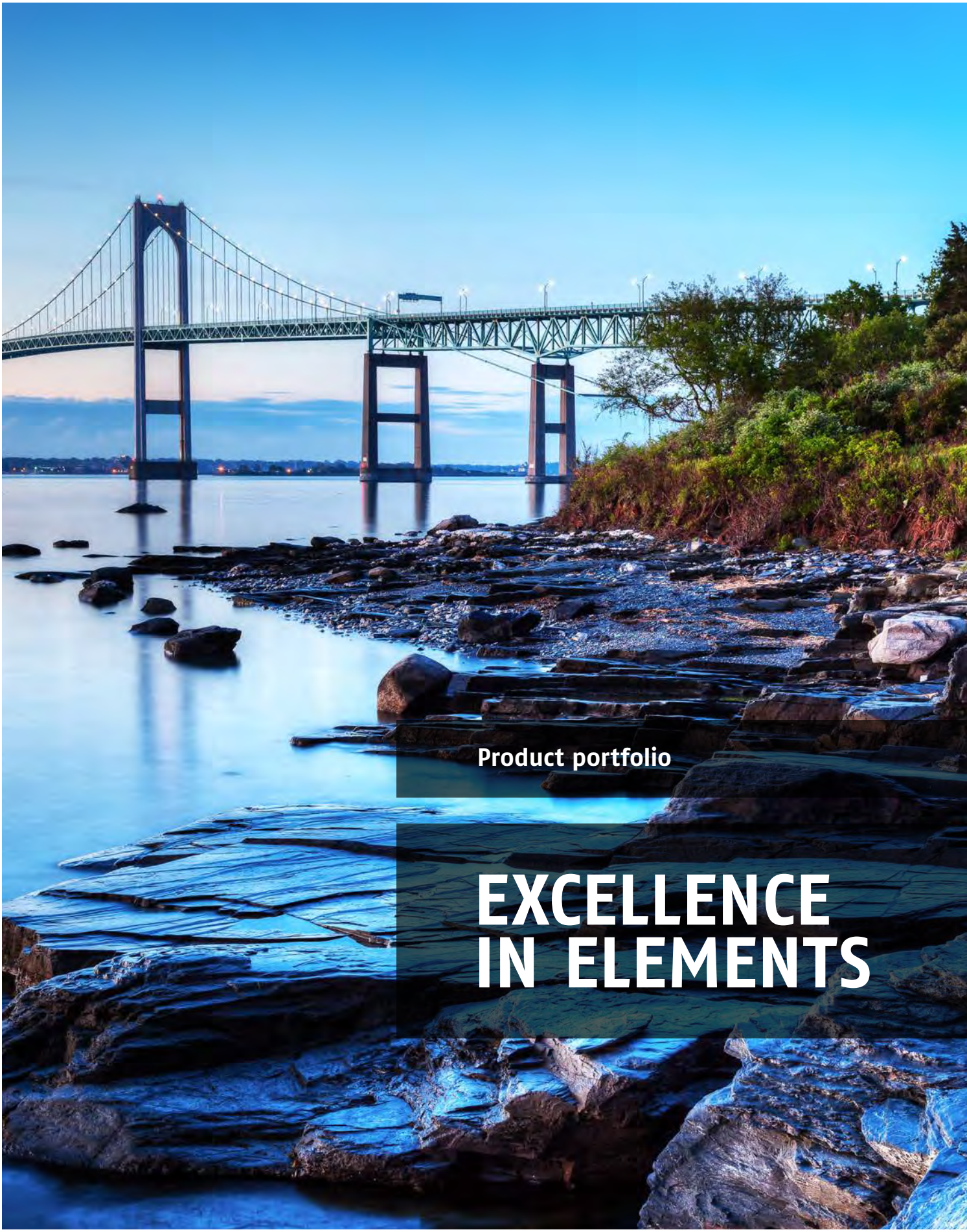


Product portfolio

EXCELLENCE IN ELEMENTS

elementar

EXCELLENCE IN ELEMENTS

View of the production facility in Langenselbold near Frankfurt am Main

It is always fascinating for us how individual elements shape the world.

Elementar is arisen from the analytical Instrumentation Department of the Heraeus technology group, in the Rhine Main area near Frankfurt, Germany. Nowadays, we are a constantly growing, owner-managed company with nine locations worldwide. Together with our sales and service network, we serve more than 80 countries with our solutions.

We help you, our customers, to support the quality of life whenever water, nutrition, education, health, environment, climate, energy or product quality are involved. We make life understandable in its elements, to explain it and to preserve it. Constantly. Simple.

We aim to provide you with the best solution for your applicational needs. To achieve this, we are constantly working on innovations and strive for the highest quality.

In addition, we attach great importance to comprehensive customer support and pursue a strong sustainable approach – in ecological as well as economic terms.

This is reflected in the use of high-quality materials for longest lifetime of our instruments, in our headquarters, which follows a sustainable construction and energy concept and also in a business model that ensures our long-term success.



