

# SOLUTIONS FOR ANALYSIS IN THE AGRI-FOOD INDUSTRY



**ALLIANCE**  
INSTRUMENTS  
an AMS Company Brand

AUTOMATED ANALYTICAL SOLUTIONS FOR ENVIRONMENTAL & FOOD INDUSTRIES

# A MAJOR PARTNER FOR THE FOOD INDUSTRIES

Alliance Instruments is a premier manufacturer of instrumentation for analysis in the agri-food and environmental markets. We have developed our expertise through investment in complementary technologies and through our various partnerships with renowned research centers.

Today, Alliance Instruments can offer laboratories a wide range of modern and integrated solutions enabling them to automate their analysis for R&D, regulatory reporting, or process/quality control.

**Alliance is ideally positioned to meet the analytical needs of the agri-food industries** for finalizing new products, production control, control of the end product and also for verifying compliance with current standards and regulations. Alliance's line of analysers meets **the specific requirements** of each production phase, covering parameters such as:

- Measuring **alcohol, sugars, the SO<sub>2</sub> or the volatile acidity** in wine
- **Acidification Kinetics** of lactic bacteria for milk and dairy products
- **Calculation of cheese making time** (setting and cutting)
- **Bitterness, beta glucanes** or color for beer
- **Proteins, fats, nitrates, nitrites, sugars...** in a various food products

This is just a glimpse of some of our possibilities. Whatever your constraints, your demands, or your applications, Alliance Instruments has both 'off the shelf' and custom solutions for you.

Our commitment is to bring you solutions that are adapted to your needs with **fast, accurate, simple** and **user friendly instruments at a reasonable price** with guaranteed **quality technical support**.

**Laurent CLOUSIER**  
Directeur Général AMS France

## THE RIGHT TECHNOLOGY ADAPTED TO YOUR NEEDS

### ■ Segmented Flow Analysis (SFA)

Continuous flow technology allows complete automation of all types of wet chemistry analysis. Cost effective and easily adapted to your needs with an extensive range of products, this technique will satisfy your requirements: small or large-bore series, standard methods, complete automation, and high throughput.

### ■ Discrete Analysis

Discrete technology enables you to run routine analysis, enzymatic and colorimetric. Simple, easy to set up and use, this technique gives you a high level of flexibility and the possibility to run multiple chemistries simultaneously while reducing reagent consumption and operator intervention.

### ■ NIR Analyzers

Using various NIR technologies (filters, grating, diode array...) our analyzers are widely used in food and feed applications. Liquids, pastes, powders or solid samples, we provide the right equipment. Simple and fast results are guaranteed, and ready for immediate use.



## APPLICATION LAB AND CUSTOMIZED DEVELOPMENTS

Soft drinks, dairy products, meat products, fish, food, feed... Each product requires specific parameters. Alliance Instruments provides expert advice to help you select the best analytical technique for your workflow and applications. Our hardware and software solutions have been specifically designed to cover most of the market parameters. Furthermore, to satisfy growing demand for custom applications, our application lab is available to develop solutions suited specifically to your needs.

Whether you require new methods, higher throughput, special data treatment, compliance with industry standards, or integration into special IT environments, our team of engineers has the experience to successfully develop your project. Instruments, software, accessories and consumables, we develop turn-key solutions, customized to fit your needs.

## FROM DESIGN TO PRODUCTION... COMPLETE PRODUCT MANAGEMENT

### ■ Integrated Research and Development

At Alliance Instruments, we invest a big part of our revenues into R&D. This investment enables us to design new products as well as develop methods and applications that simplify routine analysis and enable you to measure new parameters. We also cultivate strong partnerships with universities and research centers to share their expertise and transfer their technologies into applications for the market.



### ■ Production and Quality

Much more than a simple integrator, our manufacturing plants are located in France, Italy and the USA. By controlling each aspect of the production process, we are able to drive continuous improvements in quality, delivery, and reliability of our instruments. We are ISO 9001:2000 registered and actively pursue an environment of continuous improvement.

*The right product  
The best value  
Premium Quality Service*



# ADAPTED TECHNOLOGIES FOR EACH OF YOUR PARAMETER



	Continuous Flow	Discrete	NIR and others
ABVT	✓		
Acetaldehyde	✓	✓	
Amino acids ( $\alpha$ amino Nitrogen)	✓		
Ascorbic acid	✓	✓	
Citric acid	✓	✓	
Lactic acid	✓	✓	
Malic acid	✓	✓	
Tartaric acid	✓	✓	
Ammonia	✓	✓	
Total Nitrogen	✓	✓	
Total Kjeldahl Nitrogen	✓	✓	
Volatile bases	✓		
Total carbohydrate	✓		
Cellulose			✓
Chlorate	✓	✓	
Chloride	✓	✓	
Acidification kinetics			✓
Coagulation			✓
Collagen (hydroxyproline)	✓		
Conductivity	✓		
CO <sub>2</sub>	✓	✓	
Copper	✓	✓	
Iron	✓	✓	
Firmness			✓
Glucose / fructose / sucrose	✓	✓	
Humidity			✓
Magnesium		✓	
Fat			✓
Nitrate	✓	✓	
Nitrite	✓	✓	
pH	✓		✓
Phosphate	✓	✓	
Total Phosphorus	✓	✓	
Potassium	✓		
Proteins	✓	✓	✓
Pyruvates	✓		
Redox			✓
Free SO <sub>2</sub>	✓	✓	
Total SO <sub>2</sub>	✓	✓	
Sodium	✓		
Enzymatic sugars	✓	✓	
Reducing sugars	✓	✓	
Total sugars	✓	✓	
Sulfate	✓	✓	
Sulfide	✓	✓	
Temperature			✓
Thiocyanate	✓	✓	
Urea	✓	✓	

