# Advanced Analytical Instruments

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# Introduction

SciSPX is part of Beun-De Ronde BV, a leading supplier of laboratory instruments for over 100 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 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 support the whole process from advising, demonstrating and developing the applications, installing and maintaining your laboratory equipment.



## **Our markets**



Chemical industry



Pharmaceutical industry



Food - Feed - Beverages



Agriculture



Environment



Energy resources

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#### **Sample Preparation**



#### **Automated Solvent Extraction System**

The EDGE<sup>®</sup> 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<sup>™</sup> 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



#### Better digestions for better analyses with Mars

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





٠	Contactless	in-situ	temperature	measurement

- Sensors that detect vessel type and count
- Hundreds of preprogrammed methods
- Easy to use vessels for every application



from side



Good (non-Wave) IR sensor from below



(non-Wave) IR sensor with fiber-optic probe & sensor from below



Best

iWave\*

www.scispx.com

#### **Sample Preparation**



#### **BLADE - The future of microwave digestion... today**

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

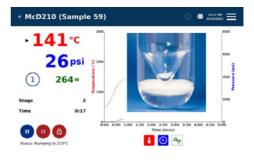


- Digestions in minutes
- Prepare vessel in seconds with the Easy Snap Cap
- Workflow solutions from balance to analysis
- Mix and match samples and acids



#### Digest any sample with ease.

From routine to extreme, BLADE can digest it all with ease. Mix and match samples and acids, including HNO3, HCl, and HF, in one batch using available methods. Even watch your digestion in real-time with the high definition built-in camera.









#### Compositional Analysis Moisture, Fat and Ash

#### 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







# **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











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#### Compositional Analysis Moisture, Fat and Ash

#### Microwave Muffle furnace.

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

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- 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 (sulfate ashing)







Phoenix Black Airwave













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

High performance and versatility in simultaneous Carbon, Hydrogen, Nitrogen and Sulfur analysis made easy.

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





UNICUBE

Vario EL Cube

#### **Inductar - Inorganic elemental analysis.** Advanced CS analysis of inorganic materials.

- Energy-efficient and longliving solid-state induction furnace
- Gastight clamp connection system ensures easy and tool-free maintenance
- No tedious cleaning needed with the innovative crucibles



Inductar CS Cube





#### **Elemental Analysis**





#### Rapid N exceed & Rapid Max N exceed -Nitrogen and Proteïn analyzers.

Maximum performance Dumas Analyzers.

- 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

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Rapid OXY cube - Rapid Oxygen analysis.

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

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















#### **Multi-Parameter and Titration Analyzers**

MANTECH		
Acidity	Color	Oxygen
Alkalinity	Conductivity	рН
Ammonia	Fluoride	Salinity
Chloride	Nitrate	Temperature
Chlorophyl	Oxidation-reduction	Total hardness
COD/BOD	potential (ORP)	Turbidity

#### Lowest operating cost per sample

- Automates 32-720 samples in a single batch
- Customizable user interface for simplified operation
- IntelliRinse<sup>™</sup> 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



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#### PeCOD - Fast, green, accurate COD analysis

- Results in 10-minutes or less
- Uses safe reagents
- No lab training required
- Highly correlated results to those obtained in the lab
- Benchtop and in-line solution





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#### **Precision measuring instruments**



#### Measuring instruments for:

- Viscosity
- Optical contact angle for surface analysis
- Tensiometry

#### Viscometer

- Viscosity measurement with Ubbelohde capillary viscometers
- Easy to operate and compact
- Modular solution for maximum flexibility







#### **Contact angle measuring instruments**

- Surface analysers for a wide range of applications
- Innovative unique drop shape adjustments
- Fully automatic measurement



#### Tensiometer

- Fully automated tensiometer
- Wide variety of applications in compliance with international standards
- Remote control with intuitive user interface





### Next to SciSPX, the BDR group holds:



AddSPX

LabSPX

BioSPX: Life Science - Part of BDR

ChemSPX ChemSPX: Chemistry connects – Part of BDR

AddSPX: Element and Structure Analysis - Part of BDR

LabSPX: Instrument Support - Part of BDR

#### You might want to know more.

In that case, don't hesitate to contact us to make an appointment for a meeting, a product presentation, or any other question.



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