



## **NIRSolutions™** Maximize your efficiency

NIR analysis offers rapid, affordable and precise results. It enables real-time decision making for enhanced quality and higher productivity. BUCHI's NIRSolutions™ support you in mastering your daily challenges from incoming goods inspection to finished product release.



## Core messages to our customers

BUCHI creates added value with “Quality in your hands”

“Quality in your hands” is the guiding principle that shapes our philosophy and our actions. It challenges us to provide outstanding services that are precisely tailored to your needs. This means that we must stay in close contact with our customers. That is why we keep in touch and continue to work very hard to understand you and your business even better.

We help you by providing high-quality products, systems, solutions, applications and services that offer you added value. This allows you to focus entirely on your processes and your work.



### Easy

You handle complex processes, do challenging work and want to focus on what is essential. We support you by providing carefully designed solutions as well as instruments and systems that are easy to operate.



### Competent

You need products, systems, solutions, applications and services that are precisely tailored to your needs. We have the technological expertise and decades of experience needed to provide competent support and work with you to continually improve our market services.



### Reliable

You want to be able to rely completely on your partner for products, systems, solutions, applications and services. We guarantee the quality and functionality of our equipment and will continue to help you quickly and efficiently whenever something does not operate to your satisfaction.



### **Cost-effective**

You want to achieve the best possible results using efficient solutions. We help you to handle your jobs and processes economically. We strive to create a high level of economic benefit and maximum added value for you.



### **Safe**

You are working in an environment in which safety is a high priority. By collaborating closely with you, we do everything in our power to make our products, systems, solutions, applications and services as safe as possible for people and the environment.



### **Global**

You value personalized service and short communication channels. As an international family-owned business with our own subsidiaries and qualified distributors, we have a presence wherever our customers are located. Our local staff and the large number of satisfied customers around the world give you the assurance that you are working with the right partner.



### **Sustainable**

You prefer a partner who acts responsibly when it comes to current environmental challenges. We support environmentally friendly processes and manufacture products that have a long service life. We utilize advanced technologies in order to conserve energy and water and leave the smallest environmental footprint possible.



**We offer NIR Solutions™ and beyond**  
 Enhancing productivity and quality

We offer a broad spectrum of tailored NIR Solutions™ meeting the needs of your business from the analysis of common nutritional parameters in food production to quality control of pharmaceutical dosage forms.

**Food and Beverage**



Control dairy, meat, milling and other food products for

- moisture
- macronutrients
- ash and fiber
- rheological properties

**Feed**



Test raw materials, premixes and finished products for

- moisture
- fat
- protein
- ash and fiber
- ADF and NDF
- amino acids

**Environmental Analysis**



Customize accurate calibrations to measure

- Moisture, organic carbon and total nitrogen content of soils
- fertilizers formulation
- biogas potential of biodegradable feedstock and urban waste

**Pharma**



Perform regulatory compliant

- raw material identification and/or qualification
- tablet content uniformity analysis
- final product release testing

**Chemical**



Control processes by

- raw material qualification
- hydroxyl number measurement
- polymerization end-point determination
- residual moisture/ solvent quantification

**Academia**



Make new discoveries with BUCHI NIR Solutions™. We support the researchers efforts with flexible products coupled with our application expertise.

## NIRSolutions™ along your value chain

For over 50 years we partner with our customers to assist them in meeting their goals. We deliver enabling solutions from needs assessment to the development of innovative products. Competent application support, efficient data management and professional technical services complete our offering. Our NIRSolutions™ span across your entire value chain from incoming goods inspection all the way to release control of your finished product.



	Research & Development	Incoming materials warehouse	Production	Finished product storage	NIRSolutions
Sample analysis in the laboratory	●	●	●	●	«NIRSolutions™ Laboratory» p. 6
Material qualification in the warehouse		●			«NIRSolutions™ Warehouse» p. 8
Analysis of intermediates at the production line			●		«NIRSolutions™ At-line» p. 10
On-line measurement of in-process samples			●		«NIRSolutions™ On-line» p. 12

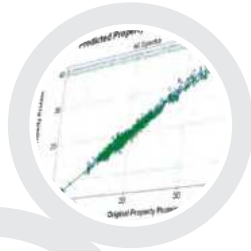
Find your NIRSolution at:  
[www.buchi.com/nir/solutions](http://www.buchi.com/nir/solutions)





## «NIRSolutions™ Laboratory» Precise analytical results within seconds

You need fast and reliable information about your samples in order to take far-reaching decisions. Whether you are performing analysis for research or quality control our «NIRSolutions™ Laboratory» with dedicated measurement cells delivers precise analytical results for a broad variety of sample types.



