



Varibull

Paddle Agitator



Customer testimonials

Martin Hafner - 88367 Hohentengen/BW

It is not necessary to change the settings regularly. In 2006, I adjusted the paddle agitator once for commissioning and then didn't have to adjust it again for many years. The first agitator overhaul was only carried out in 2024.

Klaus Hölzl - 84419 Schwindegg/BY

I am completely independent in the use of substrates. I feed up to 80 % manure, a high proportion of which is horse manure. You can feed up to 100 % grass or manure.

Günter Nels - 54655 Wilsecker/RP

Due to their long service life and low maintenance costs, paddle agitators are the most reasonable and stress-free agitator design. I only had to replace one arm of the paddle agitator once.

Dirk Delfs - 24644 Timmaspe/SH

Compared to other paddle agitators, Varibull is very energy-efficient. Frequency inverters also have positive effects on the paddle. You achieve above-average stirring effects even at lower rotation speeds. The substrate is mixed evenly throughout the digester. I also save electricity thanks to the frequency inverter because the agitator only has to take on the load that it actually needs.



Biogastechnik Süd GmbH

Am Schäferhof 2
D-88316 Isny im Allgäu, Germany

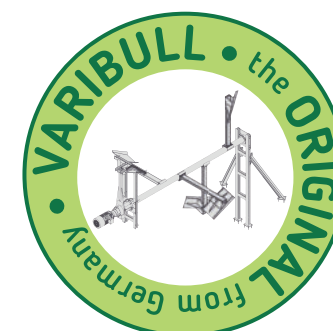
Telefon: +49 (0) 7562 970 85-40
Telefax: +49 (0) 7562 970 85-50

E-Mail: info@biogastechnik-sued.de
Website: www.biogastechnik-sued.de



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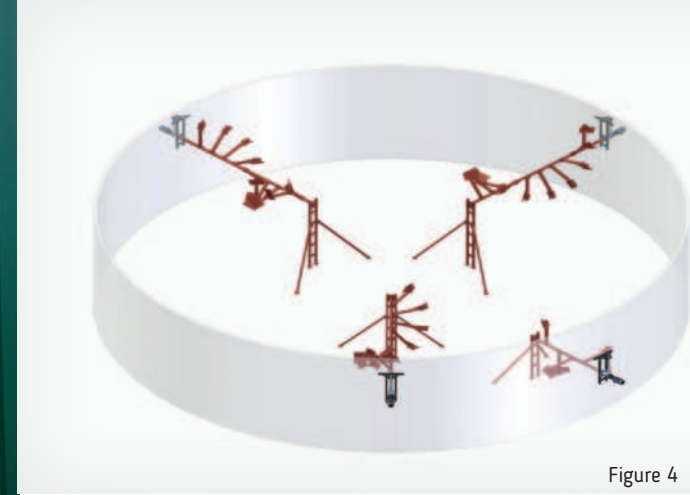
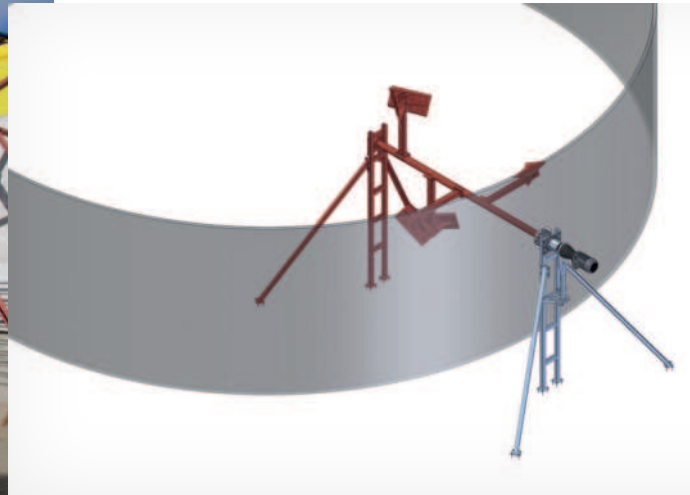


Figure 4

Paddle agitator Varibull

...simply install, switch on and stir!

