

FOSS

MilkoScan™ FT3

Deliver peak performance in milk and dairy analysis



ANALYTICS BEYOND MEASURE



DAIRY INDUSTRY IN TRANSFORMATION

The global dairy industry is under transformation as consumers demand more diverse products. In this dynamic environment, the successful dairy is smart and agile, while delivering safe quality products in a sustainable way.

The MilkoScan™ FT3 is a versatile analyser for dairy producers wanting to test a wide variety of liquid and semi-solid dairy products with exceptional consistency at a low cost of ownership.

Packed with innovative hardware and connectivity features, the MilkoScan FT3 delivers the ultimate solution for applications such as testing of raw material, milk standardisation, process control and end-product control.

THE WORLD'S FIRST INTELLIGENT MILK ANALYSER

With its new digital capabilities and built-in intelligence, the MilkoScan™ FT3 boosts uptime and the consistency of your liquid dairy product testing.

Whether you test raw materials or final products, the MilkoScan FT3 is always easy to operate, adapting effortlessly to your needs to deliver accurate analyses and valid test data. Enabling you to get the most out of your production, improve everyday operational performance and ensure the highest quality product.



FULL COVERAGE ROBUST CALIBRATIONS

MILK, CREAM & WHEY

YOGHURT & FERMENTED APPLICATION

DESSERT & ICE CREAM APPLICATION

CONCENTRATED & FORTIFIED MILK

WHEY CONCENTRATES & PERMEATE

ADULTERATION SCREENING



ONE SOLUTION COVERS MANY JOBS

Be prepared. With MilkoScan™ FT3 you can test a wide variety of products and you do not need to worry about complicated calibration work when introducing new product types, no matter what you are testing.

Smart flow system handles multiple products

The range of dairy products demanded by consumers has exploded and dairies need to be agile in production and product development with analysis capable of handling lots of different samples, no matter what the future brings.

MilkoScan FT3 provides accurate testing of any liquid or semi-solid dairy product including chocolate milk, drinking yoghurt, milk and whey concentrate (such as WPC) and more. With its smart flow system, it can recognize and auto-adjust to each sample and deliver results from as little as 30 seconds depending on product type. This leads to immediate gains in production through the rapid availability of critical quality control data for a variety of samples.

All-inclusive calibration models reduce cost

The instrument can handle a wide variety of dairy products and it does so without additional calibration work. A single calibration model can be applied to multiple products within the same product

category, for example one calibration model for liquid milk. You can still choose specific products, but these do not require individual calibration models. Compared to other solutions, this means that you have fewer calibration models to maintain and less reference testing to be done.

Rapid screening of abnormalities and adulterants

MilkoScan FT3 offers the most comprehensive and accurate screening of your milk with either targeted or untargeted models.

Adulteration screening can be included as part of the platform quality testing and is an important tool for improving milk quality and ensuring food safety. Check for deliberate or accidental adulteration while performing normal quality control tests.

- Untargeted models for adulteration screening allow you to screen all incoming milk for abnormalities in just 30 seconds.
- Targeted models for adulteration screening allow you to screen for specific adulterants.

DELIVER PEAK PERFORMANCE

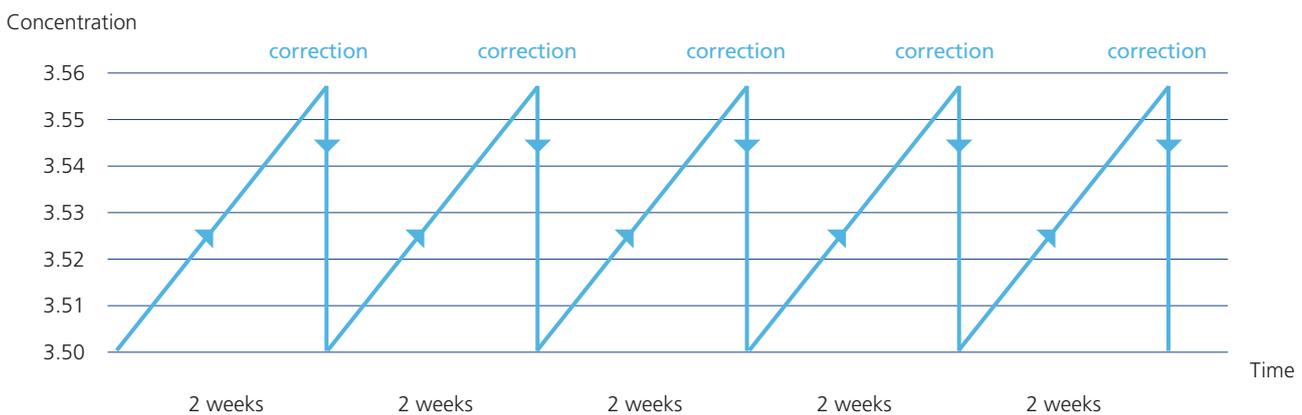
With MilkoScan™ FT3, we have made it possible to ensure a consistent high performance at a low cost of ownership.

