

Каталог продукции

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Product Guide



QUALITY IS THE DIFFERENCE

Analytik Jena – Quality is The Difference

Tradition with innovative power

Analytik Jena has a long history and tradition in developing high quality and precision analytical systems which dates back to the inventions made by Ernst Abbe and Carl Zeiss over 150 years ago. Within the last 25 years our company group has grown to become one of the most innovative manufacturers of analytical measuring technology worldwide.

Technology competence

Analytik Jena has excellent competencies in the fields of optical spectroscopy, sum parameter and elemental analysis. We develop and manufacture premium instruments for:

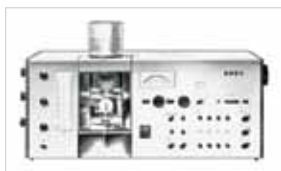
- High-Resolution Continuum Source AAS
- Line Source AAS
- High-Resolution Array ICP-OES
- Mass Spectroscopy (ICP-MS)
- Mercury analysis
- UV/Vis/NIR spectroscopy
- TOC/TN_x analysis
- AOX/EOX/TOX/POX analysis
- C/N/S/Cl elemental analysis
- Determination of the antioxidant capacity

Along with comprehensive laboratory software solutions, the company's broad product range consists of device-specific accessories and consumables for laboratories.

Premium Quality „Made in Germany“

The name Analytik Jena stands for highest standards of quality. Various R&D and production sites throughout Germany ensure reliable state-of-the-art technology, continuous improvement and development for highly efficient and practical analysis systems.

Our aim is to provide the most comfortable and reliable instruments for diverse analytical tasks. The use of selected, certified components guarantees the absolute precision and outstanding analytical performance, the robustness and durability of Analytik Jena instruments.



1874 First spectrometer invented by Ernst Abbe

1924 First Pulfrich photometer – foundation for the development of spectral photometry in Jena
1937 First flame photometer – Carl Zeiss established the methodology of flame photometry

1963 SPEKOL® and SPECORD® – as the successors of the Pulfrich photometer

1969 Prototype of the first commercial flame AAS
1971 Market introduction of the first flame AAS, the AAS 1 by Carl Zeiss Jena

1982 First simultaneously measuring UV/Vis spectrophotometer with Multi Channel System (MCS)

1991 First simultaneous elemental analyzer and special TOC/TN_x and AOC/TOX analyzer multi X® – first AOX/TOX analyzer with automatic sampler

1994 multi N/C® – first simultaneous TOC/TN analyzer worldwide

2002 Double furnace – innovative concept for the combustion analysis of very varied matrices and introduction of the first elemental analyzer multi EA®

Analytik Jena – Outstanding Customer Support

Networked worldwide

Satisfying our customers' demands and needs is our top priority. We offer round-the-clock dedicated customer care and support services, enabling you to exploit the full potential of our high-quality products.

Wherever you are – technical service and international sales support on site are a matter of course. Our worldwide service network guarantees close proximity to our customers, fast response times, short travel times and low costs to you.

Always by your side

Whatever your requirements are – you can count on our expertise. We will also support you in the qualification procedures and the system validation for compliance with specific standards and guidelines in your business.

Our well-trained, globally active specialists offer excellent training programs, be it individualized hands-on user training or on-site workshops or seminars, road shows and webinars on specific topics.

Analytik Jena has established competence centers all over the world – certainly also in your vicinity. Fully equipped laboratories allow for comprehensive support on technical and application issues and intensive training possibilities on our analytical instruments.



Application development and support

We provide comprehensive advice on various analytical methods and support you in the selection of the appropriate technology. We are on your side, ready to assist you in your projects with our experience and know-how in analytics. We support you in carrying out special applications. In close collaboration with you, we also develop analytical method packages which are explicitly tailored to your requirements.



