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 40 000 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 shrink on tube.

   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

<table>
<thead>
<tr>
<th>Diameter (m)*</th>
<th>3.9</th>
<th>4.25</th>
<th>4.25</th>
<th>4.25</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (m)</td>
<td>29</td>
<td>37</td>
<td>40</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>Power (kW)</td>
<td>75</td>
<td>160</td>
<td>160</td>
<td>200</td>
<td>400</td>
</tr>
</tbody>
</table>

* * Sizes listed are not exhaustif.