This is the list of the most usual parameters, but not an exhaustive list. For specific parameters or the complete list, please do not hesitate to contact your Alliance Instruments representative.

# A TECHNOLOGY ADAPTED, TO YOUR NEED...

## ANALYSIS TECHNIQUES

### Continuous Flow Technology

As an expert in segmented flow analysis (SFA) for more than 20 years, Alliance Instruments has developed a complete product range, offering you the right solution adapted to meet your application needs... Sampling, incubation, dialysis, filtration, distillation, digestion (according to the method and the sample type) and measurement are fully automated.

#### Futura

A modular and user friendly instrument, the Futura is the most versatile CFA analyzer available on the market. Micro-flow, macro-flow, high-resolution digital colorimeter, extended measuring range, high throughput, complete automation (including automatic startup and shutdown)...



#### Proxima

Compact and cost effective, the Proxima has been designed to reduce analysis cost without reducing analytical performances. The modular design allows up to 5 chemistries simultaneously on a single system.



### Near Infrared

#### Infrascan+

Very easy to use, robust, rapid, Infrascan + is widely used in oenology to measure the alcohol content and sugars. 5, 6, 7, or 8 filters. It can be adapted to your sample, whatever the degree of alcohol and sugar content.



#### SpectraStar

SpectraStar is the latest generation of scanning NIR analyzers offering rapid and reliable results on many types of samples: food, feed, tobacco, pharmaceutical and chemical products. The system is simple, easy to use, and cost effective (requires no reagents), several configurations are available to fit your requirements.



### Discrete Technology

State of the Art technology combined with USEPA compliant methods allows you to maximize productivity in your lab with minimal operator intervention. With automatic method changeover, minimum waste to dispose of and maximum accuracy and precision, The SmartChem instruments are yours for success.

#### Smartchem 140 Discrete Analyser

Fully automated discrete analyser to minimize human intervention, improve analytical performance and streamline sample workflow with a throughput of 140 test / hour.



#### Smartchem 200 Discrete Analyser

Fully automated discrete analyser to minimize human intervention, improve analytical performance and streamline sample workflow with a throughput of 200 test / hour.



### Kinetics

#### Cinac

The Cinac system has been designed to answer specific needs for the dairy industry to control lactic bacteria acid forming activity. Modular and upgradable, Cinac is designed to test, control, and validate the quality of starters in dairy products (yogurts, cheese...).



### Coagulation

#### Optigraph

The Optigraph is a specialized instrument designed to control rennets and the renneting ability of milk by near infrared. Widely used by the dairy industry, Optigraph gives you optimal monitoring of your processes and will help in the development of new products.



## OTHER MODULES AND ACCESSORIES

### Distillation Apparatus

#### Easy Dist

Distillation equipment for pre-distillation of phenols, cyanides, ammonia, sulfide and fluoride. Optional with your discrete analyzer.



### Digestion Apparatus

#### Easy Digest

Mineralization blocks allow sample preparation. Option available for your CFA or discrete analyzer.



### Enzymatic kits and reagents

Glucose, fructose, malic acid, lactic acid, acetic acid, SO<sub>2</sub>, iron... Alliance Instruments offers a complete range of reagent kits. Perfectly adapted to discrete and CFA analyzers, they are packaged in the right volume, and adapted to your use to minimize loss of reagents.



# MUCH MORE THAN A SUPPLIER, A COMPLETE TEAM AT YOUR SERVICE

Allow Alliance Instruments to help solve your toughest applications. Whatever your field of work, obtaining accurate and reliable results is essential. For this reason our service and technical support are there to support you when you need them – both on the phone and at your facility.

## ADVICE FOR YOUR PROJECT FROM THE START...



In order to assist you in your technical choices, our teams will be there for you:

- To present the different techniques and their importance for your needs
- To help you draw up your specifications
- To explain in detail how the instruments work
- To demonstrate the repeatability, the accuracy, and the reproducibility of a method
- To familiarise you with the different functions of our software
- To give you a demonstration (on your premises or in our laboratory) illustrating the performances of our analysers

## TECHNICAL SUPPORT AND SERVICE

Our team of engineers and maintenance technicians are always close at hand to ensure the top performance of your equipment.

