



## THE BIOGRINDER

Made in Germany. Exported worldwide.

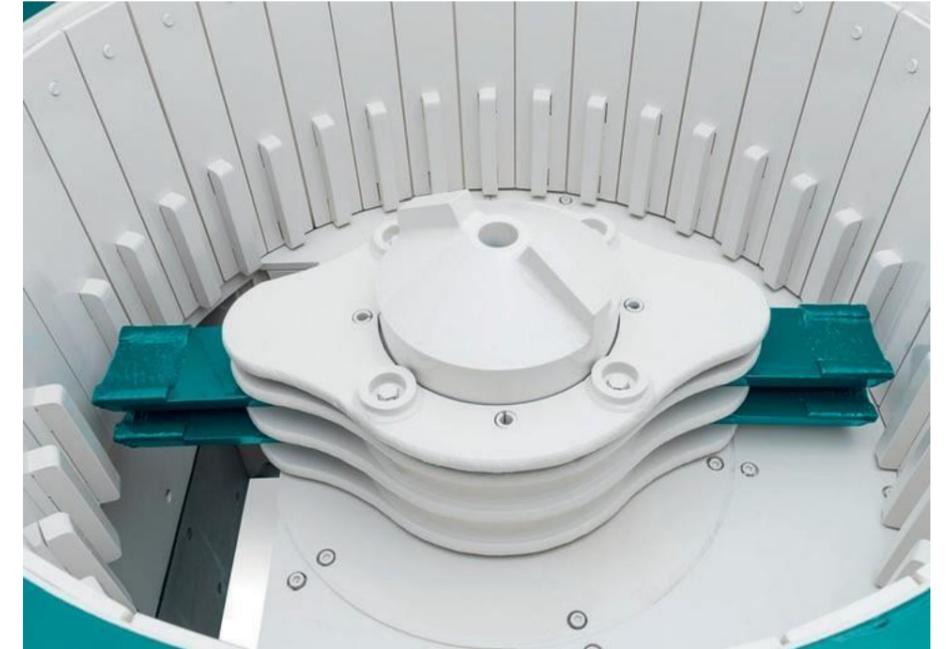




The BIOGRINDER RBG 08



Hammers



Rotor and stator strips

## THE BIOGRINDER: 37 - 110 kW

Smaller particle size. Faster decomposition.

The BIOGRINDER makes it possible for biogas plants to use crop residues and problematic types of manure (e.g. poultry manure), expanding the variety of usable raw materials and improving cost-effectiveness. The substrate can be optimally processed, because the BIOGRINDER mechanically crushes, homogenises and defibres the fed material by means of impact and shear forces, instead of shredding it. As a result, the surface area of the biomass is increased, as is the contact surface for bacteria, allowing for faster and more efficient decomposition in the fermenter.

The profitability of the biogas plant is significantly increased:

- Increased and accelerated gas yield
- High throughput rates
- Shorter retention time in the fermenter
- Less energy consumption (e.g. less stirring)
- Substrates of lower market value are made usable

You can profit from additional advantages:

- Easy integration into existing biogas plants

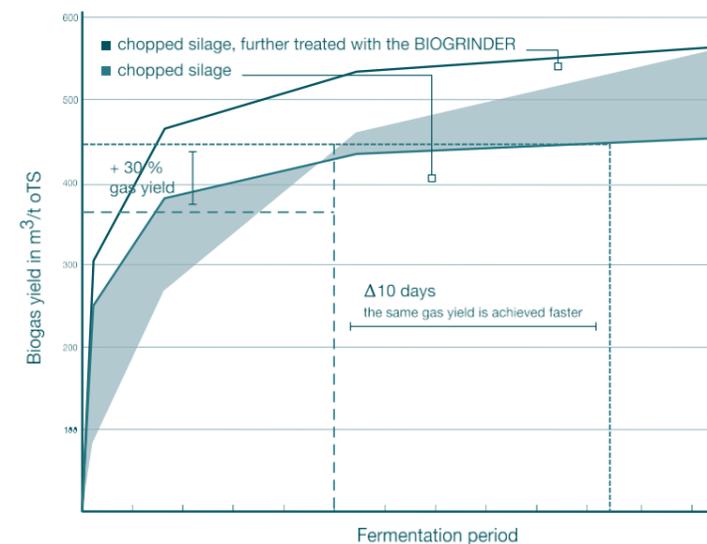
- Use of the widest variety of input materials, including those most difficult to process
- Improved operational stability
- Resistance to impurities (e.g. stones, metal)
- Low wear
- Prevention of floating layers
- Adjustment of crushing ratio via the number of hammers installed

