULSE JET BAG HOUSE TECHNOLOGY

UNICON is a multi product company specialising in design, engineering, manufacture, supply, installation and commissioning of pulse jet bag houses.

THE ULTIMATE CUSTOMER ADVANTAGE

UNICON headquartered in Coimbatore, India is a leading company for technology in air pollution control systems. The plant manufacturer draws its innovative strength in the field of dedusting and product recovery technology from the experience acquired by installing bag filters systems.

A comprehensive product range has been developed for dedusting of larger gas flow volumes. The modular layout of filters enables the system to be precisely adapted to clients requirement in terms of technical parameters and site conditions.

The range of design comprises of Various arrangements / configurations with bag lengths upto 10 meters and option of using on line and off line operating modes. This makes filter possible to handle large flows for dedusting, product separation and gas cleaning to meet stringent prevailing emission norms in wide range of industries.

UNICON's high performance in house production process supplemented by high level vertical integration supported by a reputed network of suppliers enable us to deliver high quality products.

SALIENT FEATURES OF PULSE JET BAG HOUSES

- Handles gas flows in excess of 25,00,000 m^3/hr
- Filtration area upto 10,000 m^2
- Bag length can be upto 10 meters
- Crude gas dust load can be higher than 1000 gm/m^3
- Outlet emission can be < 10 mg/Nm^3
- Operating temperature can be upto 280 deg C
- Operating suction pressure can be upto –150 mbar

PRODUCT SPECIFICATIONS

Parameter	Data
Applications	Power Plants - Boilers and Heaters, Cement, Steel, dedusting & process boiler
Power Capacity (MW)	10 to 210
Gas Temperatures (°C)	50 - 250
Gas Flow Rate (m^3/s)	5 - 1000
Bag House inlet dust loading (g/Nm^3)	0.2 - 100 g/Nm^3
Guaranteed Bag House outlet emission (mg/Nm^3)	5 - 200 (suitable design for Bag House as pre-collector)
PM Collection Efficiency	Up to 99.99%
Availability	Up to 98%
Bag Cleaning	Online or Offline as per customer requirement

DESIGNED FOR PERFORMANCE

- Our Bag House/ Bag Filter design offer a flexible alternative to ESP when characteristics are variable.
- Over 99.99% Efficiency
- Modular Design
- Different types of Bags like Polyster, PTFE, Nomex, Ryton, Fiber glass, etc,. are used according to the applications.
- Corrosion resistant cages.
- PLC controlled cleaning can be integrated.
- Automatic air pulse jet system with adjustable sequential timer to clean filter bags on-line.
- Long bag life guaranteed.

BENEFITS

- Low Pressure Drop
- High flow Rates
- Positive Sealing
- High dirt holding capacity
- Low down time
- Custom design Services
- Unicon Bag filter is compact, results in low civil and erection cost.

PRODUCT PROFILE & APPLICATIONS

- Pulse Jet Bag filters for dedusting transfer points
- Pulse Jet Bag House for kiln/ raw mill
- Pulse jet Bag houses for coal mill
- Pulse jet Bag houses for cement mill, ball mill, separators
- Pulse Jet Bag house for kiln by pass
- Pulse Jet Bag filter for boilers handling multifuels
- Pulse Jet Bag House system for arc & Induction furnaces
- Pulse jet Bag house for blast furnaces and sinter plants
- Pulse Jet Bag houses for lime kilns
- Pulse Jet Bag filters for pressurised vessels

OPERATING COMPONENTS OF PROCESS BAG HOUSES

- Combined crude/ clean gas channel
- Baffle Plate for Pre-separation and flow distribution
- Filter Controller
- Dust collection hopper or trough with discharge system
- Friction bearings to compensate for linear expansion
- Crude gas flaps
- Poppet Valves
- Pent house with Accessories
- Heat and Noise Insulation

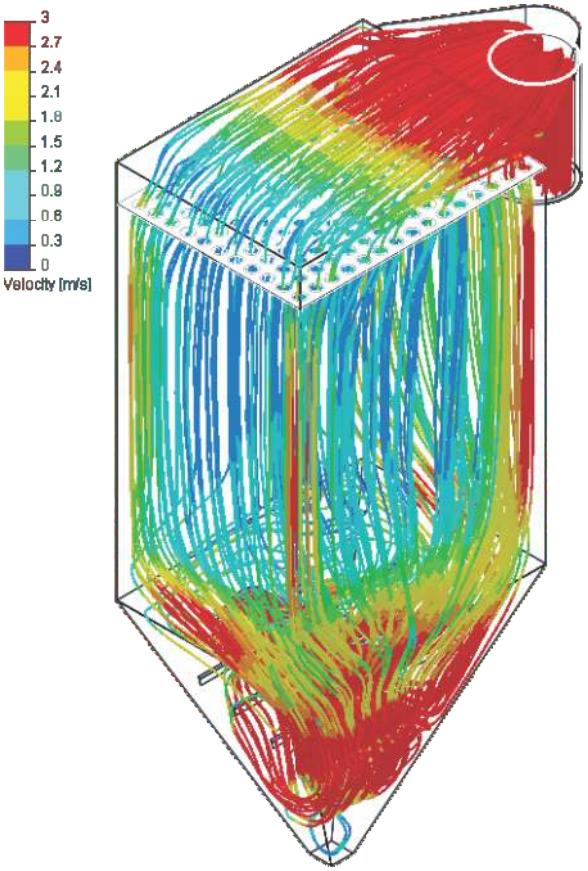
		Polyester	Pps	Aramid	Polyimide	PTFE	Fiberglass
	Temperature °C	135-150	190-210	190-220	235 -260	260-290	285-300
Resistance	To Acids	Good	Excellent	Poor	Fair	Excellent	Good
	To Alkalis	Poor	Excellent	Excellent	Fair	Excellent	Fair
	To Hydrolysis	Poor	Excellent	Poor	Good	Excellent	Excellent
	To Oxidation	Good	Fair	Fair	Good	Excellent	Excellent

