Kanadevia INOVA

REMEX®

Paddle agitator



The REMEX[®] agitator operates continuously, evenly mixing substrates in the biogas plant's digester or post-digester while protecting the process biology.

The ability to mix substrates evenly and reliably is key to achieving optimum fermentation and a high biogas yield. It's important to prevent floating and settling and enable the gases to be stirred out. At the same time the stirring process should be as gentle as possible to maximise the output of the microorganisms generating the gas.

Ideal for regenerative raw materials

Kanadevia Inova Schmack agitators stir slowly and constantly to ensure optimum fermentation. The position of the paddle is flow-optimised to mix the substrate both horizontally and vertically and prevent the formation of floating and settling layers.

REMEX[®] is a continuously operating agitator that's especially well suited to substrate consisting of

regenerative raw materials and slurry. A particular advantage is the very low power consumption, which enables continuous operation of the agitators and avoids the risk of downtime that makes the formation of floating layers more likely.

Creating the best operating conditions

The slow, even agitation creates the ideal conditions for the bacteria to break down the substrate into biogas.

During operation, the speed and power consumption of the REMEX[®] agitator can be optimally adjusted via the system control unit. All the electrical components of the agitator, plus the drive motor and gears, are located outside the digester and are freely accessible, enabling easy maintenance at all times.

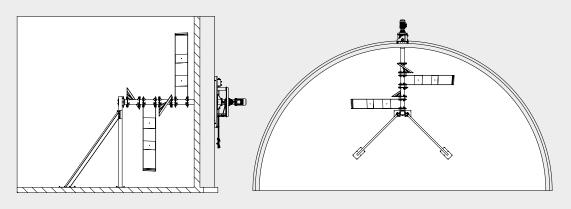
Advantages:

- Very low power consumption
- Frequency converter-regulated
- Extremely robust and durable
- Self-lubricating polyamide bearing
- Can be used in tanks with varying filling levels
- Horizontal and vertical mixing
- External motor
- Low failure rate
- Low maintenance



| General product data | |
|--------------------------------------|--------------------------------------|
| Type agitator | REMEX® |
| Standard installation heights* | 3 m; 3.5 m; 4 m und 5 m |
| Number of drive units | 1 |
| Power rating | 7.5 kW (13 kW) |
| Rated voltage | 230 V (400 V) |
| Frequency | 50 Hz (87 Hz) |
| Rated speed (electric motor) | 970 rpm (1,700 U/min) |
| Type of gearing | Robust planetary gearing |
| Agitator shaft | Ø 219 mm (wall thickness 17.5 mm²) |
| Agitator speed range | 2.3–10.6 rpm (around 6 rpm at 50 Hz) |
| Gear lubrication | Around 6–7 l of synthetic oil |
| Spherical roller bearing lubrication | Around 3.2 kg of grease seal |
| Noise emission at 50 Hz | 77 dB(A) (1 m) |
| Noise emission at 87 Hz | 79 dB(A) (1 m) |

* Customised sizes possible



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