

COMPOST TURNER

FOR OPERATION WITH SMALL TRACTORS.

2.3 METER TUNNEL WIDTH. LOW MAINTENANCE COSTS.

TURNING CAPACITY: UP TO 400 m³/h

TG 231

MECHANICAL FOR TRACTORS STARTING AT 35 HP



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"Living and working with nature."

In 1995, at Gujer Landmaschinen AG, which so far was only focused on repairs and trade, we built our first compost turner in Mesikon ZH, because in the market there was no model that met our needs. With Gujer Innotec we are always guided by technological progress, we attach great importance to quality, ecology and sustainability, in order to provide optimal concepts and customized machines.

Renato Gujer

Short Description TG 231



The TG 231 is a compost turner designed to produce smaller amounts of compost.

It is ideal for field-edge composting, small composting plants and organic farms with compost production up to 1,000 tons per year.

To be used with tractors

The Compost



Healthy humus -Healthy plants

To obtain a high quality soil, some experience and intuition is needed. With the right technique and the adequate machinery, soon an aerobic nutritious humus can be produced and thus a healthy soil, which automatically results in healthy plants, healthy animals and healthy people.

Moreover, a soil rich in humus stores CO₂ naturally, protecting our climate.

Therefore, with composting a nurturing of the soil is achieved rather than of the plants.

Within five to eight years you can increase the humus content in the soil from one to up to five percent.

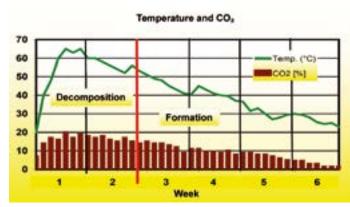


Perfect crumb structure - microscopic view

The Turning

A controlled aerobic composting is recommended. The oxygen content of compost windrow must be observed on a daily basis. The Controlled Microbial Composting (CMC) method uses a substitution test via $\rm CO_2$ -monitoring. If $\rm CO_2$ content of a windrow rises above 12%, the oxygen content drops under 5%, and will need to be turned.

The temperature must not rise above 65°C and humidity must be between 50 and 60%. Additional information is available from the composting courses of Urs Hildebrandt: www.landmanagement.net.



Temperature and CO₂ in the compost.

TG 231 - Its Advantages at a Glance

Capacity up to 400 m³/h.

Maneuverable machine; TG 231 has a length of only 3 meters.

Low maintenance costs, easy maintenance

Easy to maneuver, simple to use

The massive construction of the tunnel-shaped dome and 6 mm steel achieves great stability and omits any weak points in the structure. In addition the powder coating protects against corrosion.

All the wear plates are made of chromed steel

Robust axel with balanced turning, which properly turns the compost material (from the inside to the outside)

Fast aerobic composting; within 8 - 12 weeks, depending on the material

Large wide tires to achieve low ground pressure

A large wheel supports the turning tunnel.

Many options for retrofit, such as:

- Simple step fabric cover; with which the hard manual work in the case of wet fabric is avoided
- Tilting of the tunnel system (so that the battery stays where you want it to have it)
- Full irrigation system
- and more



With the TG 231 a successful composting is achieved easily and quickly. This is due largely to the turning axis that works perfectly and that moves the material from the inside to the outside.



Horse manure after 5 weeks.



Irrigation system



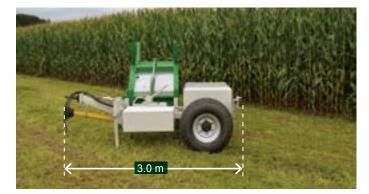
After operation the tunnel can be conveniently placed in the transport position.

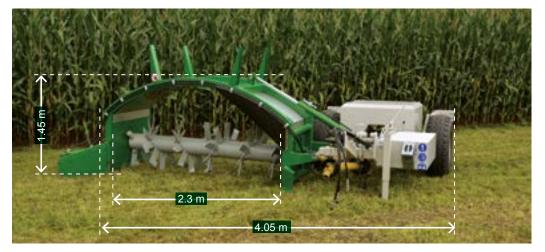
Technical Facts TG 231

| Capacity from | 400 m³/h |
|--|---------------|
| Tunnel width | 2.3 m |
| Total width in transport position | 1.85 m |
| Total width in operating position | 4.05 m |
| Total Length | 3.0 m |
| Internal Tunnel Height | 1.35 m |
| Total height (transport position) | 3.55 m |
| Ideal working speed | 300 - 400 m/h |
| Weight (incl. wide base tires and counterweight) | 1'950 kg |
| Windrow Width x Height | 2.5 x 1.2 m |
| For top hitch only | |

Tractor Requirements

| For tractors with total width up to | 2.1 m |
|---|-------------------|
| For tractors with at least | 35 bis max. 80 PS |
| For tractors with creep speed: in first gear 540 rpm at the PTO | 300 - 400 m/h |
| Tractor working pressure min. | 190 - 200 bar |







Operating position

Transport position

Simple ground adaptation of the transfer shaft





Option hydraulic



Simple altitude setting for the roller to work close to the ground yet cannot form any layer of putrefaction

Left: through spindle

Center: in the upward direction

Right: optional hydraulic drawbar

TG 231 Basic equipment, mechanical design

Tunnel with chrome steel plates, direct drive on transfer shaft

Large support wheel outside the tunnel

Mechanical feeding plates

Braked axle, manual brake, parking brake

Width of tires 11.5-15

Lighting System

Front trailer hitch: DIN coupling

Rear weight

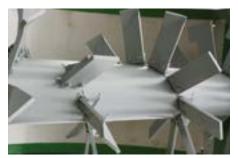
Lateral weight

Articulated shaft with spindle

Joint shaft with shear bolts



The solid arch construction made of 6 mm steel ensures a very high stability.



The good turning shaft turns the material from the inside to the outside, so that the microorganisms can be replicated everywhere



12 mm shaft width with 3 fixed screws. The balanced axle ensures long life.



Direct drive – transmission om transfer shaft



All wear plates are made of chromed steel.



Support wheel



Maximum dimensions of the battery: $2.5 \times 1.2 \text{ m}$.



Standard trailer hitch front: DIN coupling

Options for TG 231

Lateral weight, hydraulically swiveling (via control valve tractor)

OPTIONS

Water sprinklers with nozzles

Complete irrigation system hydraulically driven including water pump, spray boom with nozzles (via control valve tractor)

Hydraulic skid steer for optimal ground clearance (via control valve tractor)

Hydraulic tilting system of the tunnel (by tractor control valve). Through the inclination of the tunnel, the battery is not going to the field, e.g. in plants the battery is always easily removable.

Fleece guides front and rear

Down-hitch for deep pull

Floating position (for tractors that don't have it)

Scharmüller K80 ball hitch or Piton

Note:

The purchaser is responsible for the country-specific operating permit. Please talk to our advisors.

Options for TG 231



Hydraulic feeding plate, right side



Water sprayer with nozzles. To achieve an optimal microorganism climate within the mound, the addition of water is essential.



Complete irrigation system



Water filter



External water intake possibility for external water sources



Water pump



Hydraulic drawbar



Hydraulic tilting system of the tunnel, so that the battery stays in the site where it belongs.



The fabric cover is joined to a smaller width to allow gases to escape. The hard manual work involving the wet fabric is avoided.



Down-hitch for deep pull



Floating position. In the case that the tractor doesn't have it.



DIN (Serie)

Piton

K80

Front tow hitch

GUJER INNOTEC AG



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Reserve the right to make technical changes.
The images do not always correspond to the basic equipment.
The purchaser is responsible for the country-specific operating permit.

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