

lattec

Innovation in on-farm analysis Herd Navigator[®]

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The company behind Herd Navigator[®]

lattec
Milk Technology

The Mission of Lattec I/S is to develop, produce and distribute the leading concept in the world within on-farm analysis of milk.

LATTEC

FOSS

DeLaval

- 50:50 Partnership between Foss and DeLaval established in 2001
- R&D: Technical (Hardware, Software, Mechanics) and Biological
- Technical and Biological support
- Manufacturing and operations
- Business development
- Sales and Marketing through owners
- Situated in Hillerød (FOSS), ~28 people



Herd Navigator[®] - The Product

Herd Navigator[®] is an automatic diagnostic and herd management solution developed by Lattec

First launched in 2008 – compatible with DeLaval milking parlours up to 2x16 milking points. Support for VMS was launched in May 2010

Herd Navigator[®] version II was released in September 2011

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Measurements in raw milk tell a lot about the cow

Reproduction – Measuring Progesterone

Early detection of: Heats, silent heats, pregnancy, abortion, follicular and luteal cyst and prolonged anoestrus.

Energy balance – Measuring BHB (beta-hydroxybutyrate)

Early detection of: Ketosis, subclinical ketosis and metabolic diseases.

Udder Health – Measuring LDH (lactate dehydrogenase)

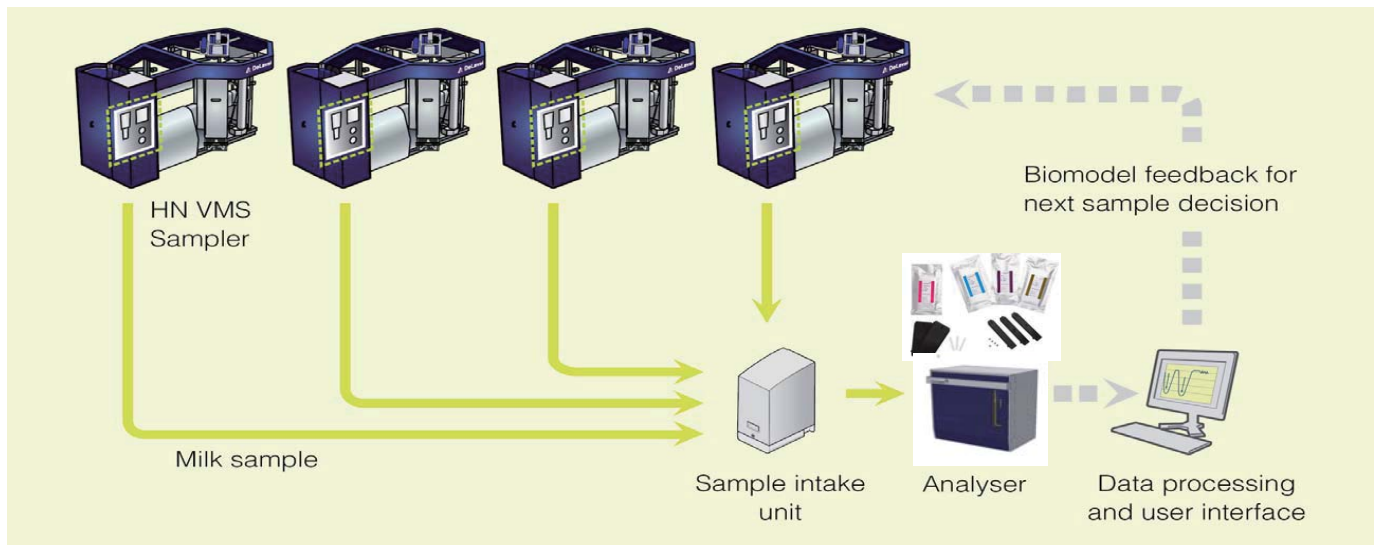
Early detection of: Clinical mastitis and subclinical mastitis.

