

## Combination Models



### Bentley 150 Combi

The Bentley 150 and the Somacount 150 can be connected to form a combination system offering simultaneous infrared and somatic cell count analysis. The result is significantly improved laboratory efficiency and faster sample analysis. Bentley combination models are available in many different configurations to meet the needs of any testing facility. Please contact us for more information on these models.

### Service and Support

Delivering a superior level of customer support has always been a top priority at Bentley Instruments. From onsite training and installation to long term technical support, our experienced staff of engineers is there to help you maintain the highest level of productivity.

### Somacount 150 Specifications\*

<b>Measurement Range:</b>	<b>0 - 10 M/ml</b>
<b>Variance:</b>	< 5.0% C <sub>U</sub> @ 100,000 < 3.0% C <sub>U</sub> @ 300,000 < 2.0% C <sub>U</sub> @ 500,000
<b>Accuracy:</b>	(100k to 5M) Within 10% Typically
<b>Speed:</b>	150 per hour
<b>Correlation To DMSCC:</b>	> 0.96
<b>Work Factor:</b>	< 100
<b>Electrical:</b>	115 Volts/60Hz/2Amps 230 Volts/50Hz/1 Amp
<b>Dimensions:</b>	Width: 52.0 cm Height: 38.0 cm Depth: 38.0 cm Weight: 33.0 kg
<b>Fluid Use:</b>	Milk: 3.5 cc/test Ethidium Bromide: 0.083 mg/test Buffer Solution: 3 cc/test 2% RBS Solution: .25 Liter/hour

\*Specifications for typical raw milk samples.

# BENTLEY INSTRUMENTS

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# Somacount™ 150

## Precision Somatic Cell Counter For Milk

The Somacount 150 utilizes state-of-the-art technologies to deliver highly accurate Somatic cell counts. It is designed for reliability, ease of use and precision measurements.

This instrument is ideal for small to mid-size laboratories that need an easy-to-maintain Somatic cell counting system.

- Capable of analyzing over 150 samples per hour
- Built-in computer offers flexible data output options
- Optional autosampler for fully automatic analysis
- Low maintenance design



### Technical Overview & Principle of Operation

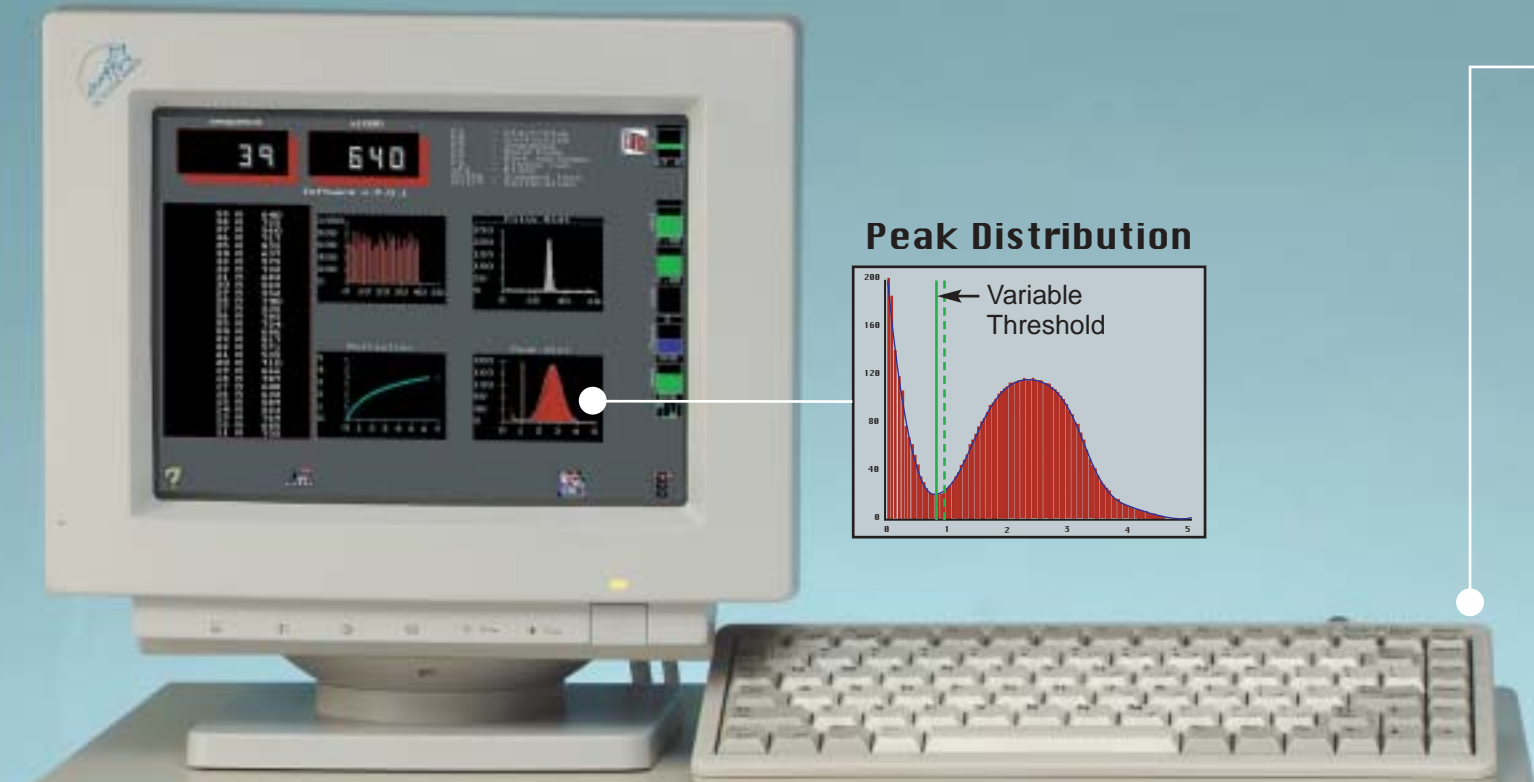
The Somacount 150 uses a proprietary process based on the principle of laser-based flow cytometry to determine the Somatic cell counts within a milk sample.

