



## The Earth Flow In-Vessel Composting System – Features & Benefits

The Earth Flow system is a fully automated in-vessel composting system that provides optimum conditions for thermophilic composting. The Earth Flow features:

- **Automated mixing** – via the Earth Flow's exclusive Traveling Auger technology.
- **Automated aeration of compost** – boosts oxygen levels even further.
- **Automated moisture addition** – maintains appropriate moisture content.

The combination of these features facilitates a thermophilic composting process in 14-21 days. Retention times as low as 5 days are possible in combination with secondary aerated composting.

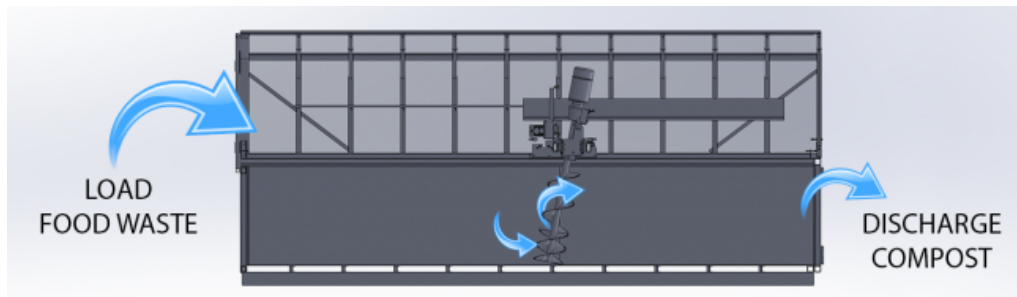


The Earth Flow has an integrated mixing system that allows the compost to be mixed on a daily basis (2-4 times per day). The Traveling Auger is the true magic of the Earth Flow and really is the optimum technology for hot food waste composting. The traveling auger provides seven different functions that facilitate the hot composting process:

1. **Shreds.** The auger tears up food waste clumps as they cook to reduce particle size and make the food waste more available to the microbes.
2. **Mixes.** The auger mixes material by smearing food waste onto bulking agent.
3. **Aerates.** The auger continually fluffs the compost to add oxygen to the matrix.
4. **Distributes Moisture.** The auger sweeps up wet material from the base of the pile and elevates it to on the surface. This maintains an even distribution of moisture through the pile.
5. **Homogenizes.** The auger homogenizes food waste with bulking agent for an even distribution of nutrients.
6. **Transports.** The auger slowly increments compost from the load end to the discharge end.
7. **Stacks.** As compost reduces in volume, the auger continually stacks the material toward the back to maximize utilization of the space.



The Earth Flow is designed such that feedstocks are loaded on one end of the vessel and finished product is discharged from the opposite end of the vessel.



The Earth Flow can be operated as a batch-system or a continuous-flow system. A batch-system means that the vessel is filled to capacity and is then closed and the batch is composted for a specified period of time and then discharged. In a continuous-flow system, feedstocks can be loaded at anytime on the load end and the traveling auger slowly migrates compost to the discharge end, where material can be discharged once the discharge end is full and the compost is ready to be discharged. It is also possible to run the Earth Flow as a hybrid of a batch and a continuous flow system.

#### Why is the Earth Flow system the best technology for food waste composting?

- **Speed/Performance/Cost** – No other hot composting system on the market today offers the combination of high performance, speed, small footprint, odor control and top quality compost at such a reasonable price.
- **Compost Quality** – The traveling auger mechanism produces a superior quality compost: light-weight, fluffy, homogeneous, extremely friable, highly oxygenated.
- **Fully Self-Contained** – No additional structures required.
- **No Leachate** – Leachate is managed and recycled internally within the vessel.
- **Excellent Odor and Vector Control** – Five different engineering controls combine to provide unsurpassed control over odors, pests and air quality:
  1. Mixing auger – oxygenates compost, breaks up anaerobic pockets and evenly distributes moisture.
  2. Positive aeration – further boosts oxygen levels.
  3. Bulking agent – absorbs moisture, provides available carbon, structure (air space in the pile).
  4. Fully enclosed system – provides control over process air.
  5. Biofiltration – filters all process air through a biofilter.
- **Small Footprint for Restricted Space** – The Earth Flow’s unique design creates high throughput on a modest footprint. Many of our Earth Flow systems fit in a standard parking spot.
- **In-Vessel Retention Time** – Adequate in-vessel retention provides assurance that the discharged compost will not produce odors, be an attractant to vectors, or require additional active composting. Shorter retention times are possible if combined with a secondary aerated system.
- **Operational Flexibility / Control** – The Earth Flow can be operated as a batch-system or a continuous-flow system. The Earth Flow mixing, aeration and moisture addition systems are fully programmable for specific process and product objectives.
- **Handles Manufactured Organics** – The Earth Flow handles manufactured organics such as uncoated food-soiled papers, pizza boxes, shredded paper, cardboard, compostable serving ware.