



## EUCO<sup>®</sup> TS paddle stirrer

The digestion of renewable raw materials in particular places the highest demands both on the engineering and biology of the system. As well as continuously monitoring and supervising the biological process using "Fit for Biogas", technical requirements also have to be met. A key aspect of the process is the technology of the stirring mechanism.

#### Compact construction – efficient operation

The EUCO<sup>®</sup> TS is constructed to allow high solid feed stock to be homogenized. Despite its robust design, the slow-running, horizontal paddle stirring mechanism, with a power requirement of just about 2.2 kW, has an extremely low level of intrinsic power consumption. The position of the blade-like stirrer paddles means that they generate a desired direction of flow. The constant thorough mixing and the flow channel prevents the formation of sinking and floating layers.

#### Ideal living conditions

In addition, the centrally heated stirrer shaft ensures that heat is distributed uniformly in the digestion substrate. This offers the micro-organisms optimum living conditions for the best-possible biogas production.

#### **Technical details:**

- Paddle stirring mechanism: 0.75 revolutions per minute
- Can be subjected to loads of up to approx. 30,000 Nm
- Heated stirrer shaft
- Fan-shaped stirrer blades
- Synchronous drives (2.2 kW) with special transmissions for direct drive
- All bearings made from polyamide



Stirrer paddle

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The Future of Energy



# COCCUS® TS paddle stirrer

COCCUS<sup>®</sup> TS is suitable for feedstocks which contain a small proportion of dry substance. The comparatively large volume (between 1,200 m<sup>3</sup> and 4,000 m<sup>3</sup>) places particular demands on the technology of the stirring mechanisms. With REMEX<sup>®</sup>, Schmack Bioenergy has developed a modified large-span stirring mechanism based on the EUCO<sup>®</sup> TS which satisfies the highest demands.

Proven technology to guarantee high yields REMEX<sup>®</sup> stirring mechanisms ensure thorough mixing

over a large area and a stable temperature of the substrate. As well as the static heat surfaces on the wall, the heated shafts of the stirring mechanisms allow ideal heat distribution. The stirring mechanisms are arranged opposite one another at different heights and therefore cover large areas of the digester. This means that they prevent dead zones in the biomass and ensure steady biogas production.

#### Technical details:

- Lateral throughput
- Heavy flat gear drive
- · 2-stepped drive 4.7 kW / 5.9 kW
- Speed regulation and gentle start-up via frequency converter
- Heated stirrer shaft

### Advantages:

- Efficient, energy mixing
- · Proven bearing and seal technology
- Even temperature distribution through heated shaft
- Formation of floating layers is prevented
- Sinking layers are prevented

Thorough mixing of the fresh mass with the digestion

Reliable decomposition of the substrate

Stirrer paddle

substrate

Drive

Heated stirrer shaft

Stable biological management of operations



Stirrer paddle

Are you interested?

For Additional Information, call us at +1 (216) 986 - 9999