

Your Partner for High-Power Ultrasound



Design, development, manufacture and sale of ultrasonic devices for laboratory, industrial, commercial, service, medical, pharmaceutical and dental applications

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"We provide highpower ultrasonic devices to optimise your results."



We take responsibility

We are passionate in our responsibility for the quality of our products and for the continuous development of the family business through independent decisions.

We continually monitor the latest requirements for ultrasound technology and the specific applications of our customers.

Our products are characterised by excellent operation and a long service life. They are therefore considered reliable tools for a smooth working process in laboratory, medical practice or industry applications.

Obefor Below J. Gelshe Stefan Bandelin

Managing Director Managing Director Joshen Bandelin

Jochen Bandelin Management Development

Our company

Since 1955, our family-owned company has been developing, producing and selling high-power ultrasonic devices as well as handy accessories and cleaning and disinfecting agents for the industrial, medical and laboratory sectors.

Due to the very wide range of products for ultrasonic cleaning and the implementation of process engineering methods, we are regarded as a full-range supplier for the

The high degree of specialisation in diverse applications enables optimal solutions for our customers.

BANDELIN

over

years of experience and industry expertise

over

employees

over

million

products sold

patents/utility models

Established 1946 by Wilhelm Bandelin

Managing Directors Jutta Gehrke (born Bandelin) and Stefan Bandelin

Headquarters, Development, Production and Sales

Products/brands

High-power ultrasonic devices with accessories and ultrasound-compatible preparations for laboratories, medicine and industry, including SONOREX, SONOREX TECHNIK, SONOPULS, TRISON, SONOMIC, BactoSonic, LABOCOOL, TICKOPUR and STAMMOPUR

Quality management:

BANDELIN's quality management is certified in accordance with DIN EN ISO 9001 and DIN EN ISO 13485.

For equipment qualification, we provide you with the templates for IQ/OQ documentation.

Special solutions:

. We would be happy to support you in providing solutions for individual tasks. OBL solutions are also part of our range of products.

We impart specialist knowledge on ultrasonic devices and their application in practice as well as on-site service. You receive numerous tips on applications to avoid application errors. Training courses are tailored to the requirements of the participants.

Whether bridging a repair or testing a device for your application – almost all device types are available.

Maintenance:

We can check device function and replace worn parts upon request.

Our employees are happy to assist you during our business hours. If a problem cannot be solved directly by the service personnel, we will ensure that a technician contacts you with the required specialist knowledge.

Range of services

Principles

Principles of our corporate culture

As an innovation-oriented medium-sized company in its third generation, promising long-term solutions are our primary focus. The products and processes, which have been perfected over many years, are reproduced with the highest precision and adapted to the constantly changing framework conditions.

Core competences

Added value for our customers

Our work culminates in reliable and robust products that always perform well even under demanding conditions of use.

This guarantees our customers smooth and economical operation of their own business activities.





Highest quality

Our customers have a decisive influence on the development and production of our products as well as on the high quality standards that every one of our products must meet. This is ensured by quality tests in all production stages as well as by a 100% final inspection.



Individual

You receive a product perfectly adapted to your special ultrasound application. Thanks to the modular combinability and application reference of the product series, special and exclusive applications can also be served.



Tailor-made

The implementation of customer-specific special solutions is one of our strengths. Thanks to the enormous vertical range of manufacture and comprehensive ultrasound expertise, we will work with you to find the right solutions.



Economical and efficient

Due to the high number of units, we can offer series-production units at an attractive price-performance ratio.



If a repair is required after many years of use, we will facilitate a quick repair at our premises.

We would be happy to advise you on applications and special applications of ultrasound. Our experts will tailor solutions for your specific application.

Certified

In order to ensure the quality of our products and the long-term satisfaction of our customers and users, we have maintained a quality management system since 1996. Certification in accordance with the DIN EN ISO 9001 and DIN EN ISO 13485 standards is a matter of course for us.



Professional advice

Just ask our ultrasound experts and benefit from their expertise. Thanks to over 65 years of practical experience, we have a professional solution for all questions regarding applications, suitable device technology and accessories.