2004 contrAA® – the first high-resolution continuum source AAS

2007 SPEKOL® – new spectrophotometers for routine analysis

2008 multi EA® – new generation of carbon, nitrogen, sulfur and chlorine elemental analyzers for liquid, paste-like and gaseous samples and TOC, EOX or AOX/TOX analysis in one device

2010 SPECORD® PLUS – latest generation of double-beam photometers

2010 multi N/C® – new high performance TOC analyzer

2014 PlasmaQuant® PQ 9000 – the high-resolution array ICP-OES

2015 PlasmaQuant® MS – the highly sensitive ICP-MS

Optical Spectroscopy

Atomic Absorption Spectrometer (AAS)

novAA® | ZEEnit



▲ novAA® 400 P

▲ novAA® 350

A new generation for the whole range of AAS

The AAS series novAA® & ZEEnit combine high performance, versatility, automation, reliability and robustness.

novAA® & ZEEnit at a glance:

- 8 lamp changer for maximum automation and sample throughput
- Fully automatic gas box and automatic burner height adjustment
- Single and double beam optics
- Integrated highend vision tool for best observation of the operations
- Fully automated optimization routines
- Analysis of liquid and solid samples

The ZEEnit P series combines an outstanding graphite furnace concept with the most powerful and latest generation of Zeeman effect background correction with variable magnetic field strength.

This is unique:

- 2Field Mode – maximum sensitivity
- 3Field Mode – expansion of the linear working range
- Dynamic Mode – automatic adaptation to varying element concentrations without dilution

The strongest Zeeman-AAS on the market!

novAA® 350 – Fully automated AAS for flame and hydride technique with D₂ background correction

novAA® 400 P – Compact AAS for flame, hydride and graphite technique with D₂ background correction

ZEEnit 650 P – High-performance graphite furnace AAS with Zeeman- and D₂ background correction

ZEEnit 700 P – High-performance tandem AAS for flame, hydride and graphite technique with Zeeman- and D₂ background correction

▼ ZEEnit 700 P

▼ ZEEnit 650 P



High-Resolution Continuum Source AAS

contrAA®



▲ contrAA® 700

▲ contrAA® 300

contrAA® – A vision becomes reality

contrAA® series is the start of a new generation in AAS, which finally closes the gap between ICP OES and AAS. All systems, contrAA® 300, contrAA® 600 and contrAA® 700, combine intelligent design with premium functionality and convincing performance:

- Just one light source for all elements
- Simultaneous, powerful background correction
- Fast, easy, economical

contrAA® 300 – HR-CS AAS for flame and hydride technique with simultaneous background correction

contrAA® 600 – HR-CS AAS for graphite technique capable of analyzing liquid as well as solid samples with simultaneous background correction

contrAA® 700 – HR-CS AAS for flame, hydride and graphite furnace technique, capable of analyzing liquid as well as solid samples in one single instrument with simultaneous background correction

Simple method development

The user is free to select the line best suited for the analytical task. As the intensity of the analytical line and the spectral environment are recorded simultaneously, noise or interferences are immediately visible and can be evaluated.

With only one light source, the Xenon lamp, the instrument is ready to measure all elements and at all available wavelengths from 185 – 900 nm.

Patented technology enables the spectrometer to change rapidly from line to line and measure the elements in optimized measurement sequences. Thus, sequential multi-element routine in AAS has become standard.

Expanded application range

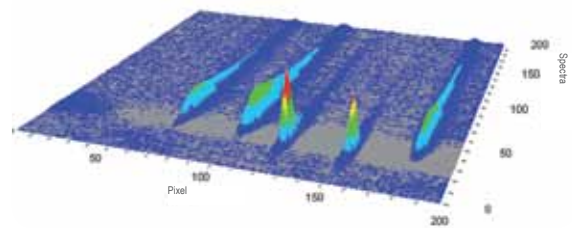
Evaluation of atom lines and molecular bands allows the analysis of additional elements like non-metals. That is a further innovation.

