

# PowerDigest

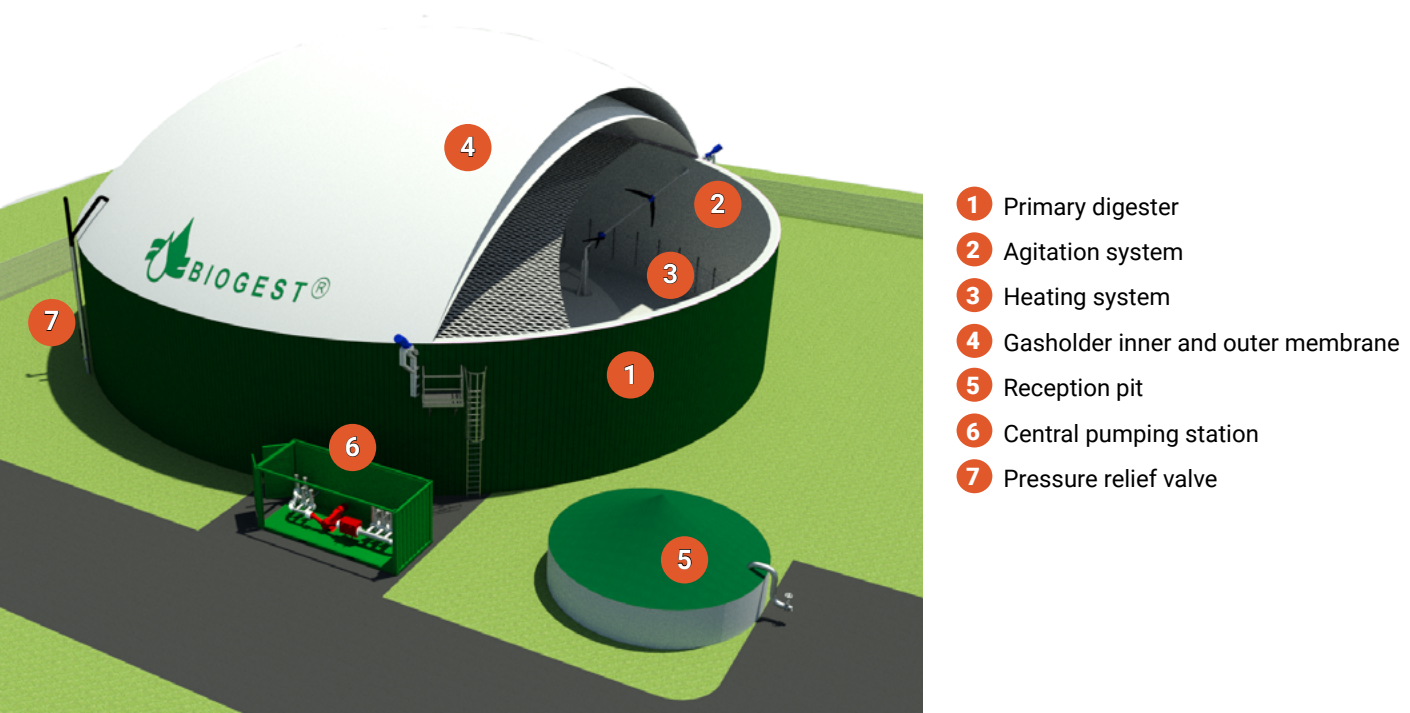
Technical Data Sheet

## The straightforward & classical solution

### Advantages

- Space saving design
- Ideally suited for liquid byproducts
- Outstanding biological desulphurization
- High full-load hours
- Easy to extent with more feedstock
- Time saving option

The PowerDigest has been developed for feedstock with low dry matter. It is ideally suited for large cattle farms, as well as for the agro-industrial sector.



## Technology highlights

The PowerDigest consists of a concrete or steel tank with a gasholder on top to guarantee space saving and a compact design. Due to our long-shaft mixers, a good homogenization of the feedstock can be achieved, fostering the degradation of the biomass. Moreover, the PowerDigest includes an improved biological desulphurization solution which decreases significantly the H<sub>2</sub>S content, minimizing the amount of active carbon needed for downstream gas cleaning. Furthermore, its gravitational overflow helps to reduce electrical consumption.

## Modular design

Due to its high flexibility, it is possible to combine as many PowerDigest as needed to treat all the available feedstock. In addition, this plant can work with a CHP, a gas upgrading unit, or a boiler as downstream processing equipment without any complicated interfaces or gas losses. In our plants we reach average full-load hours of more than 94%. The equipment of the plant can be either placed in an operational building or be delivered in practical 20-foot containers to be just placed on site – a time saving option!

## High reliability and easy maintenance

Only reliable plant components from reputable suppliers have been chosen for this plant. Special focus lies on the agitation technology, which is very efficient due to the use of strategically placed long-shaft mixers. The mixer engines are placed outside of the digester and are directly accessible, making maintenance of the system effortless.

## Top components, best-of-class technology consumption

BIOGEST uses plant components which have been optimized to process all types of waste and by-products, in addition to agricultural feedstock. BIOGEST operates as a manufacturer, design and construction contractor, biogas plant owner and operator, and uses its experience to provide only proven technology which assures a robust durability of the equipment and low maintenance costs on a long term basis.

## Covering the entire value chain

Our cost-effective and resource-saving solutions, based on technically advanced designs, contribute to an environmentally friendly future by providing green and sustainable energy. The scope of BIOGEST services range from project feasibility studies, design development and business planning to turnkey construction and commissioning of plants.

## Service and maintenance

Our clients also trust our expertise when it comes to operation and maintenance, for which we offer tailor-made service agreements. Our technical and biological service provides support after the construction and commissioning of your biogas plant is completed, to help you achieving excellent performance over the long-term. Our service package also includes regular plant inspections by our specialists, and training customer employees on how to operate their plants. Moreover, our eShop offers wear and tear parts needed for your daily operation that you can directly order from your computer or from the mobile phone app we have developed.

## Our experience

BIOGEST has completed more than 180 projects on 3 continents and is able to provide tailored service due to its highly qualified international team. With more than 30 years of experience in the AD sector, we have optimized the process design of our plants to guarantee simple operation while achieving high reliability.



**Picture:** BIOGEST® PowerDigest biomethane plant, 184,000 MMBTU/year (585 Nm<sup>3</sup>/h), Oak Valley, South Dakota, US

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