ENVIROGEN TECHNOLOGIES

Envirogen Biotrickling Filters

Highly efficient treatment with a small physical footprint



Envirogen Biotrickling Filters are vertically-oriented vapor-phase bioreactors filled with an inorganic media featuring 100% recirculation. The filters' unique design can address high concentration of H2_s odors in areas where space is at a premium – offering a shorter retention time and treatment of higher air volumes than conventional biofilters. They can also treat high concentrations of VOCs and ammonia, and be chemically augmented when needed.

Line	Models	Media (ft ³)	CFM	EBRT/seconds (default)
Biotower (BT)	30	120-3500	480-14000	10-30 (15)

The biotrickling filter towers are available in a dual media chamber version (Tall), and a single media chamber version (Low Profile). They are delivered with lightweight, synthetic media with internal irrigation assemblies preinstalled to improve the speed and lower the cost of installation.

Envirogen Biotrickling Filter systems are a very robust, sustainable solution, offering:

- · Small physical footprint
- · Efficient contaminant destruction
- Eliminate chemical usage/storage of chemical scrubbers
- Reduced energy usage
- · Lower carbon footprint than traditional technologies
- Lower overall emissions
- · Adaptation to changing odor sources and levels

Exacting Process Control

Envirogen Biotrickling Filter Systems feature the latest concepts in odor and VOC control system design. Unlike other biofilter tower systems, the recirculation water maintained in the tower allows for optimal control of pH, nutrient levels and biofilm thickness. These highly automated systems use minimal energy; require minimal staff attention and little or no chemicals, cutting operating costs and eliminating the need for chemical storage and handling. Features include:

- FRP vessel without metal support structure (no corrosion)
- Single or dual-zone media tailored to air influent
- Ease of Installation (modular)
- "Drop and Start-up" (i.e., drop unit on pad, pre-loaded media)
- High degree of automation & process control in FRP
 or stainless steel panel construction



About Envirogen Technologies

Envirogen Technologies is an environmental technology and process solutions provider that combines experience in water and vapor phase treatment with process development expertise, delivering long-term, guaranteed solutions in a broad range of treatment and process-related applications. Today, we provide system design, process engineering, equipment and operating solutions for the treatment of process water, groundwater, wastewater, VOCs & odor as well as materials recovery for a range of industrial and non-industrial customers throughout North America.

The Envirogen Technology Portfolio

Bioreactors	Biofilters	lon Exchange		Filtration	Phys-Chem	Adsorptive
Fluidized Bed Reactors (FBR)	Built-in-Place (BIP) (High flow)	SimPACK™ (400 gpm+)	FlexSorb™ (5- 150 gpm)	Ultrafiltration	Gas Transfer Membrane De-Aeration	Granular Activated Carbon Systems
Membrane Bioreactors (MBR)	B, P, BT/BF, & I- Series (mid-flow)	MinX™ (100-850 gpm)	HyperSorb™ (35-3000+ gpm)	Multimedia Filtration	Demineralization	Zero Valent Iron
Suspended Carrier Reactors (SCR)	H-Series (low flow)	MinFlex™	Softening	Cartridge and Bag Filters	Disinfection	
	Biotrickling Filters (air) BT-Series	Service Exchange/ Customer Supplied		Reverse Osmosis and Nanofiltration		

Envirogen Biofilter Media

ScorFil™ inorganic, scoria lava

VamFil™ aged bark, engineered

FlexFil[™] synthetic structural or random packed media

Up to 10-year warranty





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Visit our website www.envirogen.com for more information about the Envirogen Biotrickling Filters and our regional locations.

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