NIRWare® Software



Measurement cell: Solids



NIRFlex® N-500 Solids



NIRCal® Software

## Your most important benefits

### Dedicated

- Dedicated measurement cells perfectly optimized for the analysis of samples such as: solids, powders, tablets, granulate materials and liquids

### Fast and safe

- Get results within seconds
- Obtain several parameters simultaneously
- No need for chemicals or solvents and no sample preparation
- Automated data transcription into LIMS

### Superior data quality

- Precise and accurate results due to FT-NIR wavelength precision
- Robust prediction models thanks to powerful chemometrics software
- Direct and effortless transfer of calibrations within your analytical network

## Your «NIRSolutions™ Laboratory»



- Spectrometer base unit: NIRFlex® N-500
- Measurement cell: Solids
- Instrument control: NIRWare® Software (Page 14)
- Calibration development: NIRCal® Software (Page 15)
- Options: various measurement cells for different sample types, spectra libraries for pharma identification, pre-developed quick-start calibrations



- Basic operation and maintenance training
- Advanced calibration training
- Comprehensive IQ/OQ documentation
- Customized calibration support
- Preventive maintenance including IQ/OQ
- Minimize downtime with our service hotline

---

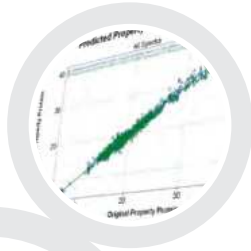
*“Barilla Food Company has always been characterized by a clear focus on quality, as demonstrated by significant investments in research and innovation. Since 2005 the company has put into action a network of Fourier Transform NIR Spectrometers for Quality Control Laboratories of its European bakery plants.”*  
By Dr. Ugo Bersellini, Barilla G. e. R. F.lli SpA, Central Research Labs, Italy

---



## «NIRSolutions™ Warehouse» Reliable material qualification in the warehouse

You need fast and convenient inspection of incoming goods as a prerequisite for ensuring superior quality of your product. Our «NIRSolutions™ Warehouse» with multi-bundle fiber optic probe offers reliable and precise qualitative and quantitative analysis directly in the warehouse.



NIRWare® Software

Measurement cell:  
Fiber Optic Solids



NIRFlex® N-500 Fiber Optic



NIRCAl® Software

## Your most important benefits

### Reliable

- Uninterrupted operation through robust multi-bundle fiber optic probe, automatically switching twin-lamp safeguard
- Robust and precise polarization FT-NIR technology
- Error-free identification even of chemically similar substances

### Fast

- Immediate measurement without sample preparation and cleaning procedures
- Rapidly develop robust prediction models with powerful chemometrics software
- Short implementation time through pre-existing spectra libraries (e.g. pharma)

### Compliant

- Fully compliant with pharma regulations like international pharmacopoeias, GMP guidelines and US FDA 21 CFR Part 11
- Full traceability through calibration and validation lifecycle concept
- Data security through electronic signatures

## Your «NIRSolutions™ Warehouse»



- Spectrometer base unit: NIRFlex® N-500
- Measurement cell: Fiber Optic Solids
- Instrument control: NIRWare® Software (Page 14)
- Calibration development: NIRCal® Software (Page 15)
- Options: various measurement cells for different sample types, disposable plastic sleeves and spectra libraries (e.g. pharma)



- Basic operation and maintenance training
- Advanced calibration training
- Comprehensive IQ/OQ documentation
- Customized calibration support
- Preventive maintenance including IQ/OQ
- Minimize downtime with our service hotline

---

*The NIRFlex® N-500 in combination with the disposable sleeve makes day-to-day work easier due to its ease of use and efficiency. Since it requires no use of chemical reagent and no sample preparation, the analysis is more economical and environmentally friendly. It is the key for cost-efficient analysis at a high quality level, performed in a short time."*

