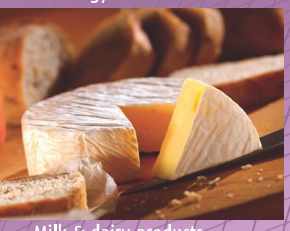
Environment

Food

Oenology



Milk & dairy products

FUTURA

The best Continuous Flow analysis Technology

ALLIANCE INSTRUMENTS
an AMS Company Brand

AUTOMATED ANALYTICAL SOLUTIONS FOR ENVIRONMENTAL & FOOD INDUSTRIES

Futura

The Best Continuous Flow Analysis Technologies Available on a Single Platform.

Taking advantage of a unique, modular design, each Futura console is capable of running a variety of analytical methods using different CFA techniques. The integration of a pump, manifold, and detector into each console simplifies manifold changeover. Advanced features like automatic manifold washout and shut down enable 'lights-out' operation and make the Futura a highly versatile tool for today's laboratory.

Consoles may be linked to run multiple parameters in parallel, doubling, tripling or even quadrupling overall system throughput. Up to 12 analytical channels in any combination can be run simultaneously.

From simple colorimetric assays to complex in-line distillations and digestions, users can pick from a library of both micro-bore and macro bore CFA methods. Whether your needs are environmental, industrial, food, or wine applications, the Futura can provide an automated solution.

INTEGRATED MODULARITY MEETS MULTI-CHANNEL CFA PRODUCTIVITY

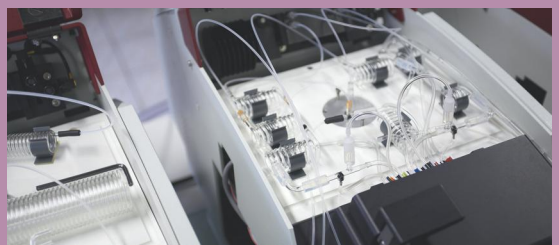
- From 1 to 12 Futura consoles per system,
- Integrated console: reagent drawer, pump, manifold, heater, detector and diagnostics,
- Easy analytical manifold change over

YOUR CHOICE OF CFA TECHNIQUES

- Choose between Micro Flow, Macro Flow, or combine them both,
- Optional dual probe on all types of auto-samplers,
- Physical and software debubbling techniques available,
- Multiple path length flow cells (5 to 50mm) for a wide variety of analytical ranges,
- Wide range of detector options.

ADVANCED AUTOMATION: IMPROVING EFFICIENCY AND PRODUCTIVITY

- Automation of complex, time consuming manual methods
- Inline Distillations
  - Ammonia, phenolics, cynanides
  - Volatile Acidity (VA), Free and Total SO_2
- Inline Digestions
  - TP via acid persulfate
  - TN and TP via alkaline persulfate
  - TP via inline autoclave
- Inline extractions
  - MBAS Surfactants
- Automated programmable startup
- Automated preparation of calibration standard solutions
- Automated pre-and post run dilutions of off-scale samples
- Programmable post-run manifold washout and shut-down

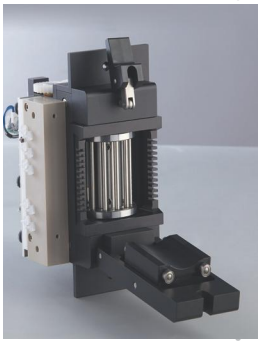


LOGICAL SIMPLICITY: EASY TO USE AND MAINTAIN

- User friendly software
- Easy analytical manifold change over
- Diagnostic LCD screen provides easy system monitoring without a PC
- **Very low consumption of reagents** (minimum analytical cost)
- Fewer moving parts means simplified maintenance and less downtime
- Integrated reagent drawer enables visual management of the reagents.
- Designed to accommodate the necessary containers for one or two chemistries, the drawer allows the user to store and continuously view the levels of all the reagents.
- Easy to remove from the console, the entire drawer can be taken out and stored in a refrigerator.
- Chemically inert, no corrosion, always clean, that's simplicity!

HP3: THE HEART OF THE SYSTEM

Each Futura analyzer can be configured for a wide range of applications thanks to its modular construction. Each console is a small, integrated CFA system, consisting of a multi stream peristaltic pump, independent diagnostics, detectors, heaters, manifolds and reagent drawers. The High Precision Peristaltic Pump (HP3) produces a highly stable flow for up to 13 sample or reagent streams ensuring optimum chemistry runs for any methodology. The pump motor can operate at different speeds enabling the Futura to be the only continuous flow analyzer on the market which can combine micro flow and / or macro flow methods in the same instrument. The pump module can also be programmed to automatically engage or release the pump tube platen, (APS Automatic Pressure System) which enables automatic and unattended start up and shut down of the analyzer.

