

FUME EXTRACTION SYSTEMS

WET & DRY SCRUBBERS

Scrubber systems are a diverse group of air pollution control devices that can be used to remove some particulates and/or gases from industrial exhaust streams. Scrubber is referred to pollution control devices that use liquid to wash unwanted pollutants from a gas stream. The exhaust gases of combustion may contain substances considered harmful to the environment, and the scrubber may remove or neutralize those.



A wet scrubber is used for cleaning air, fuel gas or other gases of various pollutants and dust particles. Removal efficiency of pollutants is improved by increasing residence time in the scrubber or by the increase of surface area of the scrubber solution by the use of a spray nozzle, packed towers or an aspirator. Wet scrubbers can also be used for heat recovery from hot gases by flue-gas condensation.

A dry or semi-dry scrubbing system, unlike the wet scrubber, does not saturate the flue gas stream that is being treated with moisture. In some cases no moisture is added, while in others only the amount of moisture that can be evaporated in the flue gas without condensing is added.

Features

- Different Throat and water Injection Options.
- Low water requirement
- Ability to handle high temperatures
- Vertical and Horizontal Gas Entry
- High Efficient Mist Eliminators
- Various packing's for high surface area and dwelling time.
- Different MOC like: MS, SS, FRP etc.

ACTIVATED CARBON FILTERS



Carbon filtering is a method of filtering that uses a bed of activated carbon to remove contaminants and impurities, using chemical adsorption. Active charcoal carbon filters are most effective at removing chlorine, sediment, volatile organic compounds (VOCs), taste and odor from water. For water adsorbents to become physically adsorbed onto activated carbon, they must both be dissolved in water so that they are smaller than the size of

the carbon pore openings and can pass through the carbon pores and accumulate. Besides physical adsorption, chemical reactions can occur on a carbon surface.

VENTURI SCRUBBERS



Venturi Scrubbers have the highest particle collection efficiency of any wet scrubbing system which can reduce the contamination level of flue gas up to 99%. A Venturi scrubber consists of three sections: a converging section, a throat section, and a diverging section. Their open construction enables them to remove most particles without plugging or scalding. The inlet gas stream enters the converging section and, as the area decreases,

gas velocity increases. Particle and gas removal occur in the throat section as the inlet gas stream mixes with the fog of tiny liquid droplets. The ability of Venturis to handle large inlet volumes at high temperatures makes them very attractive to many industries.

Process Applications:

- For particulate removal.
- For variable exhaust volumes.
- For gas absorption and particulate removal
- For coarse particulate removal.

Features

- High cleaning efficiency is high
- High pollution load acceptance
- Pollutants can be removed from scrubbing liquid using water recycling units
- Works well even at high temperatures