

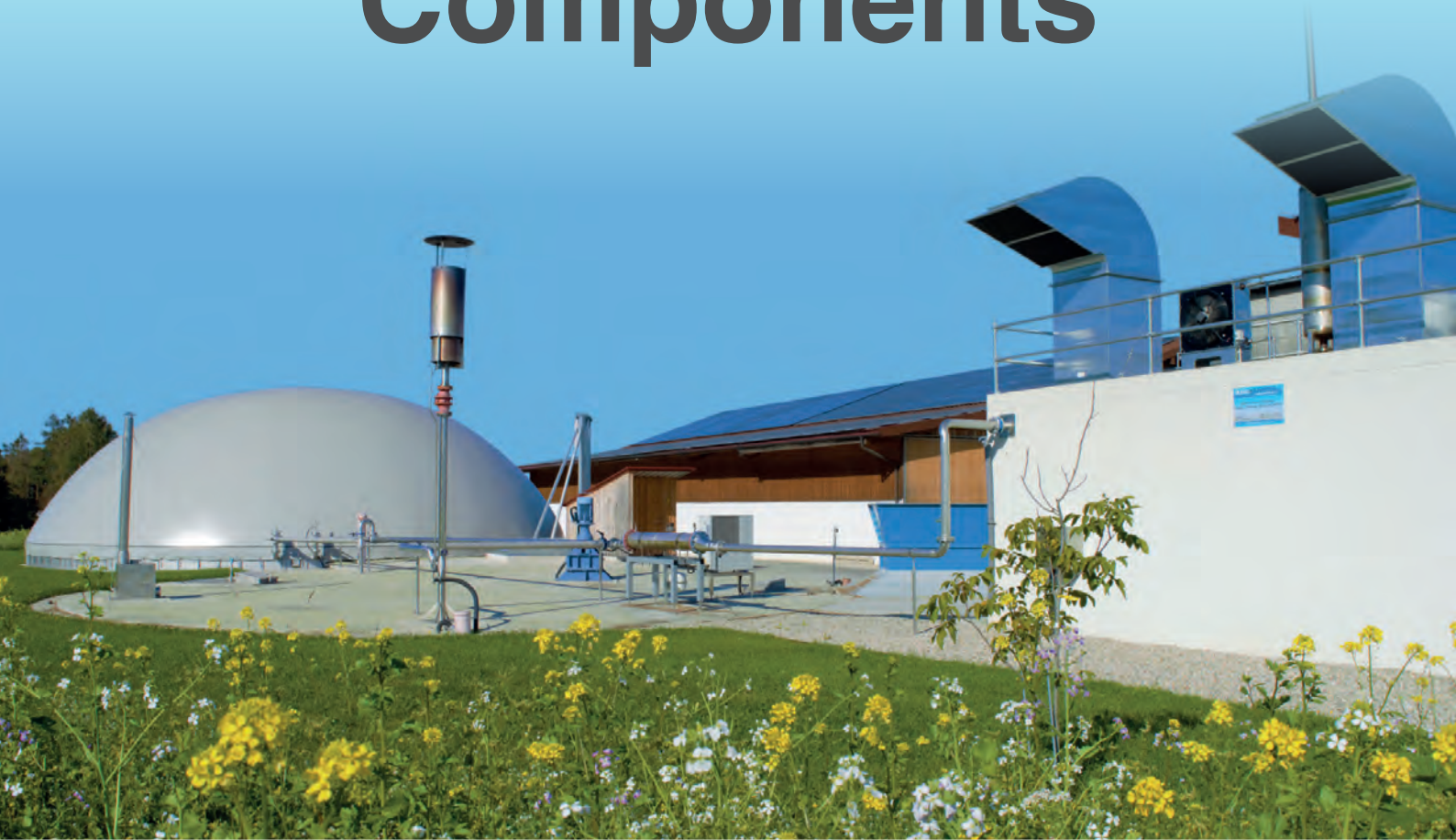


BIOGAS HOCHREITER

Innovation aus einer Hand

Energy for the future

Components



Tsunami paddle agitator



Facts

- ▶ 18.5 or 22kW electrical power
- ▶ Low energy consumption due to frequency converter operation
- ▶ 43,422 m³/h circulation capacity with simultaneous low speed of 9 rpm
- ▶ Paddle diameter 5.20 meters
- ▶ Available with 2 or 4 paddles
- ▶ Easy maintenance, as the drive unit is outside the tank
- ▶ Suitable for digesters, post-digesters and storage tanks
- ▶ 3-stage, reliable planetary gear unit
- ▶ As an option: with floating body for changing filling levels

Construction of the first biogas plant on his parents' farm in Steinau/Schnaitsee to generate thermal energy.