Product solutions from a single source

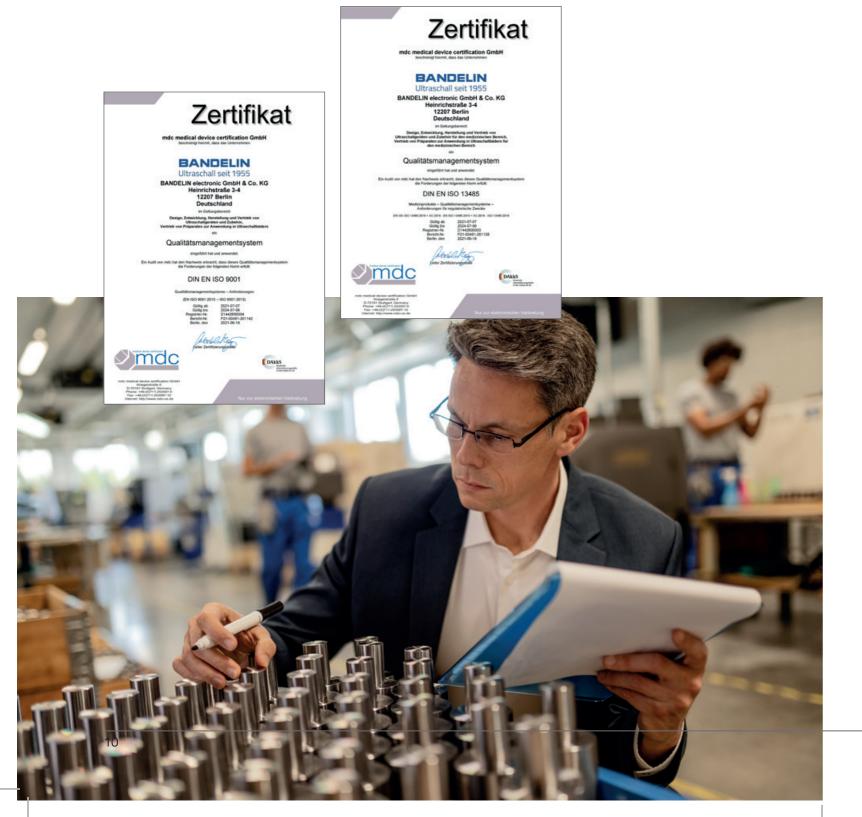
We provide ultrasonic devices with accessories perfectly tailored to the application. This includes insert baskets, holding racks, disinfectants and detergents.



Quality Management

As a manufacturer of medical devices, we have always focused on quality and safety. For more than 25 years, our quality management system has been certified in accordance with the DIN EN ISO 9001 and DIN EN ISO 13485 standards. Regular monitoring and re-certification serve to continuously improve our quality management and to meet the growing requirements placed on us and our products.





Association Activities

With our ultrasound expertise, we are involved in a number of associations and contribute to the optimum practical application of ultrasound technology by means of training and lectures.



DIN

The Deutsche Institut für Normung e. V. is the most important national standardisation organisation in the Federal Republic of Germany.







DGSV

The DGSV promotes the qualification of employees who process medical devices.

FiT

Fachverband industrielle Teilereinigung (Professional Association for Industrial Parts Cleaning) – Navigator for component cleaning

VGKL

Verband des Groß- und Außenhandels für Krankenpflegeund Laborbedarf (Association of Wholesale and Foreign Trade in Nursing and Laboratory Equipment)

Excerpt from our customer list and references



















































Quality from Germany

Everything from a single source

In order to ensure both the highest quality flexibility in new developments, we are constantly working on increasing our vertical range of manufacture.

The entire production process, from stainless steel sheet to the finished ultrasonic bath, takes place at one location.

Our highly integrated value chain means we can also produce small quantities at an attractive price-performance ratio for our customers.

The consistent investment in modern production machines pays off in efficient production and high component precision.

A strong sense of belonging and low staff turnover are guarantors of sustainable knowledge retention and transfer to the next generation. The close cooperation between development, production and sales enables direct exchange and optimal fulfilment of customer requirements.

