LOW-MAINTENANCE SYSTEMS FOR SUPERIOR POLLUTION CONTROL

KCH Engineered Systems has designed, manufactured, and installed hundreds of packed bed Chemical Scrubbers (wet scrubbers) that achieve excellent removal efficiency on a variety of Odors, Hazardous Air Pollutants, and gases from municipal and industrial processes. Our advanced system monitors both pH and ORP (oxidation reduction potential) to minimize chemical usage and guarantee removal efficiency.

APPLICATIONS
- Municipal Water Treatment Plants
- Pump Stations
- Headworks
- Dewatering
- Composting
- Sludge Dryers
- Industrial Odor Control

BENEFITS
- Custom Designed to Your Odor Control Needs
- Designs to Remove Both H,S, Reduced Sulfur Compounds and Ammonia
- Handles High Inlet Loadings and Fluctuations in Concentration and Humidity.
- No Acclimation Time Required to Achieve Efficiency (Unlike Bio-Scrubbers)
- Proven Designs with Predictable Removal Efficiency
- Corrosion Resistant Materials of Construction
- Smallest Footprint of Any Odor Control Technology
CHEMICAL SCRUBBER SYSTEMS

PRODUCT INFORMATION

The KCH Engineered Systems Chemical Scrubber System can be designed and built in a vertical or horizontal scrubber vessel configuration. Single or Multiple Stage systems are available based on the types of Odors to be removed. KCH Odor Control Scrubbers achieve excellent removal efficiencies on: Hydrogen Sulfide (H₂S), DMDS, DMS, Amines, Methyl Mercaptans, Ammonia and other odor causing compounds. KCH wet scrubbing technology can be used in conjunction with Biotricklers or Bio-Scrubbers to achieve greater efficiencies and greatly reduce chemical consumption.

These systems are constructed with POLYLAST® or POLYSTRONG® material, providing structural integrity, UV protection and corrosion resistance required for outdoor installations.

The Chemical Scrubber System can include additional components needed to provide a complete functioning system such as:

- pH and ORP Probes/Analyzers
- Integral Mist Eliminators
- Recirculating Pumps
- Fans
- Liquid Level Control
- Chemical Addition Pumps
- Chemical Storage Tanks
- Instruments
- Control Panels
- Ductwork
- OSHA Approved Ladders or Platforms

HOW IT WORKS

To remove H₂S and other reduced sulfur compounds, a solution of dilute caustic and sodium hypochlorite is injected into one or more scrubbing stages and recirculated over a random dumped packing material. This solution will oxidize these compounds through chemical absorption and mass transfer into the scrubbing liquid. The addition of freshwater allows them to be flushed from the scrubber sump via overflow or blowdown methods. In applications where Ammonia or nitrogen compounds are present, an additional scrubbing stage will recirculate a dilute sulfuric acid with chemically absorbed compounds again being flushed from the Scrubber sump with freshwater.

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