

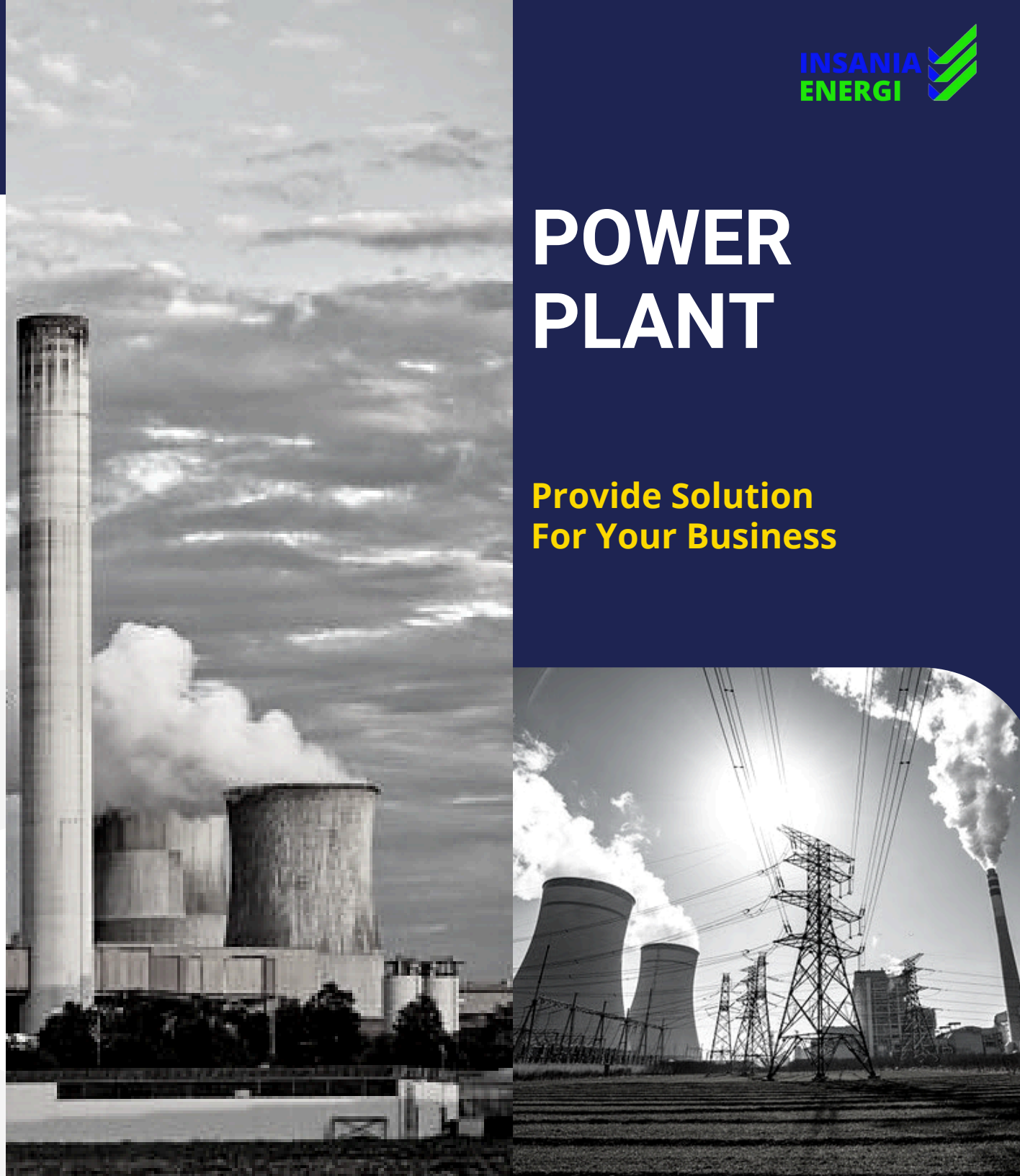
## About Us

**INSANIA ENERGI** serve you to increase your performance as well as to create a long term relationship with you to help you stay ahead at the competition. To do so, we provide a variety of structured consultancy programmers in combination with implementation skills in all relevant areas.

We see our key strengths not only in the development of innovative technologies, which help improve product quality and performance but also in provide service as supervision unloading, loading, start-up process, troubleshooting, evaluate performance and our commitment to close customer relationships. With sales offices two branch in java area, INSANIA ENERGI can meet market requirements for speciality chemical and equipment wherever that market may be. Therefore we are very appreciate your interest in our product and look forward to serving your needs.

