

BacSomatic™

Integrated bacteria and somatic cell count



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



ANALYTICS BEYOND MEASURE

BacSomatic™ is the first-ever integrated bacteria and somatic cell tester. It offers full automation for minimal reagent handling and consistent test results.

The first-ever integrated bacteria and somatic cell tester

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

More accurate than alternative methods

A fully automated procedure avoids the risk of human error and inconsistency, while ready-to-use reagents ensure the exact same dosage for every measurement. 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. Easy test with intuitive touch-screen operation for smarter money-saving decisions on how to use milk.

Sample types

Raw cow's milk

Parameters

Individual Bacteria Count (IBC/ml) and Somatic Cell Count (SCC/ml)

Technology

Flow cytometry, counting individual bacteria cells and somatic cells

Specifications

Feature	Specification
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
Power consumption	max 190 VA
Water supply for preparation	Purified water (<5 µS/cm ³)
Waste	Max 1 l
Ambient temperature	Ambient temperature 5 - 35 C
Analysis time	9.5 minutes for IBC, 1.5 minutes for SCC
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)
Sample quality	Raw milk of normal composition and good quality. Unpreserved or preserved with azidiol
Carry-over effect	<1%, usually <0.5% (uncompensated)
Working factor	100
Accuracy	For IBC; $S_{y,x} < 0.25$ log units in the entire measuring range. For SCC; <10 % relative mean difference from Direct Microscopic Somatic Cell Count (DMSCC).
Reference or anchor method	Standard Plate Count (SPC) EN-ISO 4833-1:2013

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 - 1500	3
Reproducibility	
Range (SCC/µl)	S_{Rr} , %
100 - 299	7
300 - 499	5
500 - 1500	4

Instrument management	
Networking software	FossManager™