

# Solutions for the agriculture industry



Feed, grain, flour, oilseeds, nuts, soils, fertilisers, pesticides, ...

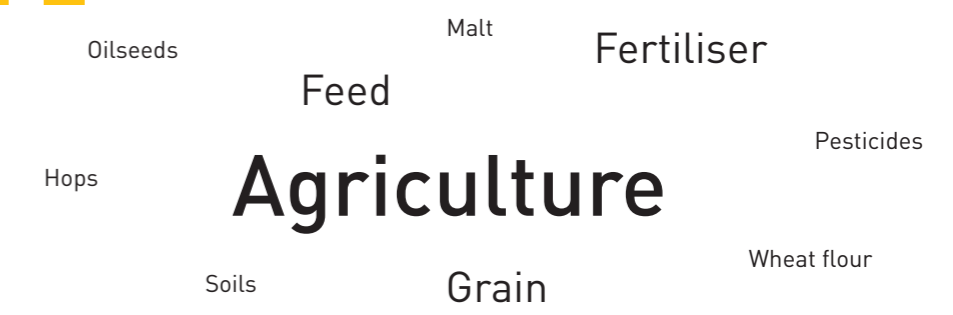
STEAM DISTILLATION | KJELDAHL | DUMAS | HYDROLYSIS  
EXTRACTION | DIGESTION

# Specialised in agriculture

Agriculture forms the basis for our food industry. At the same time, it requires resources such as good soil quality and fertilisers. This calls for particularly flexible analytical systems. We offer various solutions for analysing samples from the agricultural area. We not only provide you with reliable products, but also expert consultation from our application specialists.

On our website [www.gerhardt.de](http://www.gerhardt.de) you will find detailed information about our analytical systems, also specifically for your application.

**We are always happy to offer you a personal consultation - just get in touch: [info@gerhardt.de](mailto:info@gerhardt.de).**



## N-Realyzer

Automatic N-determination according to Dumas



- + Automatic and flexible autosampler
- + Intuitive Software
- + Low operating costs and high accessibility
- + Validated reference results for all sample matrices: liquid, pasty, solid

### Applications

- Protein in Feed
- Crude protein fractionation/ Protein solubility in animal feed
- Total nitrogen in:
  - Fertilisers without nitrate
  - Soils
  - Plant materials
  - Grain and starch
  - Wheat and soy flour
  - Malt and hops
  - Fertilisers and soils
- etc.

## HYDROTHERM | SOXTHERM

Hydrolysis and solid-liquid extraction



- + Safe, automated and fast sample preparation and analysis
- + Total fat analysis and preparation for fat spectrum analysis
- + Resource-saving

### Applications

- Total fat in:
  - Grain and grain products
- Crude fat in:
  - Feed
  - Oilseeds, Nuts and seeds
- Free fat in grain and grain products
- Oil content in pepper
- Dioxins, PCBs, phenols, PAHs, EOX and organic analytics in soils
- etc.

## KJELDATHERM | VAPODEST

Acid digestion, Kjeldahl und Steam distillation



- + Rapid and automatable analysis
- + Glass varieties from 100ml to 1200ml
- + Soft start during distillation to avoid strong reactions in sample tube
- + Traceability on different user levels

### Applications

- Protein in Feed
- Crude protein fractionation/ Protein solubility in animal feed
- Total nitrogen in:
  - Fertilisers with nitrate
  - Soils
  - Plant materials
- Kjeldahl nitrogen in:
  - Fertilisers without nitrate
  - Soils
- Ammonium in fertilisers
- Ammonium nitrogen and nitrate in fertilisers
- Chitin in insect-based feed
- etc.

## FIBRETherm

Crude fibre extraction, ADF and NDF



- + Rapid and automated
- + Parallel analysis of up to 12 samples
- + Optimised extraction and filtration conditions
- + Automated addition of amylase (optional)

### Applications

- Crude fibre in feed
- ADF in feed
- ADL in feed
- aNDF in feed
- NDLXP in feed
- Chitin in insect-based feed
- Crude protein fractionation in animal feed
- etc.

## MEETING HIGH DEMANDS ON ANALYTICS:

C. Gerhardt's analytical systems cover a wide range of analytical possibilities, here are only a few examples:

Parameter	Matrix	Gerhardt Apparatus
Nitrogen Non-protein nitrogen Protein	Feed	N-Realyzer KJELDATHERM VAPODEST
Nitrogen	Fertiliser	N-Realyzer KJELDATHERM VAPODEST
Protein	Grain	N-Realyzer
Nitrogen	Soils	N-Realyzer
Fibre	Feed	FIBRETherm
Fat	Feed Nuts Oilseeds	HYDROTHERM SOXTHERM
PAK EOX PCB	Soils	SOXTHERM



### APPLICATION SERVICE

Our laboratory staff is regularly trained and is always available for specific questions. If desired, we can optimise your applications or create an application specifically for you.

- + On-site service
- + Evaluation of your samples in our application laboratory
- + Applicative Support (Webinars / Trainings / Online-Support)
- + Consultation / Installation and Training
- + Aftersales Service / Customer Service

Have you heard of our webinars?



### STRONG PARTNER

We are global leaders in the automation of reference analysis. We stand for the development, production and global distribution of highly efficient, precise and reliable analytical systems.

Our specialties are automatic systems for

- + Nitrogen analysis according to Kjeldahl
- + Nitrogen analysis according to Dumas
- + Determination of fat content (hydrolysis and extraction)
- + Analysis of plant fibres (crude fibre, ADF, NDF)



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