Unique background correction

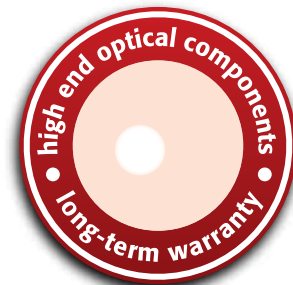
The contrAA® is the first AAS capable of separating broadband and spectral background effects. Fully automatic background correction routines use the available reference pixels and enable realtime simultaneous correction.

3D Spectrum – a new dimension

The 3D Spectrum, absorbance versus time and wavelength, offers unimagined possibilities for parameter optimization. The HR-CS AAS user can now identify the cause of interferences and eliminate them, as required.



Our instruments for optical spectroscopy combine proven Carl Zeiss technology with modern, innovative solutions. We are the only company that provides a long-term warranty of 10 years for the high-performance optics.



Optical Spectroscopy

AAS Analysis

Mercury/ Hydride Systems

Multiple solutions for special challenges

The availability of flow injection and batch mode at the various automation levels guarantees convenient handling and precision as well as efficiency during the analysis of hydride forming elements and mercury with the cold vapor technique.

The traditional way – atomization in the electrically heated quartz cell!
The future-oriented way – hydride formation coupled with electro-thermal atomization in the graphite tube (HydrEA)!

- Flow Injection Mode: fully automated mode with optimized gas/liquid separator and membrane drying system ensures high sample throughput
- Batch Mode: special designed reactors for large sample volumes, for foaming samples and low element concentrations
- Enrichment Mode: integrated gold collector unit for the enrichment of mercury
- Modular design: all functions can be upgraded, the system grows with changing lab requirements

HS50 – Simple Batch Mode, flame heated cell

HS55 – Batch Mode, electrically heated cell

HS60 – Fully automated system with Flow Injection and electrically heated cell

Direct Solid AAS

solid AA[®]

solid AA[®] – Intelligent solution for direct solid analysis

Solid and paste like samples, as powders, cream or viscous oils can be analyzed directly in the graphite furnace.

In direct solids analysis, the decomposition of the sample matrix by means of an acid digestion is replaced by the temperature program of the graphite furnace.

solid AA[®] at a glance:

- Analysis of the original sample
- Wide measurement range – no dilution required
- Analysis of small sample quantities – solid AA[®] is a micromethod
- Avoiding harmful reagents – chemical waste kept to a minimum
- Simple handling – samples are simply placed on the sample carrier and analyzed directly
- Fast results

All graphite furnace systems by Analytik Jena can be upgraded with the solid AA[®] technology:

SSA 6 – Manual solid sampler

SSA 600 – Fully automated solid sampler with integrated microbalance

Liquid dosing unit – Upgrade kit for dosing liquids automatically on the SSA 600

▼ Solid autosampler



▼ Hydride system



Accessories for flame analysis

The **Segmented Flow Star (SFS)** for flow injection operation simplifies the analysis of samples with high salt, high sugar or acid content. It guarantees stable burner conditions by continuous rinsing and constant flame temperatures and allows automatic metering of smallest sample volumes (μl range).

The „**Scraper**“, an automatic, software-controlled cleaning device for the nitrous oxide burner head, guarantees a continuous and reproducible operation over a long period.

▼ SSA 6



▼ Liquid dosing unit



▼ Scraper



▼ Injection module SFS 6



Mercury Analysis

mercur

mercur – Trace analysis with best analytical certainty

Thanks to its excellent detection limit and its wide linear measuring range, atomic fluorescence spectrometry is the method of choice in mercury analysis down to the ng/L level. Using the advantages of the cold vapor technique to separate the analyte from the matrix and of atomic fluorescence as powerful detection method, interferences and matrix effects are almost completely eliminated. AAS has the advantages of a greater degree of robustness with complex sample matrices. mercur DUO makes it possible to integrate the techniques of AAS and AFS into a single instrument and to adapt specific application tasks.

