

BacSomatic™

Integrated bacteria and somatic cell count



Product	ID	Time	IBC	SCC
Repeatability	498-1-1			
Milk SCC	497	13:34		
Milk IBC SCC	496	13:30		5461
Milk IBC SCC	495	13:07	6.70	87.1
Milk IBC SCC	494	13:05	8.20	91.0
Milk IBC SCC	493	13:01	11.9	85.6
		12:40	1875	91.9



ANALYTICS BEYOND MEASURE

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

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
Carry-over effect	azidiol <1% relative, usually <0.5% (uncompensated) IBC and SCC IBC: 100 and
Working factor	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 $S_y, x < 0.25$ log units from SPC (standard plate count) SCC: < 10% relative mean difference form Direct Microscopic
Reference or anchor	SCC Standard Plate Count (SPC) EN-ISO 4833-1:2013
method Dimensions (w x h x d) Weight	400 x 400 x 400 mm 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 prepa-rations 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

Sole distributor in Romania and Moldavia:

SERVITECH EXPRES S.R.L.

Phone: +40 744 433 283

Email: contact@servitechexpres.ro

Web: www.servitechexpres.ro

Source: www.fossanalytics.com