Location

Development, Production and Sales in Berlin

Berlin-Lichterfelde is traditionally recognised as the nucleus of many of the world's most successful electrical engineering companies. This competence environment facilitated the early development of the company at its current location.

As the company grew, production capacity was continuously increased through expansion of space and modern production technologies.

Our customers and employees appreciate the excellent accessibility in the constantly growing

metropolis of Berlin.



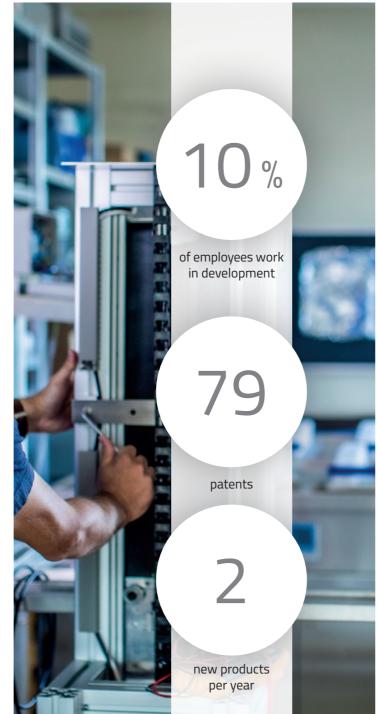
HERGESTELLT IN **DEUTSCHLAND**

Development and Innovation

From idea to series product

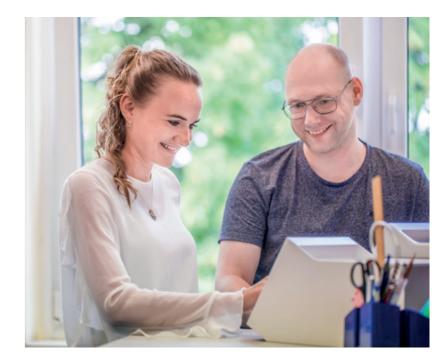
Since the company's founding, constant innovation and improvement of the customer benefit of the products have been the core of its success.

In addition to the further development of the tried-and-tested products, the company has also developed unique complete solutions for high-power ultrasound. These include highly specific instrument reprocessing devices that enable simultaneous rinsing, movement and ultrasonic cleaning of increasingly complex robotic instruments. A comprehensive range of accessories such as shakers, moving devices, sound proof boxes, sonication vessels and cooling solutions has been developed for the topic of "Sample preparation using ultrasound in the laboratory". These prepared applications offer customers an uncomplicated introduction to new analysis methods.

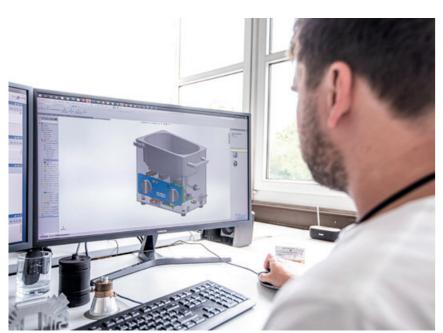


From the component cleaning sector came a comprehensive range of modular ultrasonic baths and corresponding accessories for the configuration of complete cleaning lines and associated media preparation.

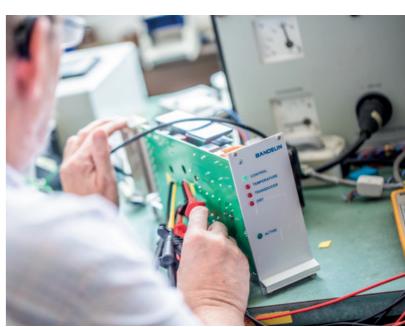
The interdisciplinary skills from the fields of electronics and mechanics as well as the close connection to the local production enable a fast sequence of prototypes. A total of 79 patents have been implemented as landmark innovations in our products.











Milestones

Third-generation family business

Enthusiastic about new technologies and with pronounced business sense, Wilhelm Bandelin founds RADIOLUX GmbH in Berlin-Steglitz. During the years of the "economic miracle", he starts series production of measuring instruments for determining the accuracy of mechanical mechanisms and founds the TICK-O-GRAF W. Bandelin KG for this purpose.

