PRODUCT DATA SHEET

PlanET Retictor®

Optimal use of the substrate for your biogas plant

Up to 25% more yield

www.planet-biogas.com

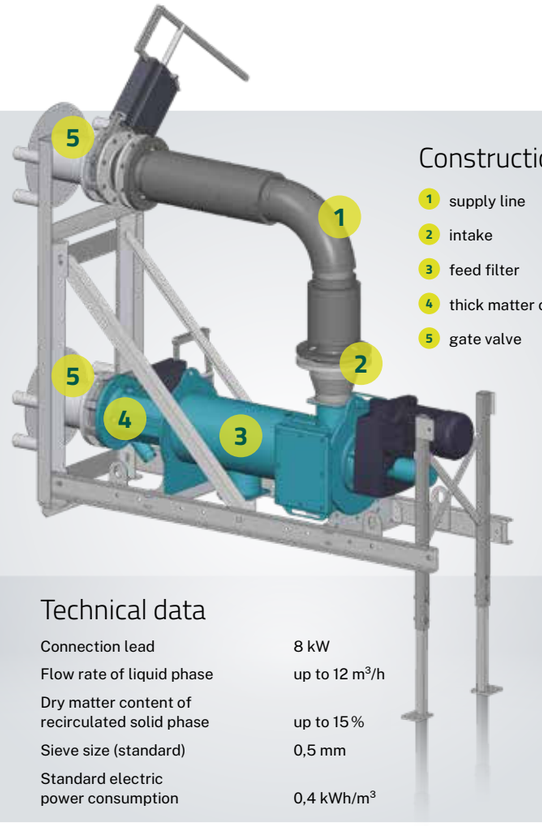
GENERATE UP TO 25% MORE BIOGAS

PlanET Retictor®

"The PlanET Retictor provides my biogas plant with a significantly higher yield of biogas; in the short and long term."

Application

- → Capacity expansion of existing plants
- → Seasonal energy peaks
- → In case of insufficient retention time in the digester



Construction

1. supply line
2. intake
3. feed filter
4. thick matter outlet
5. gate valve

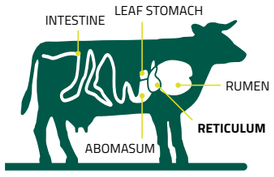
Technical data

Connection lead	8 kW
Flow rate of liquid phase	up to 12 m^3/h
Dry matter content of recirculated solid phase	up to 15 %
Sieve size (standard)	0,5 mm
Standard electric power consumption	0,4 kWh/m^3

Bionics: Nature as a role model

Cows and other ruminants do not waste any food. Food which is hard to digest is filtered in the animal's reticulum. The solid components are chewed again in the mouth and then returned to the digestive organs.

Our research and development department at PlanET has taken this as a model and designed the PlanET Retictor®. This innovative technology separates fiber-rich and difficult to decompose substrates from already decomposed ones and feeds it back into the digester.



More resistant biology in the biogas plant

The process which is a protected procedure by PlanET ensures the concentration and controlled recirculation of the nutrient substances for a more resistant biology in the plant. The used substrate is efficiently converted into biogas.

Advantages for existing plants

- ✔ Increase of digester efficiency
- ✔ More economical substrate utilization
- ✔ Reduced substrate demand
- ✔ Preservation of valuable microorganisms
- ✔ Selective extension of dwell time
- ✔ Separation of fermented organic material
- ✔ Recycling of substrates which contain nutrients
- ✔ Closed separation system prevents odor emission
- ✔ Low operating costs
- ✔ Reliable operation due to robust control system

Simple and fast assembly

Without much effort, the PlanET Retictor® is mounted directly on the wall of your digester or secondary digester. The substrate is fed directly from the top. The separator's screw conveys back the thickened material up to 15% total solids. An additional installed pump takes care of the discharge of the liquid fermentation residues to the storage. This new innovation with a standardized interface makes it easier to optimize your plant at low cost. A special control system automates the technology and ensures quiet and low-failure operation.

Example A: 750 kW biogas plant

	BEFORE	AFTER
Feeding	44 t/d	40 t/d
Cost savings		up to 1.460 t/a corn
Electric power consumption red.		by approx. 91.000 kWh due to savings in the agitator

FURTHER ADVANTAGES

- ✔ Up to 10% longer retention time in the digester and secondary digester
- ✔ Optimal utilization of the used substrate with the same biogas yield

Results based on a reference plant running for about one year.

Example B: 75 kW liquid manure plant

	BEFORE	AFTER
Power	60 kW	up to 75 kW
Feeding	32 m^3/d	25 m^3/d
Biogas yield	25 m^3/t FM	34 m^3/t FM

FURTHER ADVANTAGES

- ✔ Increase of substrate efficiency up to 26%
- ✔ Reduction of feeding by 14%

Results based on a reference plant running for more than two years.

Do you want to calculate the possibilities for your biogas plant? Get in touch with us!

Benefit from more than 20 years of experience in planning, permitting, engineering, biogas plant construction, development of technical components and industry solutions, biological service and much more.

With our teams, we implement holistic concepts professionally and in a solution-oriented manner.

More than 870 biogas plants worldwide (from 75 kW plants up to four MW industrial plants) speak for themselves.

We look forward to receiving your call or message.

PlanET Biogas Group GmbH

Schildarpstraße 75
48712 Gescher, Germany

Tel.: 0 25 42 / 86 95 6 520
WhatsApp: 0172 / 1832106

lab@planet-biogas.com
www.planet-biogas.com
career.planet-biogas.com