By Zhang Yan, Analytical Engineer, Bayer HealthCare, Qidong, Jiangsu, P.R. China

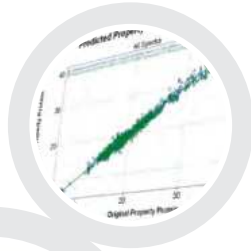
---



## «NIRSolutions™ At-line»

Fast analysis of intermediates at the production line

You need fast quality control of intermediate products to reduce waste and optimize your manufacturing processes. Our «NIRSolutions™ At-line» brings the accuracy of FT-NIR analytical technology into production environments for the precise determination of chemical and physical properties.



NIRWare® Software



Magnetic spinner



NIRMaster™ Pro



NIRCal® Software

## Your most important benefits

### Efficient

- Fast and precise results in just 16 seconds
- Analysis of several quantitative parameters simultaneously even at low concentrations
- Time saving quick-start calibrations

### Robust and reliable

Uninterrupted operation through

- vibration-proof FT-polarization interferometer and embedded PC
- automatically switching twin-lamp safeguard
- certified dust and splash water protection (IP54)

### Easy to use

- User-friendly touch screen operation
- Easy to operate through customizable user interface
- Easy to clean (IP54)

## Your «NIRSolutions™ At-line»



- Spectrometer: NIRMaste™ Pro
- Magnetic spinner for sample cups
- Instrument control: NIRWare® Software (Page 14)
- Calibration development: NIRCal® Software (Page 15)
- Options: unbreakable sample cup, higher protection: NIRMaste™ Pro IP65



- Basic operation and maintenance training
- Advanced calibration training
- Comprehensive IQ/OQ documentation
- Customized calibration support
- Preventive maintenance including IQ/OQ
- Minimize downtime with our service hotline

---

*“BUCHI FT-NIR Spectrometers are now in daily routine use for all five labs. Ring tests to check repeatability of results among our FT-NIR network are carried out. The statistic of results obtained shows that the five spectrometers using the same applications without correction factors produce analysis reproducible within the range of specification of Provimi Russia quality control’s policies.”*

By Dr. Maxim Yu. Filippov, Provimi Russia, Research Service & Consulting Department, Russia

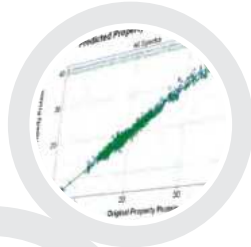
---



## «NIRSolutions™ On-line»

Direct on-line measurement of in-process samples

You need to control your processes tightly to reduce waste and optimize your manufacturing operation. Our «NIRSolutions™ On-line» offers continuous monitoring of critical parameters and therewith the ability to optimize processes in real time.



NIRWare® Software



NIRFlex® N-500 SMA



Measurement cell: SMA



NIRCal® Software

## Your most important benefits

### Efficient

- Time saving quick-start calibrations
- Maximum information content through measurement of several parameters simultaneously
- Automated data transcription into MES

### Productive

- Real-time process optimization through continuous measurement
- Automated process control through unattended data acquisition

### Reliable

Uninterrupted operation through

- vibration-proof FT polarization interferometer technology
- permanent performance verification through internal standard checks
- automatically switching twin-lamp safeguard

## Your «NIRSolutions™ On-line»



- Base unit: NIRFlex® N-500
- Measurement cell: SMA
- Instrument control: NIRWare® Software (Page 14)
- Calibration development: NIRCal® Software (Page 15)
- Options: liquid samples (immersion process probe), powder/cream samples (reflectance process probe), fiber optics of customizable length



- Basic operation and maintenance training
- Advanced calibration training
- Comprehensive IQ/OQ documentation
- Customized calibration support
- Preventive maintenance including IQ/OQ
- Minimize downtime with our service hotline

---

*“Benefits of NIR implementation for our soap production are just-in-time process management, better quality, loss reduction, less environmental impact because of no chemicals, standardization among sites and supply chain/R&D/supplier fully aligned”*

By Andre Krell Pedro, PhD, Global R&D Manager, Unilever Brazil

---



## **NIR Solutions™ NIRWare** Easy and efficient system operation

Operating a BUCHI FT-NIR spectrometer without advanced expertise is easy thanks to the intuitive NIRWare® operator software.