Various configurations and detection techniques are available for the whole range of mercury analysis compliant with EPA and EN/ISO norms.

mercur and mercur PLUS – Mercury analyzer based on cold vapour technique using Atomic Fluorescence (with or without enrichment)*

mercur AA and mercur AA PLUS – Mercury analyzer based on cold vapour technique using Atomic Absorption (with or without enrichment)

mercur DUO and mercur DUO PLUS – Tandem mercury analyzer based on Atomic Fluorescence and Atomic Absorption (with or without enrichment)*

** Two gold collectors are available for single or cascade enrichment.*

mercur at a glance:

Highly automated and fast – thanks to continuous flow injection with or without autosampler and the unique FBR routine (Fast Baseline Return).

- Safe – due to use of a bubble sensor, a specially optimized drying membrane and cascade enrichment
- Efficient – due to automated, intelligent gas-liquid control, ensuring minimum reagent consumption and short measurement times
- Self Check System (SCS)

▼ mercur



Microwave Digestion System

TOPwave®

TOPwave® provides a wide range of applications. Its patented sensor concept and intelligent design enable reaction control and operating safety at the highest level.

Effective sample preparation is achieved by facilitating high sample throughput through short cycle times and high capacities.

Another crucial factor is safety. Working under exceptional conditions requires an absolutely reliable system and an experienced partner.

TOPwave® at a glance:

- High sample throughput
- Minimum number of consumables
- Sensor concept which documents all digestion parameters of each sample thanks to wireless optical temperature control with RTM, wireless optical pressure control with RPM and SMART reaction control
- Self Check System (SCS)

▼ Digestion vessels

▼ Easy to use without tools



▼ TOPwave®



Optical Spectroscopy

High-Resolution Array ICP-OES PlasmaQuant® PQ 9000



▲ PlasmaQuant® PQ 9000

Welcome to the most powerful ICP-OES – PlasmaQuant®

PlasmaQuant® PQ 9000 masters the most difficult analytical challenges in atomic spectroscopy with superiority in terms of convenience, flexibility, and precision.

It delivers rigid plasma even under most extreme matrix loads and so meets the high demands of heavy-duty industries facing samples like saline, metallic or petrochemical materials.

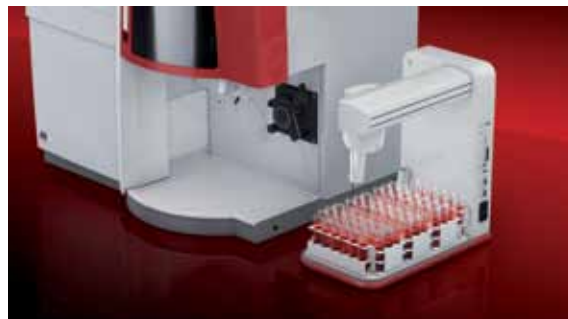
Thanks to its unique resolving power and its superior sensitivity PlasmaQuant® PQ 9000 permits robust trace analysis down to low ppb. Its detection limits that reach parts per trillion are an innovation in ICP-OES.

PlasmaQuant® PQ 9000 is a High-Resolution Array ICP-OES instrument for the elemental analysis of liquid samples.

PlasmaQuant® PQ 9000

- ... guarantees trace detectability, ultimate precision, and supreme long-term stability with high ease of use
- ... is specialized in the analysis of demanding and matrix-rich samples (e.g. brine, metals or petrochemicals)
- ... covers analyte contents ranging from ultra-traces to high-percentages with minimal sample dilution
- ... simplifies the handling of complex samples, plasma torch and analytical data

PlasmaQuant® PQ 9000 – Compact High-Resolution Array, optical emission spectrometer with an inductively coupled plasma



PlasmaQuant® at a glance:

Whether you are interested in consistent routine elemental analysis or seeking a high-end instrument capable to deal with very specialized applications – PlasmaQuant® PQ 9000 will meet your demands.

