

Advanced Analytical Instruments

For Analysis & Sample Prep



SciSPX

Introduction

SciSPX is part of BRS, a leading supplier of laboratory instruments in BeLux for over 30 years. SciSPX is active in the field of Analysis and Sample Prep.

Our Xperts support our products for Elemental Analysis, Food Quality Control and Environmental Analysis. In the Benelux we are based in Abcoude (NL) and in Beersel (BE) working every day to provide service and support to each and every customer.

Who are we?

Support and Product Xperts

As Support and Product Xperts, we help laboratories with their analysis and research.

We introduce new technologies and developments of existing technologies to our customer to help them reach their goals.

Through our experience, versatility and organizational strength, our organization distinguishes itself as a company where every employee maximizes customer satisfaction, personal results, teamwork and communication skills. These principles help us establish a long-term relationship with our customers.

Our Support Engineers and Product Specialists cover the whole process from advising, demonstrating and developing the applications, installing and maintaining the laboratory instruments.

2 |

Our markets



Chemical industry



Pharmaceutical industry



Food - Feed - Beverages



Agriculture



Environment



Energy resources

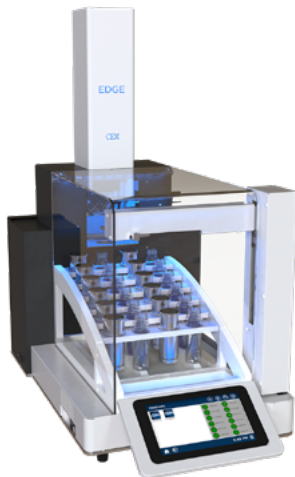
Index

Sample Preparation	p 4-5
Compositional Analysis - Moisture, Fat and Ash	p 6-7
Elemental Analysis	p 8-10
TOC Analysis	p 11
Multi-parameter and Titration Analyzers	p 12-13
Discrete Analyzers	p 14
Segmented Flow Analyzers	p 15
Refractometers	p 16
Density meters and Polarimeter	p 17
Visometers, Tensiometers & Contact Angle Measuring	p 18-19

Automated Solvent Extraction System

The EDGE® is an automated extraction system that is faster than Soxhlet, more automated than QuEChERS, and simpler than other solvent extraction systems.

- Fastest technique available
- 12 samples in an hour
- Q-Cups™ are easily assembled and cleaned
- One technology with unlimited applications



Flexible: Get better results with one instrument.



- Dispersive Solid Phase Extraction
- Pressurized Fluid Extraction
- Supported Liquid Extraction
- PFAS version is available

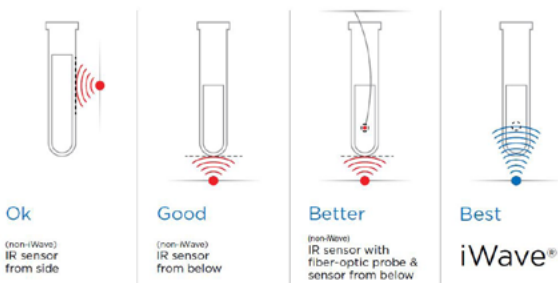
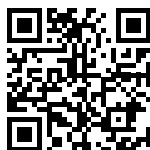
4

Better digestions for improved analyses with Mars 6

For over 45 years chemists have trusted CEM to provide the highest quality microwave digestion for their laboratories.



- Contactless in-situ temperature measurement (iWAVE)
- Sensors that detect vessel type and count
- Hundreds of pre-programmed methods
- Easy to use vessels for every application



BLADE - The future of microwave digestion... today

BLADE™ brings speed, simplicity, performance, and flexibility to labs to increase their capabilities and drive them into the future of elemental analysis.

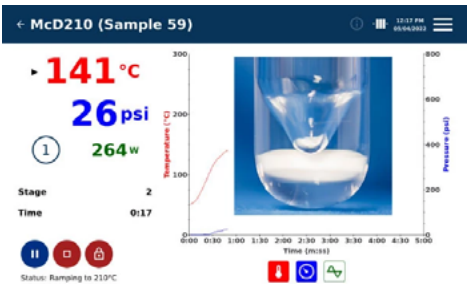


- Digestions in minutes
- Prepare vessel in seconds with the Easy Snap Cap
- Workflow solutions from balance to analysis
- Mix and match samples and acids



Digest any sample with ease.

From routine to extreme, BLADE can digest it all with ease. Mix and match samples and acids, including HNO_3 , HCl , and HF , in one batch using available methods. Even watch your digestion in real-time with the high definition **built-in camera**.



Rapid Moisture/Solids analyses in <5 minutes!

The Smart6 is the most technologically advanced and fastest microwave moisture/solids analyzer on the market.

