



Compost



Ring Gear



Drum



Nowadays, the pre-fermentation drum (or composting reactor) is one of the key elements for recycling and composting installations in order to get good quality compost meeting the N FU 44 051 standard requirements.

It is the best adapted equipment to start the fermentation of the organic component in the waste before the refining and maturing steps.

Thanks to our know-how in the manufacture of rotary tubes and to our production capacities, Maguin is today the only supplier on the market to offer fully equipped pre-fermentation tubes coming from their own workshops.

MAIN FEATURES

- ! Diameter up to 5.0 metres
- ! Length up to 52 metres
- ! Friction drive or by toothed belt

ADVANTAGES

- ! From 7000 to 40000 tons/year per line
- ! Our calculation rules enable to guarantee longer equipment lifetime
- ! 150 years of experience in the manufacturing of heavy-duty equipment
- ! Our expertise covers equipment design, manufacturing, erection and commissioning by our teams

DETAILS OF CONSTRUCTION

- 1 The infeed consists by an inlet channel with a closing gate.
- 2 The body of the drum is composed of several sections of different thicknesses in order to take up the forces and longitudinal bending.
- 3 Internal equipment is located at the first parts of the tube in order to push the waste to the rear of the tube.
- 4 The ventilation of the bioreactor has two goals:
 - Odor treatment
 - Bring oxygen to the microbial fauna
 The intake of oxygen is achieved by three fans located on the shell.
- 5 Both tires are hardened and fully machined, seamless. These tires are mounted shrunk on tube.
- 6 Supporting elements (bearings, rollers, frame). The frames manufacturing by Maguin are machined. Mechanical bearings are equipped with adjusting thrusters.
- 7 The drive wheel is mounted on tangents lames to absorb ovalization and the starting torque.
- 8 The output shield is equipped with a discharge door. It does not generate retention zone (no threshold) to limit the formation of strands.
- 9 The tube is provided with a pierced trommel output.
- 10 The Outlet Shelter shield allows protecting access to the tube and the connection to the processing system air. A device drawbridge provides access to the tube outlet and allows the extraction of the strands.



Pre-fermentation tube standard size

Diameter (m)**	3.9	4.25	4.25	4.25	5
Length (m)	29	37	40	48	52
Power (kW)	75	160	160	200	400

** Sizes listed are not exhaustif.