1985

First-time feed-in of electrical energy of 11kW with a remuneration of 2.3 Pfening/kWh.



1986/87

Start of co-fermentation and continuous upgrading of the plant to 65kWel. Production of various biogas plant components and construction of combined heat and power plants with pilot jet engines.

1988 - 90

Construction of the first customer plant in Baden-Württemberg.



1992

Steinauer agitator



Facts

- ▶ 18.5 or 22 kW electrical power
- ▶ Low energy consumption due to frequency converter operation
- ▶ 43,900 m³/h circulation capacity
- ▶ Smooth adjustment of the stirring capacity
- ▶ Paddle diameter 4.20 meters
- ▶ Available with 4 to 6 paddles
- ▶ Suitable for digesters, post-digesters and storage tanks with concrete ceiling
- ▶ 3-stage, reliable planetary gearbox
- ▶ Easy maintenance, as the drive unit is outside the tank

Start of industrial Production of combined heat and power units with Opel and Ford engines.



1994

Expansion of the company's own biogas plant to 400kWel. output with a fermenter volume of 2,200m³ in Steinau.



1995

Construction of combined heat and power plants based on MAN gas engines.



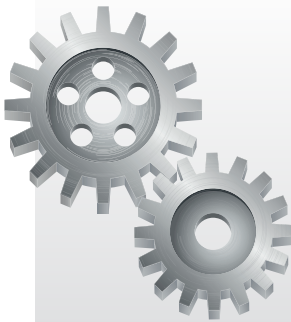
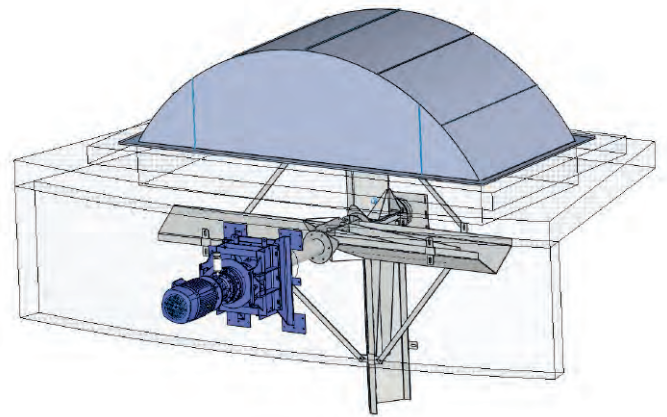
1996/99

Construction of a new sand scraper.



1996/99

Mississippi Paddle agitator



Facts

- ▶ 18.5 kW electrical power
- ▶ Low energy consumption due to frequency converter
- ▶ 26,675 m³/h circulation performance
- ▶ Paddle diameter 4.20 meters
- ▶ Suitable for digesters and post-digesters with concrete ceiling
- ▶ 3-stage, reliable planetary gearbox
- ▶ Easy to maintain, as the drive unit is outside of the tank
- ▶ As an option: available with central lubrication system

Installation of the first „Steinauer agitator“ and expansion of the company’s own biogas plant to max. 700kWel. and a fermentation volume to 6,000m³.



Series production and patenting of the „horizontal paddle agitator“ and the „vertical agitator“.



Steady growth and international orientation. At this time, over 100 CHP units are produced annually from the company’s own production facilities.



Production and sale of combined heat and power units based on DEUTZ engines.



2001

2002

2002

2004

Hochreiter Pump station



Facts

- ▶ 18,5, 22 and 30 kW electrical power
- ▶ Body made of stainless steel with 5 inlets in DN300
- ▶ Integrated manifold from 5 to 11 outlets
- ▶ High degree of prefabrication due to a beforehand frame construction with pneumatic gate valves
- ▶ Large pumping capacity due to a centrifugal pump
- ▶ Automatic central lubrication system
- ▶ As an option: with flow measurement

Expansion of activities to Austria, Switzerland and Italy.



