



Bioscience, Inc
Environmental Products and Services

BTX BIOTREATER SYSTEM FOR WASTEWATER AND GROUNDWATER

WHAT IS BTX?

BTX biological submerged, fixed-film reactors are advanced packaged biotreatment systems used in the treatment and pretreatment of industrial, institutional, commercial and domestic wastewater; in the treatment of surface water and groundwater in site remediation applications; and, in the treatment of drinking water. They are unsurpassed for stability and ease of operation compared to conventional packaged activated sludge systems.

FEATURES

- Factory Fabricated, Modular Design
- Aerobic, Anoxic or Anaerobic Operation
- Flow Capacity: 500 to 225,000 Gallons Per Day (1.9 to 852.3 m³/day)
- Easy and Inexpensive to Install
- Self Controlling - Easy to Operate
- Transportable by Roadway

BENEFITS

- **Treats Difficult-to-Degrade Organics**

The **BTX** system was developed specifically for effective treatment and/or pretreatment of wastewaters from hotels, motels, food processing plants and small industrial plants. **BTX** systems are also used for on-site decontamination of groundwaters, surface waters and wastewaters containing hazardous wastes. The **BTX** system has special advantages in removing "difficult-to-degrade" organics. Its totally-enclosed design allows for the treatment of volatile as well as non-volatile compounds.

- **Treats Volatiles**

Each **BTX** unit is an airtight enclosure. Gas diffusers and recirculation pumps circulate gas and wastewater through a rigid, reinforced polyvinyl chloride (PVC) matrix. The corrugated matrix provides 42 square feet (3.9 m²) of biofilm growth surface per cubic foot (0.028 m³) of matrix. **BTX** treatment capacity equals or exceeds

that of an activated sludge plant of the same size, while **BTX** units are much easier to operate. This is because no sludge wastage decisions need to be made and because the secondary sludge from **BTX** units generally settles and dewater better than that of suspended media systems, such as activated sludge.

■ **Treats Complex Mixtures**

BTX units can be arranged in series or in parallel for complete treatment of complex mixtures of diverse organic chemicals. A combination of units operating in aerobic, anoxic and/or anaerobic modes can provide BOD removal, degradation of chlorinated compounds, nitrification, denitrification, and desulfurization in a single process train.

■ **Ideal for Pollution Prevention**

Because the biological population is fixed in each reactor, the **BTX** system requires no interstage clarification, sludge separation or sludge recycle making **BTX** systems easy to operate and control. **BTX** systems are ideally suited to in-plant "pollution prevention" applications since they are totally contained.

Your Bioscience Technical Representative will prepare a detailed, coordinated design to meet your treatment needs.

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