Technological advancement make it possible to produce high-power ultrasonic baths for cleaning watches and jewellery. These are initially produced at two small company sites in Berlin-Steglitz. The ever-increasing demand for ultrasonic cleaning devices for the reprocessing of medical instruments opens up a new business field and exceeds all expectations. The new, significantly larger company building location is in Berlin-Lichterfelde.











Graduate Engineer Stefan Bandelin Managing Director



Business Admin Graduate Managing Director



Dr. Jochen Bandelin Jutta Gehrke, born Bandelin Management Development

The successors of the founder Wilhelm Bandelin are committed to the success of the company on a daily basis with their interdisciplinary expertise in the fields of electrical engineering, process engineering and business administration.

The great independence of the company and short decision-making paths could therefore already be maintained in the third generation.

Both the fascination with the technical details and the view of the big picture come to fruition in the mediumsized company.

As time changes, the framework conditions and technologies for the development and production of complex machines are constantly changing. In order to ensure efficient production, new processes are continuously evaluated and incorporated into the existing conditions in a targeted manner. This includes optimising material supply and logistics as well as processing and storing products. The early start of the constant digitalisation of business processes is the most important component in corporate development.





Company History

: Wilhelm Bandelin founds RADIOLUX GmbH in Berlin-Steglitz

> Renaming to TICK-O-GRAPH



1954

1946

Production of the first ultrasonic homogenisers with tubular technology

SONADENT

Ultrasonic

1964 : 1967

dental scaler



SONOREX TRANSISTOR RK Ultrasonic baths with transistor technology

SONOREX Z

1971 : 1982

Two-part ultrasonic

built-in devices for

the medical field



SONOREX PR Ultrasonic pipette cleaner



SONOREX DIGITAL DK Digital ultrasonic baths

1990



SONOPULS HD Ultrasonic homogenisers



Initial certification in accordance with ISO 9001/ISO 46001

1955



Manufacture of high-power ultrasonic cleaning devices

1985

1986





First immersible transducer with power generator

SONOREX TECHNIK TG Power generators with thyristor technology

1992

1991



SONOREX TECHNIK RM Modular ultrasonic baths SONOREX TECHNIK MB Lifting device



SONOREX LG Market launch of adjustable and power-constant ultrasonic generators

1998 2001



SONOREX TECHNIK W Ultrasonic baths for shipping



SONOREX TECHNIK Immersible transducer, flat transducer plates

2002



SONOREX TECHNIK ZM Two-part industrial cleaning devices



SONOREX TECHNIK RB SONOBLOC tube reactor

Watch test instruments Ultrasonic baths

Utrasonic dental scaler

Homogenisers and *immersible transducers* and generators

Introduction of SONOREX First digital ultrasonic baths

First certification as a medical device

Modern generators Ultrasonic baths for industrial ultrasonic baths

with periphery for industry

Two-part ultrasonic baths for industry



SONOPULS HD Series 3000 ultrasonic homogenisers



SONOREX DIGITEC DT .../... RC Digital ultrasonic cleaning baths with infrared interface and **WINSONIC**

SONOMIC MC

: 2006

ultrasonic bath for MIS instruments



SONOSHAKE for sample preparation



SONOCOOL Ultrasonic bath with cooling

2010



SONOREX **DIGIPLUS DL** Digital ultrasonic baths with power control

2013

SONOREX TECHNIK RB

3 in./5 in. ultrasonic

tube reactors



SONOPULS HD Series 4000 ultrasonic homogenisers



Sound proof box LS 40 and rack HG 40 as accessories for ultrasonic homogenisers



SONOPULS HD Series 5000 ultrasonic homogenisers LABOCOOL LC 200 laboratory coolers for homogenisers LABOCOOL LC 400 laboratory cooler for standard ultrasonic baths

: 2008



2005

SONOREX TECHNIK ZM Modular ultrasonic baths with additional lateral sonication



2003

2004

SONOREX TECHNIK L Ultrasonic baths for blind cleaning

2009



SONOREX TECHNIK TO trough dryer

2017

TRISON 3000 Ultrasonic bath for

2016

2014

robotic instruments



2020

air circulation dryer



2022

SONOREX TECHNIK UT SONOREX CNp 28-2 high-power ultrasonic baths with pulsed vacuum



