

ANNEX VIII

EARTH TUB COMPOSTING TECHNOLOGY

For Composting Organic Wastes



The Earth Tub

Commercial Duty Compost System

The Earth Tub is designed specifically for on-site composting of food-wastes. The Earth Tub is a fully enclosed composting vessel featuring power mixing, compost aeration, and biofiltration of all process air. This self-contained unit is ideal for composting at schools, universities, restaurants, hospitals and supermarkets.

The Earth Tub Process

Loading

Organic materials such as food scraps, manure or yard waste are loaded through the large hatchway in the cover. Periodically, dry materials such as wood chips, shredded paper or shavings can be added to insure that porosity and moisture levels are ideal for composting.



Mixing

Turn on the auger motor and rotate the cover to shred and mix the new organic material into the active compost. Two revolutions of the rotating cover are required to mix the outside and center of the Earth Tub. The auger will shred and mix a ton or more of compost in 10-15 minutes. During active composting, the Earth Tub should be mixed at least two times per week.

Aerobics and odor control

Maintaining aerobic conditions and controlling temperature are essential for composting and odor control. The aeration system draws air through the compost and forces the exhaust air through

our biofiltration air purification system to remove odors. Liquids are collected and disposed to a sanitary sewer or holding tank. The overall cleanliness of the in-vessel design allows the Earth Tub to be placed in commercial settings close to where waste is generated.

Waste reduction

Heat generated in the Earth Tub rapidly breaks down the food scraps. The volume reduction is typically 70% or higher. After 3--4 weeks of active composting, open the discharge doors and the auger pushes the compost out as it rotates past the discharge door. The compost can be cured for 20-40 days for further stabilization.

Key features

- ✓ Easy to operate
- ✓ Rapid process reduces volume quickly
- ✓ Heavy-duty plastic construction
- ✓ Minimal need for bulking agent
- ✓ Short time required for mixing/loading
- ✓ Temperature controlled system
- ✓ Insulated for cold weather operation
- ✓ Thorough compost mixing
- ✓ Biofilter odor control system

Specifications

Tub Vessel Height	48"
Overall Height	68"
Overall Diameter	90"
Foam Insulation	R-12
Shipping Weight	450 lbs
Volume	3 cubic yards
Mixing Auger	12" Diameter Stainless Steel
Auger Motor	3 Ph 2.5 hp 230/460V
Aeration Blower	80 CFM 100 watt
Power Usage	~1080 KWH per year
Liquid Drain	1" drain on biofilter
Processing Capacity	40-200 ppd*
* Pounds per day of biomass per Earth Tub.	