Yours, Albrecht Sieper
Managing Director
Elementar Analysensysteme GmbH





ORGANIC ELEMENTAL ANALYZERS

Our analyzers for organic elemental analysis are designed to offer industry-leading versatility in the analysis of the elements C, H, N, O, S, and Cl. All analyzers are designed to simplify daily routine operation and to reduce maintenance to a minimum. Thanks to our Advanced Purge and Trap (APT) technology even the most challenging C : N elemental ratios of up to 12,000 : 1 can be reliably measured. Many of our organic analyzers use our intelligent ball valve technology for blank-free sample transfer. Optional conversion kits make it possible to upgrade every instrument at any time for special applications.

UNICUBE®

Combustion analysis has never been easier

The UNICUBE® combines the low operating costs and high sensitivity of a micro elemental analyzer with the dynamic measuring range of a macro analyzer.

Your benefits

- Highest precision: Even with low sample weights
- Highly reliable measurement results: Even for the most difficult samples
- Low costs per analysis: Low gas consumption and need for consumables
- High flexibility: Simple carrier gas exchange (helium / argon) without hardware adaptation

vario EL cube

Unsurpassed performance and versatility in elemental analysis

From pharmaceuticals in the 100 µg range to 20 mg of liquid fuels and 1.5 g of soil samples – the vario EL cube adapts perfectly to all analytical requirements in elemental analysis with maximum precision and accuracy.

Your benefits

- Highest precision: Sharp peak separation by 3 gas-specific adsorption columns guarantees complete baseline separation
- Exceptional element concentration and sample weight range: Large dynamic measuring range up to 40 mg absolute carbon content
- High sample flexibility: Reliable results for a wide range of samples thanks to matrix independence
- Ultimate versatility: Large selection of optional conversion kits for a wide range of applications

vario MACRO cube

The one and only CHNS macro analyzer

Industry-leading performance and versatility: the vario MACRO cube. The world's first macro elemental analyzer for the simultaneous determination of carbon, hydrogen, nitrogen and sulfur from one sample.

Your benefits

- Largest sample weight ideal for inhomogeneous samples: absolute carbon contents of up to 150 mg possible
- Ultimate versatility in the macro range: In addition to simultaneous CHNS analysis, options for analyzing chlorine and oxygen are available
- Sample preparation reduced to a minimum: Large sample weights of up to 1.5 g possible

vario MAX cube

Reach a new level of sample throughput

The vario MAX cube is designed for unattended 24/7 operation and meets the requirements of any laboratory faced with high sample throughput and significant ash content in the samples.

Your benefits

- Simplified sample preparation: Large, reusable crucibles for liquid and solid samples up to 5 g/5 ml
- Highest sample throughput: fast, unattended analysis thanks to automatic sample supply and ash removal
- Independence from rising gas prices and supply bottlenecks: free choice of carrier gas (argon or helium)



	UNICUBE®	vario EL cube	vario MACRO cube	vario MAX cube
Elements	C, Cl*, H, N, O*, S	C, Cl*, H, N, O*, S	C, Cl*, H, N, O*, S	C, N, S
Parameters		TIC*	TIC*, TOC*	TIC*, TOC*
Max. C content	14 mg (50 mg in CN mode)	40 mg	150 mg*	500 mg*
Max. sample weight	1 g	1.5 g	1.5 g	5 g
Recommended sample homogeneity	High	High	Medium	Low
Applications	Chemicals, pharmaceuticals, coal, soil, plants	Chemicals, pharmaceuticals, alternative fuels, polymers, petroleum products, soil	Coal, coke, biomass / biochar, waste, chemicals, soil	Soil, plants, fertilizer, chemicals
More information				

* Optional configuration



	UNICUBE® trace	rapid OXY cube®	trace SN cube	rapid CS cube
Elements	C, N	O	N, S	C, Cl, S
Parameters				TIC
Detection limit	< 10 ppm	< 10 ppm	S: 6 ppb / N: 15 ppb	C: 100 ppm / S: 2 ppm / Cl: up to 1.2 mg
Recommended sample homogeneity	High	High	High	High
Applications	Chemicals, pharmaceuticals, polymers, peptides	Alternative fuels, petroleum products, chemicals, pharmaceuticals, polymers, coal	Petroleum products, liquid organics, alternative fuels, gas, LPG	Coal, biomass, rubber, soil
More information				

UNICUBE® trace

Matrix-independent determination of C and N at trace levels

The UNICUBE® trace uses the safe, user- and environmentally friendly Dumas high temperature combustion and offers fast (5 min), highly sensitive carbon and nitrogen analysis at a detection limit of 10 µg/g or 10 ppm.

