

# CASE STUDY

## BioReactor Composting System Food Waste & Garden Waste





## 8,000 Room Resort in Cancun Composts Food and Garden Waste

Food waste composted with the in vessel composter by XACT is solving the organic waste problem of an 8,000 room hotel in Cancun, Mexico. The Cancun Palace Resort generates 2500 tons of organic waste per year, and they wanted/needed to reduce their high waste haulage costs and landfill tipping fees. In addition, the hotel management wanted to take meaningful action to reduce their GHG emissions.

The Palace Resort was able to solve both objectives effectively by choosing the BioReactor Composting System to compost their organic waste. As an added bonus, the Cancun Palace Hotel's corporate image is enhanced by their responsible waste management initiative. Plus the benefits don't stop there! The Return On Investment (ROI) is only 18 months making the investment in the BioReactor Composting System a savvy decision in all respects.

### Food Waste and Garden Waste are the Feedstocks

The BioReactor is composting food waste from the kitchens and dining rooms as well as green and brown gardening residue. The waste is processed in the in-vessel composter for 5 days. Upon discharge, the compost is pathogen-free, weed seed-free and virtually odorless.

### Composting in the BioReactor Is Followed by Vermicomposting

The next step in the operation is for the compost to be placed in the worm bins for further decomposition. Vermicompost is process of decomposition of organic waste using worms. The castings (or worm manure) have a high saturation of water soluble nutrients (readily plant available) and makes an excellent organic fertilizer and soil conditioner. The Cancun Palace Resort uses the castings in their own nursery, gardens, flower beds, and on the golf course.

Food waste from the kitchens and dining rooms is collected separately and taken to the on-site composter for fast composting.



The BioReactor is 8' diameter by 40' long. The food waste, green and brown plant residue are composted in the vessel in 5 days.



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