

***Kaleter***



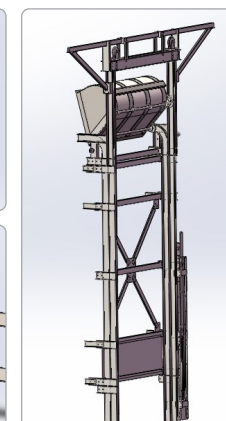
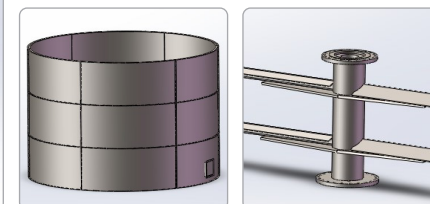
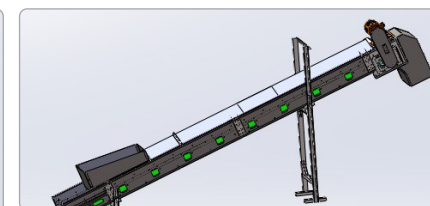
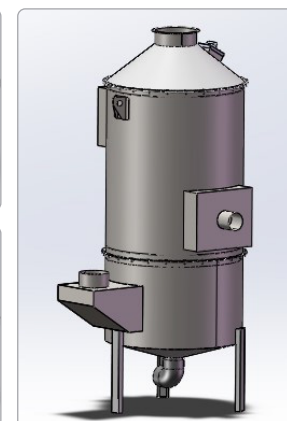
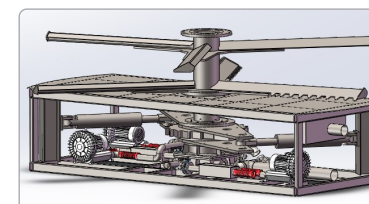
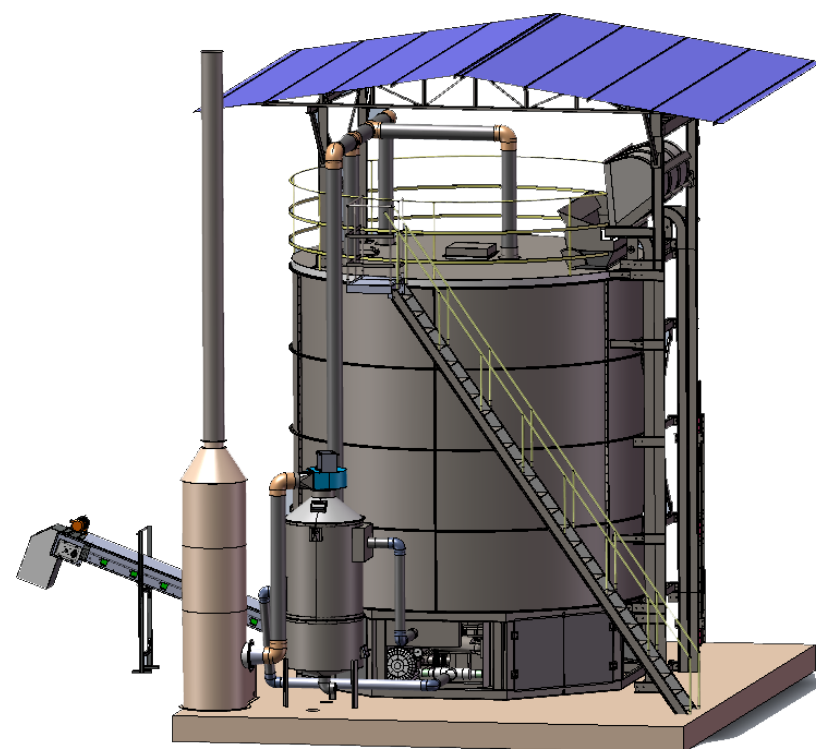
ZHUCHENG ZHONGYU ELECTRICAL AND MECHANICAL EQUIPMENT CO., LTD.