Outstanding analytical capabilities of PlasmaQuant® PQ 9000 arise from synergetic interactions between its key components:

High-Resolution Optics

- High resolution echelle spectrometer
- Advanced CCD detection

V Shuttle Torch

- Vertical plasma torch with shuttle design
- Plug-and-play with precision auto-alignment

Dual View PLUS

- 2+2 plasma views
- Extended working range

High-Frequency Generator

- High-end generator for extreme sample loads
- Long-term plasma stability for excellent reproducibility

High-Performance ICP-MS

PlasmaQuant® MS/ MS Elite



▲ PlasmaQuant® MS



Powerful, patented technology – PlasmaQuant® MS

The PlasmaQuant® MS is the world's highest performing ICP-MS with unsurpassed sensitivity of over 1.5 billion counts/second/ppm. Integrated patented technologies provide an efficient and robust plasma system, superior interference removal and extended linear dynamic range, handling any application with ease.

Two models are available that serve both the routine and research industries:

The PlasmaQuant® MS is optimized for routine applications in environmental including waters, wastes, soils and sediments, food and agriculture, chemicals and petrochemicals as well as for quality control in the semi-conductor industry where plasma robustness to handle complex sample matrices is paramount.

The PlasmaQuant® MS Elite is designed for maximum sensitivity to deliver lowest possible detection limits for research applications. It measures the smallest nano-particles and detects drug-tracing elements at below parts-per-trillion level. The Elite is also perfect for laser ablation analysis, isotopic-ratio measurements and chromatography techniques to separate analyte species.

PlasmaQuant® MS Elite: Research-grade Inductively Coupled Plasma Mass Spectrometer with industry leading sensitivity and lowest argon gas consumption

PlasmaQuant® MS: Routine-analysis Inductively Coupled Plasma Mass Spectrometer with Integrated Collision Reaction Cell (iCRC) and lowest argon gas consumption

PlasmaQuant® MS at a glance:

The series provides unsurpassed limits of detection for over 75 elements. Fast, accurate and precise analysis of all sample types from ultra-trace to major concentration levels in a single, interference-free measurement.

The PlasmaQuant® MS and PlasmaQuant® MS Elite include:

Eco Plasma

- Robust plasma performance
- Requires only half the Argon gas

iCRC – Integrated Collision Reaction Cell

- Fast, simple interference-free analysis
- New BOOST technology drives performance further

ReflexION

- Reflecting ion mirror with 3D ion focus
- Maximum sensitivity across the entire mass range

HD Quadrupole

- True 3MHz Quad with industry leading abundance sensitivity
- Very fast and precise scan rates

ADD¹⁰ – All-Digital Detection System

- One-of-kind all-digital detector
- 10-orders magnitude of linear dynamic range

Optical Spectroscopy

UV/Vis Spectrophotometer SPECORD® | SPECORD® PLUS

UV/Visible spectrophotometer series sets new standards

The SPECORD® series provides high-performance real double-beam instruments with Cooled Double Detection, spectrophotometers using Split-Beam-Technology and high power diode-array systems for simultaneous high-speed measurement. All our powerful spectrophotometers operate in the spectral range of 190 -1100 nm. A versatile software provides maximum efficiency and offers specific tailor-made software packages. The extensive range of accessories enables flexible and convenient operation in various fields of application.

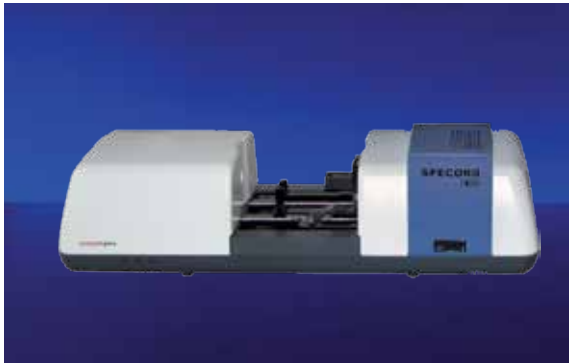
SPECORD® S – Diode Array Systems

SPECORD® S 600 combines the precision and convenient handling needed in laboratories with speed, reliability and superior optical performance.

