

Vertical agitators

THE POWERFUL COMPACT CLASS

Vertically agitating biogas fermenters constitute a niche segment, however, their use is strongly increasing. Steverding Rührwerkstechnik offers efficient agitator technology for a broad variety of substrates – whether you need fermenters with a central agitator or several eccentric agitators, or even receiving tanks for food industry waste products. The robust agitators made by Steverding Rührwerkstechnik may be the right choice for these cases.

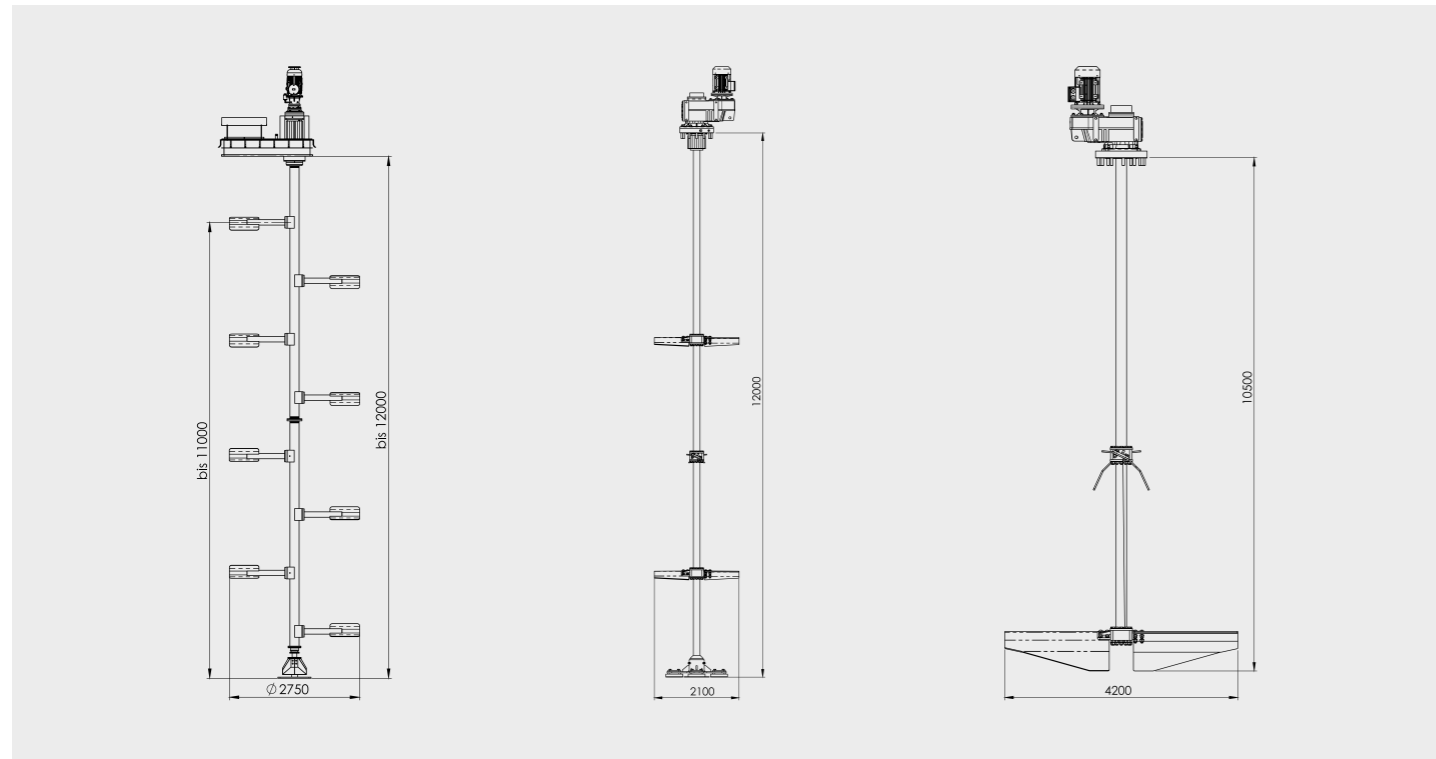


Advantages

- Centric and eccentric installation in the container for an ideal flow in the medium
- Horizontal and vertical intermixing for high-viscosity input materials by arrangement of the paddles alternately on each side (preventing setting/floating layers)
- The special arrangement and design allows for the attainment of an optimum gas yield with low-power motors
- A special seal prevents gas from escaping from the top cover
- For maintenance purposes, the agitator can be removed from the container during operation

Fields of application

- Breaking of floating layers
- Agitation of setting layers
- High-viscosity media (dry matter content up to 15 %)
- Suitable for fermenters with a concrete top cover, steel containers, and GRP containers



