

Biogas storage tank

Biogas storage tank

Choosing the right biogas storage system is as important as any other aspect of biogas production. It has a far-reaching impact on the safety as well as the efficiency of your biogas plant. Whether you go for biogas storage for on-site use later, or after transportation to distribution plants located off-site, the importance of biogas storage goes well beyond mere storage. Doing biogas storage properly also curbs production fluctuations, consumption, and changes in volume.

As the name suggests the first category- internal biogas storage tanks are a part of an anaerobic digester. On the other hand, external biogas holders are not an integral part of the digester.

A low-pressure storage option is formed when floating biogas holders are placed on the digester. As the name suggests these biogas storage systems function at a pressure as low as 2 psi.

Fiberglass, flexible fabric, and steel are majorly used in the construction of floating gas holders. You can also use a separate tank along with a floating gas holder for digestate storage purposes apart from the storage of raw biogas.

A flexible inflatable fabric top is the most economical and hassle-free gas holder. That's because, for one it is not an intrinsic part of the digester and secondly, it doesn't react with hydrogen sulfide present in the biogas.

Flexible membrane materials can also be seen used for these gasholders. Such materials are LDPE (Low-density polyethylene), LLDPE (Linear low-density polyethylene), and polyester covered with chlorosulfonated polyethylene.

Medium pressure biogas storage systems are used for storing biogas between 2 and 200 psi. As far as the process is concerned, the biogas is required to be cleaned and the Hydrogen sulfide is eliminated to safeguard the tank components from corrosion. Besides, it also ensures a hassle-free and safe operation.

It may interest you to know that the cost of gas compression to high pressures, between 2000 to 5000 psi, for example, is way higher than it would be for medium pressure storage.

Besides, raw biogas" composition is not in line with the minimum CNG fuel specification requirements. That's because of the presence of carbon dioxide and sulfur present in raw biogas which makes it unsuitable to be used as fuel. For this reason, biogas must be purified and upgraded. Biocng has no H₂S, CO₂, or moisture as they are removed during processing.

Policies and ethics

Contact us for free full report

Web: <https://sumthingtasty.co.za/contact-us/>

Email: energystorage2000@gmail.com

WhatsApp: 8613816583346

