Save time and money

A unique cluster was launched at UK Dairy Day and some revealing data highlighted that there could be efficiencies to be gained – and costs to be saved – by reviewing parlour cleaning routines.

1 Cluster speeds up milking times

The first milking cluster in the world to utilise a cartridge, instead of a liner, has been launched by DeLaval. The Evanza cluster and cartridge comprises a claw with an easy, quick-connection between claw and teat-cup. And the company says that it will offer significant benefits in terms of improvements in performance, cow welfare, service, ergonomics and reliability.

Units where the milking cluster and cartridge have been tested saw an increase in milk flow of up to 9.3% and a 7% reduction in milking time, compared to conventional clusters with liners.

Teat condition scores also improved in the trial herds and parlour service times were reduced by 50%.

Cartridge change times are three times quicker than a conventional liner change, according to the company. The cluster will officially go on sale in the UK in October.

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2 Review cleaning routine and save money

Data has revealed that inefficient parlour wash routines could be costing the industry up to £3 million per year.

Analysing figures from a Deosan-designed app, which has been used to study cleaning efficiencies on a representational range of dairy unit throughout the UK, there were two significant findings:

- Water heating, on average, accounted for £3,250 of expenditure per year yet, due to inefficient release and uptake into the parlour, 20% of the expenditure was never realised due to temperature drop.
- Chemical consumption was 10% above the required levels for circulation cleaning. This equates to around £300 in additional cost per unit each year.

"The overuse of chemicals and inefficient water temperatures aside, there is also the cost of accelerated deterioration to equipment and milk liners," says Deosan's David Horton.

"Clearly some major improvements can be made, and the good news is that they can be made quickly and simply," he adds.

An effective wash cycle can be split into four equal areas – all of which work in harmony for a successful clean. These factors, which should be given equal attention to ensure hygiene investment is cost effective, are: temperature, contact time of the chemical to clean, correct chemical dosage, and mechanical action.

"An efficient parlour wash is essential to ensure milk soil and bacteria are removed," stressed Mr Horton.

"Aiming for water leaving the boiler at between 77ºC and 82ºC should deliver a good temperature profile across the whole wash cycle.

The data showed that, on average, 18ºC was lost between extraction of the hot water from the heater to the start of the wash. "Some simple modifications to the water heater outlet, or the parlour intake arrangement, can be made at minimal cost. If maintaining higher temperatures is difficult, look for chemical options that work at lower temperatures."

Mr Horton adds that it is important to be careful with chemical dosage: "The data shows that 54% of units introduced a chemical to the final rinse at a higher rate than required.

"So routinely check how much chemical is used to ensure over-dosing is avoided. This can lead to milk fat and scale deposition, biofilm formation, bacterial growth, equipment deterioration, teat damage and, ultimately, income loss."

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