### ✓ LED FLOW CYTOMETRY

The SomaScope Smart is the first somatic cell counter that uses Light Emitting Diode (LED) technology together with flow cytometry. LED technology is a very stable light source that does not deteriorate over time and would be expected to last the lifetime of the SomaScope Smart. Gain adjustments are hardly or no longer needed.

The latest flow cytometry technology is used to produce a laminar flow of the somatic cells through the measuring flow cell. This laminar flow ensures that every somatic cell is counted. This results in a linear measurement up to 1\*10<sup>7</sup> cells/ml. It also provides unsurpassed measurement of somatic cells at low Somatic Cell Count levels.

Delta Instruments was the first company to use flow cytometry for counting somatic cells in the dairy industry. Since 1989 our company has been fine tuning this technology resulting in this latest development; LED laminar flow cytometry. Giving cost effective benefits from the latest technologies.



### **Technical specifications**

### Performance Data

For fresh or preserved cow, sheep, goat, buffalo and camel milk		
Measuring speed:	Up to 120 samples per hour	
Measuring range:	From 0 to 1*10 <sup>7</sup> cells/ml	
Accuracy (Cv):	< 10% relative to Direct Microscopic Somatic Cells Count	
Repeatability (Cv):	< 5% at 1*10 <sup>5</sup> cells/ml	
	3% at 3*10 <sup>5</sup> cells/ml	
	< 2% between 0,5 - 2*10 <sup>6</sup> cells/ml	
Linearity:	Up to 1*10 <sup>7</sup> cells/ml	

#### Other Specifications:

Sample volume:	3 ml (replicates 1.5 ml)
Sample temperature:	40 °C ± 2°C
Carry-over:	< 1%
System dimensions (HWD):	37*74*47 cm
Weight:	28 kg
Power supply:	110V/60Hz, 230V/50Hz, 150 VA excl. PC

### Standards / Approvals:

IDF 148-2 ISO 13366-2 EMC Directive: 2004/108/EC Low Voltage Directive: 2006/95/EC

### Delta Instruments

Delta Instruments, an Advanced Instruments company, is a well-established manufacturer of rapid routine analytical instrumentation for the analysis of milk and milk derivatives. Our product portfolio includes milk analyzers for dairy processing industries and for payment and dairy herd improvement laboratories, all to the same high quality.

For more than 25 years the Delta Instruments team has focused on customer satisfaction, technological progress and premier quality. The dairy industry is our core business.

### Representative





# New Horizons in Dairy Analysis

## SomaScope Smart

A) DeltaInst

# Your Partner Dairy Analysis

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## SOMASCOPE SMART THE SMARTEST SOMATIC CELL COUNTER IN THE WORLD

### A NEW HORIZON IN DAIRY ANALYSIS

The SomaScope Smart is the only manual somatic cell counter that combines ease of use with low cost of ownership and the latest (FC) flow cytometer with LED (Light Emitting Diode) technology.

It has been designed for small and medium sized laboratories such as:

- Dairy laboratories
- Payment laboratories
- Veterinary laboratories
- Dairy Herd Improvement (DHI) laboratories

Dairy and payment laboratories will benefit from the improved specifications on low somatic cell counts. This narrow specification will lead to more reliable payments on borderline samples. Veterinary and DHI laboratories are also benefiting from using our non-mutagenic staining solution when analysing samples from a cowherd or individual cows for the effects of mastitis.

The non-mutagenic staining solution also gives unprecedented and reliable results when measuring sheep and goat milk that by their nature have higher somatic cell counts.

It is known that sheep and especially goat milk has a high background level when using the classical (DMSCC) method. The special mixture of nonmutagenic reagents in combination with our unique software can separate the cells from its background resulting in more reliable results.

The SomaScope Smart is approved to count the somatic cells in cow, sheep, goat, buffalo, and camel milk.





### Low Maintenance Costs

The smart design of the SomaScope Smart has resulted in an integrated liquid compartment. The staining and cleaning liquids therefore have a long lifetime, reducing operating costs. To minimise any down time during maintenance and service the SomaScope Smart features line replaceable units (LRU) which also result in lower maintenance and service costs. The 6 month maintenance interval only requires replacement of tubing that can easily be done by the customer.

The automatic cleaning with a walk away security minimises the risk of blockages or contamination. The pipette can also easily be removed and cleaned by the customer.

### Ease of Use

The SomaScope Smart is easy to use and has a start up time of only 5 minutes. With the single button operation and easy to use software, operators are able to work with the SomaScope Smart with a minimum of training. Measurement only takes 30 seconds.

To ensure confidence in the result a smart Q(uality)value indicator can be shown, this indicates the raw milk sample quality. This assures reliable measurement and results from the somatic cells in the milk sample. SomaScope Smart



The newly developed SomaScope Smart software is based on our existing easy to use and intuitive software modules. The software uses various wizards that can guide you through all the start up, calibration, and shut down procedures.

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The software is LIMS compatible and the data is presented in Excel format. All the data is captured and logged and can be used as part of Good Laboratory Practice (GLP)

Operators can easily monitor the process by viewing the special designed flow graphs and histograms.

### ✓ Affordable FC

The SomaScope Smart is an affordable somatic cell counter using Flow Cytometry and the latest LED technology. This has resulted in a rugged analyser with a low cost of ownership that is very easy to use: The smartest somatic cell counter in the world.

Cost effective ownership, calibration, maintenance and operation combined with fast results that exceed IDF/ISO norms.