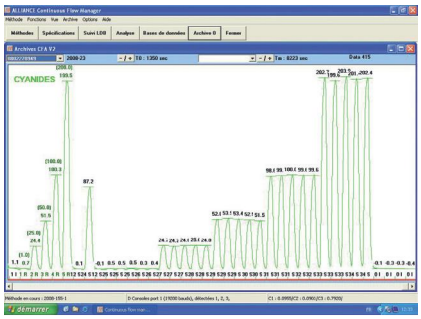


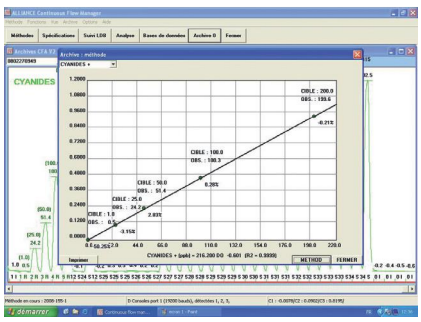
DEDICATED ANALYTICAL SOFTWARE

The Futura software is designed to simplify your day to day operation. With bi-directional LIMS capabilities, it becomes an integral piece to improving workflow in your laboratory.

The software provides a simple, elegant environment for the user to process samples. With a few mouse clicks, start a multiple parameter run that prepares calibration standards, runs samples and QC's, dilutes any off-scale samples, prints reports and QC charts, exports data to LIMS, washes out the manifold and shuts down for the evening. That's automation.

During analysis, the software monitors the system's vital signs (heating bath temperature, voltages, detector outputs), and alerts the user to any problems. Such automated self-monitoring helps the user stay productive even in troubleshooting and provides the peace of mind to walk away from the analyzer.





COMPLIANCE WITH REFERENCE METHODS

- Compliant to ISO, EPA, AFNOR, COFRAC...
- Fully compatible with the former Technicon® systems
- ISO 9001:2000
- GLP compliant and compatible with your Laboratory Information Management System

AVAILABLE ACCESSORIES AND MODULES TO IMPROVE PRODUCTIVITY

- **Autosampler 30**
  Maximum capacity of 30 samples.

- **Autosampler CS9000**
  XYZ
  Maximum 100 samples.

- **Autosampler 104**
  Maximum capacity 104 samples.

- **Autosampler XYZ**
  Maximum capacity 360 samples.

- **Dilutor**
  Automatic preparation of standard solutions and automatic dilution of off scale samples.

- **UV digestion**
  In-line digestion.

- **Distillation module**
  Simple or double in-line distillation.

- **Autoclave**
  In-line digestion.

- **Flame photometer**
- **Fluorometer**

- **Full auto module**
  Automatic handling of external modules and accessories.

- **Enzymatic kits**
  A full range of specific reagents.

Futura

Technical specifications

Principle	Wet chemistry automation using continuous flow	
Operation	By multi parametric batches in parallel	
Samples	Analytical rate	From 15 to 120 samples an hour
	Special analytical rates	Please inquire specifically
	Samples loading capacity	Depends on selected autosampler (range of 30 to 360 samples)
	Dual probe	Optional
	Sample volumes	From 0.5 ml to 100 ml
	Identification	Alphanumerical identification/ Bar Code (optional)
Reagent drawer	Removable drawer with control window	
	Loading capacity	Up to 5 different reagents
	Containers	From 200 ml to 1000 ml
	Leak retention volume	
	Made of chemically inert plastic material	
Pump	Number of pump tubes	13 per console
	Automatic valve	Yes
	Auxiliary valve	Optional
	Leak detector	Optional
	Automatic shut down	Yes
	Automatic start up	Yes
	Variable speed	Yes
	Flow rates	From 50 to 3000 µl / minute
Measurement		
Analytical manifold	Injection, Dilution, Mixing, Incubation, Distillation, Dialysis, UV Digestion, Extraction liquid / liquid	
Colorimeter	Standard spectral range	340 - 1100 nm
	Type	Monochromatic or dichromatic
	Analog / Digital Converter Resolution	24 bits (16.8 million points)
	Linearity	From 0 to 2.5 absorbance units
Optical path	From 5 to 50 mm	
Flow cell volume	From 1 to 150 µl	
Debubbing	Via mechanical or software control; hardware bubble detection	
Other detectors	UV / Vis, Flame photometer, Fluorometer, electrodes, and more... let us help develop a method that is specifically designed to meet your analytical needs	
Dimensions	24 x 65 x 41 cm (L x W x H)	
Weight	17 kg	

AUTHORIZED DEALER

ALLIANCE INSTRUMENTS
an AMS Company Brand

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