- Simple steps to run any sample type
- Analyze both dry and wet products in one system
- Ready-to-use preprogrammed methods
- Direct loss on drying measurement
- Combines microwaves and infrared to rapidly determine moisture content



Rapid NMR Fat analyzer.

ORACLE is the first ever rapid fat analyzer that requires absolutely NO method development or calibrations.

- Rapid 30 seconds analysis
- Analyze any sample from 0.05% - 100% fat
- Direct measurement of hydrogen protons on fat molecules
- Major breakthrough in NMR technology



Matrix independent



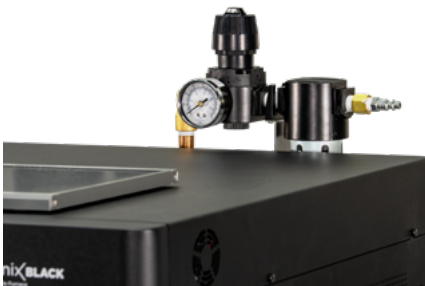
Microwave Muffle furnace.

Ash samples with unmatched speed and safety with the Phoenix BLACK.

- Ash samples up to 97% faster
- One-step ashing without need of pre-ashing
- Use any type of crucible
- Easy to use methods with automatic start and temperature ramps
- Meets industry requirements for muffle furnaces
- Is CFR 21 part 11 compliant (sulphate ashing)



7



Phoenix Black Airwave



Phoenix Black Sulfate Ashing

Vario EL & UNICUBE - Golden standard in simultaneous CHNS elemental analysis.

- Little and tool-free maintenance
- Patented ball-valve for blank-free sample introduction
- Unique element separation



UNICUBE



Vario EL Cube



Vario MACRO Cube & Vario MAX Cube the first MACRO analyzer for the simultaneous CHNS analyses of CHNS.

8

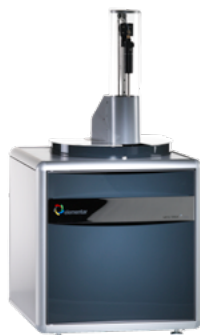
- The use of our Advanced Purge and Trap (APT) technology enables the instrument to measure samples with even the most challenging C:N
- Can handle large sample volumes of up to 1.5 g which allows analyzing even inhomogeneous matrices
- Future proof thanks to 10-year guarantee on the high-temperature combustion furnace and the thermal conductivity detector cell



VARIO MACRO CUBE



VARIO MAX CUBE



Rapid N exceed & Rapid Max N exceed - Nitrogen and Protein analyzers.

Maximum performance Dumas Analyzers.

When it comes to advances in food production and for example the transition from animal to plant proteins in the food chain, we support agricultural and food companies in the production of high-quality food.

Nitrogen and protein analyzers that are fast, robust, and precise help to develop new products, reliably monitor food quality and production, and optimize production processes. As a result, food manufacturers specializing in alternative proteins can achieve maximum efficiency in the laboratory and grow rapidly with the market.



- Maximum sample flexibility due to different sample introductions
- Patented ball-valve for blank-free sample introduction
- High accuracy due to unique post-combustion technology
- Little and easy tool-free maintenance



Rapid Max N exceed



Rapid N exceed



Rapid OXY cube - Rapid Oxygen analysis.

Highly accurate and precise oxygen analysis, even in the low ppm range.

Oxygen concentration analysis is becoming increasingly important in fuel biomass and renewable industries. Only direct analysis provides accurate and reliable data.

However, oxygen concentrations derived from indirect calculation of differences (e.g. according to ASTM D3176) suffer from cumulative errors on the measurement of C, H, N and S and the determination of ash content.

In the fuel industry, the ASTM D5622 standard, among others, requires accurate direct determination of oxygen concentrations at a pyrolysis temperature of 1450°C.

In the plastic recycling process, oxygen content is a decisive factor for whether or not to recycle. Indeed, certain concentrations lead to the formation of NO_x and by-products that interfere with the recycling process.

Thanks to its new gas processing technology, Elementar's Rapid Oxy Cube offers accurate, blank-free and matrix-independent oxygen analysis, based on pyrolytic conversion of oxygen to carbon monoxide at 1450°C.

The detection limit of the Rapid Oxy Cube can be reduced to 10 ppm by installing an infrared (IR) detector, which is also characterised by high linearity and stability. Since the IR detector responds only to the target analyser CO, pyrolysis gases can flow directly to the IR detector. The sample analysis time is 3-4 minutes.

Oxygen analysis with the Rapid Oxy Cube is cost-effective: the device is designed for low consumption of both consumables and carrier gas. Maintenance is only required after analysing a few thousand samples.