2004

Production and sale of combined heat and power units based on TEDOM engines.



2005

New edition of the Mississippi agitator.



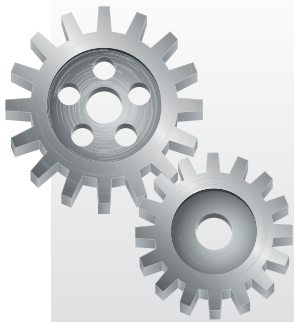
2005

Activities in the Czech Republic, Slovakia and Hungary. Increase in the number of employees to 25.



2005

Hochreiter Fuada Sepp



Facts

- ▶ Single feeder with 10 m³, 20 m³, 24 m³, 34 m³, 40 m³ or 50 m³
- ▶ Double feeder with 68 m³, 80 m³ or 100 m³.
- ▶ 7.5 - 11 kW electric power per screw
- ▶ With ceiling, or side entry, or with vertical conveying technology
- ▶ Solid screws and screw tubes (opt. completely made out of stainless steel)
- ▶ Stainless steel sump
- ▶ Large digital display
- ▶ Visualized control panel
- ▶ Reliable drive units with planetary gearboxes

Construction of the Binder biogas plant with 1.8 MWel. output in Breisgau.



2006

Commissioning of the first Hochreiter plant in the Czech Republic with an electrical output of 500kW.



2006

Construction of the biogas plant at the future company site in Stangern with an output of 500kWel.



2006

Construction and financing of further large-scale plants as a full-service provider. Expansion of activities towards France, Belgium and Luxembourg.



2007

Hochreiter Walking Floor



Facts

- ▶ Volume from 56 m³, 82 m³ up to 108 m³
- ▶ 4 to 5.5 kW hydraulic power pack
- ▶ 2.2 kW per milling drum (optionally with central lubrication)
- ▶ Side entry or vertical feeding technology possible
- ▶ 12 hydraulically controlled push bars out of stainless steel
- ▶ Visualized control, large digital display with dosing diary
- ▶ No corrosion problems, cause of PE lined sump
- ▶ Economic operation due to low power consumption
- ▶ As an option: available with additional milling drums

Further activities in Spain, England, Scotland, Wales, Northern Ireland and Ireland. Expansion of the product range for organic waste recycling.



2008

Construction and delivery of CHP container solutions.



2009

Conversion of a biogas plant in Tunisia.



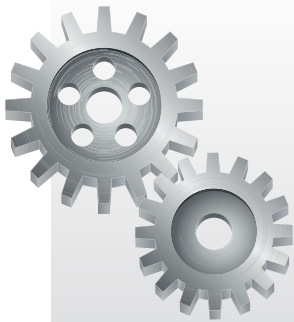
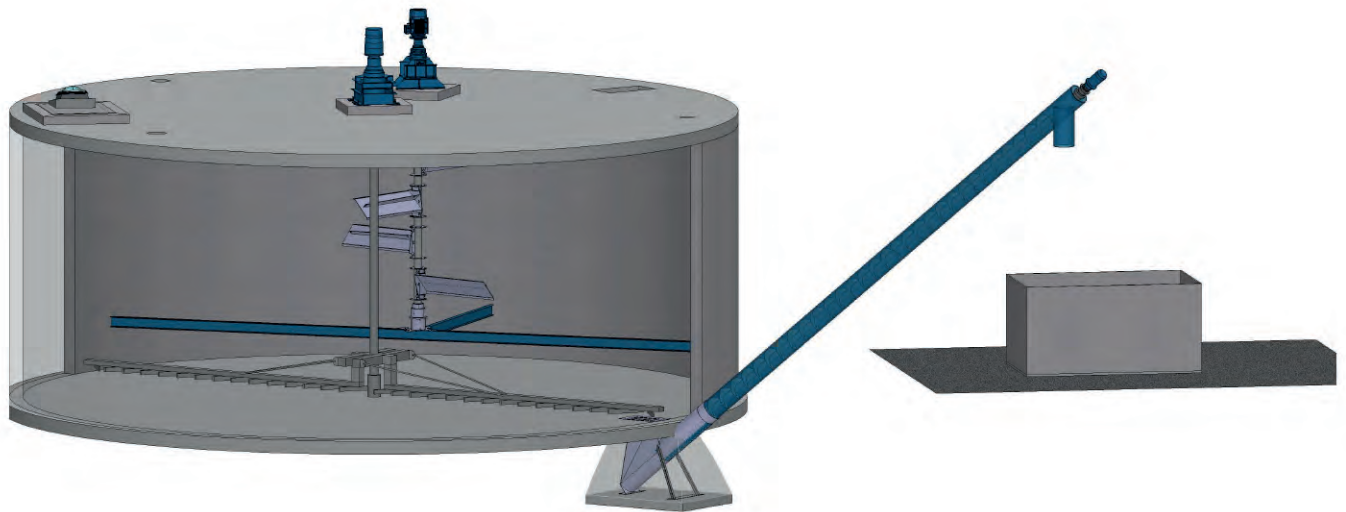
2009