SPECORD® S 600 at a glance:

- High precision diode array systems
- Excellent spectral properties, fast measurement of complete spectra in less than 12 milliseconds
- High throughput cell carousel with 52 positions available
- Self-adjusting photometric linearity, automatic stray light correction, open sample compartment

▼ SPECORD® S 600



SPECORD® S 600 – Diode array spectrophotometer for UV to NIR range (190-1100 nm)

SPECORD® PLUS

Routine analysis or special applications – with the double beam spectrophotometers of the SPECORD® PLUS series you are well prepared for all requirements.

SPECORD® PLUS series at a glance:

- Automatic accessory recognition
- Large, easily accessible sample compartment
- Comprehensive software including numerous specific tools for individual applications
- Extensive method collection
- „Device Check“ software – a diagnostic tool
- Self Check System (SCS)

▼ SPECORD® 200 PLUS



Dissolution is fully integrated into the system software of the dissolution providers

SPECORD® 50 PLUS – Double-beam spectrophotometer with Split-Beam-Technology (SBT)

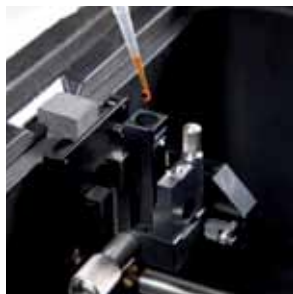
SPECORD® 200 PLUS – Double-beam spectrophotometer with fixed spectral bandwidth

SPECORD® 210 PLUS – Double-beam spectrophotometer with 5 variable spectral bandwidths

SPECORD® 250 PLUS – Double-beam spectrophotometer with 5 variable spectral bandwidths and double monochromator

UV/Vis Spectrophotometer

Variety of accessories



▲ Adjustable cell holder with ultra-micro cell for extremely small sample volumes



▲ Double 8-cell changer



▲ Reflectance attachment with variable angle



▲ Autosampler for particularly high sample throughput

▼ 15-cell changer



▼ Sipper system



▼ Solid sample holder



▼ Integrating sphere



Getting the antioxidant picture

PHOTOCHEM®

PHOTOCHEM® offers a simple, rapid and accurate method for the determination of lipid and water soluble antioxidant capacities using photochemiluminescence.

The method combines the very fast photochemical generation of free radicals with the highly sensitive detection in nmol range.

PHOTOCHEM® at a glance:

- Determination of lipid and water soluble antioxidant capacities on a single system
- The method “photochemiluminescence” is characterized by high sensitivity, speed and accuracy
- Intuitive software navigation and easy operation
- Extremely short measuring times (20 sec - 3 min)
- Independent of pH and temperatures
- Needs only a few µl of the sample
- Ready-to-use kits
- Simple handling: sampling, measurement and rinse cycles are automatic
- Compact ergonomic design with a small footprint

▼ PHOTOCHEM®



Sum Parameter Analysis

TOC, TN, AOX/TOX Analyzer

multi N/C® | multi X®

multi N/C® – High Performance TOC Analyzer!

The multi N/C® series offers the optimum solution for every application. The parameters TOC, NPOC, POC, TC, TIC and TN_b can be measured quickly, easily and without any conversion in liquid and solid samples.

