

PowerCompact

Technical Data Sheet

Plug and Play

Advantages

- Easy operation and maintenance
- Compact, modular design
- Plug and play
- Operates at full capacity
- Short construction time

The biogas PowerCompact micro plant is an anaerobic digester unit designed especially to fit the needs of small-scale dairy farmers.



Improve your dairy farm

The PowerCompact micro plant concept allows small and medium-sized farms to keep their focus on livestock, while improving profitability, by producing up to 250 kWel for input into the electricity network or for on-farm consumption.

Flexible feedstock

The PowerCompact plant can run either on slurry only or in combination with small amounts of silage or feed leftovers in order to boost gas production, depending on the on-farm availability. The matrix below shows the ratio of electrical output (in kW) to feedstock levels for a 100 kW plant.

Top components, best-of-class technology

During the selection process of high-quality plant components, special attention is paid to technology with a good price-performance ratio that was made from well-known, experienced European manufacturers.

Easy operation and maintenance

The system is designed to be operated in an agricultural environment with no prior knowledge of the topic or additional employees required. Remote control via PC or smartphone is part of the package. Most of the maintenance can be performed on a do-it-yourself basis or by our local service team, which is also ready to deliver and install spare parts if required.

Plug and Play

Due to its compact, modular design, the plant needs a minimum footprint of 1,000m². The system is tailor-made to the particular operating conditions in terms of size and power capacity. Since installation of this standardized system is simple and the start-up time is short the system can be put in operation quickly.

Compact, modular design

The plant consists of the digester and the technology container. While the digester is a tank with a gas dome on top, the remainder of the technology fits into a single prefabricated container. To save space and construction time, the technology container includes a combined heat and power (CHP) unit, a heating system and an integrated control room. In addition, the system is expandable with numerous options. This flexible approach enables the plant to be readily integrated into an existing infrastructure and can be expanded at any time. With the PowerCompact concept and technology, you produce your own energy! Farms in remote areas have the option to run in island mode.

Operates at full capacity

The PowerCompact micro plant is designed to run at full capacity throughout the whole year, when using the recommended feedstock.

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. Furthermore, we offer an eShop for our clients, where our customers can order spare and wear parts on a one-click basis via an app on your smartphone or desktop computer.

BIOGEST® Biogas Plant 100 kW: substrate matrix

Range of electrical output [kW] in relation to substrate mixsubstrate matrix

	Maize silage (32% dm)	0,0 t/d	0,2 t/d	0,6 t/d	1,1 t/d	1,5 t/d	2,0 t/d	2,4 t/d	2,9 t/d	3,3 t/d	3,8 t/d	4,2 t/d	4,7 t/d	5,1 t/d	5,6 t/d
	Grass silage (30% dm)	0,0 t/d	0,2 t/d	0,7 t/d	1,2 t/d	1,7 t/d	2,3 t/d	2,8 t/d	3,3 t/d	3,8 t/d	4,3 t/d	4,8 t/d	5,3 t/d	5,9 t/d	6,4 t/d
Cattle slurry (10% dm)	60 heads	3 t/d									64 kW	71 kW	78 kW	85 kW	93 kW
	105 heads	6 t/d								64 kW	71 kW	78 kW	85 kW	93 kW	100 kW
	150 heads	8 t/d							64 kW	71 kW	78 kW	85 kW	93 kW	100 kW	
	195 heads	11 t/d						64 kW	71 kW	78 kW	85 kW	93 kW	100 kW		
	240 heads	13 t/d					63 kW	71 kW	78 kW	85 kW	93 kW	100 kW			
	285 heads	15 t/d				64 kW	71 kW	78 kW	85 kW	93 kW	100 kW				
	330 heads	18 t/d		64 kW	71 kW	78 kW	85 kW	93 kW	100 kW						
	375 heads	20 t/d	68 kW	71 kW	78 kW	85 kW	93 kW	100 kW							
	420 heads	23 t/d	68 kW	71 kW	78 kW	85 kW	93 kW	100 kW							

■ Feeding system required
■ No feeding system

Headquarters

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