Installation requirements

Dimensions:	85 x 260 cm
Space requirements:	Approx. 2 x 4.5 meters
Weight:	197 kg (without conveyor) 205 kg (with Basic Conveyor*) 250 kg (with Conveyor 4000*)
Power supply:	110 - 240 V AC
Power consumption:	50VA stop, max 2000 VA
Water supply for preparation:	Purified water (<5 µS/cm^3)
Air (for Conveyor 4000*):	0.2 N litres/min at 4.0 – 7.2 bar
Waste:	Approx. 8 litres per hour
Ambient temperature:	15 – 33°C

Data output

Real-time display/print-out, storage on hard disk or diskette.
Host transmission (RS232) and PC network transmission (TCP/IP).
Data export using CSV files, CS83 protocol or XML.

Standard equipment

Basic analyser incl. table and reagent containers, PC, software, Basic Conveyor*.

Optional equipment

Printer, extra reagent containers, *ID bar code laser scanner, *ID bottle rotation, *Conveyor 4000, *Conveyor extensions, *Output buffer, *Sample racks.

Standards and approvals

BactoScan FC is CE-labelled and complies with the following standards:

EMC directive	89/336/EEC
Machinery safety directive	98/37/EEC
Low voltage directive	73/23/EEC
Reagents labelling directive	99/45/EEC

*Semiautomatic version does not include conveyor.
Installing a conveyor on Semiautomatic version requires upgrading of the analyser

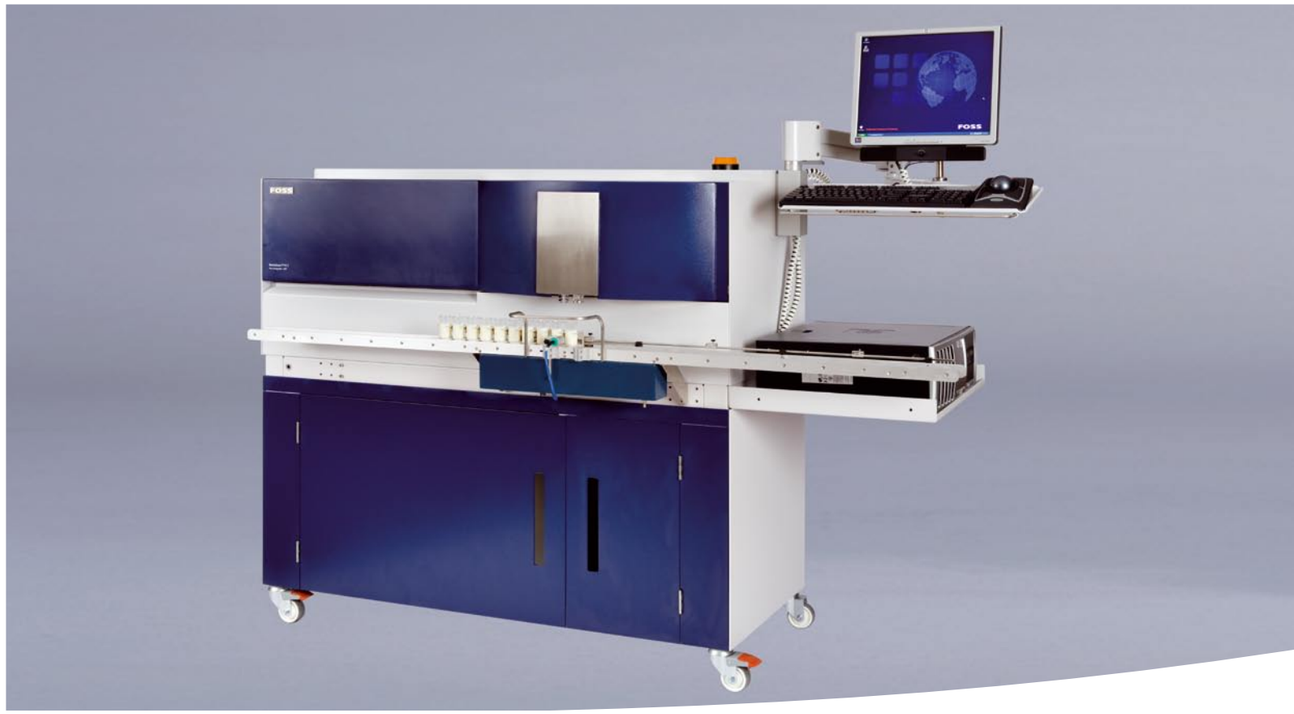
FOSS
FOSS
69, Slangerupgade
DK-3400 Hilleroed
Denmark

