

BREAKTHROUGH TECHNOLOGY AUTOMATED DIGESTION TO ISOLATION

Automates fat-soluble vitamin, cholesterol, crude and total fat extraction

Provides ability to create custom methods

Eliminates bi-phase extractions

Reduces solvent usage

Eliminates chemical handling to improve safety

Full record keeping



The ANKOM^{FLEX} Analyte Extractor is designed to simplify fat-soluble vitamin, cholesterol, and crude and hydrolysis fat determinations. Supporting up to four samples at a time, the system will automatically complete digestion, solid phase extraction (SPE) and evaporation in about two to three hours.



Digestion

Digestion vessels have been designed to allow liquid or solid samples to be weighed directly into the system eliminating transfer error. Filtration takes place without user intervention, further reducing technician labor. Once the system is purged with nitrogen and free of oxygen, reagents are pumped into each vessel while the sample is mixed.



Solid phase extraction

After digestion, the sample solution is cooled and transferred through specially designed filters onto the SPE columns. Water-soluble components are separated by adsorption onto the SPE columns, while allowing the desired analyte to be eluted.



Evaporation

A nitrogen atmosphere, positive flow and low temperature evaporation protects sensitive analytes from oxidation and optimizes solvent evaporation. Once the process is complete, the isolated analyte is ready for reconstitution and quantitation by HPLC, GC or gravimetric analysis.

STATE-OF-THE-ART SOFTWARE

The ANKOM^{FLEX} Analyte Extractor has touch screen functionality and a user-friendly interface. Digestion time, temperature, and pressure is monitored and controlled at all times. The software allows custom method design and research capaibilites.

METHODS



Runs pre-programmed and custom methods

DIAGNOSTICS



Includes monitoring, calibration, and troubleshooting of the system

RECORDS & UPDATES



Contains records of assays, faults, calibrations, and services



SPECIFICATIONS

Sample Specifications

Sample Types: Validated for all nine sections of the AOAC NIST Food-matrix Traingle

Fat Ranges: 0%-100%

of Assays per run: 4 assays in 2-3 hours, ~16 per day, 80 in a 5-day week

Sample Size: Up to 10g liquid or solid sample, depending on fat content

*For vitamin analysis, larger volumes can be saponified outside of the instrument and aliquots introduced for extraction and evaporation

Instrument Specifications

Dimensions: 77 cm (30.5") W x 81.3 cm (32") H x 45.7 cm (18") D

Weight: 54.4 kg (120 lbs) **Nitrogen Supply:** 5.5-6.9 bar (80-100psi)

Ventilation: Closed system with exhaust lines ready to be connected to an exhaust system,

eliminating under-hood instrument positioning

Power Requirements: 220 V-240 V ~50/60Hz 8A, 100 V-120 V ~50/60Hz 15A

Reservoirs: Four reservoirs programmable by the user for the required solutions

ABOUT US

ANKOM Technology is the developer of Filter Bag Technology (FBT) used around the world for fiber and fat analysis. With customers in over 140 countries, ANKOM has a reputation for quality and innovation. Constantly seeking to develop better methods for time consuming analytical methods, ANKOM Technology focuses on customers needs. We offer instruments, chemicals and other ancillary products to determine fat soluble vitamins, cholesterol, dietary fiber, crude and detergent fiber, crude and total fat, in vitro and in situ research and more. We work hard to keep costs low with quality and service high.



