CONFIDENTLY ANALYZE MILK AND DAIRY PRODUCTS

LactoScope™
Milk and Dairy Products Analyzer

PerkinElmer®
For the Better

OPTIMIZE PROCESSES
AND MAXIMIZE PROFITS

ACCURATE AND USER FRIENDLY

Providing Industry-Leading Capabilities for Dairy Analysis

Milk processors and dairies across the globe are challenged every day with ensuring the consistency of incoming raw materials and making fair payment to suppliers. Quick and accurate compositional analysis of key components of raw milk and other dairy products is of paramount importance in these industries for enhancing value and ensuring quality of final products. The supply of a skilled and well-trained staff to ensure proper verification of incoming and final products is also crucial to optimize processes and maximize profits.

The LactoScope™ is designed to address the needs of dairies and processors of all sizes to quickly and accurately analyze the key components of raw milk and other dairy products. A state-of-the art FT-IR (Fourier-Transform Infrared Spectroscopy) instrument with modern optics and simple to use but powerful software enables the LactoScope to test raw, standardized and processed milks, whey, cream and other dairy products. The instrument incorporates the latest mid-infrared (MIR) technology for quick measuring time of 30-45 seconds with a typical accuracy of under 1% CV. The instrument's modular construction minimizes the vibration of the FT-IR bench, and its integrated design provides efficient use of laboratory space. The LactoScope has a low cost of ownership, minimum downtime, and worldwide support for all its users.

Key Features

- Accurate and user friendly
- Automatic clean cycles and zeros
- Sample pre-heat
- Full-spectrum analysis
- Includes calibrations
- Intuitive software
- Results 24/7

FT-A – LARGE PROCESSORS AND DAIRY LABORATORIES

FT-B – MILK COLLECTION POINTS AT DAIRIES

Models to suit the different needs of individual dairy operations

Versatile Liquid Dairy Products Analyzer

The LactoScope FT-A is our most versatile mid-infrared analyzer capable of testing a wide range of dairy product: milks, creams, whey, concentrates, ice-creams and yoghurt mixes. The latest hardware innovations allow to easily test the most challenging dairy products, such as creams with up to **55% fat** and other viscous products. With a typical accuracy under 1% CV, a measuring time of 30 seconds, low cost of ownership and minimal downtime, this instrument is the preferred choice of the large processors and dairy laboratories.

Milk Analyzer

The LactoScope FT-B With a typical accuracy under 1% CV and a measuring time of 45 seconds per sample, the FT-B mid-infrared analyzer is designed to answer the needs of the small-medium dairies and milk collection points. It can test milks, whey and creams with up to **40% fat**. It has a low cost of ownership, and minimal downtime.