Tel.: +45 7010 3370
Fax: +45 7010 3371

info@foss.dk
www.foss.dk

P/N 1025915, Issue 1 GB, July 2006

BactoScan™ FC



BactoScan™ FC - a fully- or semiautomated bacteria counter for raw milk

Benefits and features

Correct and fair milk grading
- superior documented reproducibility, repeatability and carry-over

Facilities for QC and validation of results
- all reagents certified
- software traceability tools
- control samples help you monitor and document analyser performance
- control sample charts - log performance over time
- documented performance on accuracy, reproducibility and repeatability
- software conversion tools for calculation of Individual Bacteria Counts to Colony Forming Units according to IDF 196 and ISO 21187

Eminent tool for improving milk quality
- fast results - in less than 9 minutes
- recording of Individual Bacteria Count rather than Colony Forming Units which might hide poor quality milk

High up-time
- few moving parts – a robust analyser
- no daily adjustments, short warm up period
- little time spent on reagent preparation
- remote support via modem or internet
- supported by local FOSS Service organisation, trained BactoScan engineers are always close by

Low operator costs per sample
- high sample throughput – 50 -100 or 150 samples/hour
- simplified reagent concept

Low service costs per sample
- high sample throughput – 50 -100 or 150 samples/hour
- 2 year warranty on instrument
- software troubleshooting tools and remote support
- quality control concept
- preventive maintenance contracts

Dedicated Analytical Solutions

FOSS

Description

The BactoScan™ FC is the ideal solution for laboratories requiring reliable, instant and accurate bacteria count in raw milk with minimum sample handling.
The unique combination of technology and biochemistry, combined with optimum data processing and a software platform second to none, make BactoScan FC a winner.

Technology

The 100% automated BactoScan FC employs flow cell cytometry to provide a system that counts Individual Bacteria Cells - IBC (only viable bacteria). This gives a high accuracy compared to methods that are strongly influenced by bacterial growth requirements and by the number of single bacteria in a bacteria cluster.

Analytical quality assurance

A complete range of control samples and quality assurance application software offers a system for monitoring and documenting correct analyser performance, and helps trouble shooting if needed.

Member of the Foss Integrator family

The BactoScan FC is a true member of the Foss Integrator family.
The great advantage from a laboratory point of view is that the same software, the same conveyors, bar code readers etc. can be used throughout the laboratory.This eases training of laboratory staff and facilitates data transfer and -handling.

