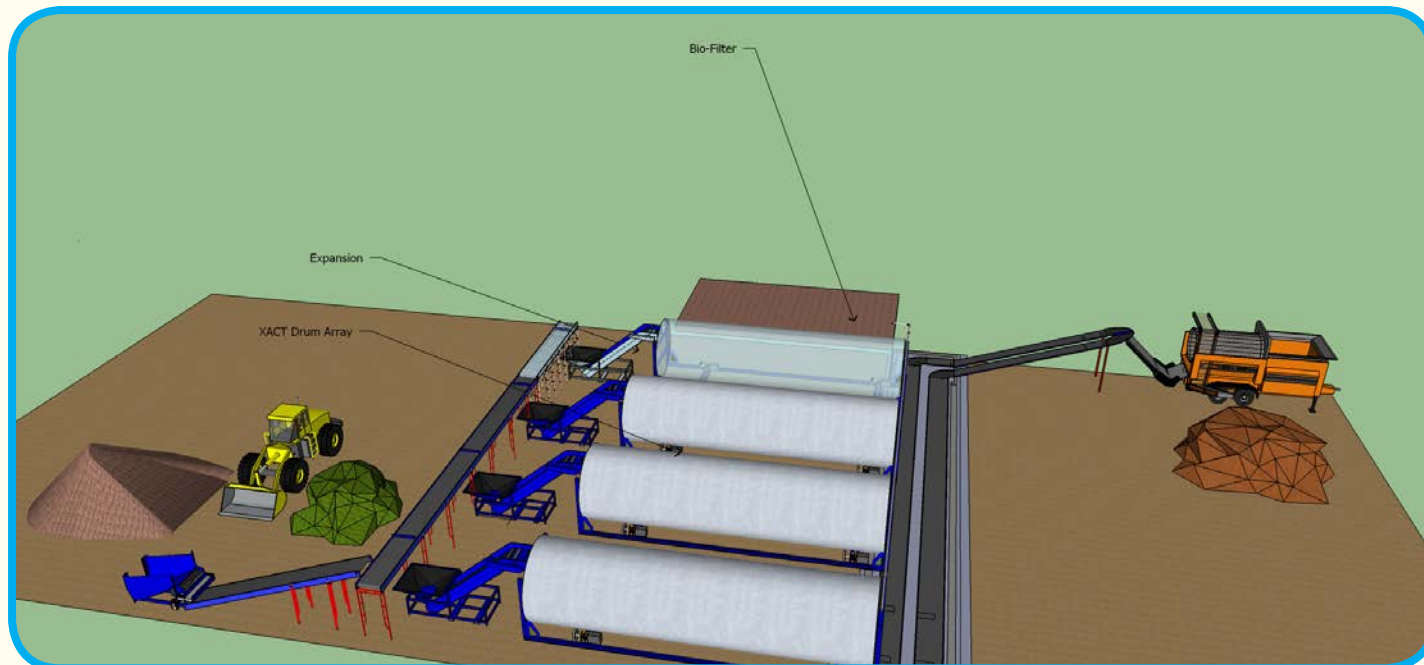




Containerized BioReactor Composting System with a Model 510 BioReactor, Vertical Mixer, Conveyors, and Loading Device.



This sample site layout illustrates the scalability of a facility for future expansion using the BioReactor technology. Auxillary equipment shown in this layout are skid steer, infeed loading devices, outfeed conveyors to the screener, and biofilter.



XACT Systems Inc.
5448 Prince Edward Rd. 1
Consecon, Ontario, Canada
K0K 1T0
Tel: 613-399-5686
info@xactsystemscomposting.com
www.xactsystemscomposting.com



REACHING TO THE FUTURE





Reaching To The Future of Composting Technology With The BioReactor Composting System

Acceleration, Automation, Monitoring, Control & Microbial Fortification



These 3 BioReactors are 10' diameter x 60' long. The BioReactors handle all the composting portion of this waste management treatment facility.



Emissions and/or odor can be captured from the composting process by attaching duct work to the Negative Ventilation Fan (see grey pipe extending down from blue fan in the upper right corner)



This composter is 10' diameter x 60' long. It features a fixed, spring-loaded output end with an automated discharge auger and a negative ventilation fan; a fixed, spring-loaded in-feed end with an opening for loading; a rotating vessel supported by 4 trunnion wheels, 4 Friction Drives (each with a 2HP motor).



One operator can handle the entire composting process because of the automated features of the BioReactor Composting System. Complete control of the system is at the finger-tips of the operator. The user friendly soft touch screen on the front of the control panel was designed for the BioReactor Composting System in order to give the operator easy access to a wide variety of critical data. In addition, the data collected from the monitoring can be sent to the operator's cell phone or computer 24/7.

The control panel monitors the composting process and controls the function of the mixer, the conveyor and the BioReactor. This is accomplished by the Timer/PLC Control on the panel.

- Rotating drum operation
- Load capacity
- Start, stop, speed of rotation
- Discharge auger operation
- Negative ventilation fan-start, stop, speed
- Internal temperature monitoring and control



These BioReactors will compost tons of solid organics daily at this new state-of-the-art solid organic waste management facility located in Goa, India. Because of the heavy-duty engineering and 24/7 performance redundancy design of the BioReactor, it was the obvious choice of composter for this massive facility. They will treat the solid organics waste of half of the city. The waste material coming into the plant is classified as MSW.



This Model 1060 BioReactor has a load capacity of 70% of the total volume of the drum due to the fact that the infeed opening is located in the upper quadrant of the fixed end. The large opening allows quick automated filling by a heavy duty belt conveyor.

Compost is typically produced with only a 4-day processing time. The BioReactor rotating drum provides a perfect environment for the decomposition process to occur. The naturally occurring aerobic bacteria do the actual decomposition work, and the BioReactor Composting System controls all the relevant factors—moisture, oxygen, temperature.



NEW

Microbial Fortification of Composting Process

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Enhanced microbial action creates new opportunities for composting operations

- Reduced carbon footprint
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- New green soil amendments
- Microbial fortified and infused bio-fiber technology