LIS

EPP®
EPP Composites Pvt. Ltd.
Since 1986

indiascrub
Cleansing Gases, Conserving Future

FRP Air Pollution Control Equipment

- Corrosion Resistance
- High Durability
- High Strength
- Long Life
- Low Maintenance
- Light Weight

- Scrubbers
- Stacks
- Blower
- Cyclone
- Absorbers
- Dust Collector
- Dust Extraction System
- Fume Extraction System



Types of Industrial Scrubbers:

1. Wet Scrubbers 2. Dry Scrubbers 3. Electrostatic Precipitators

Innovative **Engineering,** Renovating **Life**

indiascrub™
Cleansing Gases, Conserving Future

Scrubbers



Capacity :
Diameter up to 8500 mm & height 30000 mm

Material of Construction :
Isopthalic I Bisphenol I Vinlyester I Fiber Glass
I PP I FRP I PP-FRP I PPH-FRP I PVC-FRP I CPVC-FRP I PVDF-FRP

Standard and Specifications :
BS-EN-13121 I ASME RTP 1 I ASME SECTION X

Application :
Scrubber used for the removal of SOX, NOX, HF, HCL, etc.

Types :
Wet Scrubbers I Dry Scrubbers I Electrostatic Precipitators

Scrubbers for Solar Cell Manufacturing Industries

For photovoltaic (PV) devices and solar cells, the solar industry depends on silicon. The most abundant element in the earth's crust is silicon, which is surpassed only by oxygen. Still, silicon needs to be purified to a 99.99% level in order to be used as a semiconductor in solar cells. The complicated processes involved in silicon refining can be managed with EPP's assistance, which can help you satisfy the severe processing demands of the solar market while maintaining environmental control.

Our intended scrubber systems are designed as per pollution control board norms. EPP are supplying scrubber systems including:

- **Gas Collecting Hoods**
- **Scrubbers with Internal Packing**
- **Recirculation Pipes and Fittings**
- **Ducts & Fittings**
- **Chimney/ Stack**
- **Centrifugal Exhaust Blower**

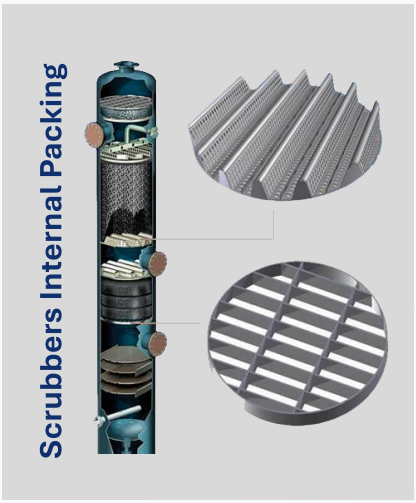




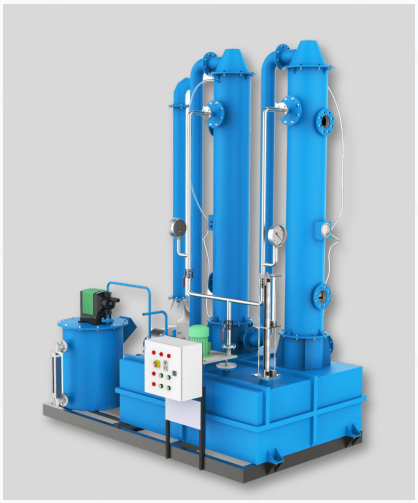
EPP FRP Acid Fume Scrubbing System are widely used in the following Industries :

- **Chemical, Caustic Chlorine**
- **Chlor Alkali Plant I Chlorine**
- **Emergency Scrubbing System**
- **Bromine Plants**
- **Paper Plants**
- **Pickling & Metal Finishing Plants**
- **Power Plants**
- **Pharmaceutical Plants**
- **Dyes & Intermediates Plants**
- **Pesticides & Fertilizers Plants**
- **Caustic Soda Plants**
- **Refineries & Petrochemicals**
- **Solar Cell Manufacturing Industries**
- **Semi Conductor Industries**











Wet Scrubbers

The first industrial scrubbers available were wet scrubbers, and these scrubbers continue to be a popular option today. Wet scrubbers are metal or composite containers that contain liquid. As a gas stream passes through the container, contaminants bind with the water and remain in the container. The purified gas then leaves the scrubber.