System description

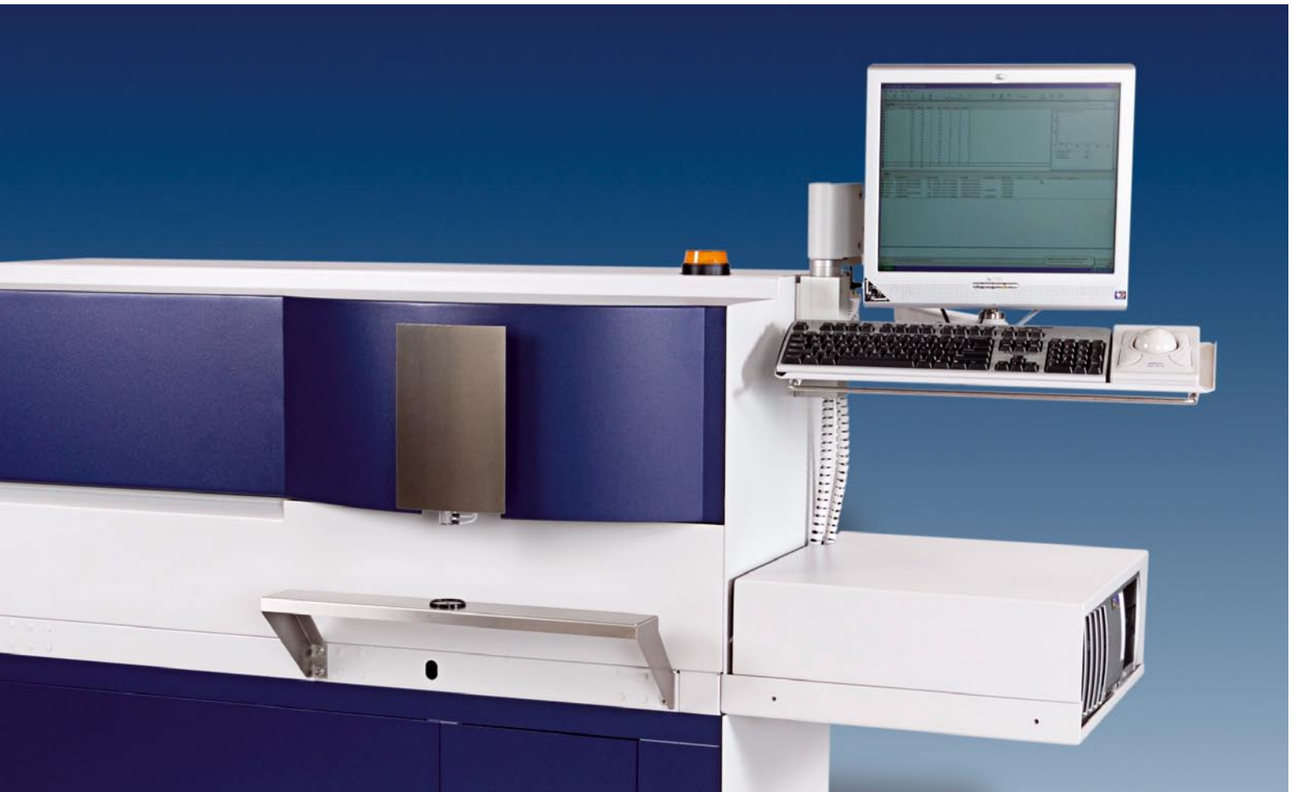
The BactoScan FC consists of the analyser, the PC and the basic Foss Integrator software package. A number of options are available.

Flexibility when purchasing reagents

The very simple reagent concept allows much more flexibility when purchasing reagents:

- all reagents can be supplied in packages for approx. 20,000 samples (150 samples/hour)
- in addition, the enzyme stock solution is supplied in smaller volumes to comply with varying needs
- all reagents are ordered separately

BactoScan™ FC in the semiautomatic version without a conveyor



Application data

Choice of speed* and sensitivity*:

Capacity / Sensitivity	50 s/h	100 s/h	150 s/h
Low	50L	100L	150L
High	50H	100H	150H

Typical measuring range*:

L models: From 100,000 to minimum 20 mill IBC/ml (approx. 35,000 to 10 mill CFU/ml)
H models: From 5,000 to minimum 20 mill IBC/ml (approx. 1,500 to 10 mill CFU/ml)

Speed:

Models: 50L, 50H: 50 samples per hour
Models: 100L, 100H: 100 samples per hour
Models: 150L, 150H: 150 samples per hour

* BactoScan™ FC Semiautomatic is only available with high sensitivity at 50 samples per hour (50H). This version does not include Conveyor and Stirrer system

Analysis time:	8.5 minutes
Sample intake:	approx. 4.5 ml
Sample temperature:	2 – 42°C
Sample quality:	Raw milk of normal composition and good quality from cows Un-preserved or preserved with azidiol

Performance data

Repeatability:

Range (IBC/µl)	Sr (log-units)	Typical Sr (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)	SR (log-units)	Typical SR (log units)
10 – 50	0.11	0.08
51 –200	0.07	0.06
>200	0.06	0.04

Carry-over effect:	< 0.5 % (uncompensated)
Working factor:	300, alternatively 95 which will reduce speed to 50 samples/hour
Accuracy:	Typical $S_{y.x}$ < 0.25 log units in the entire measuring range
Reference or anchor method:	Standard Plate Count (SPC) (IDF Standard100B:1991)