LactoScope FT-A

LactoScope FT-B

STREAMLINE YOUR PROCESS

RESULTS 24/7 BY NETPLUS

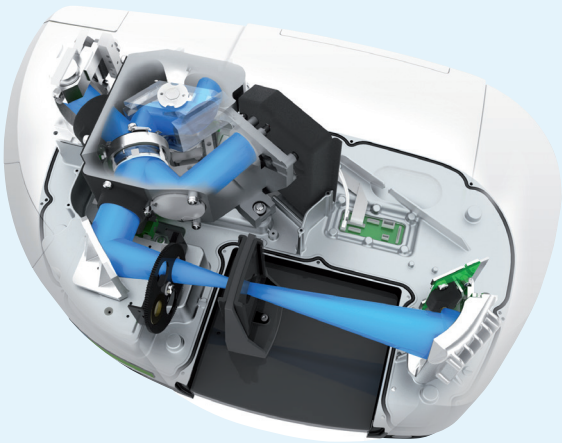
Technology that delivers

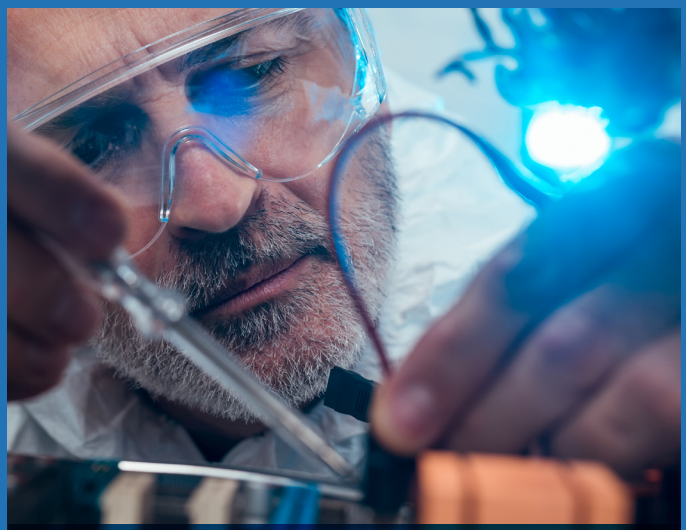
Our patented technology ensures you get the most out of your dairy analysis, regardless of your application.

Patented Dynascan™ interferometer in the FTIR Spectrophotometer

The LactoScope spectrometer incorporates PerkinElmer's Dynascan™ interferometer, the OpticsGuard™ technology and molecular sieve as an optic compartment desiccant.

- **The automatic clean cycles and zeros** maintain the sample pumping unit and the measuring cell in optimal conditions, therefore improving the overall reliability and accuracy of the instrument.
- **Sample pre-heat** and homogenization standardize the temperature and particle size of the fat globules before measurement.
- **Full-spectrum** analysis enables quantification of all components.
- **The LactoScope includes the calibrations** to analyze raw, standardized and processed milks, whey, and cream.
- **The Intuitive Results Plus software** provides rapid implementation with minimal training, is designed to make analysis as rapid and secure as possible and is compatible with LIMS systems.
- **The PerkinElmer NetPlus™ cloud solution** enables remote configuration and monitoring of the LactoScope. Using NetPlus the LactoScope can easily be set up in a master/satellite network.





Service and support

In today's world of complex operations in process environments, every function must work in sync towards the common goals of improving productivity. And that's the overarching goal of OneSource® Laboratory Services, too. We deliver solutions that cover all aspects of operations and can be customized for specific workflows – and business outcomes – you're driving towards. Simply put, OneSource is the one service organization with the requisite understanding of your needs around service and support, delivering a customized systems approach to your success. With a full measure of insight and expertise, our consultants can pinpoint the issues and inefficiencies and engineer the right solutions to solve your scientific and business challenges. From relocation services to everyday instrument repair and service, to preventive maintenance to method development services and scientific staffing, OneSource Laboratory Services can help streamline your processes and get your workforce back to its main order of business.

	LACTOSCOPE	
PRODUCTS	**FT-A**	**FT-B**
Raw milk	•	•
Skimmed milk	•	•
Whey	•	•
Pasteurized UHT milk	•	•
Cream < 40% fat	•	•
Cream < 55% fat	•	
Yogurt with starter culture just added	•	
Ice cream (white mix)	•	
Whey concentrate (max 38% total solids)	•	
Whey protein concentrate (max 38% total solids)	•	
Skimmed milk concentrate (max 38% total solids)	•	
Open for customer application development	•	

SPECIFICATIONS	
Components	Fat, protein, lactose, totals solids, solids non fat. Added water, true protein, casein, NPN-CU, free fatty acids, citric acid, density and pH.
Repeatability (typical)	CV≤ 0.25%
Accuracy (typical)	CV≤1% (on cow milk bulk tank samples)
Typical sample intake volume	10 ml
Sample intake temperature	4°C-42°C (35.5°F - 107.5°F)
Power supply	100-120 V, 60 Hz; 220-240 V, 50 Hz; 400 VA
Standards and approvals	EMC Directive 2014/30/EU; Low Voltage Directive:2014/35/EU; IDF 141/ISO 9622 compliant; AOAC 972.16 compliant

For sales and support contacts, please visit www.perkinelmer.com/lactoscope

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