Feed – Measuring Urea

Monitoring of energy and protein balance



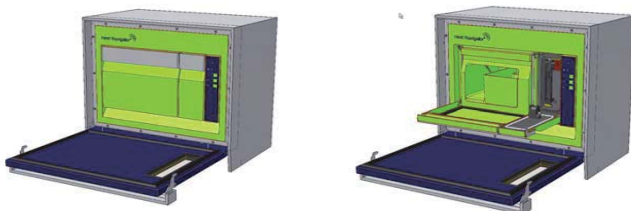
Working principle for Herd Navigator® for VMS



- While cows are being milked, representative milk samples are taken and forwarded, one-by-one, to the analysis unit. The system automatically selects, via a sophisticated biological model, three things:
 - 1) Which cows to sample;
 - 2) During which milking session a particular cow should be monitored;
 - and 3) Which parameters should be measured.



The Analysis Instrument



Consumables

- Sticks
 - Progesterone= Reproduction
 - LDH=Udder health
 - BHB= Ketosis
 - Urea= Feeding balance

• Desiccant

• Diluent



Herd Navigator® attention board

Cow	Risk	Reliability	Need2Treat	Diagnose	Execution time	Diagnose time	Description	SOP
9438	1.00	0.98	0.00	Ketosis	22:31:00 14-08-2012	22:30:52 14-08-2012	.The cow has a high risk of Ketosis. Action recommended	Fullblown Ketosis Treatment
345	0.87	0.98	0.00	Ketosis	21:05:00 14-08-2012	21:04:36 14-08-2012	.The cow has a high risk of Ketosis. Action recommended	Fullblown Ketosis Treatment
358	0.69	0.97	0.00	Ketosis	20:35:00 14-08-2012	20:34:37 14-08-2012	.The cow has a high risk of Ketosis. Action recommended	Fullblown Ketosis Treatment
102	1.00	1.00	1.00	Mastitis	17:17:00 14-08-2012	17:16:46 14-08-2012	.The cow has a high risk of Mastitis. Action recommended	Fullblown Mastitis Treatment
180	1.00	1.00		Heat	14:41:00 14-08-2012	12:00:00 14-08-2012	.Cow is in Heat, inseminate	Cow in heat
180	1.00	1.00		Insemination	14:41:00 14-08-2012	00:00:00 17-08-2012	.Cow should be inseminated	Cow should be inseminated
421	0.34	0.97	0.00	Ketosis	11:54:00 14-08-2012	11:54:12 14-08-2012	.The cow has a high risk of Ketosis. Action recommended	Fullblown Ketosis Treatment

Attention cow's are pointed out with an associated SOP

Management strategies and SOP's are created together with the farm advisors, the local vet and breeding experts

Herd Navigator® is a comprehensive herd management system with focus on daily Herd Management

Deeper analysis and screening of cow diseases still requires CMT-lab

Customer benefits

- Between 200 – 300 € can be achieved per cow per year
 - Improved reproduction - 95% heat detection. Less inseminations per cow
 - Pregnancy, abortion, cysts and prolonged anoestrus. Reduced open days
 - Potential of up to 600 kg milk per avoided ketosis case
 - Reduced mastitis
- Cows are monitored 24/7
- Saves work: 1-2 hours, 7 days a week



Soft Values - What does the users say?

- HN gives full control and overview of the herd - even when I am not milking yourself.
- Relaxed way of farming.
- With HN we can take a day off with the children without feeling there is something we will not see. Herd Navigator gives me peace of mind and less work

A product ...

with remarkable improvement possibilities for the farmer

Area	2009	2011
Number of Cows	135	190
Number of employees	2	2
Insemination per pregnancy	2,8	2,3
Replacement rate	35%	17%
Somatic Cell Count	200	130
Clinical Mastitis %	35%	17%
Use of antibiotics	Decreased by 50 %	
Average lifetime per cow	3,11	4,02
Calculated net savings	~200 €/ cow/ year	

Source: HN Customer in Nederlands.
Data collected by the farmer



Thank you



Herd Navigator®

The future of Precision farming

Proactive herd management