

Detecting lameness automatically – before it can be seen by the human eye – could be answer to reducing hoof problems on your unit

We have the technology

Technology and better training could really help time-strapped producers, struggling to tackle lameness. An automated system may be a significant investment, but it could pay for itself sooner than you think. And brushing up on your hoof trimming skills could go a long way to improving lameness treatment and prevention.

text **Rachael Porter**

Expanding herds and increased pressure on labour can only exacerbate the problem of lameness on some dairy units. But an automated system that will flag up potentially lame cows, sometimes before the lameness becomes detectable by the human eye, could be one of the cow welfare developments of the new millennium.

So says BouMatic about its patented StepMetrix technology. It's

a completely unique, automated lameness detection system that incorporates the latest technology, enables an on-board computer to detect the early signs of lameness and alerts the producer to take pro-active action before milk production, body condition and reproduction are seriously affected.

The system works via a simple 'walk through' system, linked directly to a standard PC.

Each cow is uniquely identified as she



Chris and Michael King

walks over the runway and her steps are analysed and converted to an SMX score.

Continuous comparison

SMX is a lameness measuring software analysing tool developed by BouMatic that is then sent to the computer for continuous comparison for each animal. The reports generated for the producer highlight cows with anomalies in their walk patterns, most commonly caused by the onset of lameness.



Preventative platform: StepMetrix detects the early signs of lameness



Multi-functional devise also aids lameness detection

Following the success of the Wetit Wave cow positioning device for new rotary platforms, Dairy Spares has launched another retro-fit Wetit Wave. These are screwed onto the platform, rather than bonded, allowing installation into existing milking parlours.

And the design of the product does so much more than just positioning the cow centrally in the bail, with feet either side of the wave, and ensuring that the

cluster hangs more squarely on the udder so promoting a faster and more even milking out. It can also aid the early detection of lameness in the back legs and reduce a cow's ability to kick off its cluster.

Teat spraying efficiency and coverage is also improved as the udder is presented in a consistent position.

The retro-fit Waves are longer than the original design – 580mm compared

to 460mm – and are black in colour to aid mastitis detection in stripped out foremilk.

The device will bolt onto both concrete and steel platforms, and even through rubber matting.

The cost per unit is £89 plus VAT and installation can be done by professional dairy engineers or by farm staff using a jig to ensure correct placement.

Tune up your hoof trimming skills with some hands-on training



With the spotlight firmly focused on tackling lameness on many UK units, it's little wonder that demand for hoof trimming courses is high. And spotting that – and the need for a more hands-on approach to training – Rob Doran has launched a range of practical cow-focused courses.

Mr Doran is a Dutch-trained foot trimmer and so knows just how vital hoof trimming – and doing it correctly – really is to both preventing and treating lameness. So his company is offering courses for both professional hoof trimmers and producers who want to trim their own cows' feet.

"For the past two years I have been helping the Royal Vet College's hoof-health specialist Nick Bell in the courses he's been running for producers and vets and I saw that there was a strong demand for physical and 'hands on' courses," says Rob.

"In my view there are far too many 'demonstration' type courses, where the producer is more of an observer, but not enough real one-to-one training out there. So we set out to address that and fill that gap." CowCoursesUK is using

Dutch instructor Jan de Jong and he has appointed and approved all the other instructors – mainly 'Category 1' trimmers – who are taking courses. "And because I am a qualified NPTC assessor, we can award City and Guilds Qualifications for trimming, which as you know is the UK equivalent to a Dutch diploma," adds Mr Doran. The company also offers dairy nutrition courses, delivered by a nutritionist with more than 20 years of experience. And Mr Doran and Mr De Jong are also qualified Cow Signals instructors, so courses to help you learn new skills and brush up on old ones in this area are also on offer.

Courses cost between £500 and £850, depending on their duration and length and the qualification gained.

"They are available nationwide and we have a fully equipped mobile workshop, including crushes and all the necessary equipment. So providing we have a group of four or more people who want to do the course, we will go anywhere," adds Mr Doran.

➔ To find out more visit: www.cowcoursesuk.co.uk

One of the first to install the system, back in 2007, was Bristol-based NMR/RABDF Gold Cup winning herd in 2010, Kingspool Holsteins, which is run by Michael and Chris King.

In the year prior to delivery, the pair had lost eight cows due to lameness during a 184-day period between August 2006 and January 2007.

They also had an additional 170 reported cases of lameness during the same 184-day period.

Based on average UK costs per incidence (this includes milk loss and all costs associated with one lame event) this equated to £37,000 expenditure to treat affected animals.

So the introduction of the system at Two Pools Farm was seen as essential for the future stability and commercial productivity of the herd. "Our approach to lameness and its prevention was done as part of a regular trimming and treatment cycle at drying off," explains Michael

King. "If any of the herd were visually lame then, of course, they would be treated separately and quite often the vet would be called.

"But the overriding issue we faced was the fact that we were seeing too many cases of lameness and by the time we had identified the problem we were almost certainly facing significant costs to get the cow back to full health.

Strict protocol

"We immediately saw the system's potential as a solution to our lameness problems."

The automatic detection system demanded that the old method of trimming and checking was scrapped and a new order of operation, centring on the results displayed by the computer readouts, was adopted.

And strict protocol was introduced to ensure that alerts from the StepMetric were actioned in a structured way.

Michael and Chris worked with BouMatic to evaluate the system on a commercial

UK-based dairy herd and a six-month trial period was agreed, which ran from August of 2007 to January 2008.

The system began the process of recording and measuring the 280-cow herd's rear hooves for soundness after each milking.

And in just six months a saving of around £19,000 was made, based on the previous six months' records.

"We were impressed – obviously – and the system has continued to be an invaluable asset to our herd management. We've been able to reduce costs and improve efficiency," says Michael.

"It has reduced our incidence of lameness by more than 50% and paid for itself in just 15 months.

"We have always strived to adopt best practice and improve animal welfare. And I think that because we can demonstrate these improvements to our customers, we can also help to promote a positive image of modern dairy farming." |