

# Food analytical systems





**Innovative test method, safeguarding user's health.** Low toxicity reagents have an easy waste disposal and permit to use the system along the production line.

**Waste minimization** and easy test methods thanks to pre-filled single use cuvettes (vol. 1 mL).

Only micro quantities of sample (5-100  $\mu$ L), used without any preparation required (or with a minimum treatment). This makes testing any kind of food fast and easy.

**FoodLab is supplied already calibrated.** Auto check and calibration of the reading cells as instrument is turned on. Calibration curves pre-set. A new calibration can be easly done using three or more standard or known value samples to align it to the FIL-IDF international methods.

**Easy test execution** even by untrained users. This allows to place the analytic system near the production line to carry out a real time quality control.

**Maintenance free** thanks to the spectrophotometric technology with LED emitters that excludes the contact between the instrument and the sample.

**In compliance with the analytical standards** as per regulation ECC 1989/2003 and subsequent modifications.

**Data transmission to a host computer** through RS232 serial line (XML protocol). Compliant to company LIMS systems.

# SYSTEM DESCRIPTION

The **FOODLAB SYSTEM** consists of an analyzer which uses a sophisticated spectrophotometric technology and a set of innovative reagents, pre-filled in single use cuvettes, prepared by CDR research laboratories.

The analyzer can be easily used in different places, as in the barn, in the collection/processing units or directly in food production lines. Since its use is extremely simple, tests can be run by any kind of user; the results are printed-out automatically. There is no need of time-consuming calibration, cleaning, rinsing or maintenance. Test results are available in few minutes and they can be aligned to reference standards or samples of known value obtained with other methods.

Thanks to the simplicity of operation, its superb analytical technology, designed to minimize sample preparation and handling, its software upgrading facilities **FOODLAB** is a valid investment for all food testing requirements of today and for the years to come. Reading accuracy is guaranteed by the possibility of calibrating the system with reference standards or with samples of known value. The different analysis are set up and ready to be selected from the menu.

Furthermore, it is possible to connect the instrument to a host computer using its serial output.



CDR S.r.l. www.cdr-mediared.com

Brownstone Asia - Tech, Inc Distributed by

10 A.H. Poblador St., Brgy. Hagdan Bato Libis, Mandaluyong City , Philippines Phone: 632-532-4310

Fax: 632-531-6518 www.brownstone-asiatech.com E-mail: batinc@pldtdsl.net



# **CHEMICAL ANALYSIS**



# FOODLAB SYSTEM now carries out chemical analysis to determine:

- L-lactic Acid in milk, cheese, cream, egg and vegetable purée
- Alkaline Phosphatase in milk
- Urea in milk
- Peroxidase in milk
- Chloride in milk, cheese, aqueous solution and vegetable purée
- **Ammonia** in milk, cream and cheese
- Hydrogen Peroxide in milk
- ε-Fructosyl-lysine (furosine) in milk
- Glucose, Fructose, Reductive Sugars in tomato
- Acidity in edible fats and oils, butter, margarine, cream, semi-finished product
- Acidity and Peroxides in dry fruit and olives. The test is done in an oil sample extracted using CDR solvent free system
- Peroxides in edible fats and oils
- Soaps in edible fats and oils
- p-Anisidine in edible fats and oils (only with FoodLab Fat\*)
- **lodine** value in palm oil
- Polyphenols / antioxidative activity in olive oil
- L-lactic Acid in egg
- Cholesterol in egg
- D-3-Hydroxybutyric acid in egg

# MAIN TECHNICAL CHARACTERISTICS

**SYSTEM** photometer with 3 solid state cells and independent reading channels, temperature controlled at 37 ° C.

CONTROL UNIT Motorola technology.

**PHOT. RANGE** 0,0 - 2,3 Abs, (0,0 - 4,0 Abs) ampl.

**DISPLAY** alphanumeric LCD display, 4 rows of 20 columns.

PRINTER built-in thermo-printer, using standard thermo-printer paper rolls (45 mm diameter, 57 mm width).

LANGUAGES English, German, French, Spanish and Italian are already supported,

DATA INPUT / OUTPUT RS232 input (DTE) for software and configuration upgrade and RS 232 output for host-connection to a standard PC. Data are sent following the xml protocol.

POWER SUPPLY main voltage with AC/DC external adapter to 12 V DC. Abs 1,4 A max.

**ENVIRONMENTAL CONDITIONS OF OPERATION** +15° C to 35° C.

WEIGHT / DIMENSIONS 2,5 Kg / width 190 mm, depth 310 mm, height 165 mm.

**CONFORMITIES** EN 50081/1 EN 55022B EN 50082/2 ENV 50140.

# **EASY TO USE**



Pre-filled disposable test tube: CDR' testing system only needs the addition of the sample to make the reaction start.





Kits are packed in sealed bags containing 10 tests.
The kit has a shelf life of 12 months, if correctly stored and not opened.











Each test is carried out by dispensing into a test tube, containing a pre-filled buffer, a minimum predefined amount of sample. This, combined with specific reagents, develops a colorimetric reaction. The result is automatically printed in the standard unit of measure.

<sup>\*</sup>The FoodLab Fat is a particular model of FoodLab for p-Anisidine, Acidity, Peroxides, Soaps test and lodine value.