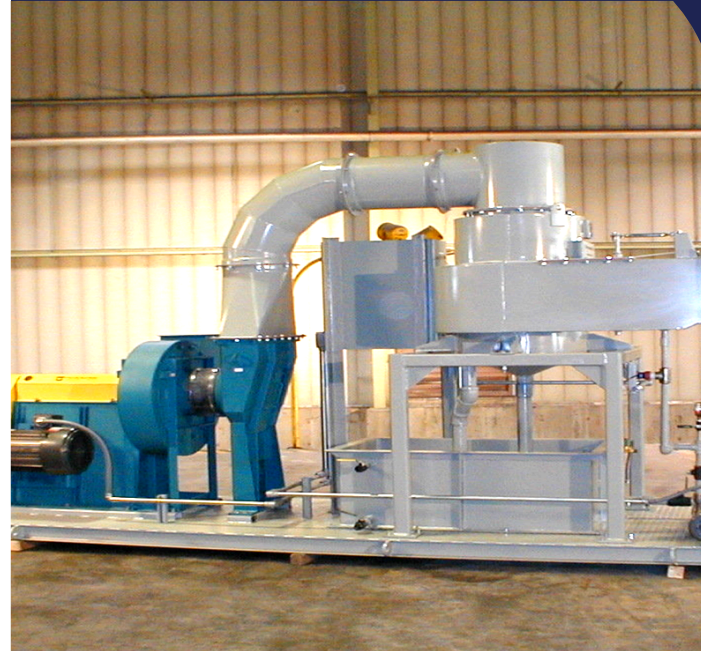
# POWER PLANT

**Provide Solution  
For Your Business**



# Industrial Scrubbers

Industrial scrubbers are pollution control devices that use liquid to wash unwanted pollutants from a gas stream, or that inject a dry reagent or slurry into a dirty exhaust stream to “wash out” acid gases. Industrial scrubbers are one of the primary devices that control gaseous emissions, especially acid gases.

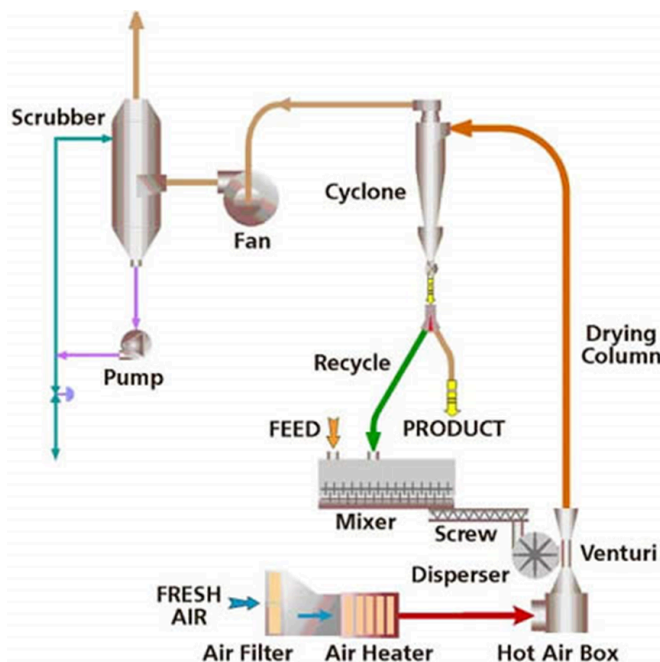


## Advantages

- Low-risk processing of incendiary gases
- Ability to handle high-temperature, high-humidity gas streams without temperature limit or condensation problems
- Small space requirements mean lower capital costs and site location flexibility – scrubbers reduce the temperature and volume of unsaturated exhaust streams, permitting vessel sizes, fans and ducts to be more compact. This also enables retro-fitting into existing systems
- No secondary dust sources – once particulate matter is collected, it cannot escape from hoppers or during transport
- Ability to absorb gas and solid particulate matter via a single device
- Ability to neutralize corrosive gases

## PRODUCTS

- **Combustion chamber**  
Venturi +Packed bed scrubber to control PM emission
- **Quench scrubber, Gas Scrubber**  
Quench waste gas temp., remove larger particles, absorb acid gases
- **Exhaust Scrubber, Hot Scrubber**  
remove heavy particulates from going downstream baghouse
- **Stack Scrubber, Flue gas Scrubber**  
Flue gas treatment, SO<sub>2</sub> removal CO<sub>2</sub> conversion.
- **Desulfurization Scrubber**  
Flue gas treatment, SO<sub>2</sub> removal CO<sub>2</sub> conversion.
- **Wet Flue Gas Scrubber (wet type)**  
Flue gas treatment, SO<sub>2</sub> removal CO<sub>2</sub> conversion.



