ELTRA®
ELEMENTAL ANALYZERS

THE NEW ELEMENTRAC CN-r

AUTOMATED NITROGEN/PROTEIN AND CARBON DETERMINATION ACCORDING TO THE DUMAS METHOD

part of VERDER

NITROGEN AND CARBON ANALYZER ELEMENTRAC CN-r

RELIABLE DUMAS RESULTS IN LESS THAN THREE MINUTES AND AT A LOW COST PER SAMPLE

ELTRA's ELEMENTRAC CN-r – ergonomic design with integrated PC and tiltable touchscreen.

TYPICAL SAMPLE MATERIALS

- Standard-compliant analysis of foodstuffs, animal feed, fuels (such as coal, coke ....), fertilizers and more.




NITROGEN AND CARBON ANALYZER ELEMENTRAC CN-r

HIGH TROUGHPUT MADE RELIABLE AND COST EFFICIENT

The ELEMENTRAC CN-r is the perfect solution for high-throughput laboratories that require fast and reliable nitrogen, protein and carbon determination. State-of-the-art hardware and a built-in PC with touchscreen, allows the operator to monitor the process and control all parameters. The compact and space-saving design of the ELEMENTRAC CN-r allows saving laboratory space. The use of non-aggressive chemicals ensures better working safety compared to the Kjeldahl method.

Typical samples of the ELEMENTRAC CN-r are natural products, with the task of considerable variations in the sample composition and oxygen requirements. Nevertheless, the ELEMENTRAC CN-r ensures complete combustion by using a pure oxygen atmosphere during the process. All components are simultaneously oxidized by using a highly efficient, chromium-free catalyst. This prevents the formation of carbon black and tin leakage and increases the accuracy of the results. The method optimization is greatly simplified by the constant oxygen stream of the ELEMENTRAC CN-r.

With the use of the innovative autosampler of the ELEMENTRAC CN-r, samples are always clearly assigned, ensuring that there is no mix-up of samples even in a hectic laboratory routine and handling a large number of samples is made easy.

Specially developed for users in high-throughput laboratories, the ELEMENTRAC CN-r offers the following advantages:

EFFICIENT
- Fully automated and process-optimised nitrogen and carbon determination according to the Dumas method

ROBUST
- Engineered for high-throughput analysis and continuous operation, ensuring durability and reliability.

SMART INTEGRATED
- Enjoy seamless operation with a built-in PC featuring a touch screen, along with network-compatible data and process management for enhanced convenience.

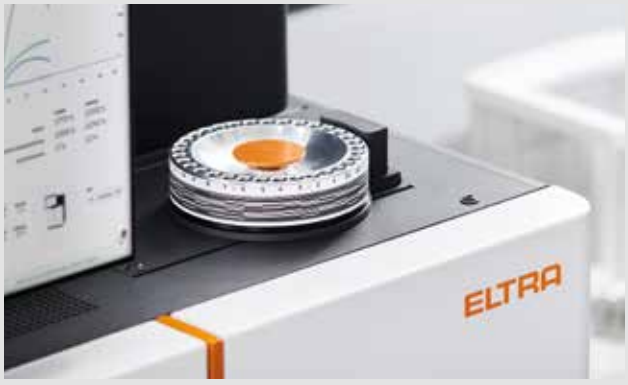
FAST PERFORMANCE
- Analyze sample in less than 3 minutes! A smart processing allows saving time: The combustion of the current sample and analysis of the previous sample is performed simultaneously (interleave analysis). Achieve results more than 70 times faster than the Kjeldahl method, ensuring unparalleled speed in your analytical workflow.

LOW OPERATING COSTS
- Economical use of resources. Intelligent gas-saving functions and use of consumables, result in lower costs per sample compared to other devices.

WIDE RANGE OF SAMPLES
- The ELEMENTRAC CN-r provides precise results for any sample matrix, be it solid or liquid. Enjoy accuracy across a wide range of samples with ELEMENTRAC CN-r's advanced capabilities.

PRIORITY SAMPLES
- Experience priority with ease. High-priority samples take the lead, getting measured immediately without the hassle of re-sorting in the autoloader. Urgent samples - our top priority.

EFFORTLESS MAINTENANCE WITH MINIMAL DOWNTIME
- All consumables can be easily replaced within less than 20 minutes, ensuring that your system is up and running. A streamlined workflow with quick and hassle-free maintenance keeps your operations running smoothly.



Detachable sample carousel for high sample throughput

Ergonomic design with integrated PC and tiltable touchscreen

TECHNICAL INFORMATION

Measurement ranges	Nitrogen: 0.03 mg to 300 mg Carbon: 0.02 mg to 175 mg
Typical weights	Up to 1.0 g, 0.5 g nominal
Analysis time	< 3 min
Detectors	Thermal conductivity detector (N) NDIR (C)
Typical samples	Food, feed stuff, fuels (coal and coke), environmental samples and fertilizers
Reagents	Magnesium perchlorate, sodium hydroxide, copper, aluminum oxide
Power supply	230 VAC ±10%, 50/60 Hz
Required gas	Oxygen (99.999% purity) Helium (99.996% purity) Compressed air (oil and water free)
Configurations	CN-r, N-r
Weight	135 kg
Dimensions (W x H x D)	75,7 x 78,5 x 62 cm

COMPLIANT TO INTERNATIONAL NORMS AND METHODS

The ELEMENTRAC CN-r is capable of analyzing variety of organic substances such as food, feed stuff, fuels, and fertilizers. From solids to liquids, ELEMENTRAC CN-r delivers pinpoint accuracy across any sample matrix. ELTRA's advanced 2-stage water separation ensures complete removal of water content from aqueous samples and allows analyzing them in a series. Liquid samples can be analyzed safely and uninterrupted. The elemental analyzer ELEMENTRAC CN-r fulfills or exceeds the requirements of all current international standards for nitrogen or carbon analysis.

Standard	Number
DIN EN	13654-2, 16168
ISO	18611-2, 22241-2, 14891, 16634, 10694, 13878, 19051, 24698-1,
AOAC	990.03, 992.15, 992.23, 993.13 997.09
AACC	46-30
AOCS	BA4E-93, BA4F-00

Overall, a nitrogen analyzer using the Dumas method offers a modern, cost-effective, time-saving and space-saving alternative to traditional Kjeldahl systems. The ELEMENTRAC CN-r is available in two configurations: carbon and nitrogen/protein or sole nitrogen/protein.

Contact us today and find out more about the ELEMENTRAC CN-r and its benefits.

ELTRA®
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