Relocation to the new company location in Stangern near Schnaitsee/Upper Bavaria.



2010

Hochreiter Sand scraper



Facts

- ▶ Economical 1.35 kW connection load
- ▶ Max. 16 diameter tank
- ▶ Single or double rake arm
- ▶ Suitable for sinking materials such as: sand, stones, etc.
- ▶ Reliable planetary gearbox
- ▶ Sand discharge screw with massive screw windings.
- ▶ Up to 95% reduced sediment residue in the storage tank
- ▶ Economical operation due to low rotation (1 rpm)

Delivery and installation of the first systems to Spain, Northern Ireland and England.



2011

Foundation of the Biogaz Hochreiter branch in France.



2011

Reorientation towards 75kW biogas plants.



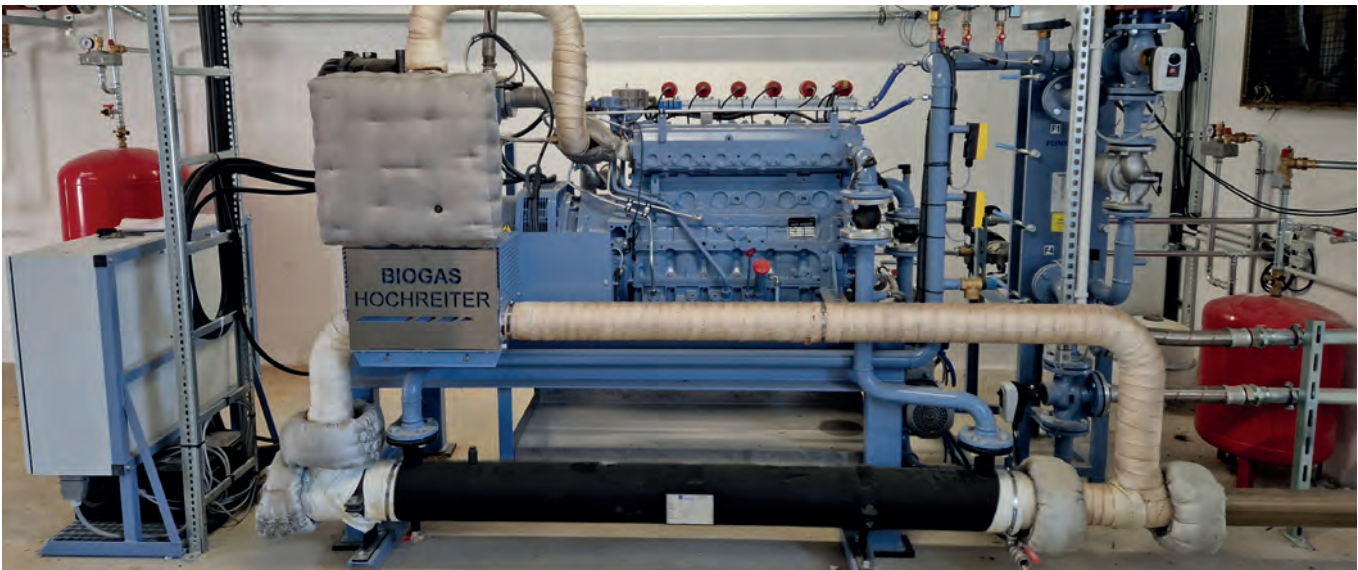
2012

Development of a new dosing technology „Fuada-Sepp / Power-Feeder“.

