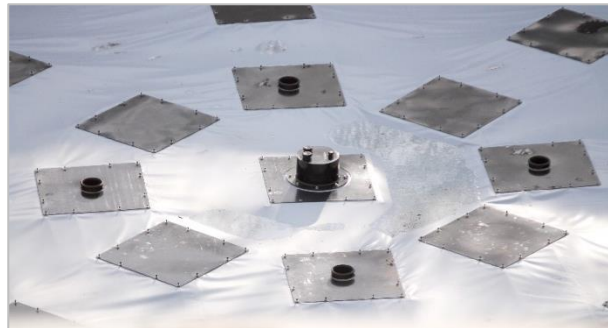


Biogas floating cover



Creating storage space without additional gas volume

The gas-tight floating membrane cover is a sensible alternative to conventional covers, especially for digestate storage. The floating cover can be used in any existing tank. The floating roof will be marketed together with the company N.E.ST from Ahaus.

The floating cover does not impose any static requirements on the tank and can therefore be easily retrofitted onto any existing tank. The membrane roof floats on the surface of the digestate and adapts to the level of the digestate storage. As a result, no additional gas space is created, therefore there is no gas exchange zone which causes aggressive acids attack the concrete.

As a floating cover the system is slightly smaller in circumference than the tank inside diameter. In addition, star-shaped gas channels are formed by a further floating body; these allow gas extraction. The membrane is stretched and mounted over this structure.

The gas compressor system automatically controls the extraction of the biogas produced by the digestate under the cover. This ensures that no significant volume of gas

is created under the membrane. This biogas can be fed back into the main gas system and therefore create additional revenue. Alternatively, the gas can be piped to an external point where it can be burnt as waste.

Surface water is deliberately removed by the unique design of the floating cover by the piped extraction system and can then be diverted away. As a result, the additional disposal costs for surface water can be saved.

Your benefits

- Low investment costs compared to retrofitting a traditional double membrane domecover
- Additional revenue for the plant operator by extracting the residual gas
- No static requirements on the tank, suitable for any existing tank
- Gas-tight cover of the digestate store; this avoids gas and odour emissions
- With the floating cover no additional gas volume will be created
- Rainwater can be drained from the tank cover; this avoids the additional cost of rainwater disposal
- Corrosion protection is not required on the inside of the tank