

EARTH FLOW SITE-BUILT



Overview

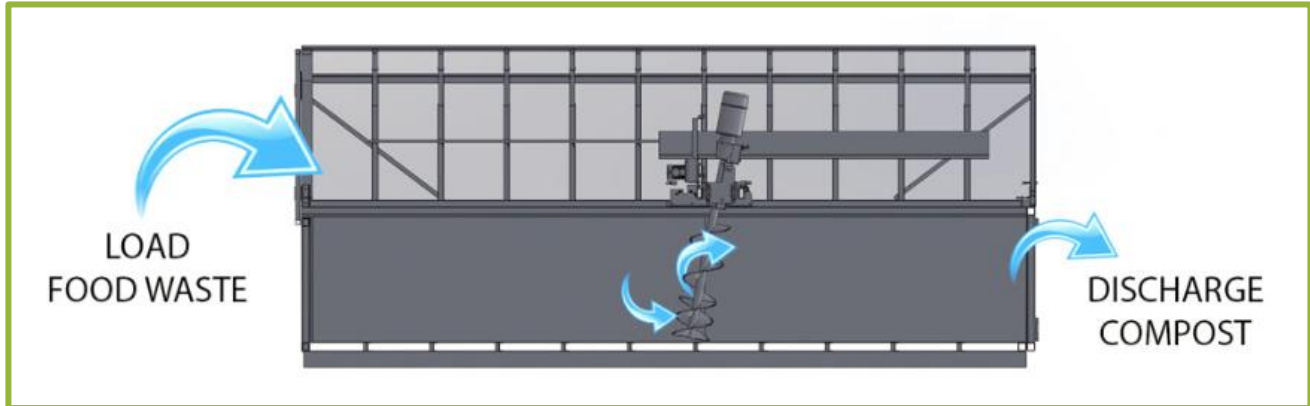
Instead of composting inside a steel vessel, the Site-Built Earth Flow™ mixing system is integrated in a locally built vessel. Typically, the vessel has a concrete pad and concrete or stainless-lined wood walls and some type of enclosure.

The Site-Built Earth Flow™ can be configured to work in any new or existing building and is custom sized to meet your project needs. The system is ideal for agricultural applications where tractors are used for material handling. The stainless-steel track system can be mounted on poured concrete or block walls up to 5' deep and 100' feet long. The open-end design allows a front-end loader or dump truck to load directly in the system. The Site-Built version significantly reduces the capital cost for larger installations of up to 10 tons per day.

Auger Mixing System

The computer controlled mixing system provides daily mixing and aeration for the compost inside the Earth Flow. The stainless steel inclined auger is mounted on a carriage that moves side-to-side and front-and-back within the vessel. The auger churns and shreds the compost in the vessel, advancing it slowly toward the discharge end. A control panel allows for automatic operation with multiple mix patterns and programmable timer cycles. The drive motors are controlled by efficient variable frequency drives to regulate the auger speed while minimizing the use of electricity.





Continuous Flow Design

Food waste and shredded woody or green waste materials can be added daily to the loading end of the Earth Flow. An automated auger mixes the food waste into the hot compost, which rapidly breaks down as it moves toward the discharge end of the vessel. The typical process time for the waste to flow through the vessel is 14 to 21 days. As the organic waste converts into compost, its volume is typically reduced by about 50-60% allowing compost to be unloaded about once a week. To unload compost, open the discharge door and the auger will lift the compost up to 3 feet and push out several yards of compost into a bucket loader, car or pick-up truck.

VESSEL SPECIFICATIONS	EF-3010	EF-4010	EF-5010
Total System Capacity (yd ³)	44	59	74
Daily Input Capacity @ 21 days retention (tons/day)	1.2	1.6	2.0
Daily Input Capacity @ 14 days retention (tons/day)	1.7	2.2	2.8
Daily Input Capacity @ 7 days retention (tons/day)	2.8	3.8	4.7
Length - Internal	30'	40'	50'
Width - Internal	10'	10'	10'

EQUIPMENT	SPECIFICATIONS
Mixing Auger	14" 304 Stainless Steel
Gear Motor	5hp 3ph (208/230/460 V-50/60 Hz)
Gearbox	Helical bevel synthetic lube
Carriage and Rail Gear Motors	1/8 hp end motor, 1/2 hp side motor
Control Panel	Programmable PLC in NEMA 4x panel
Power Requirements (Motors)	30A 220V single or 208V 3 phase