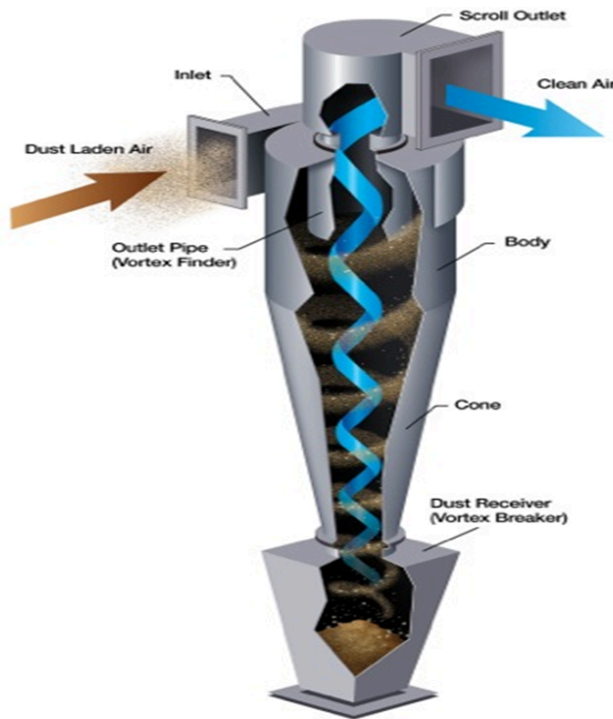
# Industrial Cyclones

## Fisher-Klosterman

Industrial Cyclones are a technology that uses cyclonic separation as its method of removing particulates from an air, gas or liquid stream, without the use of filters, through vortex separation.

### FEATURES

- Single or multiple units
- Standard or complex designs
- Internal refractory systems for high temperature operation – withstands more than 2,000 degrees F
- Varied finishes for pharmaceutical or food grade applications
- Special pharmaceutical or food grade finishes, inside and out
- Constructed of carbon, stainless, or virtually any alloy steel
- Heat transfer jacketing
- ASME pressure vessel design and construction
- Explosion suppression or venting systems
- External insulation
- Abrasion resistant construction or linings
- Break-apart construction for cleaning purposes



### Advantages

- Low Total Cost of Ownership
- Specifically tailored efficiency to meet your application needs
- Sophisticated computer modeling allows us to offer guaranteed performance when provided with complete operating information
- High reliability
- Long life due to premium quality materials and abrasion resistant linings
- Maximum performance and efficiency

For almost seventy years, CECO's Fisher-Klosterman has built and supplied custom-made air pollution equipment.

### PRODUCTS

- **Cyclone Scrubber, Exhaust scrubber/cyclone**  
Dry scrubber (Cylone) to capture exhaust gas ash, grit.
- **Baghouse scrubber/cyclone, wet cyclone**  
Wet Scrubber (liquid internal surfaces, lime+recycle water) entrain exhaust particulates
- **Dense Medium Cyclone.**  
Coal Preparation Plant (CPP), Coal Handling - Separation of different densities during sorting process.
- **Coal Wash Cyclone.**  
Coal Preparation Plant (CPP), Coal Handling - Separation of different densities during sorting process.



# Dust Collectors

## Flex-Kleen (F-X)

Flex-Kleen brand exemplified engineered solutions for a wide variety of dust collectors and particulate control applications and environments for more than 50 years. It has been a leading supplier of dry particulate collection solutions and systems for process dust control, product recovery, nuisance dust collection, and air pollution control since 1959.

CECO designs for industrial dust collectors meet the most demanding technical challenges associated with corrosive environments, sanitary conditions, combustible dusts and gases, hygroscopic materials, low bulk density materials, and materials that are under high temperature, high pressure or high vacuum.

More than 100,000 Flex-Kleen brand dust collectors ranging in size from 30 cfm to 100,000 cfm are in use throughout the world.

### FEATURES

- **Easy Installation**
- **Quick-mounting Air Headers**
- **Low operating costs**
- **Smart-Timer reduces energy costs**
- **Minimum maintenance**

## Flex-Kleen Advantages

- Proven Technology that lasts, with over 50 yrs
- Collectors are sized for each application, ensuring optimal operation
- Ability to provide equipment in high temperature and high pressure (ASME Code Vessel) applications.
- Flexibility to meet the customer requirements (special timing features, added sensors, etc).
- Customer service team dedicated to assist with your capital equipment after installation in conjunction with a library containing the specifics of the equipment.



**Designed to handle high-volume dust loads, a dust collector system consists of a blower, dust filter, a filter-cleaning system, and a dust receptacle or dust removal system.**

**CECO's Flex-Kleen brand products and solutions below fit within the classification of Dust Collectors:**

### TYPE

- **Dust, Ash, Baghouse, Pulse Jet Scrubber/Collectors.**

Ash, grit collection

- **Storage Baghouse/Dust Collector, Crushing Station Baghouse/Dust Collector, Tripper Room Baghouse/Dust Collector.**

Dust generated during coal handling and conveying system - Storage area, Crusing Station, Conveyor to tripper room.



In Collaboration with



[www.insaniaenergi.com](http://www.insaniaenergi.com)

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