



ANLAGEN- UND APPARATEBAU

Lütke GmbH
Biogasanlagen



BIOGAS Plants



Benefit from our experience



Mature construction and high-quality materials for smooth operation during the entire life of the plant

Whether you wish to increase farming yields or relieve communities of their financial burden: The production of alternative energies can make a major contribution.

With a continuous supply of fuel, biogas plants offer advantages allowing you to achieve a relatively constant level of performance - a bonus that will continue to play an increasing importance in the energy discussion.

The economic efficiency of a plant depends largely on its durability and reliability.

There is no risk with our established plants: By using high-quality materials, maintenance and repairs are kept to a minimum, which means our plants achieve production capacities beyond 90%.

You can rely on our advice, planning and service and count on the personal, individual support and handling through our company executives and our 24/7 service.



Thermal power station in modular design



From biomass to biogas ...



*Heat and mix well for excellent yields:
Lüthe Stainless Steel Tube Wall Heating
and Lüthe Power Mixers*



*Proven submersible motor mixers
for biogas fermenter vessels in a
special pressure encapsulation
for highest level requirements
and durability*

The biological processes take place in Lüthe stainless steel fermenter vessels.

Uncompromising Lüthe quality in the production of this fermenter vessel is as important as a guaranteed durability.

The resulting gas mixture is very aggressive and will attack many materials - but not a Lüthe stainless container:

Naturally, we will also supply the required working platforms and stair systems- customized and complying with all safety regulations.

The double-membrane gas storage roof consists of two UV resistant films and is kept at a pre-pressure of approx. 3 mbar by an air feed (performance approx. 90 watt). The inner membrane will buffer the variable gas storage volume. Lashing straps of the highest quality have been fastened to the centre support and form a contact surface for the variable membrane.



We will control it for you ...



*The heart and brain of your biogas plant:
The switch cabinet with central control via display*

The economic efficiency of a biogas plant depends very much on the quality of its controls. This is why Lüthe biogas controls will be provided with the smallest plant type (110 kW el/h) and delivered with the know-how of a major plant size.

All important input parameters, like substrate types, daily supply quantities and times can be pre-chosen.

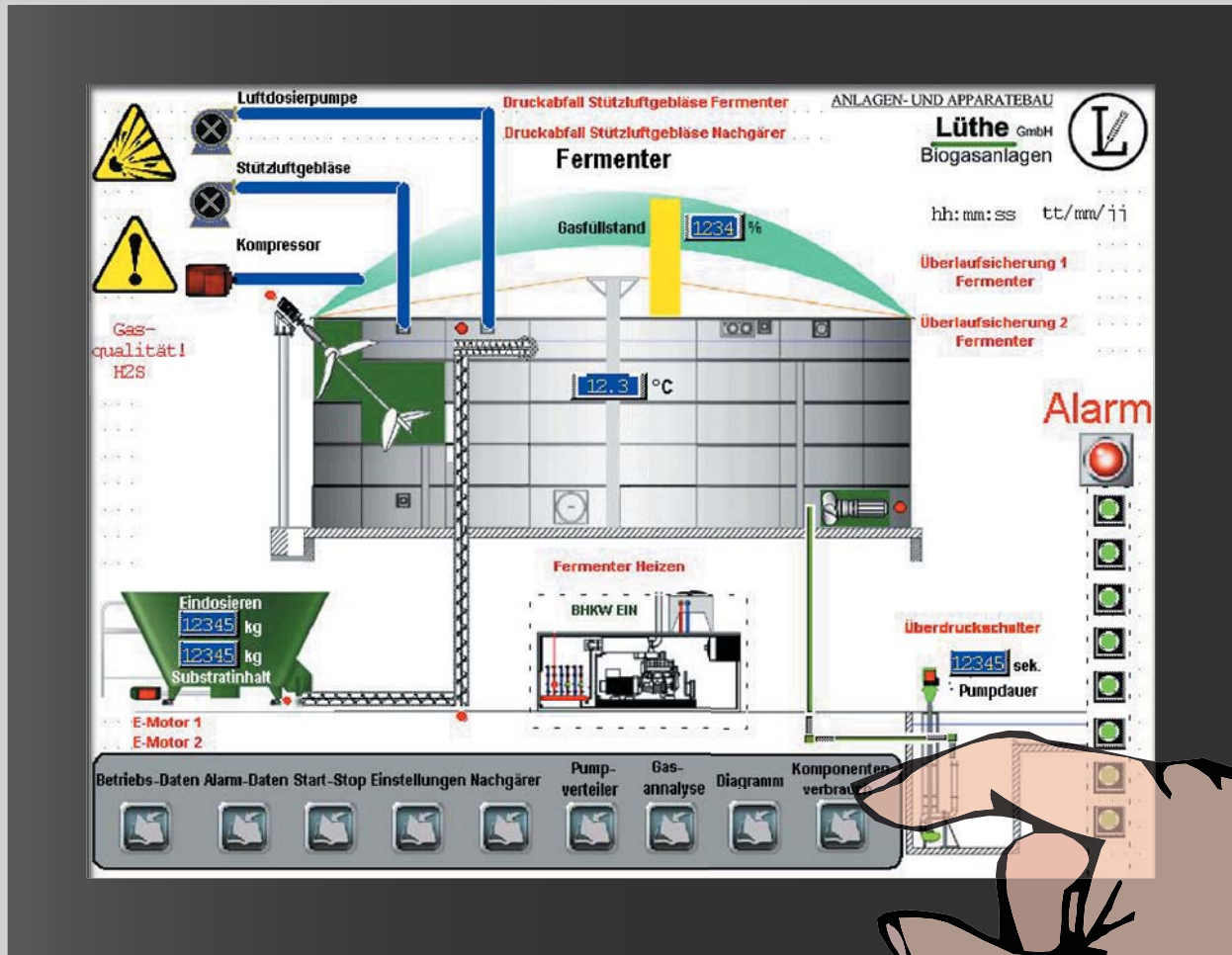
Filling levels are monitored and documented automatically in every individual plant area. Pumps and mixers are operated automatically. This helps to reduce operational costs considerably.