SONOREX TECHNIK IP67 generator The world's first waterproof ultrasonic generator

Multi-frequency ultrasonic baths Medicine: Cleaning of keyhole surgery instruments

Specialisation in the laboratory Medicine: Cleaning of robotic instruments

Production

From raw material purchasing to final assembly

From stainless steel sheet to the ready-to-use device, all production is done at our site. This historical and particularly large vertical range of manufacture enables a high level of specialisation of employees to the specific quality requirements of ultrasonic devices. It also guarantees a high degree of flexibility in terms of innovations and customer-specific solutions. Modern machinery for the production of series and individual parts creates additional efficiency and flexibility. The manufacturing processes perfected over several generations guarantee high product continuity and quality. Our qualified employees use their knowhow to ensure that components are optimally manufactured and processed at every processing station. We meet the special requirements for the precise processing of stainless steel components through regular training of our employees. With the help of new technologies, we are continuously developing the manufacture of our products in order to continue to be even more economical, precise and, above all, future-proof.



Our Range of Services

Thanks to our comprehensive network, clever logistics and dependable partners, our devices and accessories are available almost all over the world.

We believe that the manufacturer's responsibility does not end with the sale of the product. That's why we offer a comprehensive service for the benefit of our customers over the entire life cycle and for a wide range of applications of our products.

Maintenance

Upon request, we can check the function of the device and replace worn parts.

Repair

In the event of a defect, devices can be repaired by our most experienced employees. We store a large number of spare parts for the repair of our long-lasting products.

Certification

Every finished product undergoes a standard-compliant safety inspection. The test reports are saved with serial number accuracy.

Training

We provide specialist knowledge on ultrasonic devices and their application in practice as well as on-site service. You will receive lots of tips on applications and how to avoid application errors. Training courses are tailored to the requirements of the participants.

Quality Management

For device qualification as part of your quality management or validation, you will receive documentation for your IQ/OQ documentation for all types of equipment.

Technical Service

Our staff will be happy to answer any questions you may have. If a problem cannot be solved directly by the service personnel, we will ensure that a technician contacts you with the required specialist knowledge.

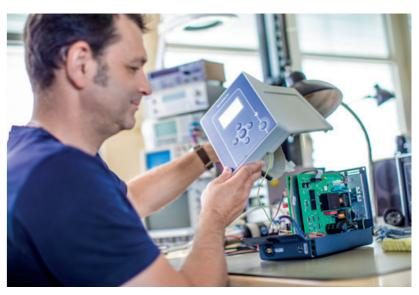
Rental

A wide range of different machine types are available for rent for testing new cleaning applications or bridging repairs.











Medicine

Ultrasonic baths are fundamentally an essential process step within the scope of instrument reprocessing. This primarily involves the pre-cleaning of contaminated and soiled instruments after their use in the treatment or operation.

Intensive pre-cleaning is the foundation for further process steps.

Instrument reprocessing is an important topic both in doctors' practices and in hospitals, in reprocessing or sterile supply units, otherwise known as CSSDs. Due to the different requirements for pre-cleaning due to the quantity and type of instruments used, BANDELIN offers ultrasonic baths as tabletop units in a wide range of sizes. Integrated devices are the preferred choice for the hospital sector. In addition, special devices for pre-cleaning hollow body, MIS and robotic instruments are also available in order to clean almost all ultrasound-suitable instruments intensively, quickly and gently.







SONOREX DIGITEC



STAMMOPUR





Dental

Whether dental practice, orthodontics or dental laboratory, BANDELIN ultrasonic baths have been integral equipment for decades. The range of possible applications for the ultrasonic bath is as diverse as it is useful: Cleaning and chemical disinfection of instruments, dentures and other aids, removal of production residues and inorganic materials of all kinds such as plaster, alginates and cements.

BANDELIN ultrasonic baths simplify everyday life in the practice and in the laboratory through effective, time-saving and thorough cleaning.

