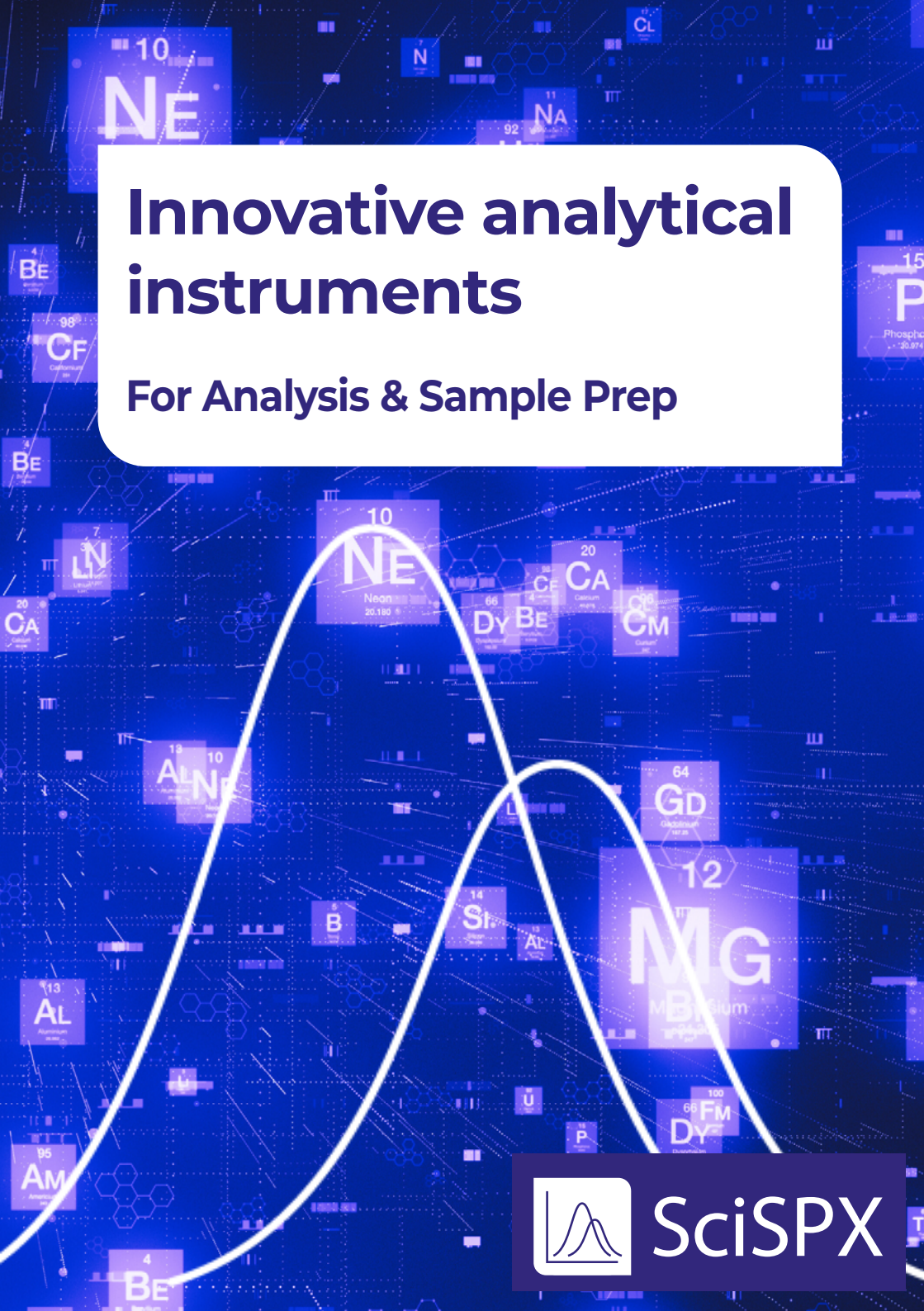
Innovative analytical instruments

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.

Our markets

Chemical industry

Pharmaceutical industry

Food - Feed - Beverages

Agriculture

Environment

Energy resources

Index

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
- **Meets ISO 16756 | IDF 259, the only fat analysis standard without calibrations or solvents.**

Matrix independent

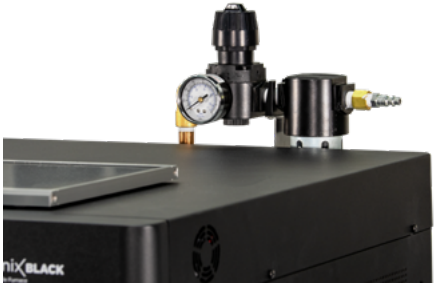




Microwave Muffle furnace.