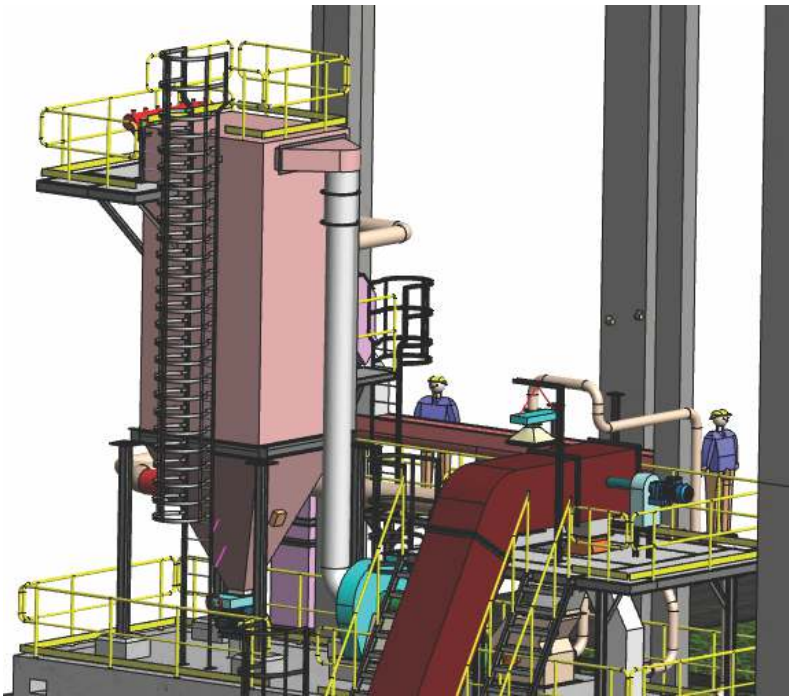
INDUSTRY USAGE

- Cement Plants
- Power Plants
- Steel Plants
- Ferro Alloy Plants
- Aluminium Refineries
- Coke Oven Plants
- Chemical Plants
- Oil Refineries & more...

FLOW OPTIMISED FILTER DESIGN

Process bag houses uses complete area with uniformed flows, dust separation, effective precipitation. It maintains pressure differential at minimum and increases service life of filter bags to the maximum. In addition, bags damage is effectively prevented because flow by passes are avoided.





MANUFACTURING FACILITIES

Details of our works including quality profile.

We Have established Quality management systems to provide quality products to our customers. Factory is equipped with the State of the Art facility to carryout fabrication and machining to international standards. Our products are used in India as well as exported to Germany, Ireland, United States, Colombia, Egypt, Malaysia, Chile, Iraq, Dubai, Indonesia, Philippines, Kenya, Thailand & SriLanka meeting and exceeding customer expectations.

EXPERTISE

We have the expertise to manufacture and supply Air Pollution control equipment entirely defect-free with relevant guarantees. Our qualified engineers and technicians, ensure smooth production and reliability. Products, components and systems are designed, manufactured and supplied based on the specific requirements of the customers

DESIGN AND ENGINEERING:

We are equipped with design and engineering department with the engineers having experience more than two decades in the field of air pollution control equipments and material handling systems. Our services include design in Civil including soil investigation, Mechanical, Electrical and Instrumentation. We are also equipped with latest design softwares.

PROJECT EXECUTION

Project engineers having experience of more than one decade in the field of project management of pollution control equipments like electrostatic precipitators, bag filters, etc. Latest Project management softwares such as MS Project etc. are implemented for Planning and Efficient Execution of Projects.

Fully equipped with tools and tackles, mobile cranes, etc. to carry out effective Site Fabrication, Erection and Commissioning. We also have our own Civil Construction Equipments to carry out construction activities. We also have our own Electrical and Instrumentation equipments to carry out related activities in the above fields.

TESTING SERVICES

We have excellent facilities for testing of various types of materials including raw materials and fully equipped for carrying out the tests with the highest precision. It extends help in laying down acceptable quality standards for various items of inputs and outputs.

UNICON

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