



6960 Wolfurt, Austria T +43 (0)5574 65190-0 www.aat-biogas.at

Package plant digestion

Digester with integrated gas storage.





The AAT package plant digestion combines the sludge digestion and the gas storage in a simple and maintenance-free system.

The installed inclined agitator in the digester is used for the gentle agitation of the primary sludge and grants a full mixing of the digester volume as well as a continuous degasing of the digestion substrate. Through the frequency converter – operation the agitating intensity can be adjusted optimal to the required conditions and the energy consumption will be reduced to a minimum.

The AAT-dry gas storage is located above the digester, a system that is used successfully since 1993.

The foil gas storage is hung up in the central dome of the roof and connected gas-tight to the tank wall. Through the gas produced in the digester the inner membrane will be blown up. The gas is stored pressureless in the foil gas storage.

The withdrawal is done with a gas blower. It is used for the transport and the pressure increase of the gas and is designed according to the local requirements for pressure increase and gas quantity and operates only when gas is withdrawed.

Advantages:

- ✓ Material: Reinforced concrete monolith tank

 Medium touched parts: stainless steel 1.4571 + 1.430
- Easy operation and maintenance of the agitators (no access in the tank or opening of the gas hood required)
- ✓ Optimal mixing of the fresh substrate into the active biomass
- Prevention of generation of sediment layer and floating matter
- ✓ Continuous degasing of the digestion substrate
- Secured discharge of non-degradable matters over the sediment conduit
- Systematic intervention possibilities with changing process conditions e.g. with development of foam
- ✓ Low investment costs
- ✓ Long life duration through gentle operation
- Low operation and maintenance costs (as no mechanical parts existing)
- Possibility of performance as a Low-pressure gas storage