

# Spray and save – automatically

Automated teat spraying can reduce labour and cut teat dip usage

How does automatic teat spraying compare to a manual system? We spoke to two manufacturers and a producer to find out and to help you decide if this is one parlour 'add on' that you could help you save on labour and the cost of teat dip, as well as improve udder health.

In parlours where teats are sprayed manually, how consistent is the spraying? And how good is teat barrel coverage? Those are the questions posed by Wetit's David Carey. He believes that, in addition to the benefit of freeing up labour, an automated teat spraying system will ensure coverage is more reliable and consistent than any manual system.

"With a manual operator, a more thorough teat spray coverage is usually achieved when carried out by the owner, milking a small number of cows,

particularly if they are female – as women are often more fastidious than males!

"However, the person who is usually responsible for teat spraying at milking is also busy with many other tasks, such as drafting cows in, taking clusters on and off, stripping foremilk and hosing muck off. And this 'multi-tasking' is a distraction from doing a consistent and accurate job of teat spraying. So it's not surprising that, in some parlour set-ups, some udders totally miss out on the hygiene routine," he says.



Tim Dale (left) with Wetit's David Carey and the Wetit Platform Magic he installed to automatically spray cows' teats

The New Zealand-based specialist teat spraying company says that, by comparison, a well set up and monitored automatic system will reliably spray cows' teats with a constant amount of chemical, 100% of the time.

On target: using an automatic teat spraying system ensures that all cows are treated after milking



"And no labour is required," adds Mr Carey. "The only factor affecting the accuracy of an automated system is the variation in udder conformation."

It was the opportunity to save on labour, rather than worries about spray coverage, that prompted Tim Dale of Little Shrawardine Farm, near Shrewsbury, to install an automatic sprayer system.

## Labour saving

Mr Dale farms with his parents Derwas and Sheila, milking a 230-cow herd that's averaging 9,500 litres. Three years ago they replaced the herringbone parlour with a 40-point Waikato rotary parlour, and also installed a Platform Magic automatic teat sprayer together with the Wetit Wave cow-positioning devices. So milking can now be carried out by one person.

"When there are two of us in the parlour, we can manage, between us, to pre-dip and post-dip the teats. But when there is only one person we use the automatic sprayer for the post-milking treatment, while still achieving the same speed of throughput," explains Mr Dale.

The two electronic sensors of automatic teat sprayer are located above the bales – they are triggered when the platform moves round and cows are in the right position, and also ensure that unoccupied bales are not sprayed. Compressed air is used to stabilise spray pressure and provide an effective spray pattern to consistently cover the teats without the need to pump the chemical mechanically.

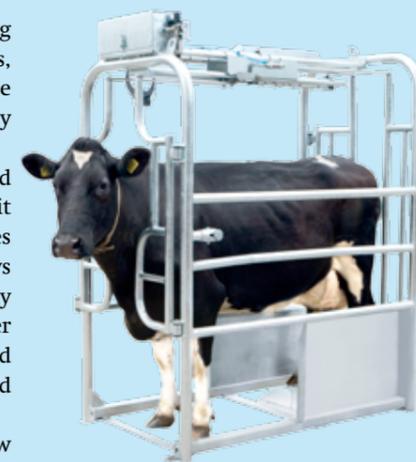
In New Zealand around 40% of new parlours are rotary platforms and of these 90% have Wetit Waves installed. The Platform Magic teat spray system costs £6,000 plus installation. Waves cost £72 per point on a new installation. "The Waves line the cow up, presenting the udder nicely for the teat sprayer, speeding up cluster attachment and reducing milking time. Cows are also

## 'Box' system offers fast and thorough teat coverage

Another automatic teat spraying system that's available to UK producers, although such a system is yet to be installed on a UK unit, is the DeRooy UdderSpray box.

This system, which costs around £6,800, is designed to sit along the exit route from the parlour and comprises a galvanized steel stall, which cows walk through as they make their way back to housing or pasture after milking. Set in its base is a pressurised spraying unit that gives thorough and fast teat coverage.

"Teat coverage is good because the cow stands still in the stall for a couple of seconds and also because the teat dip is sprayed via two nozzles," explains the company's Dirco van Dongen. "And the advantage it offers over manual spraying is that there are no areas of the teats and udder that are hidden from the sprayer – so there's no where for bugs and bacteria to hide." He adds that the amount of teat dip used to treat each cow is also small – just 9ml – because the liquid is propelled using compressed air. "This reduces the amount of teat spray used and, therefore, its cost."



The automatic spray box uses 9ml of dip per cow

Since the spray box is situated along the exit routes from the parlour, rather than in the parlour itself, the company says it's also easy to install. "It's really just a case of plugging it in and away you go," says Mr van Dongen. "External connections, such as electricity and compressed air, have to be installed prior to the installation. But all the components needed for installation are delivered with the machines.

quieter and fidget less. In fact we only use our kick bar when milking just one problem heifer.

"By making the cows stand better, the spray time can be shortened without detriment to accuracy. This reduces the amount of chemical required – we've seen a 25% saving on some farms."

## Barrel coverage

Dipping can provide total 'barrel' coverage, but it does take time and cannot be automated, according to Mr Carey. But whether dipping or spraying automatically or manually, it's essential to check techniques and monitor their accuracy. If spraying, then he advises

producers to check the spray device itself – aim it at a sheet of newspaper and look at the spray pattern.

"When you come to the end of milking and the last clusters have gone on, take a torch and check all teats have been sprayed. And scoring of teat coverage every few months can help ensure spraying is being done accurately.

"Independent scoring of our teat sprayer coverage has proven that typically more than 96% of teats are sprayed. And this may actually be a lot more than in many manual spray situations," he adds.

Rachael Porter