Your benefits

- High sample throughput: Up to 300 analyses per day
- Precise carbon and nitrogen analysis: The highly sensitive detector enables a detection limit of 10 µg/g or 10 ppm
- High sample flexibility: Suitable for all organic and many inorganic liquids and solids

rapid OXY cube®

Oxygen analysis has never been more reliable

Highly accurate and precise oxygen analysis – even in the low ppm range. This powerful oxygen analyzer delivers matrix-independent results, as the high pyrolysis temperature of 1,450 °C enables reliable and complete conversion of the oxygen contained in the sample.

Your benefits

- Reliable oxygen analysis: High-temperature pyrolysis of up to 1450 °C guarantees complete oxygen conversion
- Industry-leading detection limit: Powerful IR detector (optional) and blank-free pyrolysis reactor
- Wide range of samples: Precise analysis of samples with fluorine or inorganic compounds made possible by glassy carbon pyrolysis reactor
- Precise results: Innovative backflush technology prevents falsification due to interfering gases

trace SN cube

The very best in ppb analysis

Our innovative two-channel sulfur and nitrogen analyzer trace SN cube uses catalytic combustion to ensure complete decomposition of all types of samples without soot formation and provides rapid analysis results of sulfur and nitrogen in diesel, gasoline and similar samples – in just a few minutes.

Your benefits

- Highly sensitive sulfur and nitrogen determination: Thanks to the integrated dual-channel system with detection limits of 6 ppb for sulfur and 15 ppb for nitrogen
- Low maintenance and reliable results: Complete, soot-free decomposition of the sample through catalytic combustion
- Outstanding sample flexibility: Modules for the analysis of solids, liquids, gases and LPG available, for a variety of matrices

rapid CS cube

High precision carbon and sulfur analysis

The rapid CS cube offers simultaneous, fast and automated analysis of carbon and sulfur, making it a universal instrument for the analysis of samples such as coal, coke, soil samples or waste.

Your benefits

- Unattended continuous operation: fast and automated carbon and sulfur analysis
- High application flexibility: enables the analysis of a wide range of sample types and weights
- Low maintenance: due to clean combustion, avoidance of dust formation and contamination of the analyzer



NITROGEN AND PROTEIN ANALYZERS

Our nitrogen and protein analyzers use the high-temperature combustion method according to Dumas, which has clear advantages over Kjeldahl regarding laboratory safety, sample throughput, labor time, amount of chemical waste and thus cost per sample. Our analyzers for the determination of nitrogen and protein are specially optimized to meet your needs in terms of cost per sample, analysis time and detection limits.







rapid MAX N exceed PLUS

MAXimizing sample variety and throughput

The rapid MAX N exceed PLUS is a high-performance nitrogen and protein analyzer for maximum laboratory efficiency at high sample throughput. Designed for unattended 24/7 operation, the crucible technology and optimized consumables enable flexible analysis of a wide variety of sample types and weights up to 5 g / ml – while significantly reducing cost per sample. The ideal solution for laboratories with the highest demands on efficiency, flexibility, and reliability.

Your benefits

- Best-in-class sample throughput: more real samples, less calibration measurements
- Maximum sample diversity: Large weighing ranges without homogenization – also ideal for demanding matrices
- Economical operation: Reusable crucibles; Choice between Helium / Argon mode and less consumables consumption thanks to EAS REGAINER® technology



rapid N exceed® PLUS

Minimizing cost of ownership

The rapid N exceed PLUS enables fast (3–4 minutes) and extremely cost-efficient nitrogen and protein determination for sample weights of up to 1.5 g / ml. Thanks to its low cost per sample, maximum measurement accuracy, and excellent detection sensitivity, the analyzer combines maximum cost-effectiveness with uncompromising analytical performance.

Your benefits

- Lowest cost per sample: CO_2 as cost-efficient carrier gas and optimized consumables consumption thanks to EAS REGAINER® technology
- Fast analysis: Results in less than 4 minutes
- Space-saving: Smallest footprint available

	rapid MAX N exceed PLUS	rapid N exceed® PLUS
Ideal for	Maximizing sample throughput	Minimizing cost of ownership
Elements	N	N
Max. sample weight	5 g / 5 ml	1.5 g / 1.5 ml
Sample types	Solid, liquid, pasty	Solid, liquid, pasty
Recommended sample homogeneity	Low	Medium
Sample introduction	Reusable steel crucibles (liquids or solids)	Tin foil (solids) or tin capsules (liquids)
Carrier gas	Argon or helium	Carbon dioxide
Applications	Food and beverage, animal feed, alternative proteins, grains / starch, fertilizer, soil / sediments, pharmaceuticals, synthetic materials	Food and beverage, animal feed, alternative proteins, grains / starch, fertilizer, soil / sediments, pharmaceuticals, synthetic materials
More information		



TOC ANALYZERS

Our TOC analyzers offer fast and easy determination of total organic carbon in water and solids. Packed with innovative technologies and features, the robust design guarantees highest possible uptime and unrivaled performance for routine operation.

acquray®

Performance in TOC analysis meets ease of use

The acquray® is a highly sensitive TOC analyzer based on a wet-chemical oxidation process supported by highly energetic UV radiation. This combination ensures complete digestion of all organic compounds and leads to precise measurement results.