### Your most important benefits

#### Easy to use

- User-friendly interfaces: simplified for production line, detailed for the laboratory
- Error-free data exchange with automated interface from LIMS, MES and WES
- Centralized multisite network management through NIRAnywhere Software
- Safe operation through automatic identification of appropriate measuring cell versus chosen method

#### Data security

- Seamless records of data and user activity
- Secure data exchange with digital signatures and encryption
- Compliant with FDA guideline 21 CFR Part 11

#### Flexible

- Customizable user interface for different applications and needs
- Broad range of formats for bidirectional data exchange (MS Excel, Adobe Pdf, CSV, XML, etc.)
- Automated data transfer to company ERP and formulation systems (Brill Formulations, Anunir Specman, etc.)

---

Find more information about NIRWare® at:  
[www.buchi.com/nirware](http://www.buchi.com/nirware)





## **NIR Solutions™ NIRCal** Fast and reliable system operation

NIRCal® is a powerful chemometric software package to develop robust NIR methods which lead to fast and reliable NIR prediction results.



### Your most important benefits

#### Tailored to your need

- Achieve the most appropriate calibration from a broad range of chemometric methods (PLS, PCR, MLR, SIMCA and cluster analysis)
- Flexible pretreatment of spectral information leads to better prediction models
- Allows the integration of existing NIR data from any vendor

#### Fast and powerful

- Shorter method development time due to patented automated "Calibration Wizard"
- Time savings through rapid calculation of large data sets
- Shared database allows decentralized application of calibrations

#### Reliable results

- Reliable prediction results thanks to multiple criteria for outlier detection
- Ingenious validation tools and detailed calibration protocols
- Better understanding due to interactive graphical visualization of data

---

Find more information about NIRCal® at:  
[www.buchi.com/nircal](http://www.buchi.com/nircal)





## The best NIR Solutions™ for your need

A configuration for every need by industry and sample type



NIRFlex®  
Solids cell



NIRFlex®  
Liquids cell

Needs/Solutions	Page	NIRFlex® Solids cell					NIRFlex® Liquids cell	
		Petri dish add-on	Vial add-on	XL add-on	Flow cell add-on	Spinner add-on	Cuvette	Vial
«NIR Solutions™ Laboratory»	6	●	●	●	●	●	●	●
«NIR Solutions™ Warehouse»	8							
«NIR Solutions™ At-line»	10							
«NIR Solutions™ On-line»	12							
<b>Software</b>								
NIR Solutions™ NIRWare	14	●	●	●	●	●	●	●
NIR Solutions™ NIRCal	15	●	●	●	●	●	●	●
<b>Samples types</b>								
Powders		●	●	●				
Granulate/solids		●	●	●				
Tablets, capsules		●						
Gels, creams and pastes		●						
Clear liquids		●			●		●	
Viscous liquids		●						
<b>Industry</b>								
Food and beverage		●	●	●	●	●	●	●
Feed and forage		●	●	●	●	●	●	●
Environmental analysis		●	●			●		
Pharma		●	●	●			●	●
Chemical		●	●	●	●	●	●	●
Academia		●	●	●	●	●	●	●



## Why NIR? General aspects

What is NIR spectroscopy?

NIR spectroscopy (NIRS) is an analytical technology based on near infrared light generated by a special halogen lamp. NIR light is not harmful. The NIR radiation interacts with the sample and generates spectra which are characteristic for its chemical structure.

Why should I consider NIR spectroscopy in my processes?

NIR spectroscopy is a fast non-destructive analytical method. Almost any kind of sample can be scanned within seconds with minimal or even no preparation at all. NIRS can verify the identity of a sample and quantify multiple chemical and physical properties simultaneously.

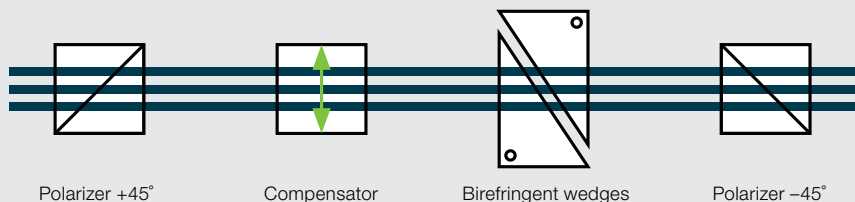
What are my commercial benefits of using NIR spectroscopy?