Always standardised and no more instrument drift

High performance has been achievable for decades but maintaining it can be a burden on the modern dairy due to the time and resources involved.

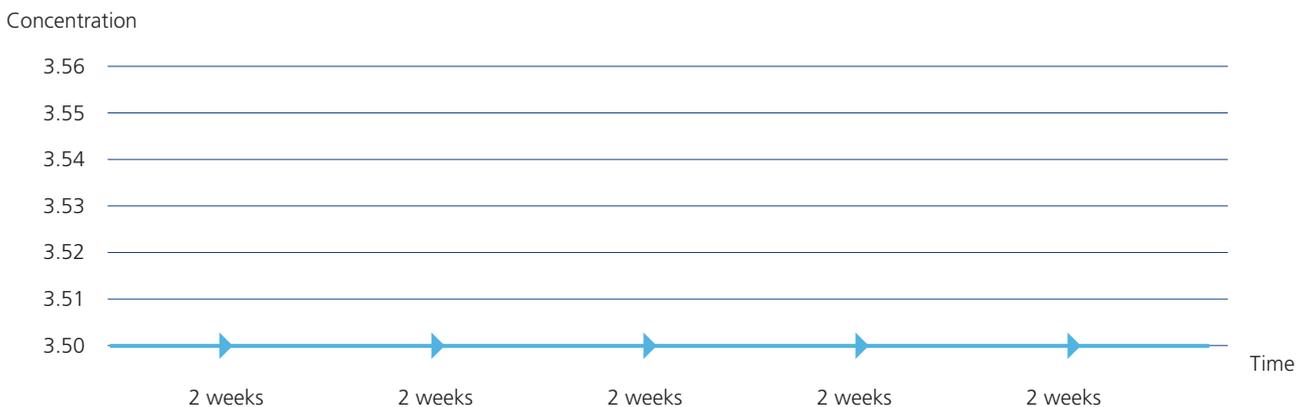
A game-changer delivered by the MilkoScan FT3 is the new patented automatic standardisation that runs every second hour. This avoids instrument drift and ensures stable results over time. There is no need to perform time consuming standardisation checks with associated use of chemical reagents, significantly reducing the need for costly reference analysis.

Standardisation today



High accuracy has been achievable for decades, but as instruments wear over time - maintaining accuracy can be costly and time-consuming.

Standardisation with MilkoScan™ FT3



MilkoScan™ FT3 performs an automatic standardisation every two hours that ensures the instrument cannot drift, i.e. results are stable over time.