Your benefits

- Highest sensitivity for precise measurement results: High injection volumes up to 40 ml and precise infrared detector
- Simplified daily routine operation: Cleary arranged, easily accessible system components minimize maintenance efforts and maximize system uptime
- Time-saving sample preparation: 111 position autosampler with automatic acidification for NPOC determination

enviro TOC

TOC analysis of environmental water and wastewater at its best

The enviro TOC is an innovative, future-oriented TOC/TN_b analyzer, tailor-made for the analysis of environmental and wastewater samples.

Your benefits

- Full recovery of even the most stable compounds: High-temperature combustion furnace with flexibly adjustable temperatures
- Precise results with no carryover: Autosampler optimized for particle-containing samples
- Highest sample flexibility: Analyze liquid and solid samples in a single instrument
- Long instrument life and low cost of ownership: SALTTRAP protects combustion tube and catalyst

soli TOC® cube

Flexible temperature-dependent differentiation of carbon in solids

The soli TOC® cube offers the determination of total organic carbon (TOC), total inorganic carbon (TIC), and residual oxidizable carbon (ROC) in solids. In addition to the TOC determination by direct and subtraction acidification methods, temperature programming according to EN 17505 can also be employed (TOC_{400}).

Your benefits

- Unmatched analytical performance: Limit of detection (LOD) of 10 ppm or < 15 µg C
- Fast and easy analyses: Autosampler for 24/7 operation and automated ash removal
- Simplified sample preparation: Minimized efforts thanks to advanced crucible technology

vario TOC cube

TOC/TN_b analysis without limitations

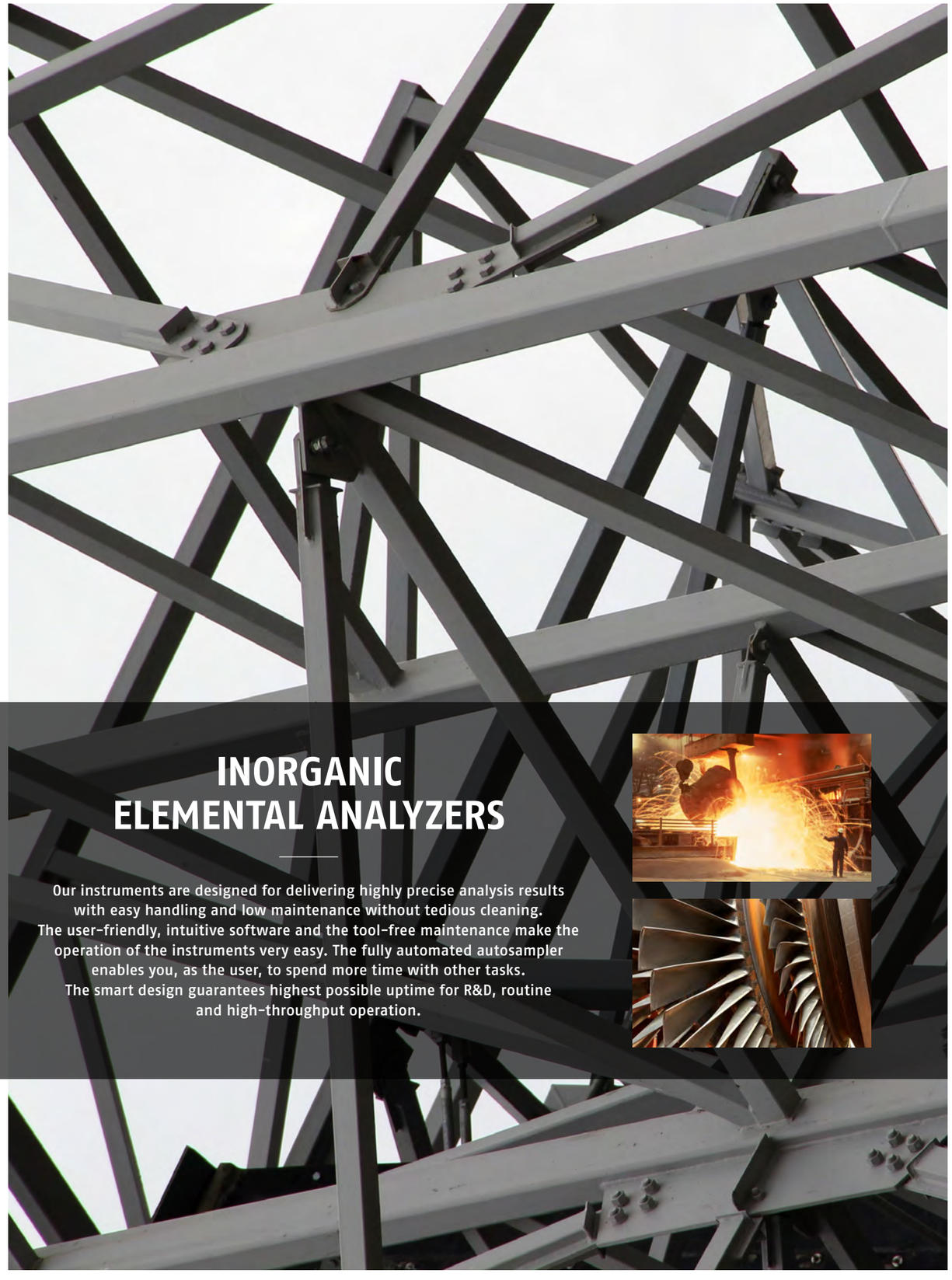
The vario TOC cube offers full flexibility and no restrictions in the sample matrix: TOC, NPOC, TC, TIC, DOC, POC and TN_b can be reliably determined with the same basic instrument.

