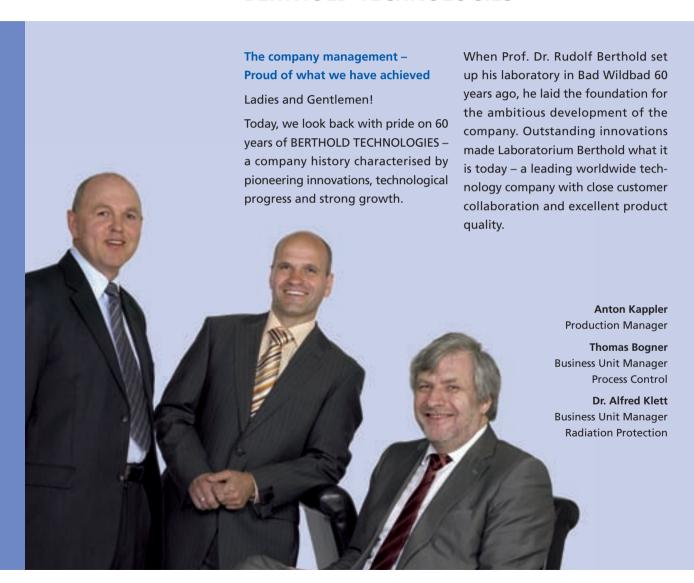




BERTHOLD TECHNOLOGIES



60 Years in Bad Wildbad

That we are able to celebrate our 60th anniversary is due, to a substantial degree, to our customers, business partners and employees whose trust and commitment have supported us through all these years. Encouraged by their loyalty, we are looking forward to the future full of self-confidence and assurance. It is our goal to further expand our technology leadership position by permanently

developing new products in all three business units and to intensify the close cooperation with and the individual service for our customers.



Dr. Wilfried ReuterTechnical Director

Dr. Fritz Berthold

Member of the Advisory Board and Director of Strategic

Marketing

Hans J. Oberhofer
Chief Executive Officer



Pioneering years

The time before 1949

The history of BERTHOLD TECHNOLOGIES actually begins in the early thirties in Berlin, with Prof. Dr. Rudolf Berthold working on non-destructive material testing. Together with Dr. Adolf Trost, he began working on innovative developments including the first counter tube for radiometric level measurement.

Today, the Berthold house at the Federal Institute for Materials Research and Testing in Berlin and the "Berthold Prize", awarded every year by the German Society for Non-destructive Testing, remind us of the former pioneer and his future-oriented research work during that period.



Milestones

From the foundation of the company to this day

1949 Prof. Dr. Rudolf Berthold sets up his laboratory in a former guest house in Bad Wildbad, where he continued developing instruments for non-destructive material testing and manufacturing radiation measuring systems for various industrial applications.



1967

1955 Counter tubes are replaced by scintillation counters which are significantly more sensitive for the measurement of Gamma radiation.

1960 Dr. Fritz Berthold, son of Prof. Dr. Rudolf Berthold, takes over the company management after his father's death. He founded the "Bioanalytics Unit" and developed measuring systems for laboratory





cal research.

analysis and biological and medi-



4







1989

2000 200



1986

1967 Foundation of the "Radiation Protection Unit".

Counter tubes which so far have been employed in industrial measurements are now developed further and tailored to the customers' needs.

1986 In the Bioanalytics unit, the luminescence technology is devised as a non-radioanalytical method. The first commercial microplate luminometer "MikroLumat LB 96P" is launched. As a consequence of the reactor catastrophe at Chernobyl, BERTHOLD TECHNOLOGIES rapidly designed the Becquerel Monitor LB 200 for foodstuff monitoring.

1989 Integration into the American corporation EG&G – later Perkin Elmer. Introduction of microwave technology as an alternative measurement procedure in process control for noncontacting measurement of moisture and concentration.

2000 Reacquisition of the company by Dr. Fritz Berthold, his family, and Hans J. Oberhofer, who now run the company under the name BERTHOLD TECHNOLOGIES GmbH & Co. KG.

2009 – Challenging the future with confidence

Through ground-breaking innovations and the technological orientation of the family-run company, BERTHOLD TECHNOLOGIES today is the technology leader in all three business units.

In the future, we aim to remain our customers' reliable partner with high-quality products "made in Germany".

Process Control Division

BERTHOLD TECHNOLOGIES – Experts for non-contacting process control

The Process Control unit offers solutions for monitoring point level, continuous level, density and concentration in industrial processes. Measurements are performed on all kinds of liquids and bulk materials. Our measuring devices do not come into contact with the product being measured. They are mounted on the outside of vessels, pipelines or conveyor systems and operate unaffected by disturbing chemical and physical properties of the measured product.

Measurements in difficult environments:

Our measuring systems are used under extreme conditions: very hot or cold, extremely corrosive, abrasive and dusty or high-pressure. Our noncontacting measuring devices deliver precise and reliable results even in the most demanding environments.

Fields of application:

- Chemical industry and refineries
- Pulp and paper industry
- Power plants
- Mining, coal and coke
- Steel industry
- Food industry







From the foundation of the company until today, the Process Control unit has been dealing with radiometric measuring systems. Ever since we invented radiometric measurements as an alternative technique. we have set new standards and maintained the technological edge. With our in-house production facilities for radioactive sources we are able to adapt our measurement solutions optimally to our customer's individual needs. Today, we are a world technology leader in the field of radiometric measuring systems. Microwave technology is another distinctive feature

of BERTHOLD TECHNOLOGIES Process Control. For more than 20 years this method has been utilised in numerous industrial applications to monitor moisture or concentration without having contact with the product.

BERTHOLD TECHNOLOGIES Process Control stands for excellent knowhow, highest quality and reliability. A worldwide network of branch offices and partners guarantee best service, qualified technical consultation and rapid response times. Benefit from our technology, our

support and our demand to have the

best solution – always.



