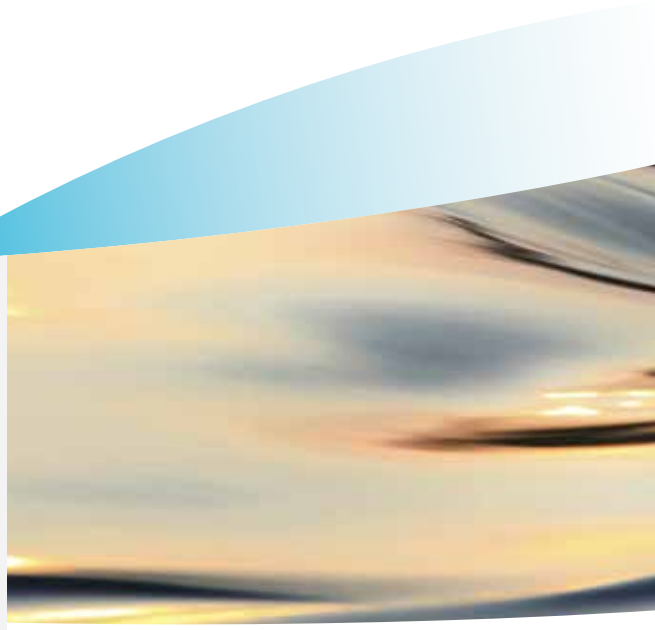


FB-SERIES VAPOR PHASE CARBON ADSORBERS

Applications

The FB-Series adsorbers are well suited for the removal of VOC's from low to moderate flow air streams and other emission control applications. Some typical applications for the FB-Series adsorbers include:

- Industrial plant emissions
- Soil vapor extraction (SVE) remediation system off-gases
- Controlling emissions from waste processing operations (i.e., tank cleaning)
- VOC removal from air stripper off-gases
- Backup VOC control device for thermal oxidizers.

Installation, Operation and Monitoring

The frequency of adsorber exchange will depend on operating parameters that affect carbon loading such as VOC type and concentration, temperature, relative humidity, superficial gas velocity, carbon type (coconut shell or coal) and other factors.

Evoqua offers state-of-the-art computer modeling programs, for carbon consumption estimates and optimization of system performance.

Evoqua can also provide monitoring services utilizing the appropriate type of field monitoring equipment. The monitoring method used and equipment required will depend on the types of VOC's being captured and on the regulatory compliance requirements.

When an adsorber exchange is required, Evoqua can provide a total service package that includes utilizing OSHA trained personnel providing on-site carbon changeouts, packaging and transportation of spent carbon for recycling at our reactivation facilities, where the contaminants are thermally destroyed.

We provide instructions on sampling the spent carbon and completion of our spent carbon profile form. Spent carbon acceptance testing can be performed at our certified laboratory. When requested, a certificate of reactivation will be issued.

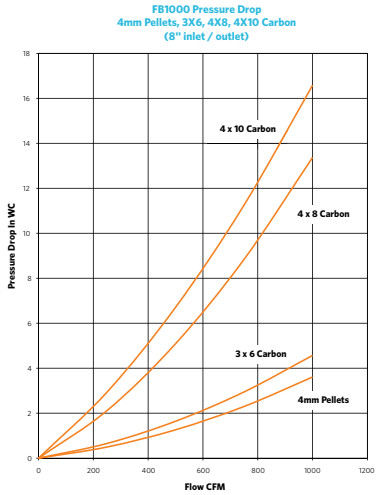
BENEFITS AND DESIGN FEATURES:

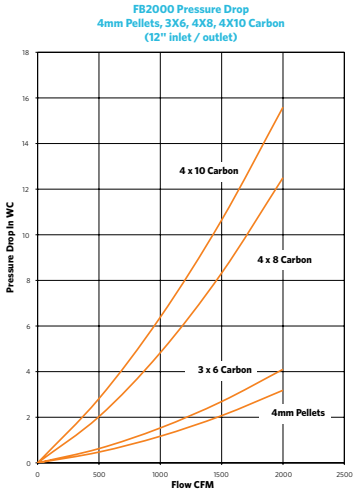
- FB-Series adsorbers are transported with carbon installed, thereby eliminating the need for on-site carbon handling
- Available for sale or rental
- Various inlet/outlet connection adapters available at no additional costs
- Systems are designed for very low pressure drops at rated flow rates
- Deep carbon bed depths (a minimum of three feet) allow for the efficient removal of VOC's
- Applications to 3,000 scfm

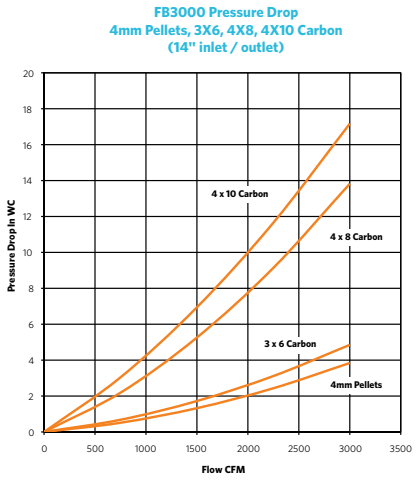
SPECIFICATION

	FB1000	FB2000	FB3000
Outside dimensions (LxWxH)	42" x 51" x 74"	60" x 68" x 74"	72" x 80" x 80"
Inlet / Outlet[1] (I.D.)	8" flanged	12" flanged	14" flanged
Interior Coating (SSPC-SP10)	Epoxy	Epoxy	Epoxy
Exterior Coating (SSPC-SP6)	Epoxy / Urethane	Epoxy / Urethane	Epoxy / Urethane
Cross Sectional Area (Sq. Ft.)	12.25	25	36
Empty Weight / Operating Weight (lbs.)	1,050 / 2,050	1,450 / 3,450	1,920 / 4,920
Approx. Carbon Bed Weight	1,000	2,000	3,000
Flow, SCFM (max.)	1,000	2,000	3,000
Pressure, inches w.c. (max)	28	28	28
Vacuum, inches w.c. (max)	14	14	14
Temperature, °F (max.)	200°	200°	200°

[1]inlet/outlet connections can be adapted to a variety of alternate connection sizes. Discuss with your Technical Sales Representative. For detailed dimensional information or drawings, contact your local Evoqua Water Technologies sales representative.







Warning

The adsorption of organic compounds onto activated carbon generates heat. In rare instances, adsorbed compounds may also react on the carbon surface to generate additional heat. If these heat sources are not properly dissipated, the carbon bed temperature may rise to the point where the carbon can ignite, leading to a fire or other hazardous condition. A description of industry-accepted engineering practices to assure the dissipation of heat and safe operation of the carbon bed can be provided upon request. In certain applications where the risk of ignition is significant, activated carbon may not be a recommended treatment technology. Please contact your Technical Sales Representative for more details.

Wet activated carbon readily adsorbs atmospheric oxygen. Dangerously low oxygen levels may exist in closed vessels or poorly ventilated storage areas. Workers should follow all applicable state and federal safety guidelines for entering oxygen depleted areas.

EVOQUA WATER TECHNOLOGIES

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