



**ANALYTICAL INSTRUMENTS FOR THE  
DAIRY INDUSTRY**

NALMA 2010

Dubuque, IA

Bentley Combi FTS System

# Bentley Instruments Inc

## *FTS/FCM Combi*

- Bentley *FTS*
- Somacount 500 *FCM*
- Autosampler
- Barcode/RFID Ready
- Internet Ready



Bentley Combi FTS System

# *FTS/FCM* Features

- Full FT-MIR High Resolution Spectrum
- 500 samples/hour
- Fat/Protein/Lactose/MUN /FPD/FFA...
- Fully compliant with IDF requirements



Bentley Combi FTS System

# *FTS/FCM* Features

- Automatic rinse/zero function (programmable)
- Open system (spectra access/calibration development)
- Permanent database storage of all raw data
- Extensive network/remote control and data access
- Pumped waste can be delivered to central drain

**Full potential of an FTIR deck – no limitations**

# FTS Technical Specifications

## Bentley FTS Analytical Specifications

Analytical speed:	500 samples/hour
Milk Volume	< 7 ml
Sample Temperature	38-42°C
Start-up/shutdown time	10 min
Measurement range (Fat/Protein/Lactose/Solids)	0-15%
Milk Type	Cow, sheep, goat and buffalo milk
Accuracy (CV) – Fat/Protein/Lactose	Typically < 1%
Repeatability (CV) - Fat/Protein/Lactose	Typically < 0,5% ;
Carryover	Tc < 0,5%

# FCM Technical Specifications

## Somacount FCM Analytical Specifications

Analytical speed:	500 samples/hour						
Milk Volume	3.5 ml						
Sample Temperature	38-42°C						
Start-up/shutdown time	10 min						
Measurement range	0-10,000,000 cell/ml						
Milk Type (fresh or preserved)	Cow, sheep, goat and buffalo milk						
Accuracy (CV)	< 10% (against DMSCC)						
Repeatability (CV)	<table border="0"> <tr> <td>300,000 &lt; SCC ≤ 500,000</td> <td>≤ 4%</td> </tr> <tr> <td>100,000 &lt; SCC ≤ 300,000</td> <td>≤ 5%</td> </tr> <tr> <td>SCC ≤ 100,000</td> <td>≤ 7%</td> </tr> </table>	300,000 < SCC ≤ 500,000	≤ 4%	100,000 < SCC ≤ 300,000	≤ 5%	SCC ≤ 100,000	≤ 7%
300,000 < SCC ≤ 500,000	≤ 4%						
100,000 < SCC ≤ 300,000	≤ 5%						
SCC ≤ 100,000	≤ 7%						
Carryover	< 1%						

# FTS/FCM Current Status

- Currently 17 systems delivered
- Several orders pending
- Gained NCIMS approval for payment/regulatory testing

# Next Generation Series



Bentley Combi FTS



BactoCount IBCm



BactoCount IBC

Bentley Combi FTS System

# Bentley Instruments Update

## What's New

- DairySpec FT product analyzer
  - Unlimited product calibrations
  - Capable of high viscosity products



Thank You