

# COMPONENTS FOR BIOGAS PLANTS

AGITATORS – PUMPS – SEPARATORS



# PAULMICHL

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## FERMENTER AGITATORS

### FERMENTER AGITATOR MAMMUT RF3 WITH WALL INSTALLATION

**Infinitely variable and easy-to-use hydraulic adjustment system.**

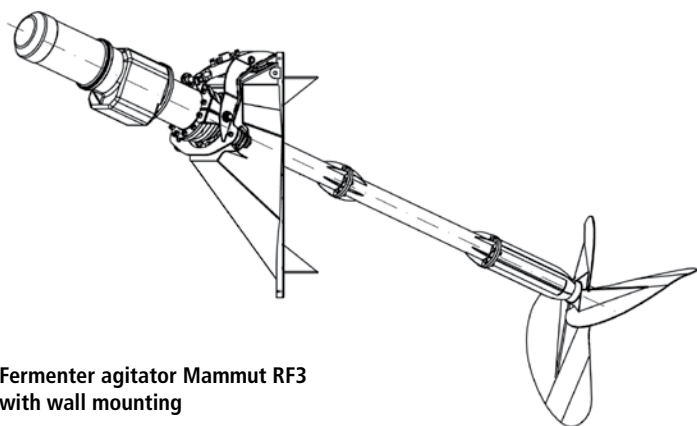
The mixing performance of the Type Mammut fermenter agitator has proved itself in operational practice to be unsurpassed, even when the dry substance content is high. This agitator was specially developed to provide a strong, slow and at the same time gentle mixing action. Due to the layout of the drive unit, the agitator itself contains no electrical components and no gear unit.

The very robust construction of the agitator guarantees reliable operation.

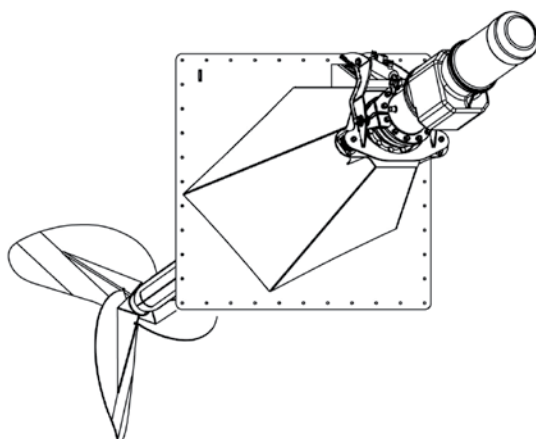
The agitator is mounted on a vibration frame on bearings which is fitted with special compensators.

The infinitely variable angle adjustment of the agitator is effected by means of a hydraulic unit, so that an optimal positioning of the agitator in relation to the substrate of the fermenter is possible.

The agitator is installed without any ware-prone floor or counter support inside the tank.



Fermenter agitator Mammut RF3 with wall mounting



### BASIC EQUIPMENT

- Agitator blade diameter 1600mm
- Agitator mounting with anti-vibration bearings, fixed to an installation bracket
- Robust gear unit with no disturbing running noises
- Drive shaft with multiple bearings and oil-bath lubrication
- Wall and ceiling installation possible
- Unsurpassed mixing performance
- Individual installation variants for wall and roof openings



**BASIC EQUIPMENT**

- Powerful but nevertheless low-noise transmission by means of toothed (geared) belt drive.
- 22 kW capacity
- High-quality sealing unit
- Mechanical seal SIC/SIC
- Agitator blade 1200mm
- Agitator for fermenter secondary fermentation tank and final storage facilities
- Almost the entire contents of the tank can be homogenised despite changing levels
- Stable construction
- Easily accessible drive elements

**AGITATOR**

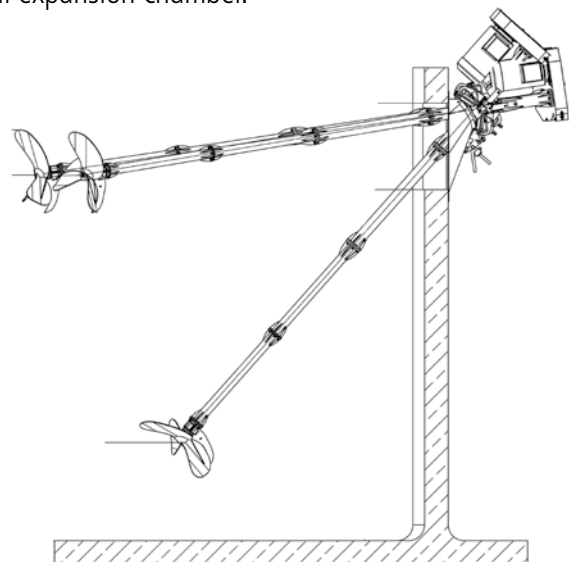
**MULTIMIX**

The PAULMICHL agitator, Type Multimix, can be used in fermenters, secondary fermentation tanks and final storage tanks. A special feature of the Multimix – Agitator is the multiple reinforcement of the agitator shaft with a standard installation length of 6.50 m. Other lengths are optionally available on request. The standard horizontal and vertical hydraulic adjustment device is supplied as part of the standard equipment, along with a manual pump and a control unit. As an option, the PAULMICHL - Multimix agitator can be supplied with a fully automatic filling level adjustment system which is controlled from the central control of the biogas plant. This feature makes it possible for the Multimix to homogenise the complete tank despite changing levels.

In spite of an agitator-blade diameter of 1200 mm with a capacity of 22 kW, the PAULMICHL-Multimix agitator ensures a low-noise but nevertheless powerful transmission by means of toothed (geared) belt drive. A further advantage of the agitator is the very stable and robust construction which ensures very reliable use.

In addition, due to the layout of the drive unit, the agitator itself contains no electrical components and no gear unit inside the tank. This allows very easy access to the drive elements of the agitator.

Due to the use of a high-quality sealing unit on the mounting plate of the tank, it is possible to operate the Multimix agitator in secondary fermentation tanks at various heights. The SIC/SIC sealing on the agitator is monitored by means of an oil expansion chamber.



Agitator with wall installation.

## PUMP STATIONS

### CENTRAL PUMP STATIONS

The PAULMICHL GmbH central pump station is equipped with shut-off and gate and valve technology as well as barrel-filling and extraction stations. Individual, special designs present no problem and can be custom-made. The gravity overflow pipes are made of stainless steel.

- Individual special solutions, custom-made
- Complete pump plant for separators
- Gravity overflow pipes made of stainless steel
- Shut-off and gate and valve technology
- Barrel-filling and extraction stations
- Technical equipment of intake and preliminary pits - planning, delivery



## SEPARATORS

### SEPARATOR

Due to the reduced amount of liquid manure, spreading and transport costs are lower. The nutrients in the liquid manure are also reduced.

Liquid manure that is spread shows improved ground filtration and plant tolerance. The time period for spreading is more flexible with no laborious homogenization work in advance. There are no problems due to blockage of the drag hose spreader, when spreading the liquid manure. The necessary liquid and storage volume for compliance with storage period regulations is reduced.

- Robust construction
- High working capacity up to 50 cbm/h
- Drum sizes 0,25 – 1,2 mm
- Extensive technical equipment for use with biogas slurry or other medium
- Accessories – complete mobil systems