Your benefits

- Extremely versatile: Customizable to meet your analytical needs
- High sensitivity: Exceptionally stable measurement results even in the lower ppb range
- Highest sample flexibility: Analyze liquid and solid samples in a single instrument
- Long instrument life and low cost of ownership: SALTTRAP protects combustion tube and catalyst



	acquray®	enviro TOC	soli TOC® cube	vario TOC cube
Main Focus	Liquid samples	Liquid samples	Solid samples	Liquid samples
Parameters	TOC, NPOC, TC, TIC	TOC, NPOC, TC, TIC, DOC, POC, TN_b	ROC, TC, TIC_{900}, TN, TOC_{400}	TOC, NPOC, TC, TIC, DOC, POC, TN_b
Decomposition	UV / Persulfate	Combustion	Combustion	Combustion
Applications	Pure water, drinking water, pharmaceutical water	Wastewater, environmental water, surface water, algae	Biomass/biochar, soil, solid waste	Pure water, drinking water, pharmaceutical water, ground water, sea water, brine
More information				



INORGANIC ELEMENTAL ANALYZERS

Our instruments are designed for delivering highly precise analysis results with easy handling and low maintenance without tedious cleaning.
The user-friendly, intuitive software and the tool-free maintenance make the operation of the instruments very easy. The fully automated autosampler enables you, as the user, to spend more time with other tasks.
The smart design guarantees highest possible uptime for R&D, routine and high-throughput operation.







	inductar® CS cube	inductar® ONH cube	inductar® EL cube
Elements	C, S	H, N, O	C, H, N, O, S
Decomposition	Combustion	Inert gas function	Combustion, Inert gas fusion
Furnace type	Induction	Induction	Induction
Carrier gas	Oxygen	Helium, argon, nitrogen	Oxygen, helium, argon, nitrogen
Applications	Steel, cast iron, non-ferrous metals, cements, other inorganic materials	Steel, cast iron, titanium alloy, copper alloy, other metals and inorganics	Steel, cast iron, refractory metals, ceramics, other metals and inorganics
More information			

inductar® CS cube

Advanced carbon and sulfur analysis of inorganic materials
The inductar® CS cube enables the high-precision determination of carbon and sulfur in metals and other inorganic materials. The handling is easy, requires only minimal maintenance routines and offers the determination of little concentrations in the low ppm-range as well as higher element concentrations of some weight percent's.

Your benefits
- Reduced time requirements: Minimal cleaning efforts due to efficient design
- Comfortable, fast analyses: Easy handling and low maintenance
- Maximized sample flexibility: Detection of the whole concentration range
- Increased efficiency: Reliable, unattended 24/7 analyses

inductar® ONH cube

Simultaneous ONH elemental analysis in metals and other inorganic materials
The inductar® ONH cube is an analyzer for the determination of oxygen, nitrogen and hydrogen, which combines highly accurate data with simple, clean, and automated processes. The innovative and advanced design offers simultaneous and user-friendly ONH analysis, without the need for tedious cleaning operations

Your benefits
- Reduced time requirements: Minimal cleaning efforts due to efficient design
- Outstanding flexibility: Adaptable to fulfill your analytical needs due to the customizable instrument concept
- Minimal operational requirements: No need for external cooling or a high voltage power supply
- Increased efficiency: Easy handling and low maintenance

inductar® EL cube

Analyze five elements in only one instrument
For the very first time it is possible to analyze the concentrations of carbon, sulfur, oxygen, nitrogen and hydrogen in metals and inorganic materials with only one analyzer. The inductar® EL cube uses an innovative, user-friendly instrument concept, that delivers precise results without tedious cleaning and offers flexible customization options.

