

EnviTec Biogas



**MACHINE
OF THE YEAR 2010**

Optimised feeding with EnviTec Feedcontrol

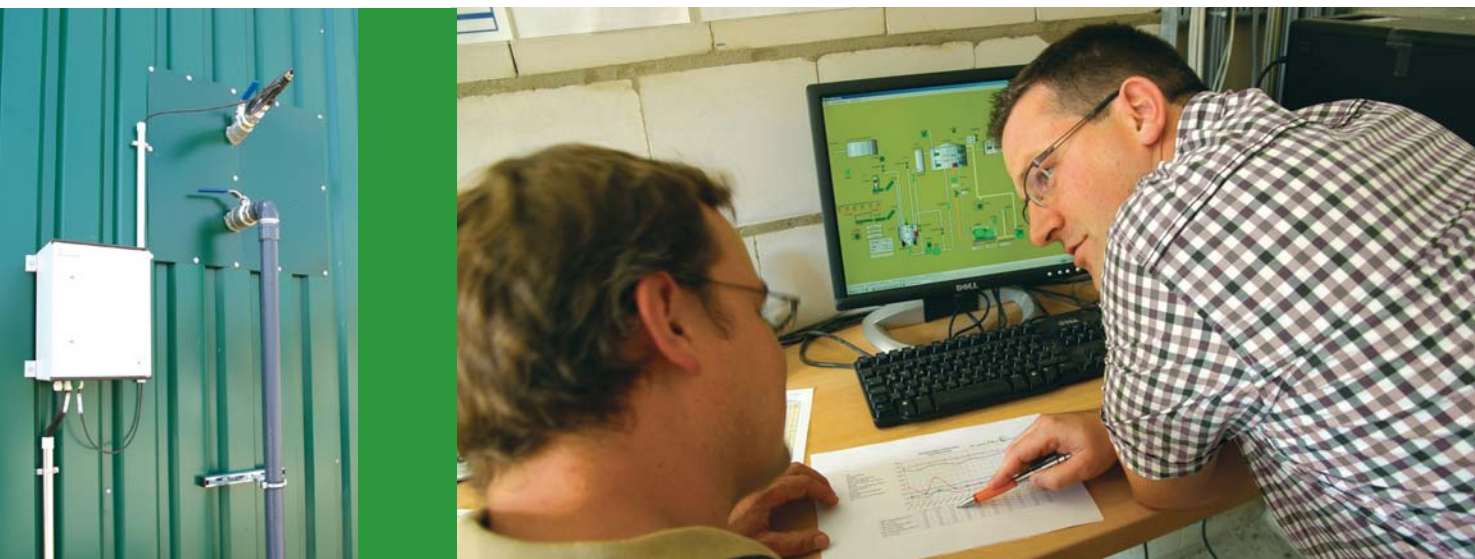
Planning

Construction

Start-up

Operation

Service



Optimised feeding – EnviTec Feedcontrol

Consistent production of biogas depends on regular feeding of bacteria into the fermenter. A PLC control system with visualisation, controlled by a PC directly connected to the system, is therefore part of the standard equipment of every EnviTec biogas plant. The composition and feed volumes are set there by a feed program.

EnviTec Feedcontrol brings optimal utilization

The EnviTec Feedcontrol expansion allows the operator to set variable feed intervals to adjust the input flows to the amount of biogas required for the highest power setting of the CHP. This thereby effectively prevents the production of surplus gas and overfeeding. The technology can be installed as a firmware update in the control PC (PLC) and can be used immediately after configuration of the plant in question. The fermenter is retrofitted with a sensor for online process control; this sensor measures the process state in the fermenter.

Advantages for the operator

- + Optimal use of resources (fewer input material is needed)
- + Better utilization of the CHP
- + Prevention of the production of surplus gas and overfeeding
- + Prevention of variations in quality concerning the input availability
- + Gas storage is used most efficiently
- + Online control guarantees high process stability and reliability

When using the new technology the financial benefit for each 500 kW_{el} module is approx. 15,000 – 20,000 EUR per annum for a German biogas plant.