  
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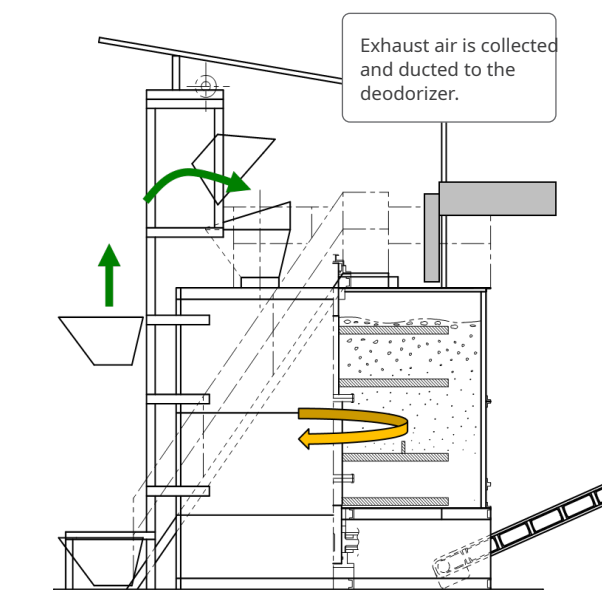
## System structure



| Product name                  | 35m³                  | 45m³                  | 60m³                  | 90m³                  | 90m³                  | 116m³                  | 116m³                  | 140m³                  | 140m³                  | 160m³                  | 160m³                  |
|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Type                          | 11FFG-35<br>(Model E) | 11FFG-45<br>(Model E) | 11FFG-60<br>(Model E) | 11FFG-86<br>(Model E) | 11FFG-86<br>(Model H) | 11FFG-116<br>(Model E) | 11FFG-116<br>(Model H) | 11FFG-140<br>(Model E) | 11FFG-140<br>(Model H) | 11FFG-160<br>(Model E) | 11FFG-160<br>(Model H) |
| Weight                        | 17T                   | 18T                   | 20T                   | 35T                   | 35T                   | 36T                    | 36T                    | 38T                    | 40T                    | 40T                    | 40T                    |
| Minimum floor space           | 40 m²                 | 40 m²                 | 40 m²                 | 64 m²                 | 64 m²                 | 64 m²                  | 64 m²                  | 70 m²                  | 70 m²                  | 70 m²                  | 70 m²                  |
| Effective volume              | 34.5m³                | 34.5m³                | 34.5m³                | 86m³                  | 86m³                  | 114.5m³                | 114.5m³                | 140m³                  | 160m³                  | 160m³                  | 160m³                  |
| Daily capacity (50~70% water) | 1.5~3m³/d             | 2~4m³/d               | 3~6m³/d               | 4~10m³/d              | 4~10m³/d              | 6~13m³/d               | 6~13m³/d               | 8~16m³/d               | 8~16m³/d               | 9~18m³/d               | 9~18m³/d               |
| Daily output                  | 0.75~1.5m³/d          | 2~2m³/d               | 1.5~3m³/d             | 2~5m³/d               | 2~5m³/d               | 3~6.5m³/d              | 3~6.5m³/d              | 4~8m³/d                | 4.5~9m³/d              | 4.5~9m³/d              | 4.5~9m³/d              |
| Installed power               | 34.3kw                | 34.3kw                | 34.3kw                | 46.5kw                | 39.5kw                | 55.2kw                 | 40.2kw                 | 78.2kw                 | 55.9kw                 | 78.2kw                 | 55.9kw                 |
| Operating power               | ~16 kW/h              | ~16 kW/h              | ~16 kW/h              | ~22 kW/h              | ~18 kW/h              | ~28 kW/h               | ~20 kW/h               | ~42 kW/h               | ~30 kW/h               | ~42 kW/h               | ~30 kW/h               |

Model H upgrades Model E with 304 stainless-steel-clad paddles and a magnetic-levitation energy-saving blower — 25–30% more efficient than standard fans.

Automated, hygienic processing that turns farm manure into a usable resource.