Your benefits
- Minimized investment costs: All-in-one solution for CS/ONH analysis
- Reduced time requirements: Minimal cleaning efforts due to efficient design
- Outstanding flexibility: Adaptable to fulfill your analytical needs due to the customizable instrument concept
- Increased efficiency: Easy handling and low maintenance

OPTICAL EMISSION SPECTROMETERS

Spark optical emission spectrometry (OES) is the most reliable and established analytical technique to determine the mass fraction or identification of metals and their alloys. Our OES analyzers meet the highest requirements of the metal industry, from production control to research and development, from the inspection of incoming or outgoing materials to scrap sorting.









ferro.lyte®

Precise metal testing.
Anywhere. Anytime

Revolutionize your mobile metal analysis with the intuitive spark spectrometer ferro.lyte®. Thanks to the unique all-in-one concept, you can carry out flexible metal analysis and identification (PMI) at almost any measuring location. ferro.lyte® can be comfortably operated directly via the display on the handheld probe. The intuitive lytic**OS**® software with guided step-by-step workflows makes analyses easier than ever. Furthermore, even light elements such as nitrogen in duplex stainless steel are analyzed in laboratory quality. The reliable results are available at the push of a button at any time on the instrument or in a cloud.

Your benefits

- Maximized mobility: Measure anywhere due to the lightweight instrument with all-in-one concept
- Intuitive operation: Analyses easier than ever with the lytic**OS**® software
- Precise metal analysis: Results in laboratory quality due to the CONLYTE® technology
- Reliable results: Analyses and reports at the push of a button

	ferro.lyte®
Instrument type	Mobile
Dimensions, Weight	425 × 315 × 210 mm, 16 kg
Applications	Fe alloys and non-ferrous alloys, stainless steel, alloying elements with a low atomic number (Li, Be, B, C, Mg, Al, Si, P, S, Ca), S in Duplex steel; Al, Cu, Ti, Ni alloys
More information	







STABLE ISOTOPE ANALYZERS

Our versatile product range for isotope ratio mass spectrometry (IRMS) includes mass spectrometers and perfectly matched inlet systems that enable excellent sample handling with the highest performance: Elemental analyzers, chromatography inlets and dedicated headspace analyzers for gas, liquid and carbonate samples as well as the gold-standard dual inlet systems for ultimate precision and sensitivity.







Mass spectrometers

Our new x**ION** isotope ratio mass spectrometer platform is the smallest 5 kV instrument available on the market thanks to the uniquely designed ion optics and integrated **centrION** CF gas handling system. Combined with lytic**OS**® Software Suite the x**ION** platform combines exceptional analytical performance with powerful automation and intelligence.



isoprime precisION

The most flexible isotope ratio mass spectrometer ever created

The isoprime precisION isotope ratio mass spectrometer is characterized by highest analytical performance and unsurpassed flexibility. It offers the perfect starting point for your research and grows with your research requirements.

Your benefits

- High performance IRMS system with excellent sensitivity, accuracy and precision
- Simultaneous measurement of up to 10 ion beams for multi-collector experiments
- lytic**OS**® Software Suite for intelligent automation and control
- Dual Inlet configuration optional



isoprime visION Solutions

The most elegantly simple stable isotope analyzer

Simplicity is what isoprime visION is about. isoprime visION is an isotope ratio mass spectrometer which offers a completely new experience of stable isotope analysis. An experience where you are free from the routine chores of maintenance allowing you to focus on the science, not the instrumentation.

Your benefits

- Comprehensive, tailor-made solutions for routine stable isotope analysis
- Smallest IRMS footprint on the market
- Fully automated system setup and performance checks
- lytic**OS**® Software Suite for intelligent automation and control

	isoprime precisION	**isoprime visION Solutions**
Isotopes	δ^2H, δ^{13}C, δ^{15}N, δ^{18}O, δ^{34}S + novel isotopes	δ^2H, δ^{13}C, δ^{15}N, δ^{18}O, δ^{34}S
Setup	High-performance mass spectrometer, configurable to suit any research requirement	Pre-configured stable isotopes applications solutions
More information		



Good to know
that environmental protection is monitorable.

Focus applications:
- TOC / TN_b analysis of environmental water
- Research into complex ecosystems and element cycles
- Characterization of soils and solid waste

EA inlets

Our EA-IRMS solutions are the most technically advanced available and offer innovative technologies for best analysis results. With our unique Advanced Purge and Trap (APT) technology for separating and focussing gas mixtures as well as the zero-blank ball valve sample introduction system, analyses are straightforward, no matter how complex the samples.