Research and quality control laboratories benefit from NIRS alike. While researchers can accelerate their experimentation, QC departments benefit from the ability to analyze hundreds of samples per day – both saving substantial amounts of time and money.

## Why do we use a polarization FT-NIR spectrometer?

How does a polarization interferometer work?

The heart of the interferometer consists of two bi-refringing crystal wedges. By moving one wedge, a part of the light undergoes a phase shift. This phase shift alters the polarization of the entire beam. After passing a polarization filter the interferogram is detected. All wavelengths are measured simultaneously.



Do I need to calibrate my BUCHI FT-NIR spectrometer?

There is no need for instrument calibration. The term “calibration” is used in NIR with two different meanings:

- Unlike other NIR instruments, the BUCHI instrument does not need to be calibrated since the accuracy is ensured by internal standards and permanent laser-aided alignment.
- In NIR spectroscopy a calibration model is generally required to interpret sample data. This model needs to be developed on setup of the application. BUCHI’s NIRCal® Software makes it straight forward to develop robust and reliable calibrations by correlating NIR data with reference analytics.

What are the benefits of BUCHI’s FT-NIR with polarization interferometer?

BUCHI’s FT technology combines accuracy and robustness. Fourier Transform spectrometers grant high wavenumber accuracy and best signal to noise ratio. Polarization interferometers are insensitive to mechanical disturbances and hence ideal for rough environments.

## In which environment can I use NIR?

Can I work with a BUCHI spectrometer in any environment? Yes, the NIRFlex® N-500 is a benchtop spectrometer mostly for laboratory use. The NIRMaste<sup>TM</sup> and NIRMaste<sup>TM</sup> Pro provide high ingress protection and are therewith ideal for production sites.

What does IP54 and IP65 stand for? IP: Ingress Protection against dust and water  
54: limited dust protection (5\_); splash water protection (\_4)  
65: total dust protection (6\_); water jet protection (\_5)

## What is chemometrics?

How does it work? Chemometrics is the application of mathematical and statistical algorithms to sample spectra in order to extract the relevant information. Developing calibration models by correlating known results from reference analysis to an NIR spectra database enables the prediction of chemical or physical properties of unknown samples.

What does it mean that NIR spectra need pretreatment? Statistical pretreatments like normalization or derivatives are commonly used to eliminate noise included in spectral data. BUCHI's NIRCai<sup>®</sup> Software provides the broadest range of pretreatment functions and other tools to optimize your dataset leading to powerful calibration models.

## NIR spectroscopy and reference analytics

Can NIR spectroscopy completely replace reference analytics? Replace completely the reference analytics is not the target. NIR spectroscopy is a powerful technique to rapidly and reliably screen samples and therewith eliminate a lot of routine analysis. A limited amount of reference analysis is still needed to develop the initial calibration models and to periodically verify their performance.

How many parameters can be analyzed simultaneously? While the number of parameters measurable within a calibration model is only limited by computing power and complexity of the analysis, it is common to analyze 15-30 properties at the same time.





## Complete your NIRsolutions™ portfolio

Complementary and related products

### NIRWare® 2Ex Software



Export information from the NIRWare® database to a standard Microsoft Excel file using the NIRWare® 2Ex module. Use filter functions to export only the selected results of interest.

### LIMS Software Interface



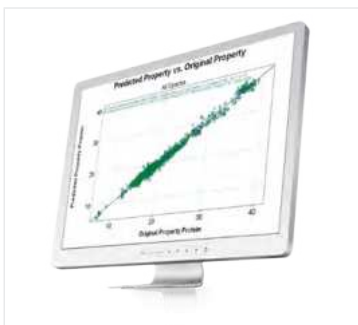
Link the NIRWare® Software to LIMS, MES and WMS systems. Automate your sample information and result data management.

### NIRAnywhere Software



The powerful tool which enables NIR-administrators to roll out applications and backup measurement spectra as well as results in multi-site instrument networks.