Reference projects



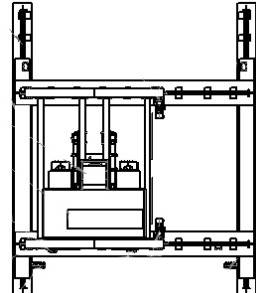
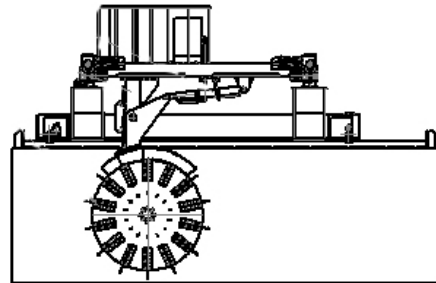
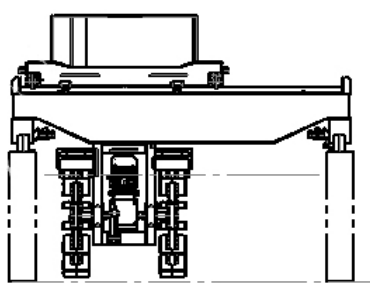
|                       | Key features                                                                                                                        |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Long service life:    | Material-contact surfaces in 2 mm SUS304 stainless steel — corrosion-resistant for a long service life.                             |
|                       | Outer shell in 5 mm hot-dip galvanized carbon steel.                                                                                |
|                       | Grade 8.8 high-strength bolts; joints sealed with high-density gaskets and structural adhesive.                                     |
| Thermal insulation:   | Clad in 50 mm polyurethane insulation (35–45 kg/m³), shielding the process from ambient conditions for year-round fermentation.     |
| Sealed design:        | Fully enclosed: fermentation is unaffected by outside temperature or humidity, and the composted output meets industrial standards. |
|                       | Contains fermentation off-gas, eliminating secondary pollution.                                                                     |
| Energy-saving design: | Hot-air recirculation feeds the process, cutting power consumption and lifting energy efficiency.                                   |
| Heavy-duty drive:     | High-torque drive runs safely under a full load of composted material, with low maintenance costs.                                  |
| Automatic control:    | PLC control with automatic and manual modes — simple operation.                                                                     |
| Land-saving design:   | Tank format makes maximum use of the site footprint.                                                                                |

Product range

| No | Name                 | Model | Wheel diameter (m) | Turning span | Motor power   |
|----|----------------------|-------|--------------------|--------------|---------------|
| 1  | Wheel compost turner | Ø     | 1.5                | 6–20 m       | 55 kW         |
| 2  |                      | Ø     | 2.0                |              | 55 kW / 75 kW |
| 3  |                      | Ø     | 2.3                |              | 55 kW / 75 kW |

System structure

The compost turner consists of the cart track, traveling gantry, moving trolley, turning unit, hydraulic system and electrical control system.



Configuration

| Model                      | FP015                              | FP023     |
|----------------------------|------------------------------------|-----------|
| Turning wheel diameter     | 1500mm                             | 2300mm    |
| Span                       | 12 / 18 / 24 / 30 m (customizable) |           |
| Gantry drive motor         | 2×2.2KW                            |           |
| Trolley drive motor        | 2×1.5KW                            |           |
| Hydraulic unit power       | 4KW                                |           |
| Main motor power           | 55KW                               | 55KW/75KW |
| Wheel spindle speed        | 103rpm                             | 62rpm     |
| Travel speed (theoretical) | 0–9.32m/min                        |           |
| Throughput (m³/h)          | 100–300                            |           |

## Applications

Widely used for fermentation, maturing and moisture removal in organic and compound fertilizer plants, sludge and waste plants, horticulture sites and Agaricus mushroom farms.