Motor power: 1 – 45 kW
Torque: 80 – 45000 Nm
Max. thrust at the paddle: 0.2 – 46 kN
Displacement volume per hour: 2000 – 6350 m³/h
Speed: 10 – 400 1/min
Circumferential speed: 69 – 1005 m/min
Agitation diameter: 800 – 4200 mm
Total paddle surface: 0.8 – 2 m²
Gearbox: 3-stage planetary gearbox/helical gearbox
Shaft length in the container: 1500 – 12000 mm
Weight: 500 – 4500 kg

Container filling level: Constant and fluctuating filling level
Substrate: Up to +55°C and pH value between 6 and 8
Installation height: 1500 – 12,000 mm
Material: Structural steel+special coating and V4A
Inner bearing: Encapsulated bearing unit with maintenance-free oil lubrication/plain plastics bearing
Outer bearing: Spherical roller bearing/bearing in the gearbox
Seal: Sealant, filled with a sealing medium (e.g. oil)

Comparison of our products

Features / description	Spiralo®	Schwanko	Hydromixer	Vertical agitator	Plug-flow agitator
Agitation efficiency	+++	++	++	++	+++
Agitation efficiency	++	+++	++	+++	+++
Agitation efficiency	+++	+++	++	++	+
Fluctuating filling level	+++	+++	+	+++	++
Fluctuating filling level	+++	++	++	+	○
Torque	++ (+)* ²	++ (+)* ²	++ (+)* ²	++ (+)* ³	+++
Ideal for dry matter content* ¹	Up to 11%	Up to 15%	Up to 13%	Up to 15%	Up to 25%
Availability	Stock article	Stock article	Stock article	Per order at short notice	Per order at short notice
Suitable for:	▼	▼	▼	▼	▼
Fermenters	+++	+++	+++	+++	+++
Secondary fermenters	+++	+++	++	+	○
Fermented substrate stores	+++	+++	○	○	○

*¹ Depending on the substrate composition and cutting length

*² On request 22 KW motor

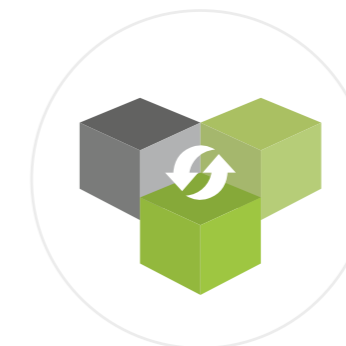
*³ 1 – 45 KW

+++ ++ + ○
 ← Perfectly suited (or not relevant) →



EFFICIENCY EXCELLENCE

Consume less, save more – this is our incentive.



BUILT-IN FUTURE

Consistent production in component design allows for an ideal extensibility of our agitators.

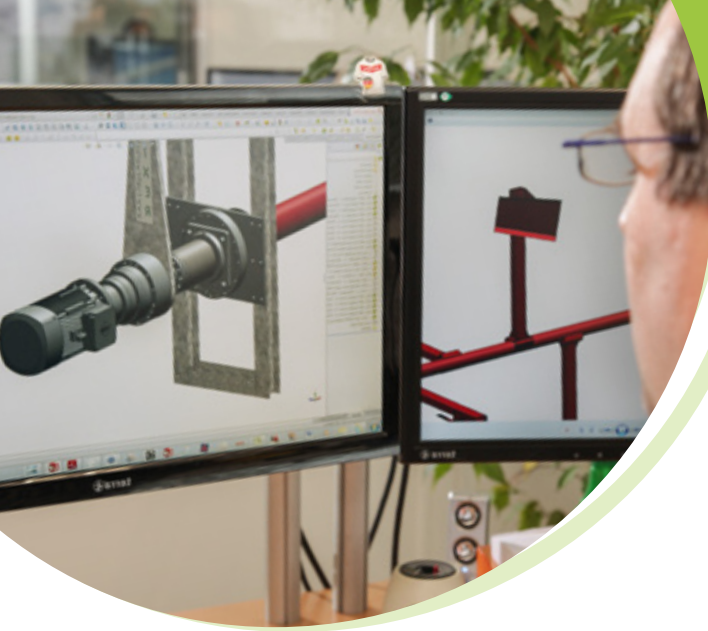


5 GOOD REASONS

For more than 20 years, Steverding has been standing for agitators made in Germany with an unbeatable price/performance ratio.

Various adaptations on the agitator can be implemented and customized special solutions are not a problem for us!

Feel free to contact us!



OUR RANGE OF PRODUCTS AT A GLANCE

In the table of the fold-out page, some technical key data are graphically compared. Our technicians will be pleased to think through together with you in a personal meeting which model is the most suitable for your plant. Due to the modular design, serial models can be individually configured.



Spiralo®

Our highly innovative product



Schwanko

The variable all-rounder



Hydromixer

The champion



Vertical agitators

The powerful compact class



Plug-flow agitators

For extreme solids contents

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