

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 30 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.





To become the worldclass Environmental protection industry by delivering Technology and Services



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



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.

ELECTROSTATIC PRECIPITATORS (ESP)

UNICON has a credential record of success in designing, engineering, fabricating, supplying, erection and commissioning of electrostatic precipitator (ESP)

Lower emission

UNICON has the technical know-how & design, Engineering to reduce the emissions to as low as 10 mg/Nm³.

Easy maintenance

The electrode system is so designed that approach to any level is possible for inspection and maintenance.

Engineered for longevity

High performing and long lasting electrostatic precipitators with very low cost of operation & maintenance



PRODUCT SPECIFICATIONS

Parameter	Data
Gas Flow Rate (m³/s)	5 – 1500
Gas Temperatures (° C)	70 – 400
Capacity (TPH)	6 to 2400
ESP inlet dust loading (g/Nm³)	0.2 - 200
Guaranteed ESP outlet emission (mg/Nm³)	10 - 200 (suitable design for ESP as pre-collector), filterable PM only
PM Collection Efficiency	Up to 99.95%
Availability	Up to 98%

Up-gradation of ESP's

We can achieve the outlet emissions as low as 10 mg/Nm³ by up-grading the existing ESPs. Unicon is having credential record in up-gradation of ESPs by adding additional fields in series, adding parallel ESP or by increasing the height of field inline with the space availability.

We can also achieve the desired outlet emission by up-grading the Tr. Set. We can replace the existing Tr. Set with a SCR Based 3 Ø Tr. Set, HF Type Tr. Set, Pulse Type Tr. Set or a combination of HF + Pulse Type Tr. Set.



PULSE JET BAG HOUSE

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 m³/hr
- Filtration area upto 10,000 m²
- Bag length can be upto 10 meters
- Crude gas dust load can be higher than 1000 gm/m³
- Outlet emission can be < 10 mg/Nm³
- 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 (m³/s)	5 - 1000
Bag House inlet dust loading (g/Nm³)	0.2 - 100 g/Nm³
Guaranteed Bag House outlet emission (mg/Nm³)	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

PNEUMATIC CONVEYING SYSTEM

Parameter	Data
Application	Power Plants (Coal Fired, Bagasse Fired, Biomass Fired) – Ash Handling System for conveying of Ash from Pre-heater, Economizer, ESP / Bag House / MDC, *Other Industry.
Conveying Capacity	As per requirement
Ash Temperature	250 Deg C
Conveying Distance	2000 meter
Transporter Vessel Size	Upto 20 CFT
Inlet Valve Size	200 mm to 400 mm (normal)
Conveying line size	50 NB to 300 NB
Conveying air pressure	4.5 to 7.5 kg/cm2
Instrument air pressure	6.5 kg/cm2



Other Industry: Cement: Conveying of Cements Dust, Clinker Dust, Gypsum Dust, Slag Duct, Fly Ash; Iron & Steel: Conveying of Sinter Dust, Cast House dust, Stock House dust, etc,.

LOW NO_x SOLUTIONS (In collaboration with INERCO)

- PRIMARY MEASURES
 - ▲ Low NOx Burners
 - ▲ OFA
 - ▲ FLEXICOM LNB (Patented technology)
- SECONDARY MEASURES
 - ▲ SNCR
 - ▲ SCR
- MONITORING & OPTIMISATION
 - ▲ ABACO
 - ▲ ABACO OPTICOM
 - ▲ ABACO -LOI
 - ▲ CEMS

LOW NOx HIGHLIGHTS -INERCO

- Offices in 8 countries, 18 companies
- 30+ years experience
- 600+ employees
- \$2.5 MUSD in R&D, 20+ R & D projects every year
- 15,000+ references in 70+ countries
- Primary measures references ranging from 66 MWe up to 617 MWe
- SNCR references from 185 MWe to 640 MWe
- Partner and supply chain availability in India
- Successfully Completed a 210MW Low NOx contract with M/s West Bengal power development corporation for their Bandel Thermal Power station.





MATERIAL HANDLING VALVES

ROTARY AIRLOCK VALVE

UNICON Rotary Air Lock Valves are designed for economical and reliable material metering and airlock service.



SLIDE GATE

UNICON Slide Gates are designed for quick isolation that can be installed in a bulk material flow path to stop material flow



DOUBLE CONE VALVE

Double Cone Valve are having prominent place in the market for controlled feeding as well as airlock sealing between collection chamber and conveying equipment.



CLAM SHELL GATE

UNICON Clam Shell Gate Systems are specially designed for bulk unloading of dust / course particles from hoppers / storage bins.



DOUBLE FLAP VALVE

UNICON Double Flap Valves are designed for high pressure applications. Designed for very less friction and transmission losses.



DOME VALVE

Thermal expansion prevents consistent valve seat action. The inflatable seal provides compensation throughout the temperature range 0º to 660ºF (350ºC).





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