

The new CombiFoss™ 7 DC – Differential somatic cell count and other advancements in milk testing

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Speaker: Andy Carr



THE NEW COMBIFOSS 7 DC – DIFFERENTIAL SOMATIC CELL COUNT AND OTHER ADVANCEMENTS IN MILK TESTING

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Dr. Daniel Schwarz, FOSS, Denmark





- New branding launched
- Customer first strategy

FOSS

• New website: www.fossanalytics.com



Dairy Herd

Improvement

MENU

THE NEW FOSS





e.g. Sampimon et al., 2005



DAIRY HERD IMPROVEMENT TESTING -THE FUTURE

- "We need to provide dairy farmers with more information for improved decision making through DHI testing."
- Mastitis: Differential Somatic Cell Count (DSCC)

60 YEARS OF INNOVATION





CombiFoss[™] 7 DC





7TH GENERATION MILKOSCAN



- Diamond or CaF2 cuvette
- 600 samples/hour
- Optimized optics and flow system:
 - Increased signal/noise ratio
 - Improved repeatability for minor constituents

7TH GENERATION FOSSOMATIC (DC) FOSS

- Modular design
- Improved working factor



- New measuring unit with patented DSCC technology (Damm et al., 2017; Schwarz, 2017)
- Performance range 50-1,500 k cells/ml



FOSS

DSCC – UPDATE ON PRACTICAL APPLICATION

MASTITIS CASCADE



EXAMPLE FOR DSCC DATASET





DSCC RESEARCH PROJECTS

Project	Objective	Status
Denmark	Longitudinal study to develop general guidelines for application of DSCC in practise	In progress





Differential Somatic Cell Count with the Fossomatic 7 DC - a novel parameter

By: Dr. Daniel Schwarz, Cattle Disease Specialist, FOSS, Denmark



J. Dairy Sci. 100:4926-4940 https://doi.org/10.3168/jds.2016-12409 C American Dairy Science Association[®], 2017.

Differential somatic cell count—A novel method for routine mastitis screening in the frame of Dairy Herd Improvement testing programs Malin Damm,¹ Claus Holm, Mette Blaabjerg, Morten Novak Bro, and Daniel Schwarz^{1,2}



KETOSIS SCREENING

- Simple, practical, rapid, and inexpensive tool
- Evidence of success of ketosis screening in various countries
- Keys to success: QA and communication

De Roos et al., 2007; Schwarz et al., 2015; Santschi et al., 2016; Coburn et al., 2017; Schwarz, 2017

ion



OTHER FTIR APPLICATIONS

• Prerequisite: Standardisation of MilkoScan analyser/spectra using FTIR Equalizer

- Adulteration screening
- Fatty acid profiling



JOIN THE NEXT WAVE - COMBIFOSS 7 DC FOSS

- +*
- Highly accurate, fast, reliable, repeatable, and robust determination of up to 19 parameters at low cost



- New services to provide dairy farmers with better information:
 - Mastitis: Various applications based on DSCC currently under validation
 - Ketosis screening: well-accepted and valuable service in many countries



