

Organic Element Analysis

Element Analyzer CN

INOEA-822 Element analyzer CN is a high-quality organic element analyzer produced by PRI-ECO with the technology of NCT (formerly Costech) from Italy, combined with Dumas' dynamic flash burning technology and chromatographic separation. It can measure carbon and nitrogen through oxidation process.



Features:

- High sensitivity, accuracy and precision;
- REDOX tubes of different diameters are optional;
- With automatic oxygen input configuration function;
- With automatic gas leakage self-test function;
- Electronic/pneumatic automatic and manual sampler;
- No reference gas required for TCD detectors;
- Dual combustion furnace, designed for economical operation;
- Can be connected to spectral and mass spectrometry isotope

Specifications

Technical parameters			
Measuring range	C: 0.002-20mg; N: 0.002-20mg	Analysis time	CN: 5min
Accuracy	<0.2% (standard, purity >99.9%)	Reactants	Dual furnace system
Precision	<0.1% (standard, purity >99.9%)	Mount	Secure and quick installation
Standby or not	Has standby mode	Display	Touch screen display
sampler	Pneumatic automatic sampler: 147 bit; Electric automatic sampler: 32,50,100 bit; Manual sampler		
System parameters			
Dimensions	810 x 500 x 370 mm	Weight	68kg
Power supply	230V, 50/60Hz	Power consumption	5A, 1100Wh
Gas requirements	Helium (99.999%), 3-5bar; Oxygen (99.999%), 3-5bar; Air (oil-free compressed air)		
Analytical conditions			
Carrier Gas	Helium	Leak detection	Automatic leak detection
Reactor temperature	Left furnace: maximum 1100 °C ;Right furnace: maximum 1100 °C;	Separator furnace temperature	Max. 110 °C
Oxygen requirements	Automatically calculated from the oxygen gauge	Flow regulation	Electronic flow regulation
Gas separation	3m GC column	Detector	High sensitivity TCD
Software	EAS Clarity	Calibrate	Linear, conic, cubic
Sample size	0-500mg (depending on sample nature)	Sample type	Solid, liquid
Bag sample	High purity tin cup or silver cup	Optional accessories	Scales, consumables

CHNSO Element analyzer

INOEA-840 CHNSO Element analyzer is a high-quality organic element analyzer produced by PRI-ECO with the technology of NCT (formerly Costech) in Italy, combined with Dumas' dynamic flash burning technology and chromatographic separation. It can measure carbon, hydrogen, nitrogen and sulfur through oxidation process, or oxygen through reduction process.



Features:

- High sensitivity, accuracy and precision;
- REDOX tubes of different diameters are optional;
- With automatic oxygen input configuration function;
- With automatic gas leakage self-test function;
- Electronic/pneumatic automatic and manual sampler;
- No reference gas required for TCD detectors;
- Single furnace economic design, compact and durable;
- Can be connected to spectrum and mass spectrometry isotope

Specifications

Technical parameters			
Measuring range	C: 0.002-20 mg; H: 0.002-5 mg; N: 0.002-20 mg; S: 0.002-6 mg; O: 0.002-2 mg	Analysis time	CN: 5 min; CHN: 8 min; CHNS: 10/25 min; O: 4
Accuracy	<0.2% (standard, purity >99.9%)	Reactants	Single furnace system
Precision	<0.1% (standard, purity >99.9%)	Display	Touch screen display
Sampler	Pneumatic automatic sampler: 147 bit; Electric automatic sampler: 32,50,100 bit; Manual sampler		
System parameters			
Dimensions	510 x 500 x 370 mm	Weight	53 kg
Power supply	230 V, 50/60 Hz	Power consumption	4 A, 900 W
Gas requirements	Helium (99.999%), 3-5 bar; Oxygen (99.999%), 3-5 bar; Air (oil-free compressed air)		
Analytical conditions			
Carrier Gas	Helium	Leak detection	Automatic leak detection
Reactor temperature	Maximum 1100 °C	Separator temperature	Max. 110 °C
Oxygen requirements	Automatically calculated from the oxygen gauge	Flow regulation	Electronic flow regulation
Gas separation	0.8-4 m GC columns	Detector	High sensitivity TCD
Software	EAS Clarity	Calibrate	Linear, conic, cubic
Sample size	0.1-500 mg (depending on sample nature), maximum soil sample injection up to 1000 mg	Sample type	Solid, liquid
Bag sample	High purity tin cup or silver cup	Optional accessories	Scales, consumables

CHNSO Element analyzer

INOEA-8020 is a C-H-N-S-O Elemental Analyzer Model based on the Dumas combustion method. It is a state-of-the-art system for the elemental analysis based on sample combustion and separation of gases with a chromatographic column. The combustion products, i.e. CO₂, H₂O, N₂ and SO₂, are separated and quantified by a high resolution TCD detector.



Features:

- LIMS
Clarity offers connectivity with LIMS both for sample submission and result output. This can be done via convenient ASCII transfers.
- Method and calibration history
Each chromatogram can easily be displayed under the same conditions as when it was printed, exported or saved.
- Column performance
Calculations of peaks in terms of symmetry, efficiency, resolution; all by several methods.
- Batch
Automatically batch processes, displays, exports or prints any number of chromatograms.

Specifications

Type	CHNS-O	
Analysis time	CN	5 min
	CHN	8 min
	CHNS	10/25 min
	O	4 min
Analytical range	C	0.002-20 mg
	H	0.002-5 mg
	N	0.002-20 mg
	S	0.002-6 mg
	O	0.002-2 mg
Accuracy* Precision* Sampler	<0.2% (certified standard; purity >99.9%) <0.1% (certified standard; purity >99.9%) Pneumatic autosampler Electronic autosampler Manual sampler	
Dimensions	81x50x37 cm	
Weight	68 kg	
Power supply	230V, 50/60Hz 5A, 1100W	
Adsorbed power	Helium (99.999% purity), 3-5 bar Oxygen (99.999% purity), 3-5 bar	
Gas requirements	Air (oil free compressed air)	