

Deliver peak performance in analysis of plant-based products

MilkoScan™ FT3



MilkoScan™ FT3 delivers the peak performance required for success in the evolving dairy-industry landscape. Now, due to the availability of readymade calibrations for plant-based milk alternatives, it is also a perfect platform for quality and production control of plant-based drinks.

Test plant-based products without calibration work

Benefit from global calibrations for plant-based products and a range of parameters for each product type. Representing the latest in rapid analysis with FTIR, MilkoScan FT3 is the perfect platform for both regular dairy and plant-based production.

Fast and cost-effective development of new products

Smart flow system handles multiple product categories and auto adjusts to each specific sample. Key calibrations cover multiple products with excellent transferability, reducing the cost of reference testing and calibration management. FossCalibrator™ software enables rapid and effective development of further calibrations.

Immediate gains in production and quality control

Secure immediate gains with precise and consistent control of fat, protein, total solids and total sugars. Intuitive touchscreen and software make operation easy for anyone in the plant, ensuring long-term consistency. Rapid and reliable checks on final products.

Sample types

Compositional analysis of plant-based products covering: Soy, almond, oat, coconut, rice and pea, including flavoured and unflavoured varieties.

Applications

Platform control of raw material, standardisation, process control and optimisation and quality control throughout the production process.

Parameters

Global calibration models: Fat, protein, totals solids, total sugars and more.

Technology

FTIR technology for analysis of milk, dairy and plant-based products.

Specifications

Area	MilkoScan™ FT3 Specification		
Included calibrations			
Milk	Fat, protein, total solids, solids non fat, lactose (incl. low lactose products), glucose, galactose, density, urea, titratable acidity, free fatty acids, casein, citric acid		
Cream	Fat, protein, lactose, total solids, solids non fat		
Whey & whey permeate	Fat, protein, lactose, total solids, solids non fat, titratable acidity		
Optional calibrations			
Concentrated Whey & Permeate	Fat, protein, lactose, total solids, solids non fat, titratable acidity		
Concentrated & Fortified Milk	Fat, protein, lactose, total solids, solids non fat		
Yoghurt & Fermented	Fat, protein, lactose, total solids, solids non fat, glucose, fructose, sucrose, total sugars, lactic acid		
Desserts & Ice Cream	Fat, protein, lactose, total solids, solids non fat, glucose, fructose, sucrose, total sugars		
Plant-based Drinks	Fat, protein, total solids, total sugars		
Freezing Point (FP)	Milk freezing point, cream freezing point (by applying conductivity sensor)		
*Untargeted models for adulteration screening (ASM Models)	Calibration tool and ready to use abnormal milk screening models. ASM models for: Raw cow's milk, raw buffalo milk, processed milk		
*Targeted models for adulteration screening (TAM)	Ammonium sulphate Cyanuric acid Formaldehyde Glucose Hydroxyproline Maltodextrin	Maltose Melamine Sodium bicarbonate Sodium carbonate Sodium chloride Sodium citrate	Sodium nitrite Sorbitol Sucrose Added urea Added water Added fat indicator
Calibration range	According to application note		
Accuracy (milk)	<1.0% C _v (F, P, L, TS) (guaranteed) <0.8% C _v (F, P, L, TS) (typical) <4.0 m°C (FP)		
Repeatability (milk)	<0.25% C _v (F, P, L) <0.20% C _v (TS) <1 m°C (FP)		
Transferability (milk)	<0.5% C _v (F, P, L, TS)		
Carry over (milk and cream)	<0.5%		
Adjustment routine	Automated slope/intercept procedure		
Sample volume milk and cream	<8.0 mL		
Measurement time (milk)	30 seconds		
Sample temperature	5 - 55 °C (the sample must be homogeneous)		
Ambient temperature	10 - 35 °C		
Advanced flow system	Automatic zero setting and clean. Cleaning defined according to properties and auto-adjust to each specific sample		
Automatic humidity control	Protected automatic drying system		
Intelligent diagnostics	Built-in ID chips for wear-time logging, service history and troubleshooting		
Network connections	LIMS		
Demineralised water quality	ISO Grade 3 / ASTM Type IV or better		
Weight and dimensions (W x D x H)	43 kg / 750 x 450 x 408 mm		

*Using conductivity sensor for optimal performance

Optimize your instrument performance	
Digital services	Streamline your operations and improve your profitability with our FOSS IQX™ digital solutions.
Service agreement	With a FOSS service agreement you will secure operational uptime, regulatory compliance, and analytical accuracy.

MilkoScan™ FT3 is in compliance with AOAC (Association of Analytical Chemists) and IDF (International Dairy Federation).

FOSS

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