

# Compost Hot Skid 250R<sup>™</sup>

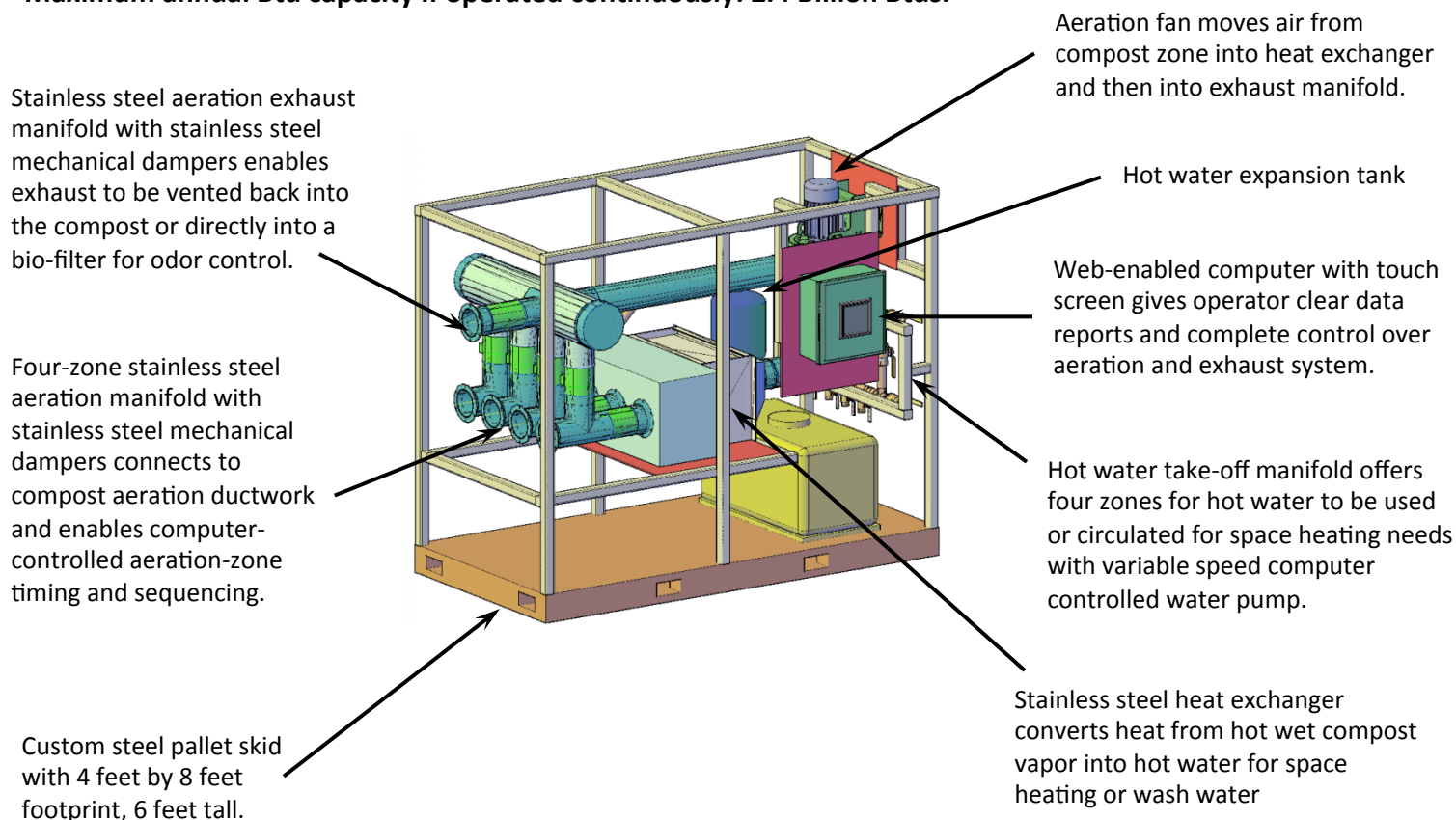
The Compost Hot Skid 250R is a mobile plug and play compost aeration, heat recovery and exhaust recirculation system featuring Agrilab Inside<sup>™</sup> technology designed for negatively aerated or enclosed composting systems on small to medium scale farms and commercial/municipal compost operations.

