



HIGH FLOW VENTSORB

ACTIVATED CARBON PRODUCT BULLETIN

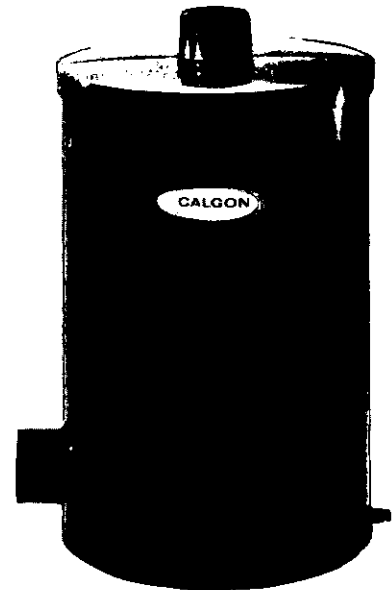
description

Calgon Carbon's High Flow VentSorb® odor control unit is a unique concept developed by Calgon Carbon Corporation to protect against noxious, unhealthy, and unpleasant odors emanating from small volume emissions from a variety of sources within sewage treatment plants.

The odors emitted from localized areas usually contain a complex mixture of hydrogen sulfide, mercaptans, and organic compounds which are generally harmless in nature, but can be olfactive at levels as low as one-half part per billion. As a result, even small emissions can create unnecessary problems both within the plant and within the surrounding community.

The High Flow VentSorb is a reusable, modular, prefabricated canister containing 225 pounds of IVP* Granular Activated Carbon that has more than twice the capacity for H₂S as an equal quantity of a standard vapor phase carbon. It includes all of the essential items found in a large-scale adsorption system--vessel, activated carbon, inlet connection, and an outlet connection for the purified air stream.

The High Flow VentSorb was designed by Calgon Carbon Corporation for purification of air streams having flows up to 425 cfm and with relatively low organic concentrations.



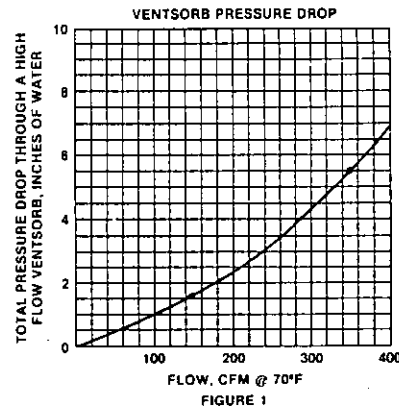
features and benefits

- **Easy To Install**--Place the High Flow VentSorb modular canister on a level surface, indoors or outdoors, near the source of the emission to be controlled. Connect a 6-inch flexible hose or pipe from the system to the inlet nozzle at the base of the High Flow VentSorb. Then connect the 6-inch outlet nozzle centered in the removable canister lid to the system outlet vent. A U-shaped vent line that will serve as a rain guard is recommended.
- **Reusable Modular Prefabricated Canisters**--When the carbon in the High Flow VentSorb is saturated and can no longer remove additional pollutants, it can be easily replaced. Unhook the unit from service, remove the twist off cover, and dispose of the saturated carbon--in accordance with environmental regulations. Then install a new charge of virgin IVP carbon and return the unit to service.
- **Replacement Carbon**--Two hundred twenty-five pound drums of IVP carbon are available from Calgon Carbon. To ensure replacement carbon is readily available when breakthrough occurs, one or more spare drums should be available for each installation.
- **Non-Corrosive**--All High Flow VentSorb components are fabricated from polypropylene resins that have a proven reliability for this type of service.
- **Effective In Treating Simple Or Complex Mixtures Of Contaminants**--The IVP granular activated carbon provides simultaneous protection against a wide variety of emissions including hydrogen sulfide, mercaptan, and many other organic chemicals.
- **Continuous Treatment**--The High Flow VentSorb works 24 hours per day to remove contaminants from air emissions regardless of fluctuations in the flow of the air stream.
- **Low Cost System**--The High Flow VentSorb contains no moving parts. Its simplicity helps to keep costs to a minimum.

- **Virtually No Operator Attention Required**--An occasional check of the treated air quality is all that is required.
- **Flexibility To Meet A Variety Of Needs**--A High Flow VentSorb unit requires relatively little space. Where necessary, more than one unit can be installed easily at different locations on a plant site. Additional units can be installed in series or in parallel configurations.

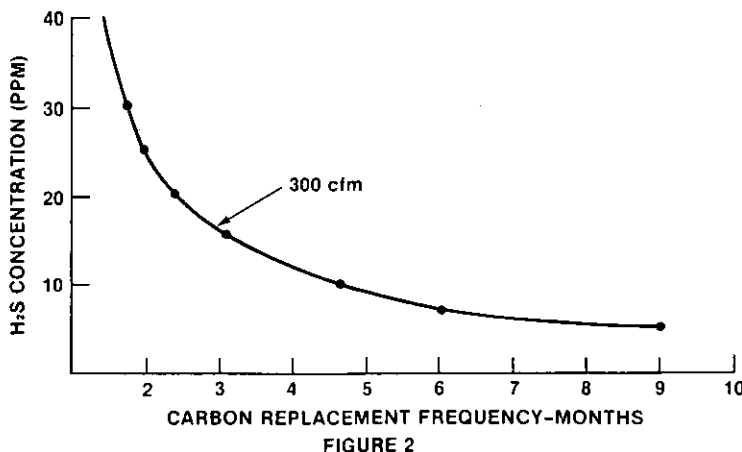
pressure drop characteristics

Pressure drop through a High Flow VentSorb is a function of the odor laden air flow as shown in the graph. A High Flow VentSorb can handle up to 400 cfm at a pressure drop of less than 7 inches of water column. If higher flows or lower pressure drops are needed, multiple canisters may be installed in parallel operation. The High Flow VentSorb modular canister is rated for atmospheric pressure.



life cycle characteristics

Figure 2 is a graph projecting the theoretical life of a High Flow VentSorb with IVP at various H₂S levels and a flow rate of 300 scfm. Actual life will depend on the type and concentration of contaminants as well as temperature, humidity, and airflow. Contact your Calgon Carbon representative for additional information.



commercial information

Shipping Point:	Pittsburgh, Pennsylvania
Packaging:	Modular Canister— 45 Lbs. Gross Weight
	Activated Carbon— Packaged In 55-Gallon Leverpak Drums; 225 Lbs. Net, 242 Lbs. Gross Weight
Replacement Carbon:	Packed In 55-Gallon Leverpak Drums; 225 Lbs. Net, 242 Lbs. Gross Weight

precautions

Calgon Carbon's type IVP activated carbon can liberate heat by reacting chemically with oxygen to form carbon dioxide. This potential is enhanced by an impregnated material which causes a catalytic reaction. Because heat is evolved, the carbon must not be confined without operative fans which are necessary to provide air flows required for heat dissipation. Inoperative fans permit formation of convective air drafts within the vessel that support this slow chemical reaction but which are insufficient for heat removal. In cases where there is insufficient air supply or where disrupted air service occurs, the chemical reaction can be prevented by sealing the vessel and thereby restricting contact between air and the carbon. Please call your local Calgon Carbon Representative for any clarification of the above.

Information concerning human and environmental exposure may be reviewed on the Material Safety Data Sheet and label for this product.



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