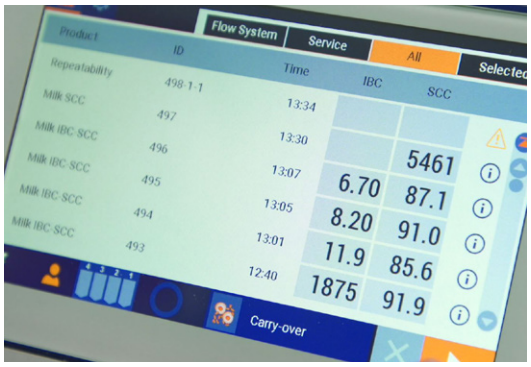
FOSS

BacSomatic™

Integrated bacteria and somatic cell count



BacSomatic™ provides rapid hygiene testing of milk. BacSomatic is the first-ever integrated bacteria and somatic cell tester and offers full automation for minimal reagent handling and consistent test results.

Integrated bacteria and somatic cell tester
Automatic and fast alternative to manual assay, providing instant, simultaneous results for individual bacteria and somatic cell count within 9.5 minutes and 1.5 minutes for somatic cell count alone.

More accurate than alternative methods
A fully automated procedure avoids the risk of human error and inconsistency, while ready-to-use reagents in an enclosed bag system, ensure the exact same dosage for every measurement. A sensor in the reagent bag indicates the number of available tests remaining. The unique reagent concept includes control samples for quality assurance and GLP. Online remote monitoring ensures consistent performance and high uptime.

Simple and flexible to use
Built on a long heritage of FOSS analytical technology and backed by global FOSS support, BacSomatic combines robust performance with a modern interface. Very easy-to-use with intuitive touch-screen operation for smarter money-saving decisions on how to use milk.

Sample types
Raw cow's milk and buffalo milk

Parameters
Individual Bacteria Count (IBC)
Somatic Cell Count (SCC)

Technology
Flow cytometry technology, counting individual bacteria cells and somatic cells.
The IBC results can be converted to CFU results. BacSomatic software includes an easy and rapid tool to develop a robust conversion table between IBC and CFU.

Approvals
EURL/Microval
FDA/NCIMS
In compliance with ISO/IDF standards

ANALYTICS BEYOND MEASURE

Specifications

Feature	Specification
Analysis time	9.5 minutes for IBC, 1.5 minutes for SCC
Analysis capacity	SCC and IBC: 15 samples/hour IBC only: 15 samples/hour SCC only: 40 samples/hour
Sample intake	IBC & SCC: 7.2 ml IBC: 6.4 ml SCC: 2.5 ml
Sample temperature	2 - 42 °C (35.6-107.6 °F) (preserved) 2 - 4 degrees °C (non preserved)
Sample quality	Raw milk of normal composition and good quality. Unpreserved or preserved with azidiol
Carry-over effect	<1% relative, usually <0.5% (uncompensated) IBC and SCC
Working factor	IBC: 100 and SCC: 100
Measuring range	IBC: 5,000-20 mill. IBC/ml (approx. 1,500 to 10 mill CFU/ml) SCC: 0-10 mill. cells/ml
Performance range	IBC: 10,000 - 10 mill. IBC/ml SCC: 100,000 - 1.5 mill. cells/ml
Accuracy	IBC: Typical Sy,x < 0.25 log units from SPC (standard plate count) SCC: < 10% relative mean difference form Direct Microscopic SCC
Reference or anchor method	Standard Plate Count (SPC) EN-ISO 4833-1:2013
Dimensions (w x h x d)	400 x 400 x 400 mm
Weight	25 kg
Space requirements (w x d)	Approx. 600 x 630 mm
Power supply	110 - 240 V AC, 50/60 Hz
Power consumption	max 190 VA
Water supply for preparation	Purified water (<5 µS/cm^3) The instrument does not require a direct connection to water tap but for chemical preparations ultra pure de-mineralized water must be available
Waste	Max 1 l
Ambient temperature	Ambient temperature 5 - 35 °C (41 - 95 °F)
Relative humidity	<93% RH
Instrument management	
Networking software	FossManager™

Repeatability		
Range (IBC/µl)	S_r (log-units)	Typical S_r (log units)
10 - 50	0.07	0.06
51 - 200	0.05	0.04
>200	0.04	0.02
Entire range	0.05	
Reproducibility (between instruments)		
Range (IBC/µl)	S_R (log-units)	Typical S_R (log units)
10 - 50	0.11	0.08
51 - 200	0.07	0.06
>200	0.06	0.04

Repeatability	
Range (SCC/µl)	CV, %
100 - 299	6
300 - 499	4
>500	3
Reproducibility	
Range (SCC/µl)	S_R, %
100 - 299	7
300 - 499	5
>500	4

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