vario ISOTOPE cube

The gold standard in elemental analyzer isotope ratio analysis

Your benefits
- Industry-leading accuracy and precision for $\delta^{15}N$, $\delta^{13}C$ and $\delta^{34}S$ thanks to APT technology
- Capable of analyzing materials with a C:N and C:S ratio of > 8,000:1
- Excellent analysis of large sample sizes up to 20 mg (abs) carbon
- Reliable results, even for low-microgram samples
- Ball valve (filled as a patent) for blank-free sample transfer



vario ISOTOPE select

The workhorse in elemental analyzer isotope ratio analysis

Your benefits
- Entry-level elemental analyzer for $\delta^{15}N$, $\delta^{13}C$ and $\delta^{34}S$ analysis of organic material
- Reliable results for sample sizes up to 7 mg (abs) carbon
- Ball valve (filled as a patent) for blank-free sample transfer
- Tool-free routine maintenance
- Integrated autosampler with up to 240 positions



vario PYRO cube®

CNSOH isotope ratio analysis – all in one universal instrument

Your benefits
- OH and CNS isotope ratio analysis all in one universal Instrument
- Capable of analyzing materials with a C:N and C:S ratio of > 8,000:1
- The only system for blank-free $\delta^{18}O$ analyses
- Matrix-independent, reliable results thanks to backflush technology (filled as a patent), with exceptional separation of N_2 and CO



iso TOC® cube

Fully integrated TOC / TN_b isotope ratio analysis

Your benefits
- Only truly integrated TOC-IRMS system for analysis of dissolved organics
- Exceptional dissolved organic carbon and bound nitrogen isotope analysis
- High temperature combustion of recalcitrant compounds yields 100 % C and N recovery
- Eliminates the need for sample extraction and purification

Chromatography inlets

Compound specific isotope analysis is a powerful technique which allows complex mixtures of organic compounds to be separated and then isotopically analyzed. Compound separation is done via GC or LC techniques prior to fractionation-free real-time conversion of the compound to gaseous phase. Our systems offer exceptional sensitivity and chromatography.

GC5

The highest sensitivity GC-IRMS system

Your benefits

- Online measurement of $\delta^{13}C$, $\delta^{15}N$, $\delta^{2}H$ and $\delta^{18}O$ in compounds separated by GC
- Agilent 8890 GC with split/splitless, PTV or on-column injectors
- High temperature $\delta^{2}H$ pyrolysis of compounds at 1,450 °C
- Optimized to maintain chromatographic integrity



iso CHROM® LC

The game changer in LC-IRMS

Your benefits

- LC-IRMS interface (filled as a patent) using high-temperature combustion to convert separated compounds to CO_2
- Robust analysis and significantly improved maintenance intervals
- Exceptional chromatography performance
- Ideal for high throughput LC-IRMS analysis



LiquiFace

High performance carbon isotope analysis of LC separated compounds

Your benefits

- Liquid chromatography interface for $\delta^{13}C$ measurements
- Fractionation-free wet chemical oxidation at 90 °C
- Direct injection mode for bulk isotope measurements
- Excellent chromatography performance



GOOD TO KNOW
how the climate has changed over the course of the earth's history.

Focus applications:
- Climate research
- Analysis of greenhouse gas emissions
- Research on element cycles



GOOD TO KNOW
that you can trust the label.

Focus applications:
- Food authenticity
- Alternative proteins

Headspace analyzers

Headspace analysis is a technique whereby samples for isotopic analysis are prepared into septum sealed vials or flasks. This includes atmospheric gases, breath, fluids and carbonate materials. These systems perform automated sampling, purification and concentration of the analytical species of interest allowing high precision, high sensitivity analysis of a broad range of sample types.



iso FLOW

Stable isotope analysis of carbonate materials, DIC and liquids

Your benefits
- Headspace analyzer for a broad range of sample matrices
- UltiTrap™ technology provides dynamic separation of sample gases
- Carrier He flow controlled by a digital high precision MFC
- 180-position heated sample tray with ±0.1 °C stability up to 90 °C
- Direct drive pump for precise delivery of acid (optional)



iso FLOW GHG

Stable isotope analysis of atmospheric greenhouse gases

Your benefits
- Cryogenic pre-concentration system for analysis of atmospheric concentrations of CO_2, N_2O and CH_4 greenhouse gases
- Perform high-sensitivity dual isotope analysis of dissolved nitrate
- Optional 1,500 °C furnace for $\delta^{13}C$ analysis of CH_4

Dual inlet analyzers

Dual inlet technology is the ultimate solution for those applications looking for the highest possible precision and sensitivity for isotope analysis of pure gases. This is due to the unique ultra-low volume change-over valve which performs multiple comparisons between sample and reference gas to drive down analytical precision. Our dual inlet system has the smallest footprint making it an ideal choice for busy laboratories.



iso DUAL INLET

High precision pure gas analysis

Your benefits
- The most compact dual inlet system on the market
- Micro-volume cryogenic cold finger enables the analysis of very small (5 µg) carbonate samples
- The world's most highly precise $\delta^{18}0$ analysis of water samples
- Capacity for up to 180 samples (sample vials sealed with septum)



OUR SOFTWARE SOLUTIONS

Analysis processes are not finished with the mere generation of analysis results. Further crucial steps in the analysis process are data processing and data analysis. With the increasing demand on laboratories for ever more efficiency, tools for simple and effective data evaluation are in greater demand than ever.
With our software solutions, the devices can be both controlled and monitored.

