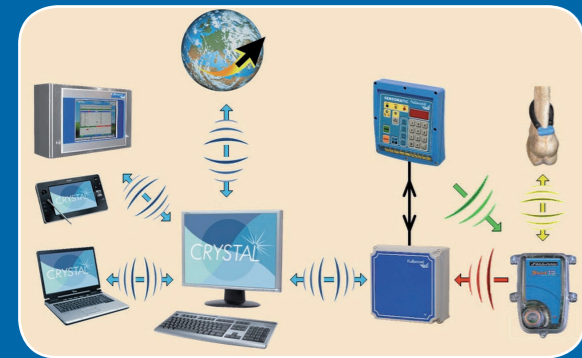## Sensomatic offers you the following advantages

Design

· Modern appearance with compact, free flow sensor design

Milking technique

· Indication of milk flow and total yield *

· Indication of milk conductivity and milk temperature

· Ability to measure flow rates from high yielding cows to sheep and goats

· Unrestricted milk flow due to free flow sensor design ensuring no effect on vacuum stability or milk quality

· No additional air inlet and/or generation of froth in the milk

· Accurate, automatic cluster removal

· Adjustable indication of time before cluster take off is performed

• Adjustable time delay between vacuum shut off and removal of cluster

· Quick cluster pick up and indication of "Kick off"

Pulsation

· Adjustable pulsation speed and ratio

· Automatic or manually activated stimulation

· Optional milk flow controlled pulsation

Operation

· Clearly marked keys for start/stop milking and gate operation

· Well organised display of attention codes

· Optional remote or automatic start switch

· Manual/Automatic cluster removal and optional sweep of remaining milk

· Optional automatic control of parlour gates

· Optional operation of swing over arms or stripping arms

· Full automatic milking operation by Sensomatic in rotary parlours

Cleaning

· No additional cleaning fluid required due to the free flow sensor design

· Per stall monitoring of cleaning parameters with clear alarms in case of deviations

· Centralised parlour commands to set units in/out of cleaning mode

Link to Crystal® Herd Management Software

· Transfer of yield, conductivity, temperature and milk flow data to Crystal®

· Display in parlour of animal information coming from the Crystal®

· Option to set Flow Controlled Pulsation curve per animal in Crystal®

· Use of parlour codes for animals needing treatment or attention

· Operate parlour and sorting gates from the Sensomatic keyboards

· Link to a wide range of animal ID systems in the parlour

* Research by Animal Sciences Group Wageningen UR has proven that for Sensomatic "standard deviation of reproducibility exceeds the ICAR limits (max 2.5%) with a factor two to three". Practically this means that with correct calibration Sensomatic can be accurate within +/- 7.5%

Fullwood

Sensomatic

Monitors and controls the milking process

Milk yield indicator helps check animal health

Sensomatic is a new generation of Milking Assistant

The flow cell and information terminal have been developed with the needs of both operator and animal in mind. It is user friendly, simple to maintain and can be fitted easily in any type of milking parlour configuration. Sensomatic controls essential milking functions such as pulsation, cluster take off and operation of entry and exit gates.

User friendly, simple to maintain and fits into any parlour

Sensomatic provides valuable information to the operator

Parameters such as milk yield, milk flow rate, milking time, electrical conductivity and milk temperature are measured and can be used as effective management tools for monitoring and improving animal and udder health.

Sensomatic's measuring principle copes well with high yields and flow rates

It also allows for accurate indication of smaller milk yields. This makes the device very well suited for milking cows, goats and sheep.

Sensomatic monitors the complete process during milking

Deviations from the norm are brought to the operator's attention who can then take action to prevent loss of milk or milk quality. Linked to a PC with Crystal®, Sensomatic presents clear data about milk quality, animal health and fertility. It then becomes a time saving tool to assist the milker with activities such as operating cow sorting systems, automatically operating parlour gates and selecting milk flow controlled pulsation curves for each individual animal.

Free flow sensor

Each stall is equipped with its own free flow sensor positioned in the milk tube between the cluster and the milk line. It can be fitted in both low line and high line milking systems. The free flow design does not impede milk flow nor does it affect the cleaning capabilities. The sensor is manufactured in one piece and does not have seals or moving parts. This means that there are no wearing parts to maintain.

Milk yield and milking time

The Sensomatic's easy to read display is mounted overhead, allowing the milker to closely monitor the milking process. When used in conjunction with the Crystal® management system, the sensor checks that each animal's yield is in line with expectation. Milk yield and milking time are shown alternately on the display panel and provides the operator with continuous, valuable information on the milking process. In addition, the milk flow rate (maximum, average or actual) can be displayed either permanently or on request through the keyboard.