- ♦ A milk sample is taken automatically and mixed with a fluorescent dye solution.
- ♦ This dye disperses the globules and stains the DNA in the somatic cells.
- ♦ An aliquot part of the stained suspension is injected into a laminar stream of carrier fluid.
- ♦ The somatic cells are separated by the stream and exposed to a laser beam.
- ♦ As the stained cells pass through the excitation source (laser beam), they begin to fluoresce creating a light pulse.
- ♦ Through a series of lenses, the fluorescent pulses are focused onto a photo multiplier tube, where they are converted into electrical pulses.
- ♦ The pulses are sorted and stored by size using a micro controller. By using a process known as pulse height analysis, the pulses are sorted, counted and translated into a somatic cell count.
- ♦ The software allows for a wide variety of data output options, including diskette, serial, parallel and network connections which can be easily formatted to fit into the user's existing system.
- ♦ Operator friendly software with graphic user interface (GUI) help make the system easy to operate.
- ♦ The Somacount 150 meets the requirements of IDF standards for Somatic cell counting. AOAC approved methodology.

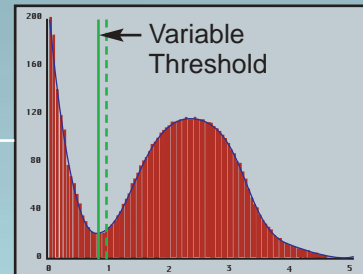
# BENTLEY INSTRUMENTS

*Analytical  
Instruments For  
The Dairy Industry*

# Somacount 150: Compact, Easy-To-Use Somatic Cell Count Analysis



Peak Distribution



## Innovative Design

- ◆ Integrated computer and compact design requires little work space, making it ideal for even the smallest laboratories.
- ◆ Proprietary analysis process based on laser flow cytometer delivers precision results at low cell counts.
- ◆ Low work factor leads to increased accuracy.
- ◆ State-of-the-art design utilizes few moving parts, resulting in a highly reliable instrument that is easy to maintain.

## Optional Automated Sample Input

- With the optional automated sample device, the Somacount 150 will provide a complete and highly automated lab procedure, where the work process is easily incorporated into the routine.
- ◆ The auto-sampler can handle most standard vial sizes.
  - ◆ Optional bar-code readers can be attached to the input tray for automatic sample identification.

## Data Output To Screen, Printer or Network

Data from the Somacount 150 can be printed on almost any type of printer via the serial and parallel ports. Multiple data output options support most of the standard host-remote solutions used in the industry today.