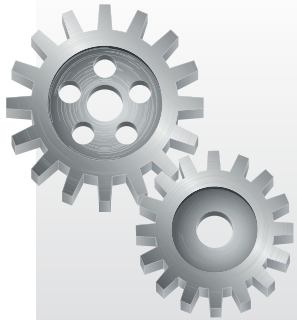


2013

HOMAN TE36 – 100kW_{el}



CHP - bio-, sewage-, natural gas



Facts

- ▶ Capacity of 6.9 liters
- ▶ Max. electrical power: 110 kW
- ▶ Max. thermal power: Up to 126 kW
- ▶ Optimized flow paths
- ▶ Water-cooled exhaust manifold
- ▶ 2-stage intercooler
- ▶ Large external oil cooler enables lower oil temperatures
- ▶ Safe compliance with NO_x limits thanks to Hochreiter SCR system
- ▶ As an option: available as fully installed and ready for operation container solution



Development and market launch of the „Inclined paddle agitator - Tsunami“.



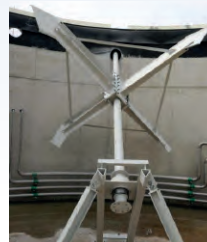
2014

Expansion of the motor series to include the HOMAN LE62 CHP unit with an electrical output of up to 530 kW.



2016

Further development of the inclined agitator with 4 paddles at the top.



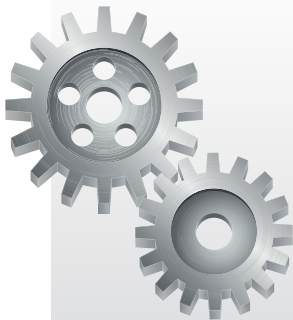
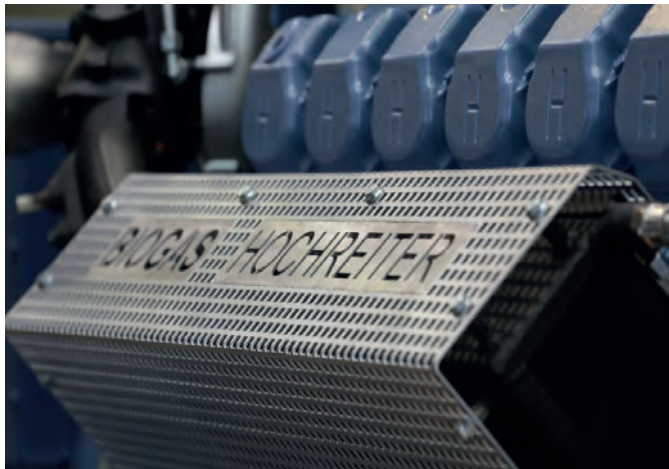
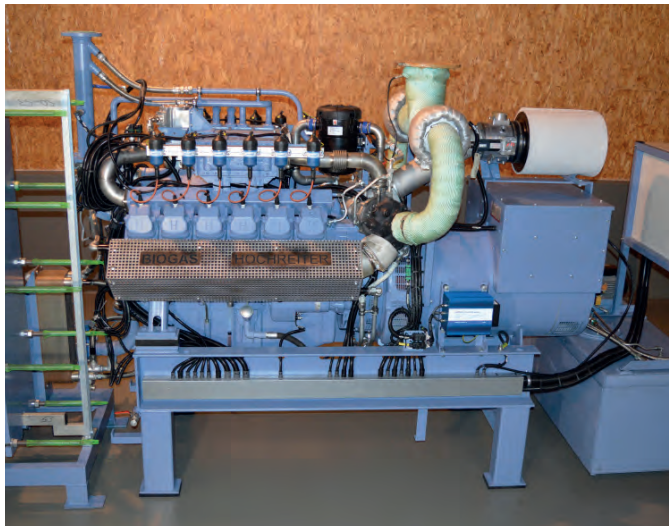
2016

