



MV TECHNOLOGIES

Engineered to Guarantee Results

H₂S Treatment SulfAx™ System

Landfill Gas

Agricultural Waste
Management

Food and Beverage
Processing

Waste Diversion

Wastewater
Treatment

MV Technologies SulfAx™ Systems are designed to optimize high-capacity granular media for the removal of H₂S from landfill gas, digester biogas and natural gas stream applications.

There are significant performance advantages in choosing a SulfAx System and we stand behind our systems with the MV Performance Guarantee™.



Design & Technology

The SulfAx System is designed to optimize high-capacity granular media. MV Technologies uses AxTrap™ granular media for its superior attributes and ease of removal.

The granular media is loaded into a fiber-reinforced plastic (FRP), stainless steel or carbon vessel through a manway. Gas flows through the vessel (top down) and the iron oxide reacts with and eliminates the H₂S and light mercaptans from the gas. The spent media is removed through a bottom, side manway, typically with a vacuum truck. Vessels are sized for a certain gas velocity and desired bed life, depending on inlet H₂S concentration and outlet H₂S requirements.

By utilizing up to a ~20 ft. bed depth, media life can be adjusted, depending on available pressure drop. Additional vessel designs are available and range from drums to roll-off style vacuum boxes.

- Different formulations of the media are available based on application and the presence of varied constituents in the gas such as non-methane VOC's and siloxanes.
- Effectively removes H₂S with or without O₂ in the gas and – based on the amount of O₂ in the gas – removal efficiency of up to 20 lbs. of H₂S per cubic foot of media.

Performance & Benefits

The SulfAx System is superior to the other leading granular media based systems in the following ways:

1. Lower pressure drop.
2. The spent media can be safely removed by many methods, typically with a vacuum truck – even if O₂ is present and without the need for water. This makes changeouts safer, quicker and easier.
3. The unique iron-oxide matrix of the AxTrap™ media avoids the excessive heating and combustion commonly found with other spent iron-oxide media (both on combustible and non-combustible substrates).
4. Injection of small amounts of air may improve efficiency by as much as 50% or more.
5. Not affected by free liquids.
6. Does not contain crystalline silica, commonly known as “quartz” that is known to cause cancer and is OSHA hazardous when present above a level of 0.2% by weight.

SulfAx System Difference

- Optimized Media Performance
- MV Performance Guarantee
- Greater Safety and Ease-of-Use

*MV Technologies is a distributor of AxTrap™ media products. AxTrap™ media is the exclusive product of Axens with USA and foreign patents granted and applied for. AxTrap™ is a trademark of Axens, all rights reserved.

Case Study



PROJECT: Wastewater Treatment Facility, Colorado

APPLICATION: Remove Hydrogen Sulfide and capture small mercaptans from a waste stream. The design parameters included the following: Gas Flow Rate – 150 scfm, Inlet Gas Concentration – 2000 ppmv H₂S, Operational Period – 24 hours per day.

MV SOLUTION: To meet the requirements established by the Customer, MV Technologies designed a SulfAx™ system. The H₂S removal and small mercaptans capture was achieved with a single vessel system utilizing 72,000 lbs of AxTrap™. This system is designed to run for 368 days before the AxTrap™ media requires a changeout.