Our original 'Varibull' paddle agitator

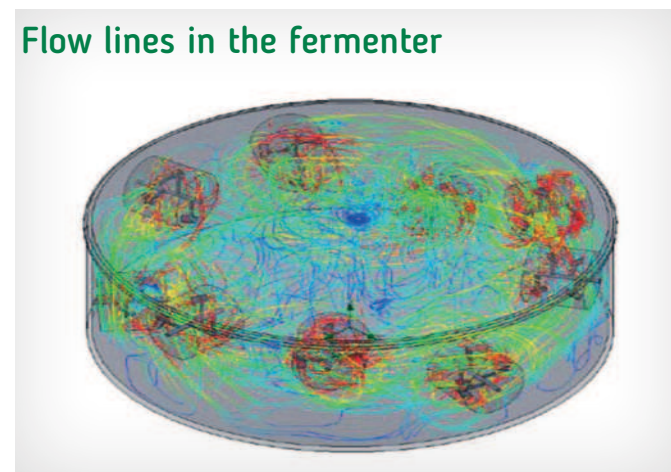
A tried-and-tested and extremely reliable agitator for digesters, post-digesters and fermentation residue storage. The low-maintenance drive unit mounted on the outside of the pit is always easily accessible. A maintenance-free mechanical seal guarantees a permanent seal on the wall feed-through, while the inner bearing made of durable plastic plain bearing operates without additional servicing. Four inclined paddles ensure fast and even mixing over the entire vertical area.

Varibull is specially designed for agitating viscous, highly viscous substrates such as manure, dung and renewable raw materials (NawaRo). The inclined paddles guarantee uniform and energy-efficient mixing throughout the entire tank.

The Varibull is designed for the use in substrates with a dry matter content of up to 15 %, a pH value between 6.0 and 8.5 and temperatures up to +70 °C. Extended areas of application are possible on request. The drive is designed for ambient temperatures up to +40 °C.

Our original paddle agitator – the most frequently used long axle agitator in low-speed biogas plants – has been specially developed for maximum safety and reliability. The design is based on strictly selected harmonised standards and technical specifications and corresponds to the latest state of the art. This allows us to offer you maximum operational safety with proven performance.

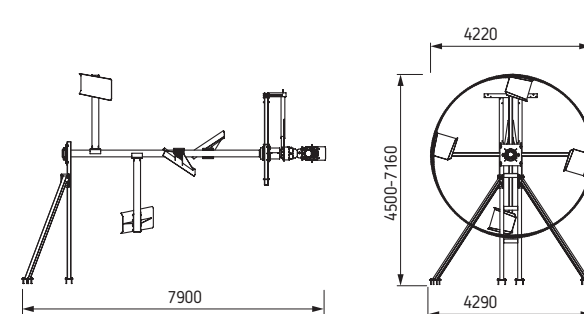
Flow lines in the fermenter



Technical data Varibull

- Drive: Electric motor with three-stage planetary gearbox
- Energy efficiency class: IE3/IE4
- Drive power: 15 kW
- Speed of the agitator shaft: 10 rpm
- Electrical connection: 400 – 690 V AC, 50 Hz
- Circulation capacity: 52800m³/h (with 5m agitator shaft length)

Dimensions Varibull



Advantages

- Excellent fermentation of NaWaRos – especially grass silage, manure and other substrates
- Energy-efficient thanks to large agitator paddles
- Gentle, bacteria-friendly mixing across all substrate layers
- Reliable with high dry matter content and long-fibre material
- Maintenance-free mechanical seal and durable inner bearing
- Constant performance with fluctuating fill levels and highly viscous media
- Complete agitation of the container in the shortest possible time
- Effective vertical mixing – prevents floating layers and dissolves sinking layers
- Replaceable, low-maintenance components
- Can be used universally in steel and concrete fermenters thanks to additional outer support that relieves the tank wall

Varibull options

- Varibull for ATEX areas
- Sound insulation cover for the Varibull drive
- Control unit for the Varibull
- Frequency inverter in the control cabinet for retrofitting
- High-quality stainless steel (VA2) for the highest demands

Varibull L

The Varibull L is used in particularly large containers with a diameter of over 30 metres. Ten paddle blades ensure powerful, uniform mixing throughout the entire tank volume. A combination with the Varibull Standard is also possible.



Technical data Varibull L

- Energy efficiency class: IE3/IE4
- Drive power: 15kW (optional 22kW)
- Speed of the agitator shaft: approx. 9 rpm
- Electrical connection: 400 V AC, 50Hz
- Circulation capacity: approx. 95,256m³/h (depending on paddle selection)

Dimensions Varibull L

