

Individual mixtures

iCAP 6500: Leading edge laboratory methodology measures the crucial macro- and trace elements

Expertise in biogas

Renewable raw materials

Process optimisation in the fermenter

### BC.PRO® and BC.COMPACT

The micronutrient mixtures BC.PRO® and BC.COMPACT synchronise the different stages of biogas production and stabilise the process as a whole:

- Stabilisation of breakdown processes
- Activation of methanogenic organisms in the fermenter
- Synchronisation of the different stages of biogas production
- Sustained increase in fermenter efficiency
- Maximum methane yields
- Increased company profit

### The BC. concept for process optimisation

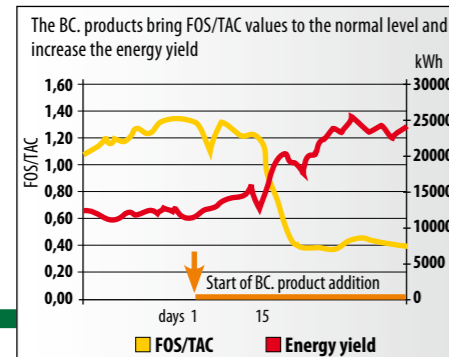
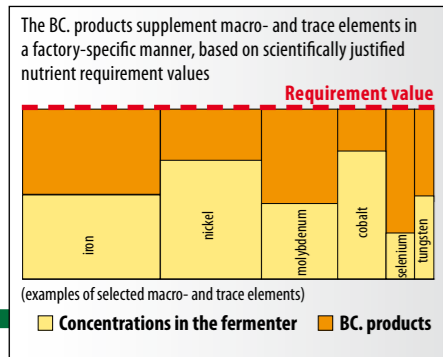
The analysis-based micronutrient mixtures make your fermenter operate at maximum efficiency.



- Accurately supplement the requirement of your fermenter
- Support a environmentally beneficial circular economy
- Promote substrate breakdown in the fermenter
- Increase gas production

### The result → More profit for you

- Long-term increase in fermenter efficiency
- More full-capacity hours per year
- Higher company profit



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**BC.PRO®**

**BC.COMPACT**

### The BC. concept for process optimisation

Competent advice, comprehensive analysis and individual BC. micronutrient mixtures

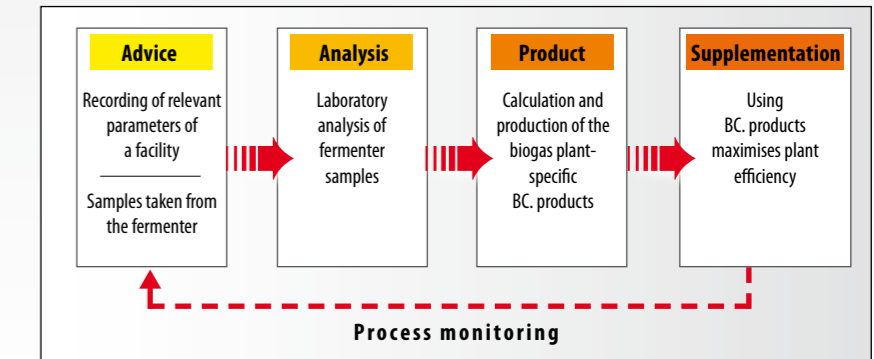


**SCHAUMANN** Expertise in Biogas  
BioENERGY

### The concept for efficient biogas production

In order to increase methane production all relevant parameters of a biogas facility must be considered. This is where the concept devised by Schaumann BioEnergy comes in: Innovative products

for improving substrate preparation and utilisation go hand in hand with accurate analysis and comprehensive advice.



### BC. products for substrate utilisation

The specific micronutrient mixtures BC.PRO® and BC.COMPACT are individually tailored to the biological situation in the fermenter and maximise the efficiency of methane production.

The mixtures based on the BC. concept compensate for deficiency, unfavourable conditions and low availability of

micronutrients. Their composition is matched to the specific requirements of the bacteria in your fermenter.

The mixtures are factory-specific, formulated and produced on the basis of accurate iCAP spectrometric analyses and in accordance with scientifically established requirement values.



### The BC.PRO® product line

The situation in a fermenter differs widely between biogas plants, depending on the substrates used, operational management and a multitude of other factors. In addition to using the tailor-made BC.PRO® micronutrient mixtures, this often requires supplementation of specific active substances.

The BC.PRO® line enables the integration of any complex of active substances for any biogas plant. The tailor-made BC.PRO® products can be used in plants of any output capacity.

### Use of the BC.PRO® product line

- Analysis-based, individual mixtures
- Suitable for agricultural biogas plants of any capacity (including biocertified factories)
- Unlimited compatibility with active substances
- In all types of biogas plant
- Optional fermentable bag
- Use rate: 3; 4; 5 kg/100 kW

### Tailor-made BC.PRO® products



### BC.PRO® and specific combinations of active substances

#### BC.PRO® START

Developed for the start-up phase. The mixture of micronutrients, iron compounds and buffer substances creates an optimal environment for the process biology and effectively reduces the concentration of hydrogen sulphide in the biogas.