Ash samples with 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)
- Homogene temperature inside the muffle



Phoenix Black Airwave

Phoenix Black Sulfate Ashing

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.

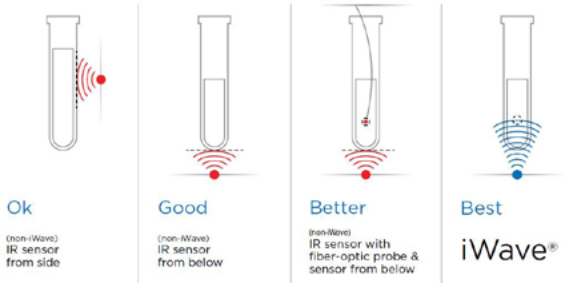
- Dispersive Solid Phase Extraction
- Pressurized Fluid Extraction
- Supported Liquid Extraction
- **PFAS version is available**

6

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



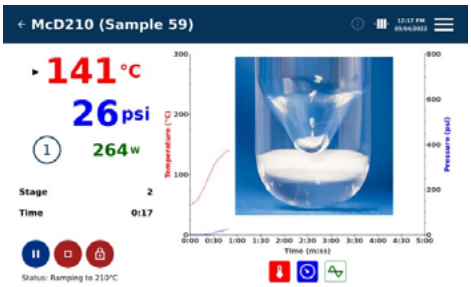
BLADE - The future of microwave digestion... today

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
- Mix and match samples and acids
- Different sample matrix
- Complete controle venting
- Is CFR21 part 11 compliant

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, etc. in one batch using available methods. Even watch your digestion in real-time with the high definition **built-in camera**.



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

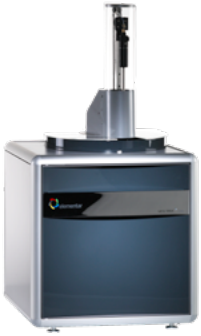
- Little and tool-free maintenance
- Patented ball-valve for blank-free sample introduction
- Unique element separation
- Optional autosampler 60-120 positions

UNICUBE

Vario EL Cube

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

- 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 1.5g (MACRO) and up to 5g (MAX) 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 MAX CUBE

VARIO MACRO CUBE

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

Maximum performance Dumas Analyzers.

Dumas is a reference and routine method for the determination of total nitrogen and protein concentration. The method is ideally suited for various food and feed manufacturers and suppliers. This nitrogen and protein analysis is highly reproducible and meets national and international standards for food and feed.

- 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 N exceed

Rapid Max N exceed

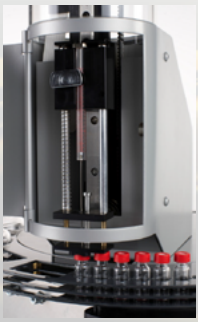
	Dumas	Kjeldahl
Sample throughput	>200 per day	Labor intensive: two systems
Single sample	3-5 min per sample	Slow analysis: >100 min
Precision / data quality	Comparable repeatability, comparable data quality	
Economic operation	Lowest price per analysis Fully automated operation	Expensive (waste disposal & manpower)
Safety	No boiling acids No corroded fume hood!	Uses boiling acid
Environment	No hazardous chemicals to recycle	Produces hazardous waste

Rapid OXY cube - Rapid Oxygen analysis.

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

To enable trace oxygen analysis, the system blank is reduced to almost non-existent levels thanks to innovative sample introduction methods and a blank-free pyrolysis reactor made from glassy carbon.

- 1450°C furnace temperatures for quantitative matrix independent pyrolysis
- An unparalleled limit of detection up to 10 ppm
- Patented blanc free sample introduction valve



Upgrade to liquid autosampler

- Liquid autosampler injects directly into combustion zone
- Time saving
- Syringe can inject 3 µl – 25 µl with highest precision
- Better results for volatile components
- Safe

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 (TN_b)
- Real matrix separation with SALTTRAP
- Software with high performance and maximum flexibility

info@scispx.com
www.scispx.com
BE +32 (0)2 334 22 70
NL +31 (0)294-280450

Vario TOC Cube
TOC/TNb 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 (TN_b)
- Modular concept for liquid and solid analysis
- Software with high performance and maximum flexibility
- Real matrix separation with SALTTRAP

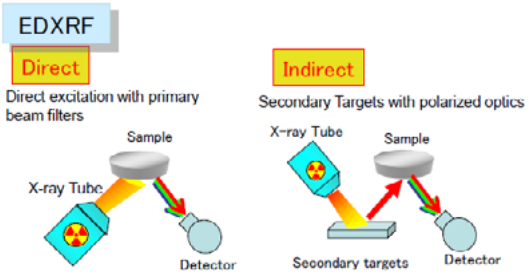
Acquray Series
An entirely new way for easy TOC analysis and more, based on a chemical oxidation process supported by highly energetic UV radiation.

