

Biogasclean QSR - biological desulfurization of biogas and CO₂



Plant: Nature Energy
Køng
Denmark

Capacity: 2,500 Nm³/h
(1,470 scfm) CO₂
7,500 ppm H₂S

Biogasclean QSR is for smaller and larger H₂S loads and used all over the World in many different applications and have the following key features:

- **The PTU** – the Process Technique Unit - is the engine room and contains PLC controller board, circulation pump, air blower, valves, flow meters and – if required – also gas detector and heating system installed either on a skid or in a custom-made fiberglass container.
- **The reactor tank** is manufactured in high quality fiberglass and made 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 robust that it can be filled with water. We manufacture fiberglass tanks in several countries to reduce transportation costs.
- **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 or oxygen 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. If the PTU is enclosed 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) of CH₄.

Plant: AB Brasil
Pederneiras, SP
Brazil

Capacity: 1,430 Nm³/h
(841 scfm) biogas
10,400 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 stable conditions for the biological process and to ensure safe and reliable production. The signals are available in the control room and can be accessed for remote process control.
- **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 and CO₂. We develop, manufacture and supply fully automated gas treatment systems combining low operating costs with high availability. Our track record comprises +340 plants in operation or under construction in +40 countries. Biogasclean supplies clean gas to +700 MW gas engines and boilers and removes sulfur from +35 biogas upgrading plants for biomethane (RNG).

DENMARK
Biogasclean A/S
Ørbækvej 268
DK-5220 Odense SØ
www.biogasclean.com

Tel: +45 6617 2177
Email: sales-dk@biogasclean.com

THAILAND
Biogasclean (Thailand) Ltd.
331 Moo 2, Unit S1/2
Soi Thetsaban Bangpoo 54
Sukhumvit Rd., T. Taiban, A. Muang
Samutprakarn 10270

Tel: +66 (0)2 395-1157
Email: office@biogasclean.com

USA
Biogasclean Americas Inc.
2800 Post Oak Blvd. Suite 1910
77056 Houston, Texas

Tel: +1 713-894-7992
Email: ces@biogasclean.com

BRAZIL
Biogasclean Brasil Ltda.
Av. Norte-Sul 575, Cambuí
Campinas, Sao Paulo
CEP 13025-320

Tel: +55 19 9 9112 0266
Email: jorge.vsn@biogasclean.com