Suitable accessories and the appropriate preparation are available for all relevant applications.



SONOREX SUPER



SONOREX DIGITEC







STAMMOPUR TICKOMED



Our SONOREX TECHNIK professional ultrasonic cleaning devices are used for effective component cleaning in industry and workshops.

Common applications include cleaning turned and milled parts, polished parts, tools, filters, valves, pumps and

For optimum cleaning results, we offer you a wide range of suitable cleaning agents that are tailored to the type of contamination and the base material to be cleaned.

Cleaning examples



SONOREX TECHNIK



SONOREX CNp 28-2



Laboratories

SONOREX ultrasonic baths and SONOPULS ultrasonic homogenisers are part of the equipment of any laboratory and are practically unbeatable for cleaning laboratory equipment, sample preparation for subsequent analysis, emulsification or cell disruption. All products have one thing in common: They focus on both the user and the processes surrounding the ultrasound. An application database was established on the basis of customer contacts. Information on the differentiated product and accessory range was paired with an overview of detailed aspects for the various application areas. This makes it easier for users to use the devices successfully and supports a high quality of the application. We do not just focus on what is needed in institutes or universities today. Our specialist knowledge, close relationship with users and our overview of the industry enable us to determine the needs of the laboratory in a targeted manner and bring product ideas to market maturity. As a result, the portfolio has been continuously improved and expanded. The device is designed for long-term use.

SONOREX SUPER



SONOREX DIGITEC







SONOPULS





SONOSHAKE TICKOPUR

LABOCOOL

BactoSonic

TICKOPUR



Frocess Engineering

The SONOREX TECHNIK sonoreactors enable flow-through sonication of high volume flows in process engineering.

This enables the implementation of processes familiar from the laboratory in large-scale systems. This applies to the support of industrial and biotechnological processes in cleaning, disintegration, demulsification, degassing and disagglomeration.



SONOBLOC





Customer-specific designs

Tailor-made features with ultrasound

In addition to the wide range of series products, we also offer our customers the option of equipping individual designs with our high-power ultrasound.

The ultrasonic oscillating systems can be permanently connected to almost any flat metal surface with a diameter of at least 50 mm. Depending on the desired power and size of the customised ultrasonic system, a variety of ultrasonic transducer systems can be applied to your component.





OEM/OBL

Our Quality – Your Brand

Are you interested in high-quality ultrasonic baths, but do not have your own production options? The solution is an OEM or OBL product. Almost all ultrasonic baths in our range can be customised in terms of appearance. Adaptations can be made with individual front plates, type plates and customer-specific operating instructions. We already have close partnerships with renowned dealers from a range of sectors and other manufacturers, who expand their own portfolio with ultrasonic baths with their own branding or company logo and benefit from BANDELIN's extensive experience and manufacturing expertise.

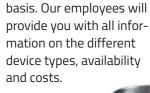
Our team will be happy to support you in the design of the OEM/OBL agreement in a personal consultation in addition to the selection of devices that suits you.

Device Rental

Testing for your application – bridging maintenance and repair times – time-limited projects

Do you require a device for testing a procedure, cleaning parts, bridging a maintenance/calibration or repair, or for use on a time-limited project?

Almost all types of equipment from our portfolio are available for rental, with and without accessories. Rental is usually done on a weekly



solutions.

Simply call us or contact us by e-mail.

We are also happy to implement completely individual

Telephone: +49 30 76880-0 E-mail: info@bandelin.com



available only within Germany

Test cleaning and field service

On site for you

Our product consultants have many years' experience and are available by telephone or e-mail to select the optimal product for the respective cleaning application. For very special cleaning tasks, we also offer a documented test cleaning in our application laboratory free of charge. If you are considering the construction of a multi-stage cleaning line in your production facility, our sales force will address any questions regarding the optimum selection of components at the customer's location.



Training and Service

First-hand expertise

In our user training courses, we convey the industryspecific expertise in devices, accessories and detergents and their practical application. You will receive numerous professional tips directly from the manufacturer. This enables optimal use of the devices. The scope and

contents of the device training courses are tailored to the requirements and knowledge levels of the participants. Regular checks of all device functions, electrical values and checks for visible wear (e.g. cavitation erosion) will protect against downtime and help ensure long service life and value retention. You will also receive maintenance and test reports.

