



BAUER Group

FOR A GREEN WORLD

Press information

Voitsberg, May 2nd, 2012

Bauer, an important partner for biogas plants

Bauer Group components are defined by their quality and high performance

Biogas is a fuel which opens up the route towards a future of green energy. This ecological method of generating energy can help us turn things around and achieve sustainable use of the Earth's resources. The Bauer company from Voitsberg in Styria supplies the required hardware for this process: their components for use in biogas plants ensure the smooth and efficient running of the power and heat production process.

"The quality of the detail is what defines the success of an entire system," explains the Sales Director of the Bauer Group, Heimo Wiesinger. If one single part fails, the entire biogas production plant could come to a standstill. "To avoid this, I would advise obtaining all of the components from the same place to ensure that the parts are all perfectly adapted to one another," says Wiesinger. The Bauer group offers solutions for all stages of the process from the substrate management to the residue recycling. Plants can therefore obtain all of the required equipment from one partner with decades of experience.

Customer-specific solutions within the group

With its BioDos automatic feed systems, the Eckart company (part of the Bauer group) offers optimal customer-specific solutions for the addition of solid matter such as corn, grass or bio-waste to the fermenter. The co-ferments are then manually or automatically transported from a specially coated basic vat of 10 to 120 m² in size. A highly efficient planetary gear system developed by Eckart guarantees a low power consumption in conjunction with a high torque, if required. The highest level of operating reliability is ensured even under difficult conditions, such as on cold winter days. "The Eckart company has been specialising in supplying biogas plants for 20 years and therefore has vast experience in constructing such containers," says Wiesinger.

Submersible mixers: the highest level of efficiency and low energy consumption

Many operators consider a homogenous mixture to be important in ensuring a good biogas yield at their plant. The substantial stirring power of the Bauer MSXH submersible mixer ensures the optimal mixing of thick fluid substances such as liquid manure and maize silage. The simple adjustability enables work to be carried out horizontally and vertically and means that the agitator can be both raised and lowered. Bauer offers the agitator with the highest level of efficient and lowest energy consumption available. This exceptional level of efficiency is achieved using a special planetary gear system. Safety is also a priority at Bauer: sensors warn of any leaks which could cause undesirable effects on the biology of the fermenter. Explosion protection is also provided, given the use of biogas.

Eccentric screw pumps: innovative construction enables maximum performance

The pumps have to work particularly hard in and around the fermenter. They must be able to tackle media of different consistencies and thereby achieve the required performance at all times. The new generation of Helix eccentric screw pumps from BSA are specially adapted to use in the biogas sector. Their smooth-running hollow rotor is produced in-house using a unique special process to ensure that it is completely break-proof. Thanks to the innovative and robust structure, an exceptional performance of 5.5 to 11 kW is achieved with a maximum delivery head of 30 to 60 m, a delivery rate of 15 to 60 m³/h and an extended product lifespan.

The importance of further recycling

Bauer is also the ideal partner for many biogas plant operators following removal of the substance from the fermenter: submersible pumps such as the Bauer/FAN CSPH are used for homogenisation purposes at the final disposal point. Heimo Wiesinger explains: "We have incorporated a new cutterbar which is both adjustable and easy to change". The use of high-quality chrome-plated steel extends the lifespan considerably and lowers operating costs. Using Bauer and FAN separators, the optimal dry substance content of the residue material can be ensured. The high throughput rate means that excellent results can be achieved fast. The separated material can then be sold as a raw material for potting compost or as a high quality bedding material for animals, generating a better profit margin for the plant owner. Bauer products are also used in the recycling of biogas slurry: the polyester tanker holds a volume of 10,500 to 24,000 litres and has a high productivity level while also protecting the ground thanks to its low weight design. "The biogas components from the Bauer group enable professionals to work efficiently and at a high quality level" explains Wiesinger.

Brief information about the Bauer Group:

Since being founded in 1930, the Bauer Group (based in Voitsberg, Styria) has focused on irrigation and slurry technology. The company started out manufacturing wastewater and slurry pumps but achieved international recognition for its irrigation technology for the first time in 1947 with the patented Bauer lever lock coupling, named after company founder Rudolf Bauer. Today the company is increasingly developing in the direction of biotechnology (e.g. treatment of wastewater and biogas plants) and focuses primarily on 3 more fields of business: overhead irrigation management, waste management and energy management.

Bauer is a world technology leader in the field of overhead irrigation management: overall, more than 1.5 million hectares of land are irrigated across the world. The slurry and environment sector also represents another primary source of revenue, contributing approx. 50% of the overall turnover. Today the Bauer Group supplies its products to over 80 countries across the world. With some 600 employees, a turnover of 179 million euros was achieved in 2010/2011. The export quota stands at 95%. The primary markets are Germany, France, the CEE area, China, the USA, South America and Australia.

The Bauer Group now owns companies in some 20 countries across the world.

The product range

- ◆ Various different overhead irrigation systems
 - Fully-automated pivot and linear systems such as Centerstar, Centerliner, Linestar
 - Overhead irrigation systems such as Rainstar, Duostar, Rainboy and ProRain
 - Classic overhead irrigation such as pipe systems and solid set systems
- ◆ Slurry transportation (slurry tanks)
- ◆ Innovative slurry processing e.g. mixing, pumping, separating, composting and recovery
- ◆ Pipes and fittings
- ◆ Wastewater treatment and separation technology for the food and paper industry
- ◆ Biogas plants
- ◆ BRU Bedding Recovery Unit

Internet Services

- ◆ Configuration of all machines possible over the internet
- ◆ Ordering of all spare parts possible over the internet

Additional information: www.bauer-at.com

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