- 1450°C furnace temperatures for quantitative matrix independent pyrolysis
- An unparalleled limit of detection up to 10 ppm
- Patented blank free sample introduction valve
- High operating comfort through intelligent design



Enviro TOC

TOC analysis of environmental water and wastewater at its best.

- Designed for environmental samples
- Modular concept for liquid and solid analysis
- TOC analyzer with flexible nitrogen determination
- Real matrix separation with SALTTRAP
- Software with high performance and maximum flexibility



Vario TOC Cube

TOC/TN analysis without limitations.

- For the determination of organically and inorganically bound carbon in liquids, slurries and solids
- Measuring modes for TC/TIC, TOC/NPOC, POC and DOC
- Modular concept for liquid and solid analysis
- Software with high performance and maximum flexibility



11

Acquaray Series

An entirely new way for easy TOC analysis and more, based on a chemical oxidation process supported by highly energetic UV radiation.

The modular concept allows the attachment of optional extra modules for the determination of TOC in solids, Total Nitrogen (TN) and Total Phosphorus (TP) in water



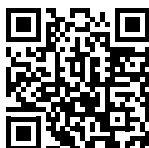
PeCOD - Fast and Portable COD (Chemical Oxygen Demand) Analyzer

- Safe, green chemistry
- Strong correlation to BOD5
- Trusted by governments
- One technology, multiple configurations: benchtop, online and automated



PC-BOD - Automated Biochemical Oxygen Demand (BOD) Analysis Solutions

- Automates the 5-day and 7-day BOD and CBOD standard analysis methods. Conforms to ASTM Standard Methods 5210B 23rd Edition, ISO EN 5815, ISO EN 1899-1, -2
- Eliminates potential for human error by automating up to five pumps for reagent addition
- Automated DO probe calibrations and calibration checks either on rack or at a separate side position, with automated recalibration and re-reading of previous samples when required
- Customizable user interface to simplify operation
- Easily manage and prioritize samples during analysis
- Quickly identify results with barcoded labels



MT Series of Automated Environmental Titration and Multi-Parameter Analyzers

Mantech can deliver analysis systems that perform the following functions between 1 parameter and up to 8 parameters can be automated.

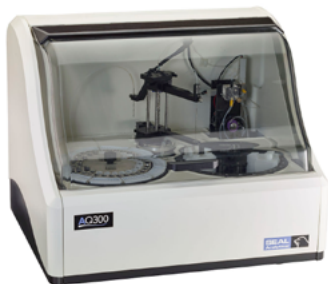
- pH
- Chloride by Titration or Direct Measure
- Oxygen
- Turbidity
- Alkalinity by Titration
- Fluoride
- Oxidation-Reduction Potential (ORP)
- Nitrate
- Electrical Conductivity (EC)
- Color
- Salinity
- Total Hardness
- Acidity by Titration
- Ammonia by Standard Addition or Direct Measure
- Temperature
- Soil pH & Conductivity
- Permanganate Index (PI) for Oxidizability

- Automates 32-720 samples in a single batch
- Customizable user interface for simplified operation
- IntelliRinse™ prevents cross contamination between samples
- Eliminates potential for human error with automated pipetting using MANTECH's Titrasisp™
- Non-destructive sample preparation allows for up to 5 parameters on a single sample



AQ300 Discrete Analyzer:

Designed for nutrient analysis on enviromental samples.



- Compact discreet analyzer
- Best reproducibility
- Lowest detection limits
- Less than 50ul waste per sample
- 9 filter postions



AQ400 Descrete Analyzer

Brings increased speed, capacity, flexibility and reproducibility to your analysis



- Compact bench-top analyzer, ideal for COD
- Very high capacity
- Silent operation
- Automated spiking
- Add samples after a run has started



AQ700 Discrete Analyzer

The highest capacity and throughput offered in a discrete analyzer



- Ability to run overnight
- Cooled and non-cooled reagent positions
- No carry-over or cross-over contamination
- Ultra low reagent consumption
- Add samples after run has started

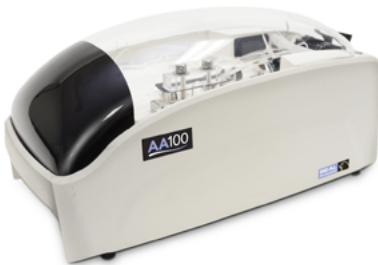


Segmented Flow Analyzers



AA100 Segmented Flow Analyzer

Ideal for all types of water analysis for laboratories needing a simple uncomplicated system to run dedicated chemistries



- Ideal for 1 or 2 dedicated chemistries
- Low cost per test
- Up to 100 tests per hour
- Add samples after run has started
- Simple to use with limited, uncomplicated tubing



AA500 Segmented Flow Analyzer

The highest performing analyzer with highest automation



- Ultra-low detection limits
- Automatic startup & shutdown
- Low reagent consumption
- Quick method change over
- Uses less bench space



15

QuAAtro39 Continuous Segmented Flow Analyzer

Compact and flexible chemistry analyzer. Easy to transport

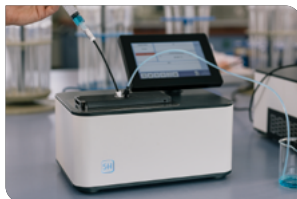


- Ability to run overnight
- Cooled and non-cooled reagent positions
- No carry-over or cross over contamination
- Ultra low reagent consumption
- Add samples after run has started



The VariRef: Refractometer on the bench for fast and precise measurements.