The technology of the acquray is 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.

- 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.
- Detection limit 2PPB

Energy Dispersive X-ray Fluorescence (EDXRF)

A non-destructive analytical technique that provides quick, multi-element analysis in a wide range of matrices. All elements in the range of sodium through uranium can be measured.



Nex CG II Series

High-performance indirect excitation EDXRF for complex applications with trace elements and variable base matrices

- Quick elemental analyses of solids, liquids, powders, coatings, and thin films
- Indirect excitation for exceptionally low detection limits
- Large-area high-throughput silicon drift detector (SDD)
- Analysis in air, helium, or vacuum
- Powerful and easy-to-use QuantEZ software
- Advanced RPF-SQX Fundamental Parameters software featuring Scattering FP
- Compliance with CFR 21Part 11
- Various automatic sample changers accommodating up to 52 mm samples

NEX DE Series

60 kV EDXRF for high-performance results when analysis time or sample throughput is critical or when small spot analysis is required

- Quick elemental analyses of solids, liquids, alloys, powders and thin films
- High-performance SDD for superior data
- 60 kV X-ray tube for wide elemental coverage
- Multiple automated tube filters for enhanced sensitivity
- Advanced RPF-SQX Fundamental Parameters software featuring Rigaku Scattering FP
- Compliance with CFR 21Part 11
- High-res camera and automated collimators for accurate sample positioning (NEX DE VS)
- Analyze 1 mm, 3 mm, and 10 mm spot sizes (NEX DE VS)

info@scispx.com
www.scispx.com
BE +32 (0)2 334 22 70
NL +31 (0)294-280450

Wavelength Dispersive X-ray Fluorescence (WDXRF)

Rigaku
Applied Rigaku Technologies

Exceptional precision and accuracy in measuring the thickness and composition of materials, particularly with light elements.

Supermini200
High-Power Benchtop Sequential WDXRF Spectrometer

The Rigaku Supermini200 benchtop wavelength dispersive X-ray fluorescence (WDXRF) spectrometer is a versatile instrument that is widely used in industrial- and research environments. It can be used for quality control of almost any type of material, as well as covering many areas of research. The Rigaku Supermini200 delivers high resolution and excellent lower limits-of-detection (LLD) at low cost-of-ownership.

- Compact and lightweight benchtop WDXRF spectrometer
- Air-cooled 200 W Pd X-ray tube
- Primary beam filter
- Three analyzer crystals
- Standard flow proportional- and scintillation detector
- Optional: sealed proportional detector
- 10- or 12-position sample carousel, for samples up to 52mm in diameter

ZSX Primus IV
Tube-Above high End Sequential WDXRF Spectrometer

- 4000 W Rh X-ray tube with a 30 um Be window
- 6-position sample mask changer (35 mm to 0,5 mm)
- Up to 10 analyzer crystals
- 3 collimator slits
- Attenuator for optimal excitation
- Auto Pressure Control (APC) of the vacuum for best light element performance
- Digital Multi Channel Analyzers (D-MCA) for increased detector linearity
- Helium partition for liquids and loose powder samples
- Guided quantitative application set-up

info@scispx.com
www.scispx.com
BE +32 (0)2 334 22 70
NL +31 (0)294-280450

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

- Safe, green chemistry: nouse of acid solvents and chromates
- Strong correlation to BOD5
- One technology, multiple configurations: benchtop, online and automated
- Results are available in only 10 minutes

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
- Upgradable and modular

MT Series of Automated Environmental Titration and Multi-Parameter Analyzers

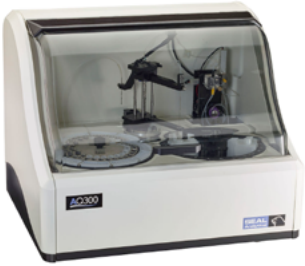
Mantech can deliver analysis systems that perform the following functions between 1 parameter and up to 8 parameters can be automated.

