# FORTIFY YOUR LAB

AUTOMATED WET CHEMISTRY

THE STANDARD FOR QUALITY CONTROL, NUTRITIONAL LABELING & RESEARCH





# **BREAKTHROUGH** VITAMIN ANALYSIS

AUTOMATED SAPONIFICATION TO ISOLATION



LEX

ANALY

TE EXTRACT

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

Eliminates chemical handling to improve safety

Provides ability to create custom methods

Eliminates bi-phase extractions

Reduces solvent usage to 50-100ml/assay

The ANKOM<sup>*FLEX*</sup> Analyte Extractor's innovative design and automated technology supports multiple samples at a time and completes saponification, solid phase extraction (SPE) and evaporation in about two to three hours. An inert nitrogen environment protects sensitive analytes from oxidation. Features include the ability to modify pre-defined methods or create custom user-defined methods to support research and development.



#### **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

# FULLY AUTOMATED PROCESS

The ANKOM<sup>*FLEX*</sup> Analyte Extractor is validated for foods from all nine sectors of the AOAC food-matrix triangle.



AOAC International NIST Food-Matrix SRMs

Up to 10g samples (liquid or solid) are weighed directly into digestion vessels before starting the run. Transfers, extraction and evaporation of solvent occurs automatically. Limited technician contact minimizes error and increases precision.



### Digestion

Automates all aspects of saponification User customizes parameters Maintains inert nitrogen environment

### Solid phase extraction

Low cost consumables No unwanted emulsions No bi-phase glassware

### Evaporation

Fast and efficient solvent evaporation Sensitive analytes are protected Isolated analyte is ready for quantitation

### STATE-OF-THE-ART SOFTWARE



The ANKOM<sup>*FLEX*</sup> Analyte Extractor has touch screen functionality and a user-friendly interface powered by state-of-the-art software. Digestion time, temperature, and pressure is monitored and controlled at all times. The user has a complete history of their research and instrument performance, which can be exported to other platforms.

# DIETARY FIBER ANALYSIS NUTRITIONAL LABELING

THE STANDARD FOR QC, RESEARCH & LABELING



Automates: AOAC 985.29, 991.43, 2001.03, 2009.01, 2011.25 & 2017.16

Reduces labor and cost per assay

Fast and technician-free filtration

The ANKOM<sup>TDF</sup> Dietary Fiber Analyzer automates tedious analytical methods, reduces per sample costs and increases accuracy. An advanced highly accurate multi-channel pump automates adding chemical solutions, enzymes, and rinses, eliminates multiple water baths, and frees up counter space. Temperature and agitation levels are controlled throughout the process. Specially designed dual chamber filter bags greatly improve filtration by reducing filtration time to seconds. Filtration is totally automatic and eliminates costly glassware. The system allows the user to perform stand-alone IDF, SDF, and TDF analyses and gives the ability to capture the filtrate for subsequent HPLC analysis.



### IDF

Automatic enzymatic digestion Technician-free filtration

### SDF/TDF

Automatic precipitation Technician-free filtration



Filtrate available for HPLC

# ADF, aNDF & CRUDE FIBER DETERMINATIONS

# FULLY AUTOMATED WITH PUMP SYSTEM

AOCS Ba 6a-05

Internal pump automatically draws solutions, greatly reducing chemical handling

Multiple chemical connections allow seamless and automatic transition between methods

Batch process of up to 24 samples

Computer control assures method compliance and eliminates technician variability

Easy access maintenance side panel and window simplifies maintenance to ensure trouble-free operation

The ANKOM<sup>DELTA</sup> Fiber Analyzer automates acid detergent (ADF), neutral detergent (aNDF) and crude fiber determinations at the highest level with accurate and precise results. Specialized software provides technician free control, assuring method compliance and guaranteeing proper delivery of required solutions and rinses. Technicians can adjust parameters and settings to meet their unique needs. Direct connection to hot water supply automatically clears lines and valves to allow for quick transition between methods, no manual intervention needed.



### IMPROVED CHEMICAL DELIVERY

The ANKOM<sup>DELTA</sup> Fiber Analyzer includes an internal pump system for automated delivery from any chemical container within range of the instrument and eliminates lifting heavy chemical containers. Five solution port connections make a seamless transition between Crude Fiber, ADF, and NDF methods without changing out chemicals.

> An optional chemical delivery system can be customized based on volume needs to further reduce costs and simplify labor for dry chemical bulk mixing.



# **POWERED BY FILTER BAG TECHNOLOGY**

ANKOM Technology is the developer of Filter Bag Technology (FBT). Samples are completely encapsulated which ensures ease of handling and virtually eliminates error. With Filter Bag Technology, productivity soars as samples are batch processed in automated systems. Our expertise in filtration media led to advancements in solid phase extraction.

Increased precision - High throughput - Batch Processing

BAGTECHNO



### **AUTOMATED SOXHLET**

The ANKOM<sup>XT15</sup> Extractor provides an official method for efficient and economical solvent extraction.

AOCS Am 5-04 Solvent per sample < 1.0ml Solvent recovery rate: 97% Up to 150 extractions per day No ventilation hood required





#### WIRELESS GAS PRODUCTION MEASUREMENT

The ANKOM<sup>*RF*</sup> Gas Production System provides an easy to use method for monitoring and measuring gas production. The system includes five gas production modules (RF1) with rechargeable batteries and sample bottles, a remote zero, system software, base coordinator with USB cable, ten station battery charger and a valve cleaning kit. Bottle size choice available.



# Helping To Feed The World!

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.

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