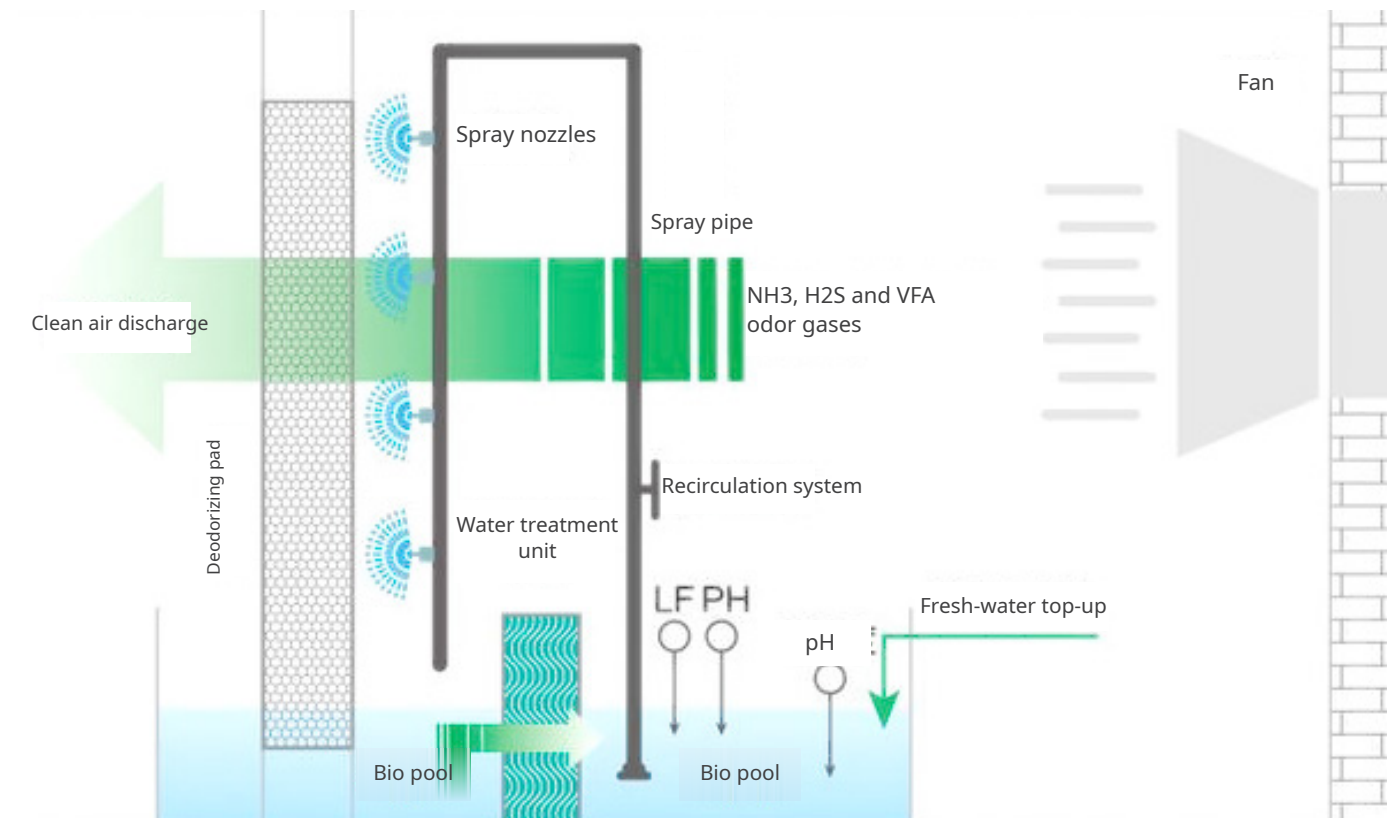
## Product features

- Hygienic fermentation with a small footprint, high space utilization and better environmental performance.
- Full travel with no dead corners and high throughput.
- Crushes large lumps; the turning wheel runs forward and reverse to make better use of the scrapers.
- Hydraulic-mechanical dual drive with high-efficiency hydraulic control: simple structure, fast lifting, high output.

## Application examples



## Working principle



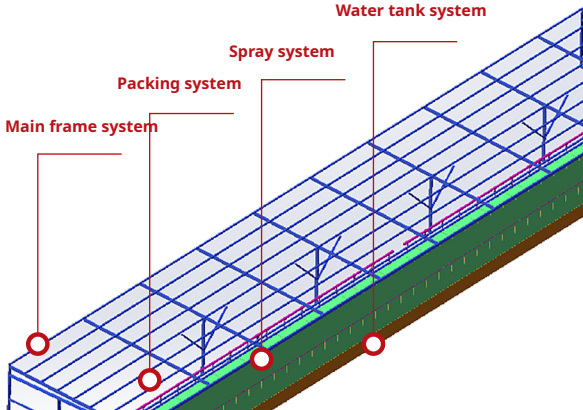
## Horizontal-ventilation deodorization — schematic

Exhaust air from the poultry house is discharged by the gable fans into main frame system (1), where it is mixed. After passing spray system (3) and packing system (2), up to 85% of the ammonia nitrogen in the exhaust is removed before discharge to the atmosphere. Spray water recirculates through the pool system, with a float valve automatically topping up the pool level.

### System composition

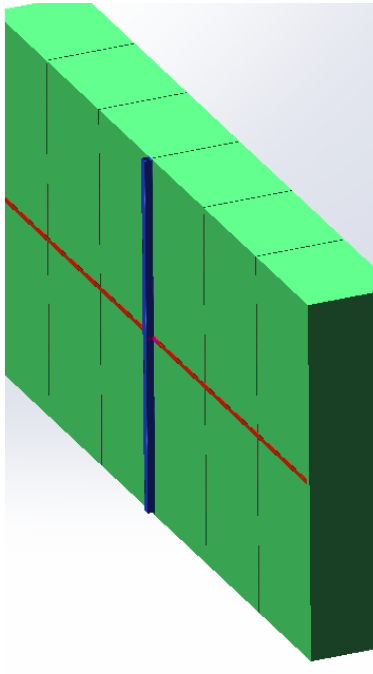
Main deodorization systems: main frame, packing, spray, water tank, and optional dosing system.