#### Ncon – binds nitrogen

Ncon reduces the inhibitory action in nitrogen-rich facilities and stabilises the fermenter biology, especially in plants using large amounts of protein-rich substrates (e. g. food waste, dried chicken manure).

#### Scon – binds hydrogen sulphide

Scon binds the hydrogen sulphide in the substrate, thereby improving the fermenter biology and enhancing the biogas quality.

#### SLcon – reduces floating biomass layers

SLcon promotes the disintegration of settled biomass at the bottom and floating biomass at the top and prevents biomass layers from reforming.

#### VIScon – homogenises the substrate

VIScon homogenises the fermentation substrate, stabilises gas production and reduces wear and tear of pumps and stirrers.

#### SPcon – controls foam formation

SPcon reduces and prevents foam formation by altering specific physical characteristics of the substrate.

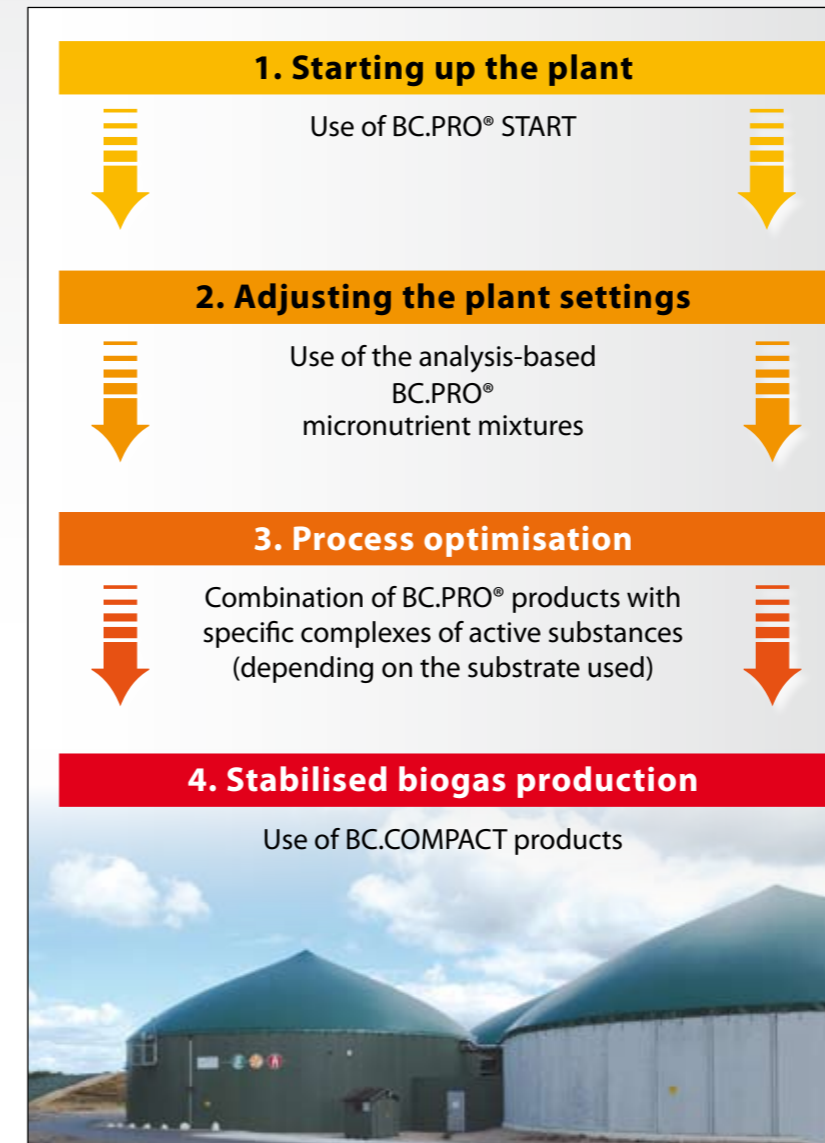
#### PHcon – increases buffering capacity

PHcon supplements buffer substances, thereby increasing buffering capacity and preventing fluctuations in the process operation.

#### ThioB – desulphurises the biogas

Nutrient complex ThioB optimise the biological desulphurisation of biogas in external solid bed systems.

### Stable process for high fermenter efficiency



### The BC.COMPACT product line

The BC.COMPACT line is characterised by low dosage and an excellent price-output ratio.

The more highly concentrated BC.COMPACT products are used after the plant has been set for a stable, optimal output level. Compatibility with active substances is limited.

In view of their composition and higher concentration, the BC.COMPACT products are classified as hazardous material.

They are therefore supplied only in fermentable bags which can be put into the fermenter unopened.

### Use of the BC.COMPACT product line

- Analysis-based, individual mixtures
- Limited compatibility with active substances
- Suitable for any capacity size
- Supplied in fermentable bags
- Dosing of sealed bags
- Use rate: approx. 2 kg/100 kW and day