Compliance

Working with multi N/C® series analyzers guarantees compliance with the valid national and international standards, such as: ISO, EN, DIN, EPA, ASTM, FDA and pharmacopoeias.

multi N/C® at a glance:

- Wide measurement range – also without sample dilution: precise detection due to high-quality Focus Radiation NDIR Detector® for TOC, the chemiluminescence-detector (CLD) or the solid state chemodetector (ChD) for TN_b
- VITA® Flow Management System: for stable device performance and highly reproducible analysis results
- Easy Cal: easy calibration with just one standard for the most different applications, including long-term stability
- Auto-Protection: cleaning of effective measuring gas and monitoring protect valuable system components
- Reliable oxidation: high-temperature combustion (up to 950°C) or High Power UV reactor
- Variable injection techniques and volumes: valve-free direct injection or flow injection
- Suitable for simultaneous TN_b determination
- Double furnace technology – the ideal combination for water and solid samples without the need of an additional furnace
- Self Check System (SCS)

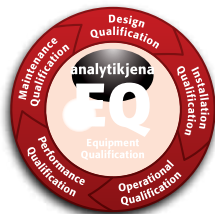
multi N/C® – High sample throughput

The available autosamplers with integrated sample homogenization (stirring) – offer automatic acidification and purging features for diverse requirements in TOC analysis. Time-optimized processes, such as parallel analyzing and purging, increase the sample throughput.

Solid analysis at the highest level

With the separate solids module HT 1300, solid samples can be digested at up to 1300°C. Using additional substances, even higher temperatures up to 1800°C are possible.

multi N/C® pharma provides detailed IQ, OQ and PQ documents that have been especially optimized for the pharmaceutical industry.



multi N/C® 2100

Space-saving TOC/TN_b analyzer for environmental analysis



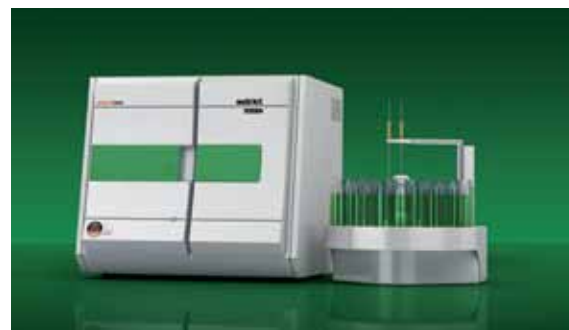
multi N/C® 3100

Allrounder for all TOC applications with high sample throughputs



multi N/C® UV HS

Extremely well proven even in complicated matrices. It is a TOC system which works with both, an oxidation agent (peroxodisulfate) as well as a highly effective UV radiation source for sample oxidation.

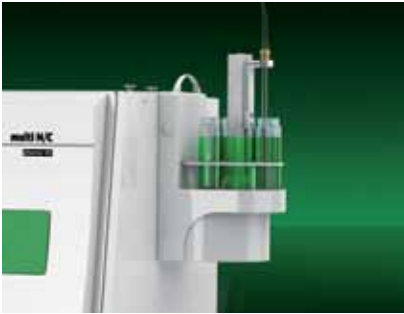


multi N/C® pharma

Predestined for pharmaceutical applications. Depending on the application, two digestion principles are available: catalytic high-temperature combustion up to 950°C or wet chemical oxidation in a High Power UV reactor.

TOC, TN, AOX/TOX Analyzer

High sample throughput



▲ Autosampler for 10 samples

▼ Autosampler for 21 samples



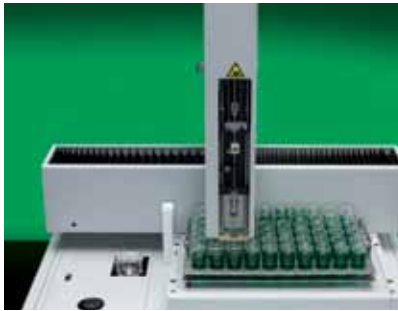
▲ Autosampler for 52/72/100/146 samples

▼ Autosampler for 60/112 samples



▲ HT 1300 – solid sample feeding

▼ Double furnace technology – sample feeding for determining TOC in solids



multi X[®] 2500 – AOX/TOX Analyzer

Whether fastest AOX routine analysis in vertical operation mode or reliable determination of the smallest EOX trace concentrations in horizontal operation mode, the double furnace technology of the multi X[®] 2500 allows you to select the best combustion mode for your application.