It includes remote data monitoring, computerized controls and hot water and condensate recirculation systems. Aeration exhaust can be automatically vented back into the compost to manage moisture and heat retention, or directly into a bio-filter for odor control. Everything is assembled on a steel pallet skid for easy setup in a utility room, shed or other enclosure. Data captured is used to increase profits through optimizing compost production volumes and quality. System documents temperature and oxygen level tracking to meet "PFRP" quality regulations and maximize renewable thermal energy capture.

**Monthly Compost Volumes: Up to 1000 cubic yards processed per month.**

**Potential annual economic value of Btu production, compared to \$15-per-million Btu energy prices: \$36,000**

**Maximum annual Btu capacity if operated continuously: 2.4 Billion Btus.**



## Benefits of Aerated Composting with Heat Recovery:

- **Aeration saves diesel fuel, labor and equipment use compared with turned windrow composting**
- **Composting reduces weight of material while maximizing fertility value, properly composted manure has no weed seeds, is low in pathogens and can be used as bedding.**
- **Captured heat can be used to heat process/wash water, radiant slabs, greenhouses or shops, etc.**

# Compost Hot Skid 250R<sup>™</sup>

The Compost Hot Skid 250R<sup>™</sup> is an integrated, plug and play system that contains the core mechanical and control equipment for aerated composting with heat recovery - the “brains, lungs and heart” of the system. The Hot Skid 250R<sup>™</sup> is designed for aeration flow of 250 cubic feet per minute (with an operational range of 100 to 500 CFM), with 4 compost batch zones and the ability to recirculate into any zone for additional heat recovery. All pumps, blowers and valves are controlled by on board PLC with touch screen controls, data logging and historical trending capabilities making the 250R capable of handling a range of compost system sizes, flow rates and heating demands.

## Specifications:

Dimensions, Installation:	Custom steel pallet skid; 4ft wide by 8ft long by 6ft high. Weight 1400 pounds. 6” hoses for compost aeration and exhaust connections.
Aeration:	2 Horsepower blower, speed controlled, 100 to 500 CFM range adjusted manually or with feedback controls. Four compost and exhaust zones with fresh air intake.
Recirculation:	Exhaust from any compost zone can be mixed with fresh air to desired oxygen level and injected into another zone. This conserves heat and moisture, and can jump-start cold or frozen material.
Sample Heating Output:	<p>With 250 CFM of saturated 140F compost exhaust:</p> <ul style="list-style-type: none"> <li>• 124,000 Btu heating loop: 9 GPM heated from 100F to 128 F</li> <li>• 160,000 Btu pre-heating: 5 GPM heated from 55 to 120 F</li> </ul> <p>With 500 CFM:</p> <ul style="list-style-type: none"> <li>• 174,000 Btu heating loop: 12 GPM heated from 100 to 130 F</li> <li>• 281,000 Btu pre-heating: 8.75 GPM heated from 55 to 120 F</li> </ul>
Monitoring:	<p>Parameters can be used to optimize composting and heat recovery, linked to SCADA system:</p> <ul style="list-style-type: none"> <li>• Oxygen and humidity of compost vapor</li> <li>• Temperatures at all critical points</li> <li>• Air and water flow rates</li> </ul>
Control:	<ul style="list-style-type: none"> <li>• Touch screen with web server for intuitive operator control</li> <li>• Full control and monitoring via internet. Remote support available by contract.</li> <li>• Expandable to control auxiliary systems (i.e. greenhouse climate control)</li> </ul>
Delivery, Purchase or Lease:	<ul style="list-style-type: none"> <li>• Base price includes delivery within 250 miles of Richmond VT, and startup support for the first week of operation plus travel expenses; No \$ down lease-to-own financing is available.</li> </ul>