

Biogasclean OS - biological removal of H₂S from biogas



Key features of Biogasclean OS:

- **The PTU** – the Process Technique Unit - is the machine room and contains PLC controller board, circulation pump, air blower, valves, flow meters, gas detector system and – if required – also heating system installed in a custom built fiberglass container or a modified shipping container.
- **The reactor tank** is manufactured in high quality fiberglass and supplied with a grating so it is possible to inspect the tank underneath the packing media. The tank is supplied with ladder and handrail and - if required – also with insulation. The tank is so strong that it can be filled with water. The diameter of the tank is so big that it is not possible to transport from a workshop; therefore the tank is erected on site.
- **The packing media** is manufactured in plastic and can be cleaned inside the tank with the QSR® - Quick Sludge Removal - system. This will reduce downtime and increase revenues.
- **Safety**; injection of air into biogas is only safe with a reliable control system. The PLC receives signals from an oxygen meter and will reduce or stop air injection in case the oxygen content in the clean gas gets too high. Furthermore, the safety system will remove the ignition source by cutting the power supply if the gas detector in the PTU should measure above 25% of the Lower Explosive Level (LEL).

Plant: Slave Lake Pulp
Canada

Capacity: 1,846 m³/h
(1,085 scfm)
20,000 ppm H₂S





Plant: KSL Green
Innovation PLC
Thailand

Capacity: 3,000 Nm³/h
(1,765 scfm)
15,000 ppm H₂S

- **Efficient and reliable operation;** the system is automatically controlled by the PLC controller board which reduces the risk for manual errors and operation problems. The main function is to provide safe, optimal and stable conditions for the biological process. The signals can be made available in the control room.
- **Low operating costs;** the system uses no chemicals and has a very low electrical consumption. In many projects we use treated water from an anaerobic digester or an aeration pond as scrubber liquid and nutrient source. This is cheaper than soft water and industrial fertilizer. To prevent clogging inside the scrubber tank the water is first pre-treated in the MUW[®] - Make Up Water - system.
- **Guaranteed performance;** we provide performance guarantees on all projects.

Biogasclean A/S

Biogasclean is specialized in biological desulfurization and methanation of biogas. We develop, manufacture and supply fully automated gas conditioning systems combining low operating costs with high availability. Our track record comprises more than 300 plants in operation or under construction in 40 countries. Biogasclean supplies clean gas to more than 650 MW gas engines and boilers and removes sulfur from more than 30 biogas upgrading plants for RNG production.

BIO GASCLEAN | The key to innovative and
efficient production of biogas

Biogasclean A/S
Ørbækvej 268
DK-5220 Odense SØ
Denmark
T (+45) 6617 2177
www.biogasclean.com

Biogasclean (Thailand) Ltd.
331 Moo 2, Unit S1/2
Soi Thetsaban Bangpoo 54
Sukhumvit Rd., T. Taiban, A. Muang
Samutprakarn 10270, Thailand
T (+66) (0)2 395-1157