The intelligent software multiWin[®], the fast changeover between column and batch method, and the user-friendly design ensure outstanding ease of use and efficiency.

Diverse automatic sampling systems offer convenient and uniquely flexible operation.

The system greatly minimizes idle time and increases the throughput of AOX samples – you remain flexible and cost-effective.



▲ multi X[®] 2500

Elemental Analysis

C, N, S, Cl Analyzer multi EA®



▲ multi EA® 4000

multi EA® 4000 – C, S, Cl analysis in solids

Determining carbon, sulfur, and chlorine from solid samples is not a problem! The multi EA® 4000 convinces with its ease of use, analysis flexibility, and particularly excellent instrument stability and precision.

The parameters **TS, TC, TX, TOC, TIC, EC, and BOC** are determined quickly and easily in organic and inorganic solids. Minimum maintenance effort, maximum operating time, low operating costs and an absolutely reliable analyzing and measuring technique ensure each process step is as effective and efficient as possible.

Unbeatable in waste analysis

multi EA® 4000 offers a unique combination of elements and parameters to be analyzed. Therefore it is unchallenged in waste analysis! The modular design of the device also allows expanding of the application options from one element to fully automated multi-element analysis.

multi EA® 4000 at a glance:

It is the ideal partner for your solids analysis.

- Offering ease of use and flexibility
- Enhanced analysis with precision and reliability
- Minimal operating costs and low maintenance effort

Fully automated TOC determination – TIC Solids Module

Quicker and easier than ever before – TOC and TIC parameters determination from one single sample in one analysis step only!

The TIC Solids Module “automatic” enables the automatic determination of Total Inorganic Carbon (TIC) in solid samples.

This way it is also possible to automate determination of Total Organic Carbon (TOC) either by difference or direct method.

Additional sample pre-treatment like acidification is not necessary!



▼▲ Automatic solid sampler for 48 samples for the automated C, S, and Cl analysis as well as the automated determination of TOC and TIC.



C, N, S, Cl Analyzer

multi EA®



▲ multi EA® 5000

multi EA® 5000 – C, N, S, Cl trace analysis in gaseous, solid and liquid samples

The multi EA® 5000 is an universal talent to be used in various fields of application for the determination of C, N, S, Cl and also TOC, EOX and AOX/TOX. The globally unique double furnace technology offers fast and optimum adaptation to the sample matrix and analysis standard with minimal effort. Its unique modular principle allows an individual configuration of the system. You are able to adapt the multi EA® 5000 to your needs and requirements.



▲ A multi-matrix autosampler for vertical and horizontal applications saves working time ▼



multi EA® 5000 at a glance:

- Multi-application, liquid, paste-like, solid, gaseous and LPG samples
- Multi-element, C, N, S and Cl as well as TOC, EOX and AOX/ TOX
- Extended measuring range from ppb to the percentage range
- Preset standard methods
- Conformity of standards such as ASTM, EPA, DIN, ISO, EN etc.
- Flame sensor technology with self-learning function for matrix-optimized sample decomposition
- Double furnace technology vertical and horizontal mode in a single instrument
- Flow Management System for stable instrument performance and accurate analysis results
- Multi-purpose combustion tube for all standard applications
- Multi-matrix autosampler for the fully automatic determination of solid and liquid samples in vertical or horizontal furnace mode
- Application-optimized sampling systems for safe and reliable analysis of pressurized and none pressurized gases and LPG samples
- Self Check System (SCS)

◀ *LPG module: Special modules for analyzing gaseous and LPG samples are available. These are optimized for the tasks in question. They combine extremely high ease of operation and ultra-modern gas handling technologies with maximum safety for the user.*

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