Our employees, all of them specialists in their field of activity, do accompany you through the entire project – from the engineering stage to the smooth start-up of the selected measuring system.





Bioanalytics Division

BERTHOLD TECHNOLOGIES – a worldwide leader in luminescence measuring technology

Our Bioanalytics unit manufactures highly sensitive measuring systems for analytical and biomedical research, and devices for use in clinical diagnostics. We develop new instruments for the latest measurement technologies in close cooperation with our customers in universities, clinical institutes and the pharmaceutical industry.

Our interest in bioanalytics dates back to the 1960s as the use of radioactive labels in research and medicine started to grow extraordinarily. BERTHOLD TECHNOLOGIES developed successful products such as thin-layer scanners and gamma counters for radio immunoassays, which are still available today.

In the 1980s radioactive labels were largely superseded by luminescence measuring technology.

BERTHOLD TECHNOLOGIES took this decisive step and today is considered a worldwide leader with thousands of luminometers installed all over the world.

In recent years, we have worked with a lot of dedication on the development of microplate readers.







In contrast to conventional sample tubes, these systems support a variety of different sampling methods on one plate that can be prepared and transported easily and measured in a short time.

Mithras, our multimode microplate reader, occupies a prominent position in BRET technology which is used in the research of G-protein-coupled receptors. Technologies such as HTRF® (homogeneous time-resolved fluorescence) and fluorescence polarisation also offer researchers sensitive tools for the detection of molecular interactions.

Thus, new active agents can be discovered and tested successfully, which will then be introduced into the market as a new medication.

In recent years, reporter genes have become an indispensible tool in the study of gene expression. The fluorescent gene of the firefly is introduced next to a still unknown gene. If this unknown gene is active, the "Reporter" is also activated which then emits light signals. These light signals can then be analysed directly in living organisms, for example, animals or plants, using our highest sensitivity imaging device NightOWL.







Radiation Protection Division

BERTHOLD TECHNOLOGIES Competence in radiation protection

The Radiation Protection unit supplies extremely sensitive and reliable radiation measuring technology for the measurement of radioactive contamination, dose and dose rate, activity and airborne activity concentrations. The product spectrum covers small portable instruments up to large systems. Our customers are in research

nuclear medicine, nuclear energy and now primarily in nuclear decommissioning and waste.

The Radiation Protection unit was founded in the 1960s. One of our most successful and best known radiation protection products is certainly the "TOL-F" (tolerance dose rate meter) and its predecessor models, which are renowned for dose measurements to photon energies even below 10 keV.





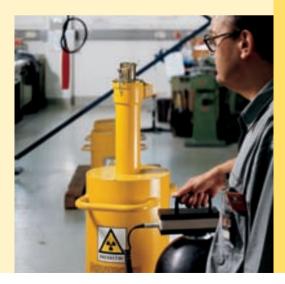


Later, large-area proportional counter tubes and contamination monitors were designed. They are widely used as portable instruments and hand-foot-monitors. Other bestsellers are the α - β -low-level activity counter LB 770 for the measurement of wipe tests, filters and environmental samples and the Aerosol monitor LB 150 for airborne activity measurements.

The Neutron probe LB 6411 – another instrument classic – was created in cooperation with the Research Centre Karlsruhe and is one of the best instruments worldwide for accurate measurements of the neutron dose.

Our latest development, large-area ZnS scintillation detectors for contamination measurements, offers an innovative technology platform for the future.

Our competent and experienced sales engineers are providing comprehensive information and advice to customers and users. Our strength is the planning and implementation of customer-specific systems customised to the special requirements of the respective location. Our quality management is certified according to the German Nuclear Safety Standard KTA 1401.



The Bad Wildbad headquarters

Working on ideas for the future

Located in the middle of the Northern Black Forest region, the town of Bad Wildbad is mainly known for its thermal springs and as a health resort. In this region, conditions are perfect for creative ideas – the basis for the growth of our company.

BERTHOLD TECHNOLOGIES' growth is illustrated, among other things, by the expansion of the company's premises. According to the motto "every 10 years a new building", a modern business complex has been created over the past 60 years.

Certainly, we have not yet laid the final cornerstone when it comes to building new premises and if sales, staff and production figures continue to grow as in the past, we will definitely continue enlarging our capacities.



People who love their job

A strong team

Today, about 330 people are working for BERTHOLD TECHNOLOGIES worldwide, more than 250 at the Bad Wildbad headquarters. Our qualified personnel consist primarily of engineers and technicians who are in charge of production. More than 40 physicists, engineers and technicians in research and development are responsible for both the conception and realisation of new and innovative products.

Our application specialists and project engineers in the sales department prepare customised measurement solutions, while our experienced service staff ensures smooth installation and start-up at the customer's site.

We place great emphasis on the training of our employees; about 10 % of our staff is trainees. In addition, we are a partner company teaching engineering students on-the-job in the course of their study at the Duale Hochschule Baden-Württemberg in Karlsruhe. The continuous training of our staff is an essential of our company's mission.











Success in numbers ...

... and quality that is internationally recognised

BERTHOLD TECHNOLOGIES, certified since 1989, operates a quality and environmental management system in accordance with ISO 9001/14001. Our products comply with the international quality standards and are manufactured in compliance with common environmental regulations.

As a member of various associations we participate and contribute to several expert working groups in engineering, science and in national and international standardization.

Key data	
■ Sales:	approx. 60 million Euro
■ Export share:	80 %
■ Employees worldwide:	more than 330
■ Employees in Bad Wildbad:	more than 250
■ Trainees and students:	more than 20

BERTHOLD TECHNOLOGIES – worldwide