Wet scrubbers use fairly simplistic yet effective technology. Engineers found that maximizing the surface area of the liquid in the wet scrubber allows for more effective purification. They also determined that agitating the solution in the scrubber helps by keeping the gas and scrubber liquid more thoroughly mixed.

Dry Scrubbers

Dry scrubbers are mostly used to remove acidic components from gas exhausts that result from combustion processes. In these applications, the dry sorbent is an alkaline slurry. When the gas interacts with the alkaline substance, it undergoes absorption, effectively neutralizing the pH of the gas. The impurities turn into solid salts, which the particulate control device removes from the system. There are two basic methods dry scrubbers can use:

Dry Sorbent Injection

Some dry scrubbers inject a sorbent that the gas directly mixes with as it passes through. This injection and resulting reaction can happen at various locations in the process. Wherever it occurs, the system absorbs the acidic components from the gas and creates solid salts. These dry scrubbers are known as dry sorbent injectors (DSIs).



Spray Dryer Absorbent Method:

Other dry scrubbers spray the alkaline slurry into the gas stream as it passes through. The heat of the exhaust gas causes water droplets to evaporate, so the purified gas that leaves the system is non-saturated. These scrubbers are known as spray dryer absorbers (SDAs), spray driers or semi-dry scrubbers.



3. Electrostatic Precipitators

Electrostatic precipitators are used to remove particles like dust and smoke. Wet scrubbers can also use an electric charge to attract contaminants, but with electrostatic precipitators, that is the sole method used for purification.

Electrostatic precipitators are classified into two types depending on the way they dispose of the contaminants they collect:

indiascrub™
Cleansing Gases, Conserving Future

Dry ESPs:

Most ESPs vibrate the collector plates when needed to loosen the collected particles. This process is known as rapping and keeps the contaminants dry during disposal.



Wet ESPs:

Wet ESPs wash the collector plates with water. Typically, this method is used when the particles collected are sticky and pose low resistivity.

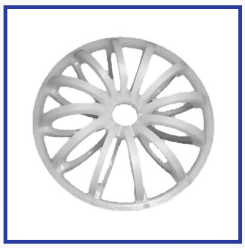
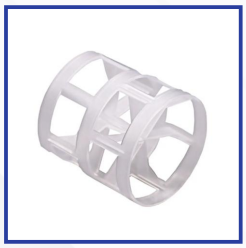


FRP Blower

The gas cleaning process, controlling gaseous emissions, especially polluted gases are an important part of waste incineration or power generation processes. EPP blower can be used for the removal of SO_x, NO_x, HF and HCL.

The design is mostly based on the requirements regarding temperature, gas flow, pressure, earthquake and climate conditions.

Packings

Flower Pall Ring	Ball Packing	Ring Packing	Pall Ring	Saddles Pall Ring
				

MOC :
Vinylester | Bisphinol | Epoxy | PP-FRP | PVC- FRP
HDPE-FRP | PVDF-FRP | PPH-FRP, etc.

SIZE / Capacity:
Maximum flow rate 150000 M3/Hr. or as per customer requirement.

Standard :
ASTM D 4167, IS 4894, ISO 1940, BS- 848







EPP/F/GFRP Pole Flyer/05/2024/Rev.00

REGISTERED OFFICE
Plot No. 2646, Kranti Gate
Main Road, GIDC Metoda,
Rajkot - 360021,
Gujarat, INDIA.

Phone No. :- +91 90990 72505
E-mail :- businessdevelopment@epp.co.in
Website :- www.eppcomposites.com

LAITH INTEGRATED SOLUTION
CORPORATE OFFICE :
PO Box 47391, 5709, Addax Tower,
Alreem Island, Abu Dhabi, UAE

Phone No. : +971255 37571
Fax : +971255 37579
Email : info@laith-is.com
Website : www.laith-is.com

Website

Catalogue