Commissioning of the first biomethane plant in France



2017

HOMAN H130LE – 420kW_{el}



Facts



- ▶ Self designed Hochreiter 12-cylinder gas engine
- ▶ Large displacement of 22.62 liters
- ▶ Max. electrical power: 420 kW
- ▶ Max. thermal power: Up to 484 kW
- ▶ External additional oil tank of 360 liters extends oil change interval
- ▶ Electric prelubrication pump
- ▶ Large external oil cooler enables lower oil temperatures
- ▶ Safe compliance with NOx limits thanks to Hochreiter SCR system
- ▶ As an option: available as fully installed and ready for operation container solution

Market entry in Asia, construction of the first biogas plant in Thailand



2018

Development of the "MasterVizor" system control



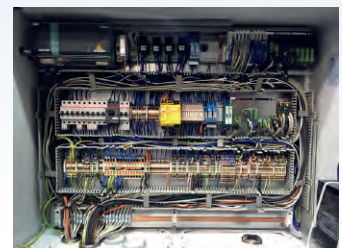
2019

Expansion of the management



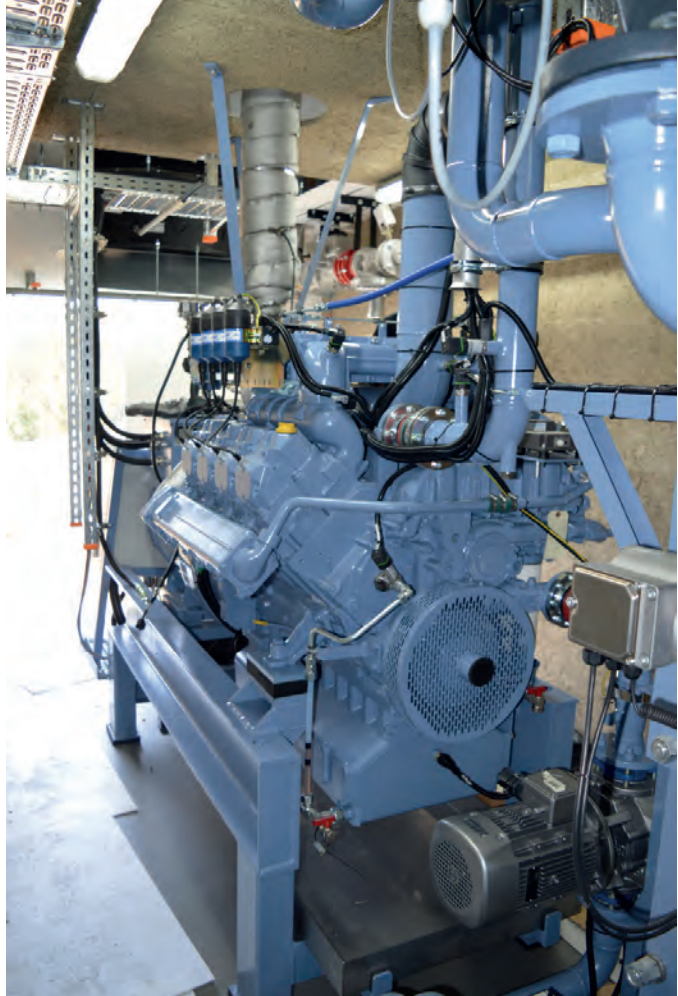
2019

Foundation of our own electrical department



2020

HODEUTZ V6 und V8 – 130 to 300kW_{el}

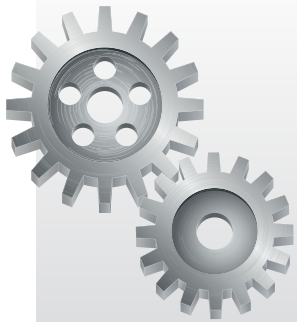


CHP - bio-, sewage-, natural gas

Facts



	V6	V8
▶ Displacement [liter]	11.9	15.9
▶ Max. electr. Power [kW]	210	300
▶ Therm. Power [kW]	263	374
▶ Longer oil change intervals due to large oil volume & external oil cooler.		
▶ Four-valve technology with prechamber spark plugs		
▶ Robust and compact V-engine		
▶ Best possible heat extraction through large-dimension heat exchanger		
▶ Safe compliance with NO _x limits due to Hochreiter SCR system		
▶ As an option: available as fully installed and ready for operation container solution		



