

COMPOST TURNER

LIGHT
AND
COMPACT.

3 METER TUNNEL WIDTH.
LOW MAINTENANCE COSTS.

TURNING CAPACITY:
UP TO 700 m³/h

TG 301

**MECHANICAL
FOR TRACTORS STARTING AT 70 HP**



With composting devices from Gujer Innotec,
you can produce high-quality, aerobic soil
nutrition in the shortest possible time.



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

“Living and working with nature.”

Short Description TG 301



The TG 301 is a compost turner that is easy to use, mechanically operated, stable and maneuverable with optimal weight distribution. It is ideal for field-edge composting, small composting plants and organic farms with compost production up to 6,000 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.

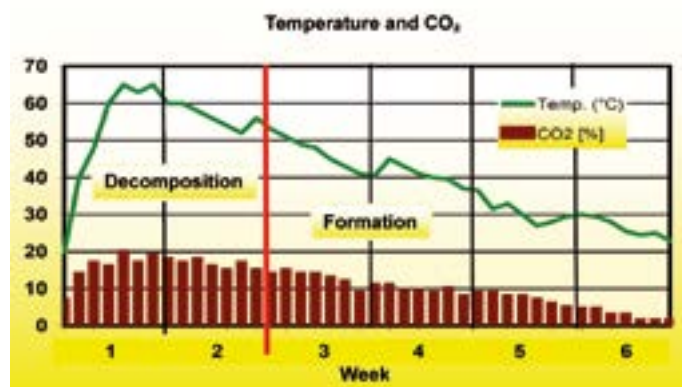


Perfect crumb structure - microscopic view

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 CO₂-monitoring. If CO₂ 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 301 – Its Advantages at a Glance

Capacity up to 700 m³/h.

Maneuverable machine; TG 301 has a length of only 3.83 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

Thanks to the counterweight on a swivel, the protection of rural roads and agricultural tracks and the optimal weight distribution of the machine is attained. And thus the total weight is reduced to 1,500 kg.

A large wheel supports the turning tunnel. Rotation without tools in seconds. (Transportation on the road is easily done with the help of the rotated wheel).

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 301 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.



Rotating counterweight protects rural roads and agricultural tracks.

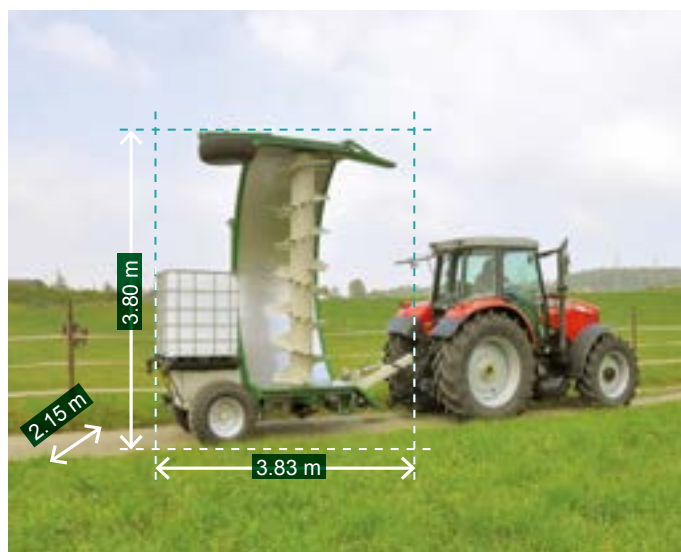


Easily manageable control panel. Switching via solenoid valves.

Option

Technical Facts TG 301

Capacity from	700 m ³ /h
Tunnel width	3.0 m
Total width in transport position	2.15 m
Total Length	3.83 m
Tunnel height	1.65 m
Total height (support wheel swiveled backwards, transport position)	3.8 m
Ideal working speed	300 - 400 m/h
Weight (incl. wide base tires and rotatable counterweight)	3'650 kg
Windrow Width x Height	3.0 x 1.5 m



Tractor Requirements

For tractors with total width up to	2.5 m
For tractors with at least	70 up to 120 PS
For tractors with creep speed: in first gear 540 rpm at the PTO	300 - 400 m/h
In the case that the tractor goes faster than 400 m/h, a drive shaft must be ordered (optional)	
Tractor working pressure	190 - 200 bar
For the standard model TG 301 the tractor needs a shuttle valve with floating position (A two plug connector)	



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 301 Basic equipment, mechanical design

Tunnel with chrome steel plates, direct drive on transfer shaft	Lighting System
Large support wheel outside the tunnel (swivel)	Front trailer hitch: DIN coupling
Mechanical feeding plates	Rear weight
Braked axle, manual brake, parking brake	Lateral weight (mechanically turns out to lower the tunnel)
Width of tires 19.00-45 / 17 AW	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 optimally.



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



Direct drive – transmission on transfer shaft



All wear plates are made of chromed steel.



For transportation, the support wheel can be pivoted away, disassembly is not necessary.



Maximum dimensions of the battery: 3 x 1.5 m, so that it can be composted aerobically.



Standard trailer hitch front: DIN coupling



Thanks to the swivel weight it is also possible to move through the field. It also ensures optimum weight distribution and reduces the overall weight by approx. 1'500kg.

Options for TG 301

OPTIONS

Lateral weight, hydraulically swiveling
(via control valve tractor)

Hydraulic feeding plate, right side (by tractor control valve)

Water sprinklers with nozzles

Complete irrigation system hydraulically driven including water pump, spray boom with nozzles, tank frame, 1'000 L tank
(via control valve tractor)

Double water tank with double brackets

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

Scharmüller K80 ball hitch or Piton

Rear tow hitch

Drive shaft with continuous traction and tires AS (studs)

Electro valve with control panel; Simple, double or triple
(for missing control valves on the tractor)

Options by country:

- Hydraulic trailer brake
- Compressed air system
- Lower mechanical hitch drawbar

Note:

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



Automatic lateral weight (Serie)



Hydraulically pivoting lateral weight



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



Double water tank

Options for TG 301



External water intake possibility for external water sources



Water filter



Water pump



Turners are designed in such a way that their own water pumps can also be installed.



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.



DIN (Serie) Piton K80

Front tow hitch



Rear tow hitch



Electrohydraulic valve bank with control panel; (Single, double or triple)



Hydraulic trailer brake



Down-hitch for deep pull for Hitch with Piton or K80.



Splash guards (Serie)

Minimum ground pressure

With a total weight of 3.65 tons, the ground pressure with the side weight (without water filling) exhausted on the tires 45 cm wide is only 400 kg.



Learn about our attractive option packages.

Note:

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

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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.