Milk conductivity and temperature: animal health and mastitis control

Mastitis is one of the biggest causes of financial loss in dairy farming. Measurement of milk conductivity and temperature, provides farmers with an early warning of infection. Sensomatic reports deviations in conductivity or temperature immediately, the highest values can be requested via the display at anytime. Linking these measurements to the Crystal® management system provides a powerful tool to help in the fight against mastitis and to monitor the overall health of each animal. Taking early corrective action increases the chance of a successful cure.

Advanced cluster removal

Sensomatic's advanced cluster removal system provides an indication of time before cluster take off, adjustable delays between operating the take off cylinder and opening or closing the vacuum valve. It also picks up clusters instantly at kick off and can be used to control other devices like swing over arms or stripping arms.
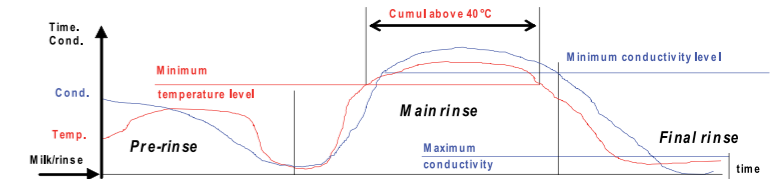
Milk-flow controlled pulsation

Animal-specific milking is more than a buzzword. Every animal is unique. Sensomatic can achieve optimum milking conditions for each animal by tuning the pulsation rate and ratio to the flow rate of the milk. In this way Sensomatic can provide real cow individual milking.

Per stall cleaning monitoring and herd management

Temperature and quality of the rinse water

Quality, hygiene and the environment are 'significant' issues in the food industry. Sensomatic's combination of measuring time, flow rate, temperature and conductivity offers direct technical solutions for monitoring cleaning. Each Sensomatic collects valuable data to monitor the milking and cleaning performance of each milking unit and thus for the whole parlour. Deviations in concentration of detergents or in the temperature of the cleaning solution are reported, as well as the presence of sanitizer residues in the final rinse water.
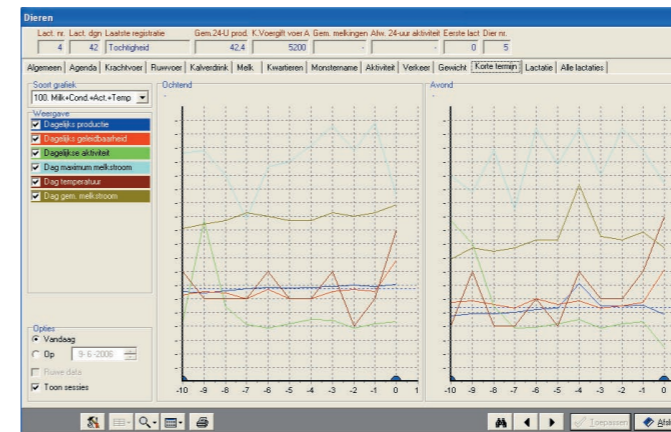
Sensomatic linked to Crystal® Herd management

If linked to a PC and Crystal®, the Sensomatic becomes a valuable source of information. Data can be accessed on a daily basis either in the parlour or at the PC.
The following information can be viewed (V) or entered (E) on the display unit in the parlour.

Animal identification:		Agenda:	
- animal number	V/E	- days in lactation	V
- manual ID of animal	E	- lactation number	V
- parlour codes	V/E	- days since last service	V
Milk:		- insemination number	V
- milk yield	V	- fertility status (pregnant/barren)	V
- expected milk yield	V	**Feed:**	
- milk flow	V	- feed allowance	V
- milk duration	V	- feed uneaten	V
- expected conductivity	V	**Milking parlour:**	
- actual conductivity	V	- parlour codes	V/E
- milk temperature	V	- messages from parlour	V

Advantages of Sensomatic linked to Crystal®

• Feed optimisation: controlled feeding in the parlour, or in out of parlour feeding stations, to maintain lowest production cost.
• Continuous monitoring of production, feed intake and udder health.
• Reducing risks, flagging cows recorded by the operator as treated with antibiotics.
• Advanced early illness detection, increasing the likelihood of successful treatment.
• Advanced control functions like automatic parlour traffic and animal separation.
• Link to a variety of manual or automatic identification systems, either per stall, at the entry of the parlour or by the milker using WatchID.

CRYSTAL
*Completing the
Management Circle*

WatchID offers reliable identification

The WatchID system uses a special "watch" ID unit worn on the milker's wrist detecting both stall position and the animal tag when the milk cluster is attached. Watch ID is easy to install in most types of parlour.

"So much information from such a simple device"