

Filtro Carb VH - Honey Comb V Carbon Filters

Filtro Carb VH is a new generation carbon filter that meets the demand of odor removal in applications where the concentrations of odor is very high. They are similar to a compact filter design with 4V and in plastic frame. Carbon filters available these days are heavy and hence require much efforts in handling. Carb HV is designed in a low weight construction and the weight of carbon dominates in its total weight. A variety of carbon selections are offered depending on the applications.

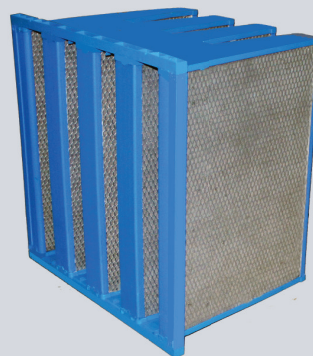
Filtrowin Models

Filtro Carb VHC

Honey comb carbon filters in plastic frame using coconut shell impregnated carbon inside.

Filtro Carb VHA

Honey comb carbon filters in plastic frame using activated alumina with potassium permanganate.



Media Features and Technical Details

Filter media used in these filters are basically activated carbon or alumina. They are arranged in a honeycomb of specific thickness and forms V packs. 8 packs are encased in a rigid plastic casing and sealed using two part Urethane sealant. Frames are offered in 20mm or 25mm header and are available in 292mm, 400mm and 430mm depth. Filter faces are generally 592 x 592mm, 292 x 592mm or 490 x 592mm. These filters are not re-usable and should be disposed after use as per local requirements. Carbon can be used for landfilling and rest of the components can be burned.

Selection of filter media is based on the application. Customers should specify the VOC to be treated and filters can be then selected based on its residence time. Residence time is the term given to the time that a gas stream contacts a carbon bed. The residence time is critical to the chemisorption or complexing phenomena. As the gas enters the bed, it must have time to interact with the impregnants on the carbon. Too little residence time will mean that the contaminants will not interact completely with the carbon or impregnants. Too much time means that the system is not designed well. An ideal contact time we recommend is 0.10 second.

Activated Carbon

The chemical filtering material of activated carbon series is based on high-quality, dustfree activated carbon impregnated with alkaline chemicals. It is a State-of-the-art impregnating technology that ensures an extremely large area and uniform distribution. Applications include wood processing industry, sewage treatment plants, petrochemical industry, composting plants and process industry. The use of special impregnating chemicals renders activated carbon capable of absorbing all types of harmful and corrosive gases. Depending on the conditions, extremely large amounts of hydrogen sulphide, sulphur oxide and other acidic gases can be adsorbed into the carbon. The impregnating agent acts as a catalyst, converting hydrogen sulphide and sulphur oxide compounds as well as other acidic gases into non-volatile, inorganic compounds.

Activated Alumina

Activated alumina is used in applications like wood processing industry, hospitals, sewage treatment plants, museums, petrochemical industry and in commercial buildings. The product consists of activated aluminium oxide (Al₂O₃) impregnated with potassium permanganate (KMnO₄). It is produced in pellets, and is purple in colour. The pellets are based on the two oldest proven methods for management of gas concentration: sorption and oxidation. The elimination of impurities starts with adsorption and absorption of molecules. After this, the potassium permanganate in media acts as an oxidiser and chemically destroys the accumulated impurities. This chemical oxidising is called controlled oxidising as the method based on pellet form converts sulphurcontaining gases, such as hydrogen sulphide and sulphur oxide into inorganic non-volatile sulphides and sulphates.

Selection Chart : Filtro Carb VHC/VHA ▼

Filter Sizes (Inches)	Filter Size (mm)	Rated Airflow (CMH)	Initial Resistance (Pa)	Residence Time (Sec)	Carbon Weight (Kg)
24 x 24 x 12	Size: 592 x 592 x 292	1700	50	0.06	12
24 x 20 x 12	Size: 592 x 490 x 292	1200	50	0.06	10
24 x 12 x 12	Size: 592 x 292 x 292	850	50	0.06	6
24 x 24 x 16	Size: 592 x 592 x 400	1700	35	0.08	16
24 x 20 x 16	Size: 592 x 490 x 400	1200	35	0.08	14
24 x 12 x 16	Size: 592 x 292 x 400	850	35	0.08	8
24 x 24 x 17	Size: 592 x 592 x 430	1700	30	0.10	18
24 x 20 x 17	Size: 592 x 490 x 430	1200	30	0.10	16
24 x 12 x 17	Size: 592 x 292 x 430	850	30	0.10	9

Residence time will be half of given above when operated at double airflow.

- Humidity : 95%
- Temperature : 60 °C
- Please contact factory for special toxic or VOC gases

All data are average indicative values with usual manufacturing and testing tolerances. We reserve the right to modify performance data without prior notices due to the constant technical improvement.

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