



„Because Quality Matters,
Good mood instead of bad air!“

Disturbing substances in biogas

Basis issue

Biogas (also referred to as digester gas) is a gas mixture emerging from the fermentation of organic substances. One of the main constituents in biogas is hydrogen sulphide, which, however, is a disturbing element and therefore needs to be broken down.

Your issue

- corrosion in digesters (such as bioreactors)
- possible odour nuisance (e.g. from gas holders, hydrolysis, pre-tanks, substrate reservoirs)
- adverse effects in the system (e.g. in catalysts, piping components)
- adverse effects on utilities (such as lubricants)

Consequences

- higher operating costs (e.g. shorter oil change intervals) to the point of a plant breakdown (e.g. due to motor failure)
- reduced turnover and feed-in tariff due to biogas plant failure
- loss of subsidies (bonuses for low formaldehyde and other emissions)
- unstable fermentation
- increased environmental pollution (SO_x emissions)

Our solution for you

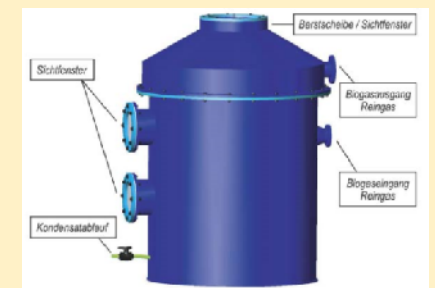
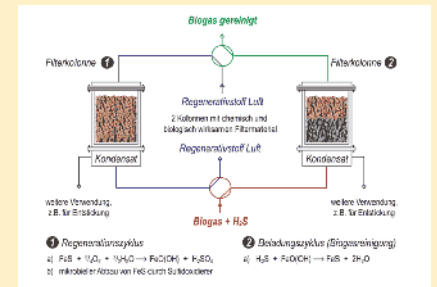
Design and construction of external bio-chemical biogas desulphurisation plants (UGN® BEKOM system) or external bio-chemical exhaust air purification systems for biogas plants (UGN® hybrid filter system) based on bio-chemical and functionalized cellulose filtering materials.

Our work is based upon:

- biogas measurements (CH₄, CO₂, O₂, NH₃, H₂, H₂S) prior to designing a biogas desulphurisation plant
- analysis of the biogas forming process
- measurements of the exhaust air emerging from pre-tanks, hydrolysis tanks, slurry storages (CH₄, CO₂, O₂, H₂, H₂S, NH₃, VOC, mercaptans),
- customized design and dimensioning of biogas desulphurisation plants and exhaust air purification systems

In addition, we provide:

- implementation planning
- issuing of explosion prevention documents
- construction surveillance, on-site assembly



For further information, do not hesitate to contact us: