**ANAEROBIC** 





## Anaerobic Service: Tested Safety

Play it safe around your methane reactor: The anaerobic service package of HAGER + ELSÄSSER® stands for a long lifespan and stable operation, as well as for high operational reliability and maximum power output of your EGSB/UASB reactor.

As with all industrial production processes, when it comes to industrial wastewater purification by means of your high-performance anaerobic reactor, from time to time inspection and maintenance are essential.

It is for this reason that we have developed the anaerobic service, our "all-round carefree package" for reactor operators. This is basically divided into two parts.

On the one hand, the operational reliability is ensured by HAGER + ELSÄSSER®'s functional test. On the other hand, the process-related review should point out any possible process optimisation.

## **Functional test gives security**

As the first part of the anaerobic service package, the functional test includes reviewing the proper operation of all

mechanical parts, measuring electrodes and sensors. Both the overall condition of the reactor as well as the associated peripherals are examined. This includes, for example, the checking and calibration of the pH electrode, as well as of the speed and relief governors. Furthermore, the tightness of the gas bag is checked and the sealing fluid in the hydraulic fuse is replaced. The checking

of pumps and valves for their ease of movement, operational accuracy or leakages are all included in our maintenance service.

## **Procedure tests optimise processes**

The second part consists of the processrelated review. This determines how effectively the reactor works, through system measurements, laboratory analyses and the review of settings and operating data. Testing and measurements happen on site, whereas the analyses and their evaluation take place in our labs. The examination and modification of the production parameters lead to a significant process optimisation on a frequent basis.

#### Further services available

Both services can be performed independently of each other. In addition, we provide a number of consulting and other services, for example when it comes to the modernisation of your purification process, in matters of spare parts requirements or the saving of chemicals.



Our service includes all parts of an anaerobic plant.

## **Benefits**

Many years of experience and the latest findings in the construction and operation of anaerobic reactors qualify H+E to become one of the world's most competent service partners.

Service and maintenance, as well as the subsequent analyses, are always carried out from the standpoint of process engineering advancements.

Through a systematic and comprehensive information intake and evaluation, H+E creates an overall picture of the plant. This allows for a multi-layered statement on possible improvements in all areas.

All these measures are aimed at increasing the capacity of organic substances degradation and thus the gas yield at all times, as well as the reduction of operating costs.

## Services

## Functional Testing\*

- Testing and maintenance of safety-relevant parts such as valves and measuring instruments
- Testing and restoring the smooth operation of moving parts (e.g. sliders)
- Calibration of measuring devices
- Replacement of wearing parts and operating fluids
- Testing for leaks, for example of pipes, flanges or the gas bag

### **Procedure Testing\***

- Recording, processing and evaluation of process data
- Performing additional analyses of wastewater, sludge and gas, and their evaluation

#### Results

Both for functionality tests and for process-engineering reviews, the results are recorded in a checklist. From this we develop a detailed status report. The final result is a catalogue of measures with recommendations for action.

\* Extract. Please ask for a detailed offer.

# Take Advantage of Our Consultancy Expertise

We always strive to offer our customers the technically as well as economically best solution for them, one that precisely meets their needs. Therefore we use the entire know-how of all the applied processes which we have acquired in building more than 30,000 plants. Thus we make sure that we contribute to cost optimisation and the economic use of water resources, as well as to massive energy cost savings and a significant reduction of emissions in their industry.