We offer the BIOGRINDER in two sizes with multiple motor options, enabling you to choose a machine perfectly suited to your biogas plant.

With the BIOGRINDER as an efficient system for the pretreatment of silage, crop residues, poultry/horse/cow manure and organic waste, you can work with a wider range of raw materials, enabling you to easily adapt to changing market conditions and regulatory frameworks.

We put energy efficiency into practice - with the BIOGRINDER!

Accelerated biogas production with the BIOGRINDER



RESULTS OF STUDY BY UNIV. OF HOHENHEIM

In field trials at the biogas research plant of the University of Hohenheim, mechanical processing resulted in a **more than 40% increase in gas yield**. If all the horse manure produced in Germany were fermented in biogas plants, almost 170,000 fewer hectares of farmland would be needed for energy maize.

The results of the study at a glance:

- Pretreatment has a positive effect on gas yield.
- In field trials, mechanical processing of the substrate resulted in an up to 40% increase in specific methane yield.
- The mechanical pretreatment of manure is absolutely essential.

## SUBSTRATE PRETREATMENT IN THE BIOGRINDER

Rotor-mounted hammers in the machine break down the material in seconds. The knife-less mechanism is resistant to stones and pieces of metal. The machine can even open and completely break down packaging materials.



Organic waste, before



Organic waste, after



Manure, before



Manure, after



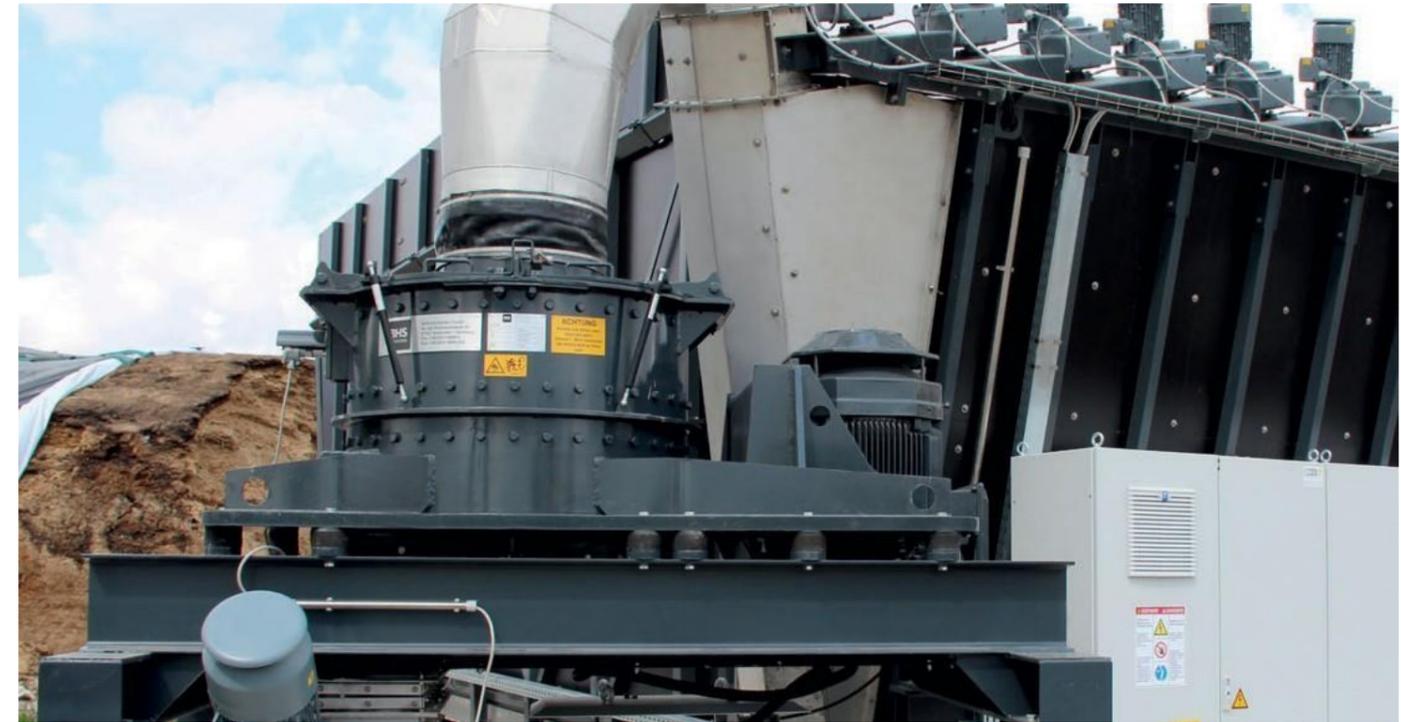
Sugar beet, before



Sugar beet, after

### INPUT MATERIALS

- Packaged foods
- Organic household waste
- Slaughterhouse waste
- Catering waste
- Maize silage
- Grass silage
- All types of manure
- Rye silage (wholeplant)
- Sugar beet
- Straw



The Biogrinder RBG 08 in the biogas plant

## EXPERT ADVICE FROM MEBA®

–Expert pretreatment with the BIOGRINDER

MEBA® is a family-owned company that has been active in the field of metal construction for three generations. Karl-Heinz Bachmann has been serving as the managing partner of the company since 1978. Over the past 30-plus years we have become a specialist in recycling technology and plant engineering. Our company has a strong commitment to sustainability and resource conservation.

