

# The **DRAMIŃSKI** Mastitis Detector From Dairy Spares Limited

Dairy Spares Limited  
Unit 1, Civic Industrial Park  
Waymills, Whitchurch  
Shropshire SY13 1TT

Telephone: 01948 667676  
Facsimile: 01948 666505  
email: sales@dairyspares.co.uk

MD04



## Early detection of subclinical mastitis

- MD02 Draminski Mastitis Detector Original Model
- MD04 Draminski Mastitis Detector 4QMAST Model

It is a requirement of "The Dairy Products (Hygiene) Regulations 1995", that the foremilk is examined and discarded. Foremilking is considered the best means of detecting early signs of mastitis and allow for the stimulus for milk let down.

**The Draminski mastitis detector provides an early detection at the non-visible subclinical stage of mastitis.**

## Mastitis detection

The Draminski mastitis detector measures the electrical resistance of the milk sample. With the development of subclinical mastitis the milk constituents alter rapidly, specifically the sodium and chloride ions which increase and the potassium and lactose which decrease. This then reflects in changes in electrical resistance, which drops immediately and causes lower readings on the Draminski mastitis detector display. When comparing the readings between all four quarters, quality milk never fails the test and provides a good reading where a quarter with as yet invisible subclinical mastitis will provide a much lower reading in comparison.

## Operation

The simple use of the Draminski detector is designed to alert the operator when an **individual quarter displays a lower reading in comparison to the other three** of the same animal.

Just fill the Draminski measuring cup to the indication line with a few squirts of the **first foremilk direct from the teat**, press the on/off button to clearly display the reading. **Testing all the quarters immediately**, you can inspect the health of any quarter within seconds.

When using the Q4 model (MD04) the reading of **all four quarters of the animal are displayed simultaneously**, enabling operator to quickly compare and interpret the results, aiding the speed of operation and diagnosis.

No need to rinse in between quarters, simple shake off any excess. Only when a quarter with a low reading has been sampled does the sample cup need to be rinsed out with clean water.



MD02



## Interpretation of the readings

There is no fixed point or number where mastitis definitely is or is not present; rather increasing or decreasing degrees of infection. Generally the higher the reading the healthier the quarter.

**Readings above 300 units:** The incidence of subclinical mastitis is very low. The sample is of high quality from a healthy quarter.

**Readings between 300 and 250 units:** A progressive increase in the incidence of subclinical infection as readings decrease.

**Readings below 250 units:** Indicates a rapid increase in the severity of infection as subclinical progresses to the clinical stage.

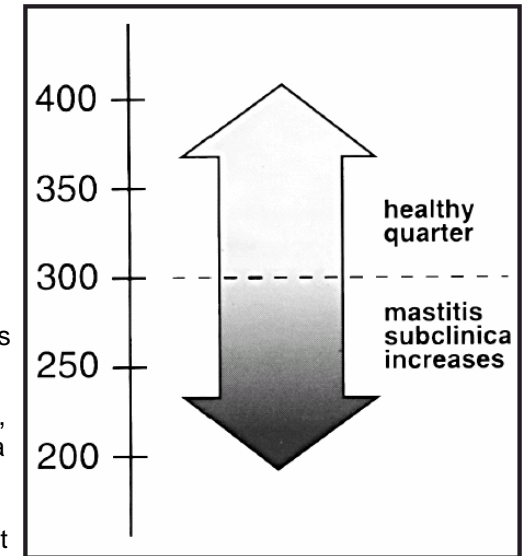
**Any quarter with a reading below 300 or showing a difference of 50 points** in comparison with other quarters of the same animal should be regularly monitored.

Among younger animals (1-2 lactations) or milk of high butterfat the average reading tend to be higher. Whereas in older animals (9 yrs plus) or low butterfat milk show a slightly lower reading.

Animals that have already developed visible **clinical mastitis the results are void**, as they will generally return to a reading above 300, as the clots and flakes hinder the flow of the ions. This indicates the need for more regular monitoring of suspect quarters, to highlight a problem prior to the animal progressing to the clinical mastitis state.

The Draminski mastitis detector should be cleaned using a mild detergent (not hypo-chloride), rinsed and stored dry in its case when not in use. Failure to comply with these instructions may invalidate your warranty.

Whilst the detector does not display SCC (somatic cell count) nor have any positive correlation to SCC. The figures below give a indication of an average herd containing cows of all ages; these readings will vary from farm to farm as conditions affecting each herds vary.



| Draminski Reading |       | Estimated SCC Range for Guidance only |           |
|-------------------|-------|---------------------------------------|-----------|
| Below             | 250   | Above                                 | 1,000,000 |
| 250               | 275   | 1,000,000                             | 600,000   |
| 275               | 300   | 600,000                               | 300,000   |
| 300               | 325   | 300,000                               | 200,000   |
| 325               | 350   | 200,000                               | 100,000   |
| 350               | 375   | 100,000                               | 70,000    |
| 375               | 400   | 70,000                                | 40,000    |
| 400               | Above | 40,000                                | Below     |