In conversations with our customers we have recognized that many laboratories face the same challenge: Which is the best practice to manage the many analysis results that are generated daily? How can evaluation of this data be done as efficiently and effectively as possible? Since we would like to support you not only by our high-performance analysis systems, but also with efficient data evaluation tools, we created powerful software solutions to make your daily analysis routines easier.

lyticOS
SOFTWARE SUITE BY ELEMENTAR

lyticOS® Software Suite

Software suite for simplified data generation and processing as well as for the control of our analyzer systems.

lytic**OS**® Software Suite is the most advanced analysis software and offers an exceptional user experience. The basis for this is the modern, intuitive user interface for controlling lytic**OS**® and your associated system. Take advantage of the unrivaled new features, to simplify your work processes. In addition, lytic**OS**® is characterized by an unprecedented symbiosis of software and hardware. With the use of intelligent automation and control, Good-for-Go optimizes your system and takes over routine tasks.

This reduces the demands on the user and improves the reliability and performance of the system.



More information:

ArDB
ANALYTICAL RESULTS DATABASE

ArDB

Software for the creation, maintenance and management of databases consisting of analysis results.

ArDB makes it easy for you to create, maintain and manage a database of analysis results, regardless of the device used to generate the data. Your results are organized and stored together with the associated metadata, making database queries easier than ever before.

The powerful data visualization features let you see trends and correlations in your data. The fully integrated multivariate analysis tools also make it possible to statistically reduce databases with a high dimensionality of the analysis results for better interpretation.



More information:



ALWAYS THERE FOR YOU – WORLDWIDE

We support you in all questions and requirements relating around your applications and offer you a wide range of solutions in the field of organic and inorganic elemental analysis, nitrogen and protein analysis, TOC analysis, stable isotope analysis and optical emission spectrometry.

Full range of services

In addition to instrument installation, we offer you a comprehensive range of consulting, method development and support in the qualification of your analytical processes. Our aim is to ensure that you get the most out of your new instrument and can use all functions effectively to achieve the best results. Our range of services also includes instrument qualification in accordance with GMP guidelines.

In our **Elementar Academy**, you can find tailor-made training courses to help you expand your knowledge or bring it up to date.





Your direct line to us

Our technical customer service team will support you in all matters relating to technical questions about our instruments. We also support you with the appropriate on-site service if required and offer you regular inspections with our maintenance agreements to ensure the best performance of your analyzer. We are also on hand to assist you with troubleshooting and repairing your instrument if necessary.

Controlled quality

Thanks to the outstanding robustness and durability of our instruments, we offer a 10-year commercial guarantee on the high-temperature combustion furnace and the thermal conductivity detector cell of the thermal conductivity detector (TCD) for most of our combustion analyzers. Our long-term oriented technical support is also reflected in the after sales area: we provide spare parts for at least 10 years. This results in exceptionally low total cost of ownership and gives you the assurance that your investment will pay off.

Order the consumables you need either directly from our customer support team or online in our **Elementar Customer Portal.**

We will be happy to help you!

Elementar Analysensysteme GmbH
Elementar-Straße 1
63505 Langenselbold
GERMANY
+49 6184 93930
info@elementar.com

Elementar UK Ltd.
Isoprime House
Earl Road, Cheadle Hulme
Stockport – SK8 6PT
GREAT BRITAIN
+44 161 4883660
info-uk@elementar.com

Elementar France Sarl
93 Rue de la Villette
69 003 Lyon
FRANCE
+33 4 72148900
info@elementar.fr

Elementar Italia Srl
Via Cavour 2
22074 Lomazzo (Co)
ITALY
+39 02 36714520
info-italia@elementar.com

Elementar India Pvt. Ltd.
204, Block-1
DLF Corporate Park, MG Road
Gurugram – 122002
HARYANA, INDIA
+91 124 4782150
info-india@elementar.com

Elementar Analytical Instruments (Shanghai) Co., Ltd.
3/F, Building 6
No. 1151 Lianxi Road
Shanghai 201204
CHINA
+86 21 68785128
sales-china@elementar.com

Elementar Japan K.K.
Yamashita-cho K-bldg. 9F,
224-1 Yamashita-cho,
Naka-ku, Yokohama 231-0023
JAPAN
+81 45 3239182
info-japan@elementar.com

Elementar Korea Ltd.
768, ITECO Centre
150, Jojeong-daero, Hanam-si
Gyeonggi-do, 12930
SOUTH KOREA
+82 31 790 1308
info-korea@elementar.com

Elementar Australia Pty Ltd
Suite 1.01, Level 1
201 Elizabeth Street
Sydney, NSW 2000
AUSTRALIA
+61 28 2960480
info-au@elementar.com

Elementar Americas Inc.
119 Comac Street
Ronkonkoma, NY 11779
UNITED STATES
+1 856 7870022
info-us@elementar.com

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Elementar Analysensysteme GmbH
Elementar-Straße 1
63505 Langenselbold (Germany)
Phone: +49 (0) 6184 9393-0
info@elementar.com
www.elementar.com

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