Would you like to carry out a repair yourself or do you need to install spare parts on your device? Please enter the serial number. We also provide service instructions. Of course, you can also send your device directly to us. We also provide rental equipment for the duration of the repair.





Working at BANDELIN

Over 100 employees at BANDELIN ensure the highest quality – from initial assembly to the sale and shipping of the devices. Everything comes from a single source. The various departments work together under one roof in a family atmosphere and benefit from short distances and uncomplicated coordination.

We offer a wide range of employment options, whether in production, device logistics, sales, device development or marketing. Friendly colleagues, fair pay and family-friendly working hours are the norm. Joint sports events or Christmas parties are actively organised by the company across departments and teams. Applications are very welcome.

Please send applications to: bewerbung@bandelin.com

Flexitime

More scope for the family and everyday appointment stress – without a lot of bureaucracy.

Annual leave

30 days' annual leave and a general closed period between Christmas and New Year, as well as bridging days ensure a pleasant working atmosphere.

Pension

You can never do enough for the future, which is why we simply include the company pension scheme and a contribution to capital-forming benefits.

Safety

Even in difficult times, we offer secure jobs in a stable industry.



Sustainability

Our ultrasonic devices are produced in high quality for a long lifespan.

We are continuously looking for solutions to increase energy and material efficiency in production for sustainable production.

The energy required for production is provided to an increasing extent from renewable sources and by means of highly efficient technologies.

Below you can see a selection of our diverse projects:



Photovoltaic system

The solar system on our company roof with a total output of 54 kW makes a significant contribution to the company's sustainable power supply. At the weekend, the surplus electricity is fed into Stromnetz Berlin, where it boosts the share of renewable energies in the grid. The majority of the device modules are south facing and generate the most output at midday. Approximately half of the modules are oriented towards the south-east and south-west and allow the sun to be used efficiently in the morning and afternoon. This means that solar energy can be used for production during a broad period of the day.

LED conversion

To further reduce the building's power requirements, we have changed the lights in production and administration to LED lights.

Heat pump technology

Two high-efficiency heat pumps facilitate use of machine waste heat to heat the office space during the winter months. An underground storage tank is also used to balance the seasonally dependent heating and cooling requirements.



Combined heat and power plant

During the winter months, we use our combined heat and power plant to generate electricity and heat for heating the company building and for hot water production.

In this process, natural gas is the fuel and is converted into electrical energy. We use the inevitably generated waste heat to heat the building via a water circuit. Over the course of the year, this technology covers over 50% of the company's heat requirement.

If the outside temperature is particularly low, our condensing gas boilers switch on automatically and ensure consistent pleasant temperatures.

Nitrogen generation

A system installed at the site for separating ultra-pure nitrogen from the air replaces regular truck deliveries of large quantities of the process gas required for production.

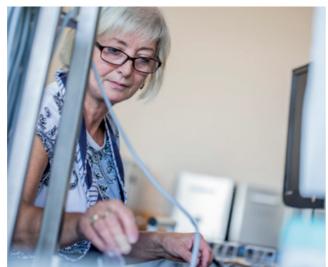
Thanks to the smart control of the generating system, excess electricity can be used for in-house nitrogen generation.

Social Engagement

Reaching targets together

To encourage the young generation to learn a technical profession, we offer student internships, providing the opportunity to gain an insight into production. For new-starters in the laboratory field and trade, we offer free training to obtain clear basic knowledge in the application of ultrasound technology. The professional qualification of career starters in the company has proven itself over many years, meaning that employment for 25 years or more is not uncommon. We offer courses for further qualification. We also actively promote dual studies and offer the opportunity for the further development of employees in the company. A company pension scheme established since the company was founded makes a significant contribution to the financial security of employees after their time with the company. As a sign of our link to our location, we regularly subsidise projects in social facilities in the surrounding area.







Made in Germany

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Certified in accordance with ISO 9001 and ISO 13485



We are always glad to offer you a personal consultation! Ask our experts.

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