All recorded process data will be visually represented on a screen and can be printed out when required. This facilitates the process monitoring and enables the operator to detect possible problems at an early stage. Corrective measures can be undertaken at the right time.

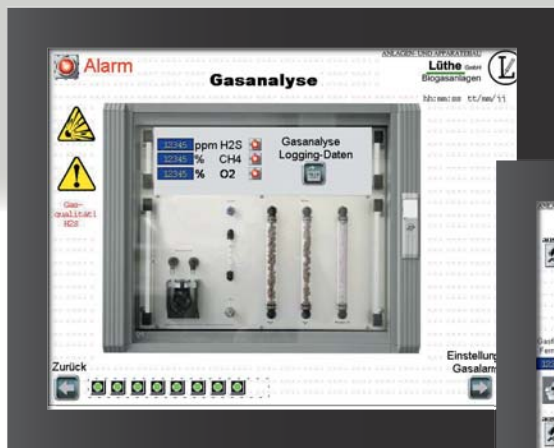
Further performance data:

- Monitoring of the gas quality
- Data telecommunication, automatic error reporting e.g. to a mobile phone.
- Recording, storage and visualization of BHKW data

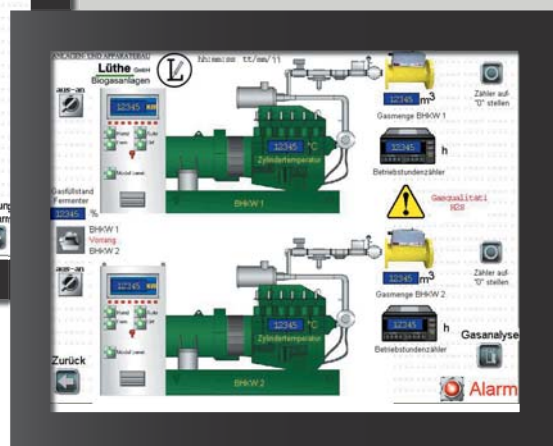




Comfortable monitoring and control of the biogas plant by touch screen



All operational situations can be displayed by pressing a button



The result: Power & heat



High production capacities will ensure ability to deliver



Compact, soundproof and quickly installed: The Container BHKW



Optionally: Unit assembled on base frame to be used on-site in machine rooms

Lüthe rounded off its own production with the production of thermal power stations. High-value engines from 110 kW to more than 1000 kW are standard products. Optional delivery in a container or the assembly on site in a machine room.

The thermal power station (BHKW) used is supplied completely pre-assembled in a noise proof container for setting up outside. The heat resulting from burning is transferred by the cooling water or optionally via exhaust heat transfer to the heating system. Any excess heat is channeled to the container roof via an emergency cooler.

The tried and true industrial engine with a generator is situated above a pan construction and shock-absorbed. The pan construction will at the same time store the extended oil stock to achieve large oil change intervals. Power generation is done via a synchronized generator. The inbuilt exciter is able to produce power without net. (Optionally the plant can be supplied as an emergency power generator.)



It's the mix that counts ...



The Lütke solid dosing units are normally based on a feed mixing vehicle with solid feeder screw conveyor.

The phased controlled engines ensure the smooth operation of the biogas plant.

- Solids dosing plants from quantities 14-120 m³
- Stainless steel screw conveyors in a 300 mm screw pipe

This feeder system has the advantage of several possible input media.

The automatic weighing of media is of course possible!

The system has proven its effectiveness over the years and is a Lütke product of the highest quality.



Reliable feed without congestion: It's the right screw conveyor that counts!



Comprehensive range of accessories



PC connection



Frequency inverter

Whether you want to increase the degree of automation, record operational data or solve a specific problem: The right accessories will enable you to match the equipment optimally with your requirements.



Slide



PH measuring



Air dosing



Temperature recorder



Flow meter



Separator



Temperature feeler



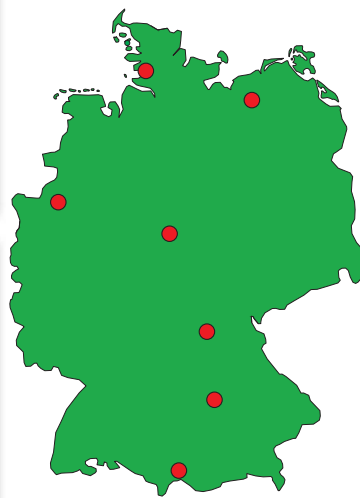
Pressure sensors



... and may we build your plant?



Lüthe branches
in Germany



Trust quality

When investing in a new plant you want to secure long-term yields and exclude potential risks. This is the foundation we focus on when planning our plants. Durability and high availability decide finally about the feasible operation of a plant. Our experience helps us doubly: It prevents us from saving on the wrong end and enables us to provide an offer that is worth its price.

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