### Quantitative quick-start calibrations



Benefit from BUCHI's many years of calibration development expertise by using our turnkey calibrations for e.g. meat, dairy and milling products.

### Pharma ID Libraries



NIR product identification libraries offer reduced implementation time and cost. Available for pharmaceutical, chemical and nutraceutical substances.

### Performance Verification KIT



The BUCHI performance verification kit includes all required standards for full compliance with US as well as EU and Japanese Pharmacopoeias.

## Mixer



The Mixer B-400 combines optimal efficiency with simple operation and flexibility where sample homogenization is required.

## KjelMaster



The KjelMaster K-375 is the ideal reference technology to calibrate NIR Spectrometers for protein determination.

## Dumas solution



The DuMaster D-480 enables unattended and flexible determination of nitrogen or protein according to the Dumas combustion method.

## Spray-Dryer



The Mini Spray Dryer B-290 is the product of choice for the quick and gentle drying to powder of liquid solutions.

## Extraction units



Total fat extraction in full compliance with AOAC regulations with the help of the Extraction Unit E-812 and E-816.

## Laboratory Rotary Evaporator



The Rotavapor® R-210 / R-215 features a complete evaporation solution offering maximum safety for your compound.



## Support and customer service

From feasibility to preventive maintenance

You value an efficient and personalized service. Our network of professional application specialists and service technicians as well as a large number of satisfied customers around the world give you the assurance that you are working with the right partner.



### Application experience

The development of a calibration is a matter of experience that includes not only the prediction model itself, but also the reference analytics in the laboratory. With more than 20 years of practical NIR experience BUCHI is a competent partner to support your daily business.

Find more about our applications at:  
[www.buchi.com/nir/applications](http://www.buchi.com/nir/applications)



### Pre-calibration development

Our team of highly qualified specialists continuously expands our collection of pre-calibrations and application notes. Read about best practices and how BUCHI's NIR spectroscopy has helped other customers to meet their goals and objectives.

Find more about our pre-calibrations:  
[www.buchi.com/nir/precalibration](http://www.buchi.com/nir/precalibration)



### Calibration support

Calibration models have to be tailored to the specifics of given samples in order to deliver optimal results. Our application specialists will support you with their expertise whether you want to work with one of our quick-start calibrations or you want to develop your own chemometric models using our NIRCal® Software.

Find more about our calibration support at:  
[www.buchi.com/nir/calibration-support](http://www.buchi.com/nir/calibration-support)





## Profit from workshops, trainings and seminars

We regularly offer practical seminars and workshops, often in co-operation with other partners in the field of sample preparation and analysis. Customer contributions thereby underline how our solutions facilitate the daily routine. We also attend many local and international scientific and industrial congresses.

---

Find an overview of our activities:  
[www.buchi.com/events](http://www.buchi.com/events)



## Use your product most effectively

We help you to set your product properly into operation. We provide thorough Installation/Operation Qualification (IQ/OQ) services to ensure compliance with FDA, GLP/GMP standards or GAMP guidelines. Whether it is because of an initial installation, requalification or relocation, we provide professional compliance verification.

---

Find out more about our services:  
[www.buchi.com/service-support](http://www.buchi.com/service-support)



## Minimize downtimes

Avoid products downtimes with preventative maintenance and tailored service packages. We offer a product warranty of two years and guarantee ten years of spare parts availability.

---

Get in touch with us:  
[www.buchi.com/warranty](http://www.buchi.com/warranty)



## Global Network

Our subsidiaries and qualified distribution partners ensure proximity where ever you are. Since we are familiar with your requirements, we use our experience and knowledge to provide first-rate solutions.

