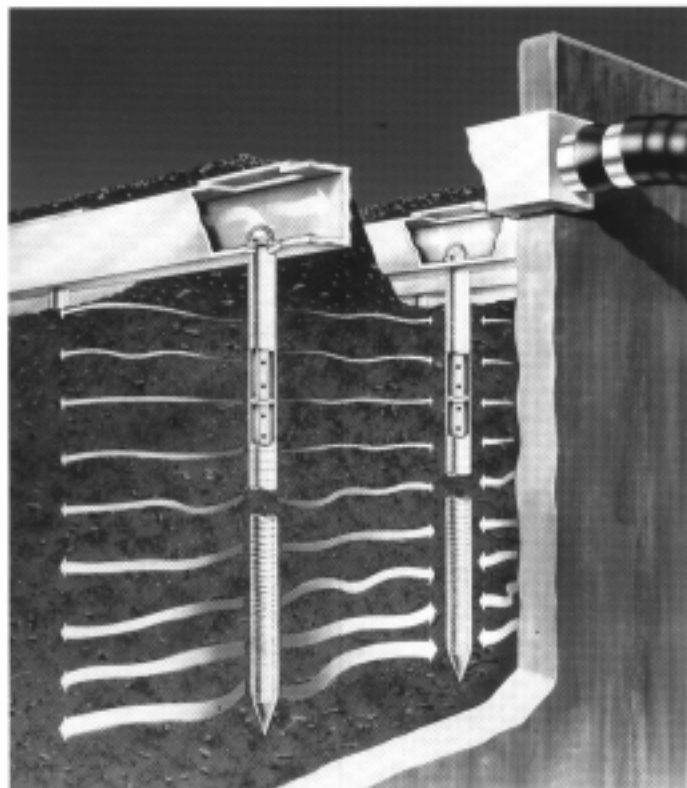


Compost is removed from the bottom of the cells by an outfeed screw removing approximately 1 to 2 feet of product at each pass. Material then simply drops down in the cell by gravity to fill the void achieving true plug flow.

The AirLance™ Compost System does not require a pressure vessel, therefore all operating and maintenance functions can be carried out on a continuous basis without interruption of process aeration. The containment building is negatively ventilated for odor control.



AIRLANCE

Successful composting requires sufficient airflow throughout the compost mass to maintain aerobic conditions, remove moisture and control temperature.

The unique AirLance™ System delivers air in a three dimensional array via simultaneous positive and negative lances creating a short horizontal airflow path. Air requirements also vary with depth as the compost density increases. An internal air profile ensures adequate supply at all depths. The result is a low pressure drop and the most energy efficient in-vessel composting system available.



PRODUCT QUALITY

In addition to exceeding USEPA pathogen destruction requirements, a high quality compost must be stable, relatively uniform and demonstrate odor and other characteristics similar to a rich humus soil. This will ensure the compost is suitable for the widest range of applications and that it can be easily marketed.

The Schenectady, New York operation attests to the ability of the AirLance™ System to produce a product meeting these requirements. The compost produced here is permitted for general distribution via a state Class I permit.

ORGRO® PRODUCT ANALYSIS

Organic Matter	71%
Total Nitrogen	1.7%
Total Phosphorus	0.7%
Total Potassium	0.2%
Alkaline pH	8.1 S.U.
Salts	3.4 mmhos/cm
Moisture Content	40%
Water Holding Capacity	70%
Stability	0.5°C/day
Respiration	7.5 mgCO ₂ /gVS/day
Volatile Reduction	57%
Germination Rate	98%

Courtesy of Professional Services Group, Inc.

AIRLANCE™ COMPOST SYSTEM

ADVANTAGES

The AirLance™ Compost System is designed to produce a high quality, marketable compost on a cost effective basis. This goal is achieved through several key design features.

- **AIR DISTRIBUTION:**
Aeration lances permit uniform and efficient air distribution throughout the compost mass and are accessible.
- **RELIABLE MATERIAL HANDLING:**
Heavy duty mixing and conveying systems ensure durability and a long service life. Routine maintenance can be performed without removing compost cells from service.
- **CONTROLLED BLENDING:**
Intimate and easily controlled blending of biosolids and amendment through visual monitoring starts the process right.
- **SMALL FOOTPRINT:**
In-vessel, compact, cube construction consumes less area than any other available system.
- **EXPANDABILITY:**
Cubical cell arrangement permits easy and cost effective expansion by simply adding new cells in line without the need for new material handling systems.
- **CORROSION RESISTANCE:**
Critical elements are constructed of fiberglass and stainless steel to eliminate corrosion and reduce maintenance.
- **LOW MANPOWER:**
Manpower requirements for both operation and maintenance are far less than most other options.
- **ODOR CONTROL:**
The entire compost process is enclosed and contained via negative ventilation. Air treatment occurs in the compost itself and in a chemical scrubber system.



AirLance Compost System
Schenectady, New York



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