

# CLEAN-BGAS® MP DRY Biogas Cleaning System

Biogas is a gas mixture formed primarily of CH<sub>4</sub>, CO<sub>2</sub>, water vapour and traces of other components (H<sub>2</sub>S, siloxanes, NH<sub>3</sub>, hydrocarbons and others). In order for it to be used within the CHP system, its moisture content needs to be reduced and all harmful compounds must be removed to ensure the durability of the equipment involved in its use as a biofuel.

The **CLEAN-BGAS® MP DRY** module, ensures the reduction of these components (water vapour, particles, H<sub>2</sub>S and siloxanes). The technology has two parts: the biogas cooling and adsorption of active carbon. The active carbon is selected for the main dangerous component. All the equipment is located within a base for easy operation, maintenance and installation.



## Technical features

- Modular system.
- Suitable for all types of biogas.
- Continuous operation since its installation.
- Simultaneous reduction of temperature, water vapour, H<sub>2</sub>S, NH<sub>3</sub>, halogenated hydrocarbons and siloxanes.
- Works on a vacuum or pressure line.
- It incorporates a separation system for particles and foam.
- Fully automation.
- The active carbon filter offers easy handling.
- Delivers high quality of biogas.
- Could have an energy recovery system or reheating.

## Process

A process based on cooling, condensation, water washing and absorption of active carbon.

## Applications

- Siloxane and hydrocarbon removal.
- Water vapour removal.
- H<sub>2</sub>S and NH<sub>3</sub> removal.
- Temperature reduction.
- Landfill gas.
- Sewage gas.

## Advantages

- Production of high quality biogas.
- Reduce power consumption by up to 30 %
- Long life of the adsorbent.
- Low maintenance cost.
- Fully automated.
- Improve exhaust flue emissions from cogeneration systems.



Overview of the plant



View of energy recovery.



Biogas Dryer



Biogas cleaning plants for WWTP