| No | Name              | Remark                                                                         |
|----|-------------------|--------------------------------------------------------------------------------|
| 1  | Main frame system | Hot-dip galvanized profiles; FRP roof tile                                     |
| 2  | Packing system    | Deodorizing black mesh; frame                                                  |
| 3  | Spray system      | PP snap-fit spiral nozzles; PVC fittings; corrosion-resistant circulation pump |
| 4  | Water tank system | Water reservoir; drainage pump                                                 |
| 5  | Dosing system     | 1. Solenoid valve 2. Stand-alone dosing unit (optional)                        |



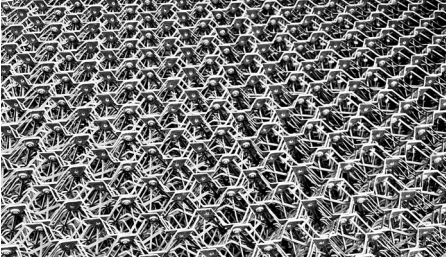
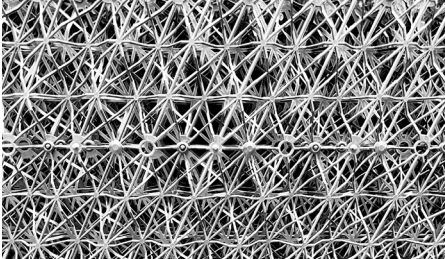
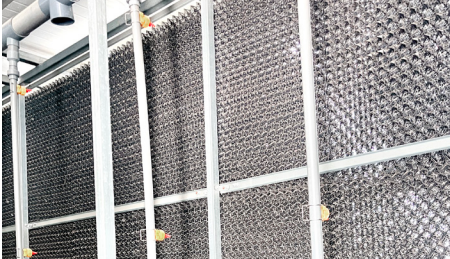
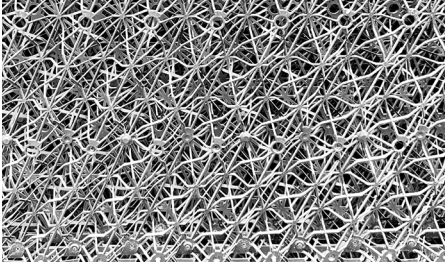
Deodorization system schematic

### Frame



| No | Name                | Remark                             |
|----|---------------------|------------------------------------|
| 1  | Mesh mounting plate | 304 stainless steel / FRP profiles |
| 2  | Mesh baffle         |                                    |
| 3  | Mesh outer baffle   |                                    |
| 4  | Fixings             |                                    |

### Packing system

| Packing media (deodorizing black mesh)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        |       |                                                |                         |                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------|------------------------------------------------|-------------------------|------------------------------------------|
| Material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | PP engineering plastic | Model | 910×450×20 mm / sheet<br>600×450×20 mm / sheet | Recommended module size | 910 × 600 × 450 mm<br>600 × 600 × 450 mm |
|       |                        |       |                                                |                         |                                          |

### Reference projects



Project gallery



## System description

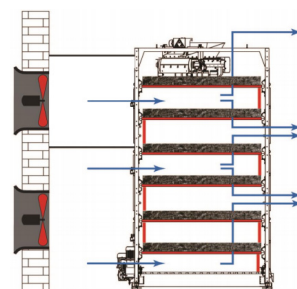
### Intelligent manure air-drying system

Manure air-drying is widely used across Europe and by large-scale producers in China. House exhaust air dries the manure naturally: above 10 °C and below 70% humidity no additional heat source is needed, putting waste airflow back to work.



## Working principle

The dryer is built with 4 (or 6) drying tiers and 2 (or 3) air tunnels, with drying fans mounted on the side of the unit. The fans blow house exhaust or ambient air through the manure in cross-flow via the upper or lower tunnel. Manure depth on each perforated drying belt is kept at 15–18 cm. The drying cycle is 48 hours, with continuous feeding twice a day, so all manure produced within 48 hours enters the dryer rather than accumulating in the house.



## System features

1. Energy saving

2. High capacity

3. Smart structure

4. Automated operation

5. Quality end product



## System advantages

### 1. Customizable modular structure

**Custom length**  
(up to 40 m)

**Technical advantages**  
(more drying area,  
higher throughput)

**Custom height**  
(up to 8 tiers)

**Fully customizable**  
(suits different heights  
and terrain)

### 2. Flexible design options

Option 1: one dryer per house — captures the full exhaust airflow and runs in sync with the house equipment.  
Option 2: one dryer serving two houses — collects exhaust air from both houses for a lower investment.

### 3. High-grade materials

Selected baffles in 304 stainless steel.

Columns hot-dip galvanized for greater corrosion resistance.

## Reference projects

