

BIOGAS Purification

Activated Carbon for BIOGAS Purification

BIOGAS: AN ECO-FRIENDLY SOURCE OF ENERGY is growing in importance as a transition source of energy. It can be naturally produced from the decomposition of organic waste through a biomechanical process such as anaerobic digestion or through thermo-chemical means such as landfills. As more uses for BIOGAS are found, gas purity is a critical consideration. BIOGAS purity is essential for the protection of downstream equipment such as engines, membranes and fuel cells. BIOGAS purity standards are also being set for emerging applications such as renewable natural gas generation and vehicle fuel.

Biogas system





BIOGAS Purification

Damaging and Unwanted Impurities in BIOGAS

There are several hazardous compounds found in BIOGAS such as H2S and VOC's. An effective removal is contigent on safety and protecting downstream parts of the process from contamination damage so the system works as effectively as possible.

Volatile Organic Compound Removal

BIOGAS derived from landfill gas (LFG) as well as from agriculture and wastewater treatment facilities is usually heavily contaminated with volatile organic compounds (VOC's). As the market for BIOGAS continues to shift from power generation to renewable natural gas (ie-biomethane) the removal of halogenated VOC's has become extremely important to BIOGAS upgrading systems and the effective operation of the systems gas permeation membranes. Membrane processes are one of the most effective means for removing carbon dioxide (CO2) to upgrade BIOGAS and VOC's often contain terpenes that are harmful to the membranes themselves.

PS Filter offers a diverse portfolio of specialized activated carbon grades to purify BIOGAS from undesirable compounds like hydrogen sulfide (H2S), siloxanes and volatile organic compounds (VOC's). The removal of VOC's offers significant benefits which include:

- Membrane Performance Improvement
- Improved Gas Quality
- Greater Operational Efficiency
- Reduced Operational Costs
- Reduced Downtime
- Increased Volume of Gas Produced

Application Support

Ongoing technical support is always available as we work in conjuction with our clients to optimize their process. Our application knowledge and expertise will help address your purification needs and we look forward to the opportunity to work with your team.