Extension of the workshop/
operational building



2020

Entry into the wood gas market, delivery of the first wood gas CHP units



2020

Development of our own NO_x control system with SCR catalyst



2020

As of today: 60 employees

Internationally we deliver to the following countries:

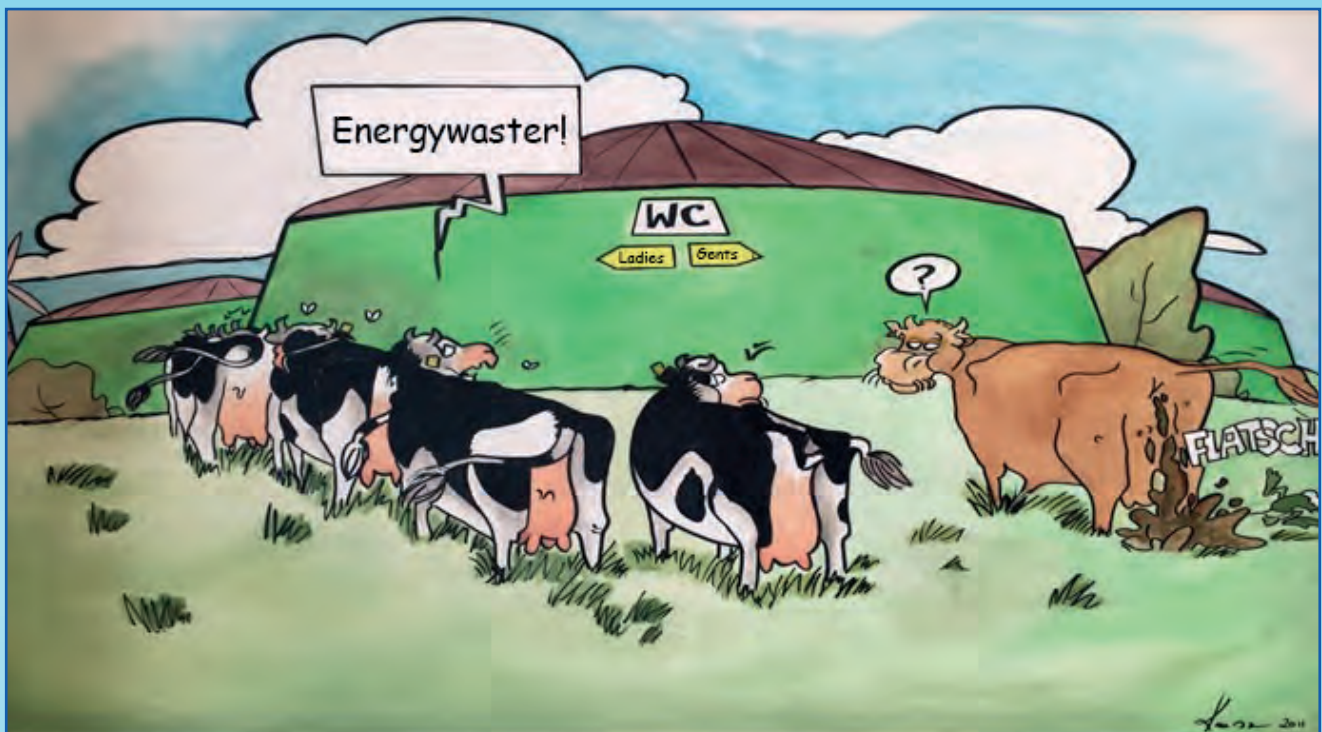
Austria, Italy, France, England, Scotland, Ireland, Serbia, Thailand, Switzerland, Czech Republic, Slovakia, Spain, Tunisia, Poland, Greece, Belgium, Luxembourg, Slovenia, Turkey and Hungary.

2023

BIOGAS HOCHREITER

Innovation aus einer Hand

FROM A FARMER - FOR FARMERS
Simple - Robust - Efficient - Reliable



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