- Call our **technical support hotline** for expert assistance when you have a problem. While phone support is always free, we offer a range of services to ensure that you can have the confidence that a 'helping hand' is always nearby.
- **Preventive Maintenance Contracts.** We offer several different levels of service to ensure we can meet your requirements.
- **On-site Service.** We provide factory based training for our service personnel and distribution partners to ensure that you have emergency on-site support when you need it.

## RELIABILITY GUARANTEED

Before being installed, all our machines are subjected to rigorous quality control tests in order to ensure your instrument is performing according to factory specifications. Each module is tested separately to check its good working order. Then, after the validation of each sub-unit and of the final assembly we carry out a complete new series of tests to ensure the routine use of the machine. In the last stage, samples are analyzed using the specific methods you have ordered.

Finally our teams carry out the complete installation of the machine on your premises. Once the machine is set up, a new validation is carried out using your samples, thus allowing you to run your analysis before we finish the installation.



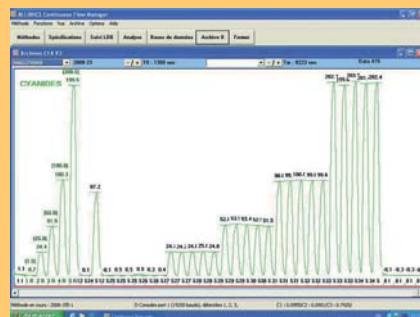
## TRAINING COURSES



We want you to get the full benefit of your investment. As such, we have standard curriculum that provides both theoretical and practical training. Frequently, our customers request a tailor-made training course – we find these to be some of the most effective training and enables us to match up specific training with the customer applications. We provide training either at your facility or ours.

## SOFTWARE SOLUTIONS

All our systems and accessories are operated by software developed in our applications laboratory utilizing our extensive expertise in the field. They correspond exactly to the analytical requirements of our customers and optimise the performance and capabilities of the instruments. User friendly, our software is as easy to use as it is technologically advanced. It is designed to be integrated into the computer systems of our customers. Moreover, you will benefit from regular software updates to ensure your system is compatible with new technologies and operating systems.



# AN INTERNATIONAL GROUP

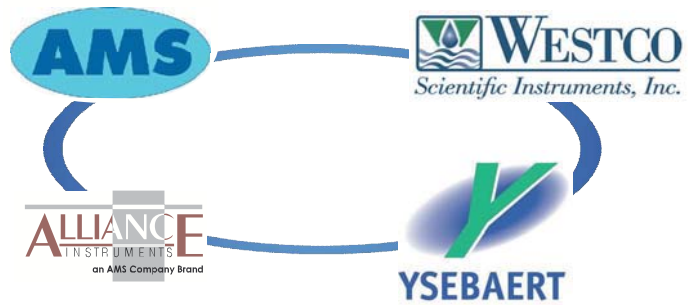
## THREE COMPLEMENTARY COMPANIES, FOUR BRANDS TO SERVE YOU

- **AMS Italy.**

The European head office of the group is located in Italy on the outskirts of Rome. This location serves as a manufacturing and R&D center for the clinical market and the discrete analyzers designed for the environmental market.

- **AMS France.**

A new subsidiary created at the beginning of 2008, combining the activities of Alliance Instruments and Ysebaert. AMS France, located in Frepillon near Paris, France, manufactures continuous flow, infrared, kinetic... the complete product line of Alliance Instruments and Ysebaert. AMS France is responsible for sales in the environmental and industrial/food markets across Europe, Africa, the Middle East and Asia.



- **Westco Scientific Instruments.**

The US headquarters is located in Brookfield, Connecticut. Westco pioneered discrete technology in the environmental market – being the first to create a custom system based on the needs of the environmental market. Westco Scientific is responsible for sales in the environmental and industrial/food markets across North and South America.

- **Alliance Instruments**

A brand of AMS France. With over 20 years experience Alliance Instruments has become a leader for agro-food and environmental analysis, specialists in continuous flow technology.

- **Ysebaert**

Ysebaert, a company founded in 1974 and a brand of AMS France since 2008 is a manufacturer of isolators and ventilation systems for pharmaceutical, biotechnology and nuclear applications.

## A WORLDWIDE DISTRIBUTION NETWORK



Besides its different subsidiaries, the AMS Group is present on all continents and in over 30 countries through specialized and exclusive distributors. Each distributor is carefully selected for his knowledge of the markets covered by AMS and his ability to ensure quality sales, installation, service and support in the respective territory. Our distributor teams are, of course, factory trained and supervised in order to have a thorough understanding of our products and techniques.



## ➔ Specialists in Food Analysis

- **Drinks**
  - Water
  - Fruit juice
  - Soft drinks
- **Food**
  - Canned food
  - Vegetables
  - Ready prepared foods
  - Specialties
- **Dairy products**
  - Milk
  - Milk powder
  - Cream
  - Cheese
  - Yogurts
- **Others**
  - Fish and other sea products
  - Meat and meat products
  - Feed
  - Meat salting industry...

## ➔ Alliance Instruments also provides:



■ Analytical Solutions for Oenology

■ Analytical Solutions for the Environment

YOUR LOCAL REPRESENTATIVE

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