Biogasclean OS - biological removal of H_2S from biogas

BIO GASCLEAN
the key to efficient and successful utilization of biogas

Plant: *Slave Lake Pulp Canada*

Capacity: *1,846 m^3/h 20,000 ppm H_2S*

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 scrubber 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: *PT Medco Biodaya Nusantara Indonesia*

Capacity: *1,100 m^3/h 15,000 ppm H_2S*

• **Automatic 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.

• **Tailor made;** we design each system to the project specific biogas flow and H_2S load.

Biogasclean A/S

Biogasclean is specialized in biological desulfurization of biogas without the use of chemicals. We develop, manufacture and supply fully automated gas cleaning systems for H_2S removal combining low operating costs with high availability. Our track record comprises mid 2018 more than 235 plants in operation or under construction in 40 countries. Biogasclean supplies clean gas to more than 540 MW gas engines and boilers and removes sulfur from biogas upgrading units.

BIO GASCLEAN

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