- 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 Titrasip™
- 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

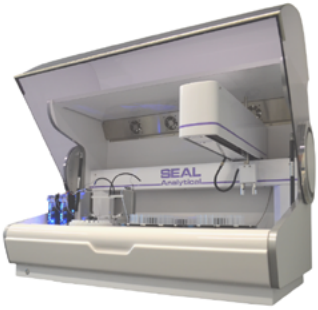
AQ400 Descrete Analyzer

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

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
- Multitest manifolds enable analysis of multiple parameters on a single channel, requiring only reagent and LED changes between tests

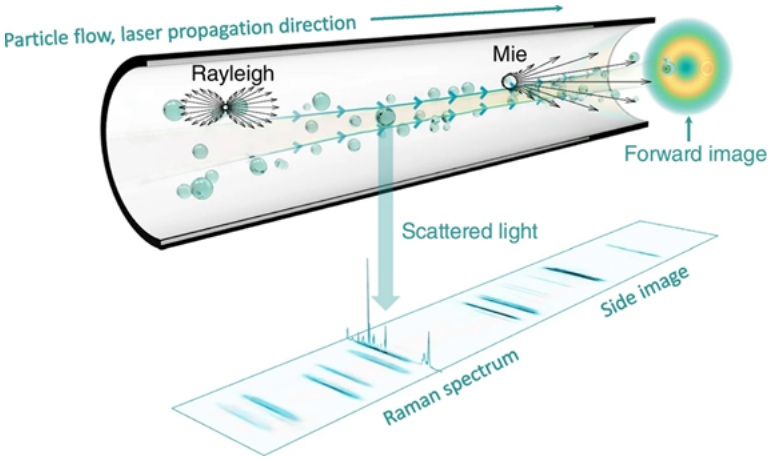
QuAAtro39 Continuous Segmented Flow Analyzer

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

Automating (nano)particle characterization and analytics for fast and accurate results in quality control for production and R&D based on the patented OF2i technique

Optofluidic Force Induction (OF2i®) is a non-destructive, parameter-free measuring method for particle counting, particle sizing and determination of particle concentration in liquid samples. Results are based on detection and counting of up to 1000 particles per minute in a continuous flow of sample through a measuring cell. It can also be used to monitor changes in the sample, e.g. reactions, agglomeration, sedimentation.



What Brave can do for you:

Real-Time process control

With a fully automated and integrable system for QC in liquid (nano)particle production (e.g. emulsions, LNPs)

Enabling new insights & discoveries

and satisfying intrinsic curiosity in basic research and R&D (formation of e.g. LLPS, degradation processes of e.g. microplastics)

Aggregation detection

For R&D and production and for QC (e.g. monoclonal antibodies, proteins)

Quantification & Analysis

of nano- and micro pollutants (e.g. degradation processes) for water injection, microplastics in liquids

B-Curious & B-Continuous: Particle count

Monitor (nano)particle behavior in real-time

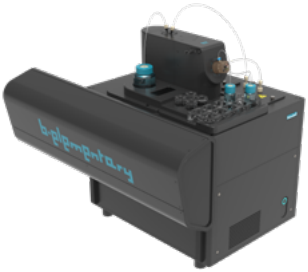
- Benchtop nanoparticle analyzer for particle concentration measurement and continuous, time-resolved nanoparticle characterization for the laboratory
- Quicker than conventional methods
- Proven throughput up to 1000 particles/minute
- Exact size and size distribution / concentration: ~100nm to 3µm (*sample dependent)

B-Curious

B-Continuous

B-Elementary:

Continuous in-flow Raman analysis



- Direct and easy integration to your production plant as an online PAT (Process analytical technology) sensor
- Seamless measurement data in real-time 24/7
- Particle size, size distribution / concentration and ANALYTICS 250nm - 50µm (sample dependent)
- Identification of unsolicited material via Light Scattering signals: 50nm - 50µm+ (concentration dependent)

info@scispx.com
www.scispx.com
BE +32 (0)2 334 22 70
NL +31 (0)294-280450

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

SCHMIDT HAENSCH

The VariPol: Modular Polarimeter for Pharma & Food

- 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

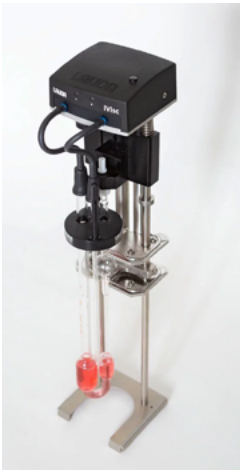
The VariDens: Density and concentration measurement

- Modular use, connectable to your internet browser or tablet
- 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.

- 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)

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: Life Science – www.biospx.com

ChemSPX: From Synthesis to Purification
www.chemspx.com

AddSPX: Element and structure analysis
www.addspx.com

BE +32 (0)2 334 22 70
info@scispx.com
www.scispx.com

Edition 03/2025