- Liquid and solid samples
- Modular and connectable to network
- Multi-point calibration for full measurement range
- User friendly
- Fast temperature control, rapid measuring results
- Easy cleaning
- Maintenance free
- 21 CFR Part 11 conform



In-Line Process Refractometers

All the in-line process refractometers and sensors perform industrial measurements continuously and in real time. This technology is also known as PAT (Process Analytical Technology). PAT allows you to monitor and control your process without product loss or process divergence.



- Liquid and solid samples
- Modular and connectable to network
- Multi-point calibration for full measurement range
- User friendly
- Fast temperature control, rapid measuring results
- Easy cleaning
- Maintenance free
- 21 CFR Part 11 conform
- ELN; LIMS ready



The VariPol: Modular Polarimeter for Pharma & more

- Great modularity
- Basic Polarimeter especially designed for pharmaceutical applications – 21 CFR Part 11
- Multi-user concept and remote control via internet browser
- Rapid measuring
- Peltier system for automatic temperature control
- Constant precision over the whole measuring range, space saving
- Energy saving durable LEDs



17

The VariDens: Density and concentration measurement



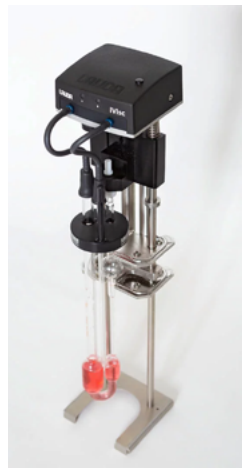
- Modular use, connectable to your internet browser and tablet or device of your choice
- Intuitive user interface, multiple users
- Fast temperature control
- Easy cleaning
- Maintenance free
- Compliant with 21 CFR Part 11



iVisc Viscometer - Compact automatic viscometer for Newtonian liquids

Intelligent viscosity measuring stand designed for a large spectrum of standard glass capillary viscometers.

- Easy to operate via the software
- Modular solution for maximum flexibility
- Kinematic viscosities ranging from 0.3 to 30 000 mm²/s can be measured
- Using a suitable Lauda Thermostat the sample temperature ranges from -20 to 150 °C



Measuring stand S5 for a complete automated solution (PVS)

The S5 is the measuring part of the PVS system. Its head is comprised of the opto-electronic meniscus detectors as well as the entire control of the measuring process including miniature pump and valves.

The accuracy and resolution of the light sensor measurement system is among the best of its class. The robust micro-pump for pushing the sample up into the measuring ball as well as the chemical-resistant valves in the head of the stand allows reliable and continuous operation.

- Completely micro-processor controlled for a highly precise time measurement
- Adaptive infrared (NIR) detection
- For (Micro-) Ubbelohde, Cannon-Fenske-Routine and Micro-Ostwald capillaries
- Control can be extended with insert cards for additional 5x S5 stands, VRM modules (automatic cleaning), MT dosing systems.



TD5 Tensiometer - For the precise determination of surface and interfacial tension.

TD5 Compact tensiometer, ideal for research, quality control and product development.



- For standard methods such as the Du-Noüy ring or Wilhelmy plate method
- Besides surface and interfacial tension in liquids to characterize surfactant solutions and oils. it can measure drop adhesion force and density
- Remote control from the user-friendly software
- Surface tension resolution: 0.007 mN/m
- Temperature ranges from 5 to 80°C (optional temperature sensor)



19

LSA - Contact Angle Measuring Instruments

LAUDA Scientific Surface Analysers cover a wide range of applications, from quality assurance to research.



- Wide range of drop calculation methods
- Innovative unique drop shape adjustments
- Fully automatic measurement
- Expandable and customizable with a wide range of dosing systems, sample stages and other accessories
- Full support of automatic interfacial tension and CMC
- Remote control from the powerful software
- High-speed video recording



Next to SciSPX, BRS has other business units:



BioSPX
A new focus on life science

BioSPX: Life Science – www.biospx.com



ChemSPX
Chemistry connects

ChemSPX: Chemistry connects - www.chemspix.com



SciSPX
Analysis simplified

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