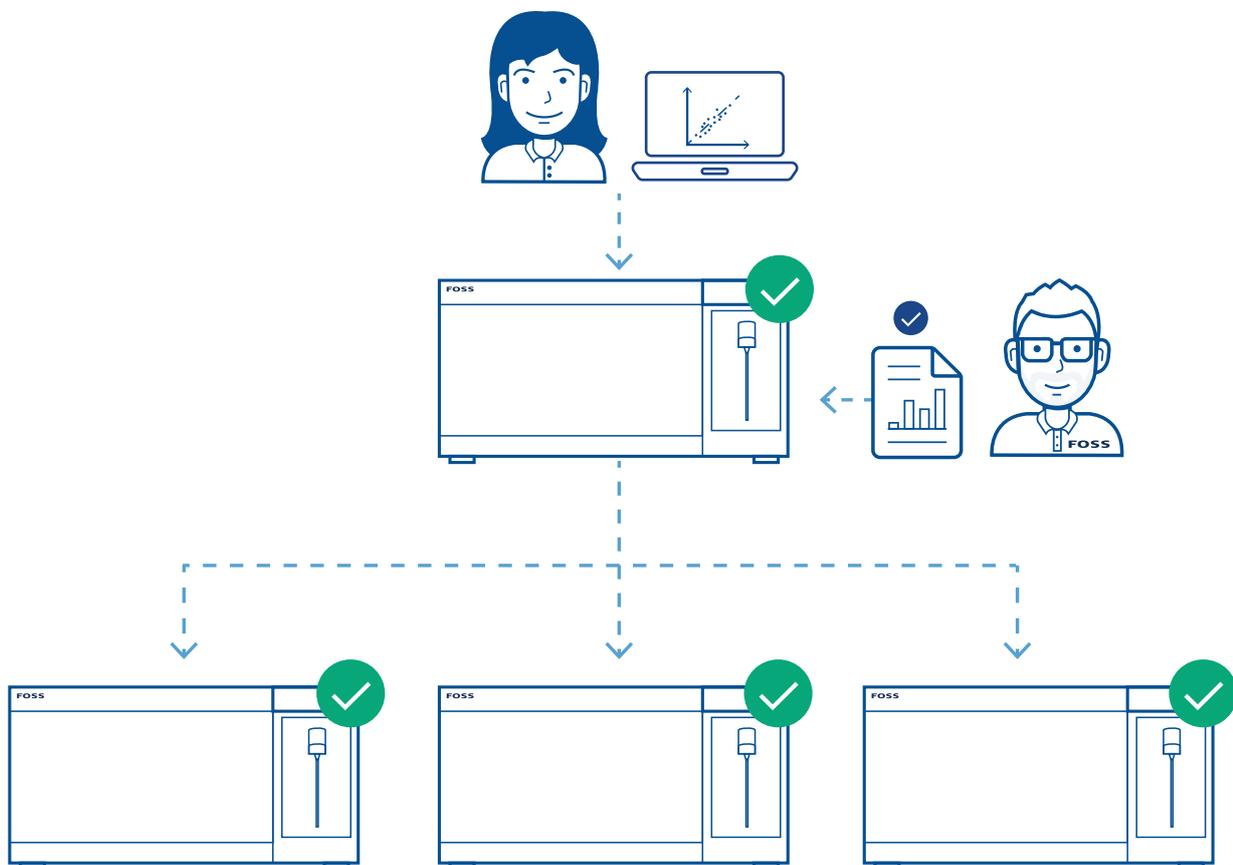
Exceptional transferability

Transferability is about getting the same result on different instruments for the same sample. Achieving high transferability is essential as populations of instruments installed both within a single factory and across different production sites are increasingly common. The automatic standardisation of MilkoScan™ FT3 ensures exceptional transferability and MilkoScan FT3 is the first ever milk analyser to offer a specification of transferability (0.5% Cv).

Connect your instruments in a network

As the industry consolidates and becomes more global so does the number of instruments within each dairy. With MilkoScan FT3 you can rest assured that all instruments in a network always measure the same. This makes it simple to run a master/satellite set-up in which a master instrument keeps the other networked instruments updated. This reduces the workload of maintaining all the calibration models and result validations.

- Master/satellite instrument concept enables sharing of slope/intercept adjustments within a product category and across instruments
- Even with multiple instruments in a network, you only have to maintain calibration models and validate the results on one master instrument



Excellent transferability ensures that all instruments are the same and that calibrations can be shared in a master/satellite set-up, saving time and money on managing calibrations.

Overview on Targeted Models, Description of Adulterant And Limit of Detection

Contaminant	Description	MilkoScan LoD, %
Added Urea	Added to milk to increase the apparent Kjeldahl protein content. Added to milk to mask the density change when water is added.	0.025
Ammonium Sulphate	Added to milk to increase the apparent Kjeldahl protein content. Added to milk to mask the density change when water is added.	0.011
Cyanuric Acid	Appears when melamine is used for adulteration.	0.004
Formaldehyde	Added to milk to disguise poor microbiological quality.	0.032
Glucose	Added to milk to mask the density change when water is added. Similar to other carbohydrates in food.	0.062
Hydroxyproline	Added to milk to increase the apparent Kjeldahl protein content.	0.014
Maltodextrin	Added to milk to mask the density change when water is added. Similar to other carbohydrates in food. Not a well-defined chemical compound.	0.044
Maltose	Added to milk to mask the density change when water is added. Similar to other carbohydrates in food.	0.054
Melamine	Added to milk to increase the apparent Kjeldahl protein content.	0.013
Sodium Bicarbonate	Added to milk to disguise poor microbiological quality.	0.010
Sodium Carbonate	Added to milk to disguise poor microbiological quality.	0.008
Sodium Chloride	Added to milk to mask the density change when water is added. The water spectrum is slightly sensitive to its presence.	0.15
Sodium Citrate	Added to milk to mask the density change when water is added. The water spectrum is slightly sensitive to its presence.	0.038
Sodium Nitrite	Added to milk to increase the apparent Kjeldahl protein content.	0.005
Sorbitol	Added to milk to mask the density change when water is added. Similar to other carbohydrates in food.	0.052
Sucrose	Added to milk to mask the density change when water is added. Similar to other carbohydrates in food.	0.037
Added Water	---	7.0
Added Fat Indicator	Detects components from detergents commonly used for mixing fat into milk (sodium carbonate, sodium hexametaphosphate, sodium metasilicate, sodium sulphate, sodium tetraborate decahydrate, trisodium phosphate)	0.036



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