Since 2008 we have been focusing on biomass processing, first as the exclusive German distributor for the Bio-QZ, which we specially adapted for the pretreatment of biomass in biogas plants. Since 2014 we have also been responsible for the exclusive distribution of the BIOGRINDER in Germany, Austria and Switzerland. The machines are manufactured in Germany and exported worldwide.

Robust machines, simple handling and close customer ties are our top priorities. We create ideal conditions for the sustainable, energy-efficient and low-cost use of the earth's precious natural resources.

Whether in agricultural biogas plants or waste-management facilities, our recycling, crushing and sorting machines guarantee exceptional results.

With our expertise and many years of experience, we can provide you with professional advice. Our services include the planning and installation of individual machines and entire processing systems. We ship our products to customers world-wide. Even after commissioning, you can count on reliable support from our customer-service and parts departments.

Our aim is to make raw materials usable for your biogas plant in order to expand the variety of available substrate inputs. This is how we help you achieve maximum cost-effectiveness.

Leo van Bree joined the company MEBA 2018. After studying electrical engineering in the Netherlands, he first started in technical sales in Germany, then he continued in intercontinental sales. As CEO of a listed company, he set up offices in Asia. Later he took over European sales for a multinational company. He then assumed responsibility for a trading company before joining MEBA after more than 30 years of managing experience. Leo van Bree has lived near Nördlingen for as long -the principal office of MEBA Biogas GmbH..

Cordially,

Leo van Bree



Expert advice. Expert pretreatment.

We provide personal advice and will work closely with you to develop the optimal solution for your plant. You can also find more information on our website:

[www.meba-biogas.de](http://www.meba-biogas.de)

The BIOGRINDER RBG is a product of the company  
BHS-Sonthofen GmbH.

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