---

Get in touch with us:  
[www.buchi.com/worldwide](http://www.buchi.com/worldwide)



# BUCHI Laboratory Solutions

Discover the benefits of our different solutions



Laboratory Evaporation Solutions



Industrial Evaporation Solutions



Spray Drying & Encapsulation Solutions



Parallel Evaporation Solutions



Preparative Chromatography Solutions



Digestion and Distillation Solutions



Solutions for Protein Determination



Extraction Solutions



NIRSolutions™

## Quality in your hands

### BUCHI Affiliates:

**BÜCHI Labortechnik AG**  
CH – 9230 Flawil 1  
T +41 71 394 63 63  
F +41 71 394 65 65  
buchi@buchi.com  
www.buchi.com

**BUCHI Italia s.r.l.**  
IT – 20010 Cornaredo (MI)  
T +39 02 824 50 11  
F +39 02 57 51 28 55  
italia@buchi.com  
www.buchi.it

**BUCHI Russia/CIS**  
United Machinery AG  
RU – 127787 Moscow  
T +7 495 36 36 495  
F +7 495 981 05 20  
russia@buchi.com  
www.buchi.ru

**Nihon BUCHI K.K.**  
JP – Tokyo 110-0008  
T +81 3 3821 4777  
F +81 3 3821 4555  
nihon@buchi.com  
www.nihon-buchi.jp

**BUCHI Korea Inc**  
KR – Seoul 153-782  
T +82 2 6718 7500  
F +82 2 6718 7599  
korea@buchi.com  
www.buchi.kr

**BÜCHI Labortechnik GmbH**  
DE – 45127 Essen  
Freecall 0800 414 0 414  
T +49 201 747 490  
F +49 201 747 492 0  
deutschland@buchi.com  
www.buechigmbh.de

**BÜCHI Labortechnik GmbH**  
Branch Office Benelux  
NL – 3342 GT  
Hendrik-Ido-Ambacht  
T +31 78 684 94 29  
F +31 78 684 94 30  
benelux@buchi.com  
www.buchi.be

**BUCHI China**  
CN – 200052 Shanghai  
T +86 21 6280 3366  
F +86 21 5230 8821  
china@buchi.com  
www.buchi.com.cn

**BUCHI India Private Ltd.**  
IN – Mumbai 400 055  
T +91 22 667 75400  
F +91 22 667 18986  
india@buchi.com  
www.buchi.in

**BUCHI Corporation**  
US – New Castle,  
Delaware 19720  
Toll Free: +1 877 692 8244  
T +1 302 652 3000  
F +1 302 652 8777  
us-sales@buchi.com  
www.mybuchi.com

**BUCHI Sarl**  
FR – 94656 Rungis Cedex  
T +33 1 56 70 62 50  
F +33 1 46 86 00 31  
france@buchi.com  
www.buchi.fr

**BUCHI UK Ltd.**  
GB – Oldham OL9 9QL  
T +44 161 633 1000  
F +44 161 633 1007  
uk@buchi.com  
www.buchi.co.uk

**BUCHI (Thailand) Ltd.**  
TH – Bangkok 10600  
T +66 2 862 08 51  
F +66 2 862 08 54  
thailand@buchi.com  
www.buchi.co.th

**PT. BUCHI Indonesia**  
ID – Tangerang 15321  
T +62 21 537 62 16  
F +62 21 537 62 17  
indonesia@buchi.com  
www.buchi.co.id

**BUCHI do Brasil**  
BR – Valinhos SP 13271-570  
T +55 19 3849 1201  
F +41 71 394 65 65  
latinoamerica@buchi.com  
www.buchi.com

### BUCHI Support Centers:

**South East Asia**  
**BUCHI (Thailand) Ltd.**  
TH – Bangkok 10600  
T +66 2 862 08 51  
F +66 2 862 08 54  
bacc@buchi.com  
www.buchi.com

**Latin America**  
**BUCHI Latinoamérica Ltda.**  
BR – Valinhos SP 13271-570  
T +55 19 3849 1201  
F +41 71 394 65 65  
latinoamerica@buchi.com  
www.buchi.com

**Middle East**  
**BUCHI Labortechnik AG**  
UAE – Dubai  
T +971 4 313 2860  
F +971 4 313 2861  
middleeast@buchi.com  
www.buchi.com

**BÜCHI NIR-Online**  
DE – 69190 Walldorf  
T +49 6227 73 26 60  
F +49 6227 73 26 70  
nir-online@buchi.com  
www.nir-online.de

We are represented by more than 100 distribution partners worldwide.  
Find your local representative at: [www.buchi.com](http://www.buchi.com)



11592853 en 1405 C / Technical data are subject to change without notice / Quality Systems ISO 9001.  
The English version is the original language version and serves as basis for all translations into other languages.

