

Double box robot fitting the bill

When one family in Shropshire realised it was time to replace their old herringbone parlour, they decided to look into a double box robot system – and they haven't looked back since the beneficial installation. Gareth Jones at Robotic Milking Systems reports.

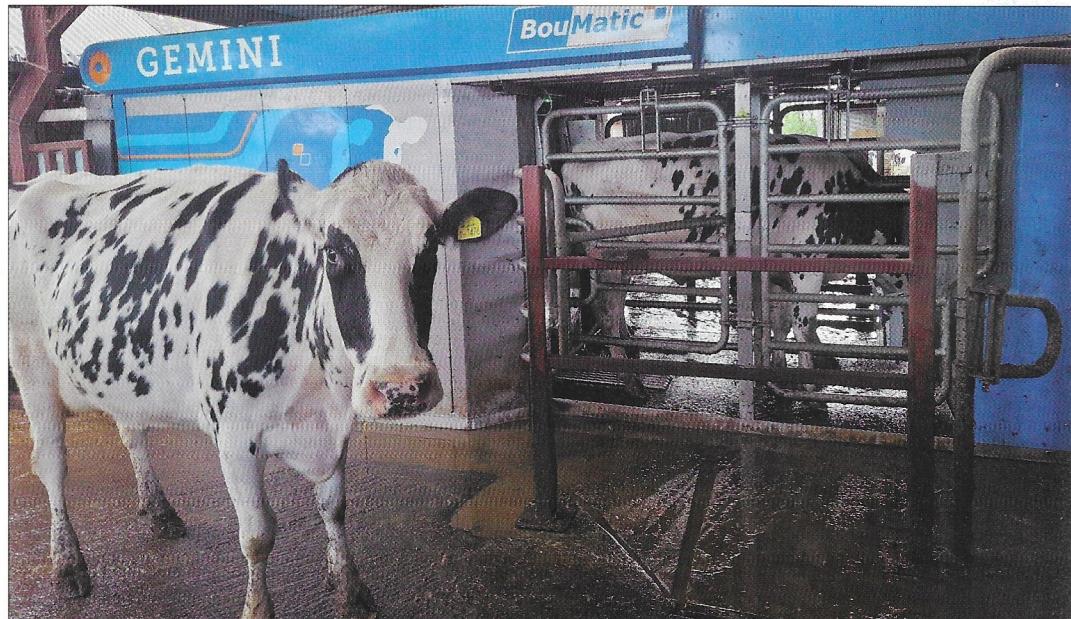
Family team, Brian, Margaret and Mark Price keep 90 Friesian Holsteins in Asterley near Shrewsbury. By 2022 they had reached the point where they knew they had to replace their existing 6/12 herringbone parlour, installed in 1996, because milking was taking too long and it was at the end of its working life.

Mark was spending a good deal of time off the farm, working as a nutritionist, so could not commit to milking the cows twice a day. And Brian wanted to take a step back from being tied to the cows. So, they decided that the next stage could be robotics, provided they could get the economics to stack up.

"When we started milking in the robot, the cows were very calm."

The family considered a few different options, but were attracted to the Boumatic Gemini because of support from their local dealership BD Atkins. Plus, the double box offered them the ideal solution for their cow numbers and building layout.

"The nice thing about the Gemini is that the double box can milk up to 100 cows," explains Mark. "So with our herd of 90 it was a great



A double box milking robot has fulfilled milking capacity without the need for extensive work to infrastructure

fit, as we only needed one machine. It is also modular, so the building work required was minimum. In addition, we liked the rear leg milking feature, which seems to be unique to Boumatic."

The robot was ordered in March 2023 and Mark set about doing most of the building work himself. "We liked the idea of incorporating a pit into the design as this would make it easier for any manual attachments or treating the cows," he says. "Apart from that it was only a case of building slurry channels and extending off the existing building."

The dairy remained in the same place, only 30m from the robot, which avoided any issues for the milk delivery line. However, the bulk tank was replaced as the old one was outdated and unable to communicate with the robot."

We decided to go for a 7,000-litre DX tank," explains Mark. "This gave us enough capacity for every-other-day collection and could be totally integrated into the new system. We also considered a buffer tank in the dairy but felt we had enough spare capacity in the double box, so this was another expense that we could avoid."

New environment

Building work was completed that summer before taking delivery of the robot, which was craned into position, straight off the lorry. Then it was just a matter of completing the installation, before using the robot as an out-of-parlour feeder for a week to get the cows used to their new environment. "This was a great move," explains Mark. "When we started milking in the robot, the cows were very calm."

Although the family considered grazing, it was getting a bit complicated. "So we decided that a housed, free-access system was best for us," notes Mark. "This gives the herd continuity, as every day is the

Robot facts

- Ear tag identification
- Quarter conductivity
- Rear-leg milking

Cost

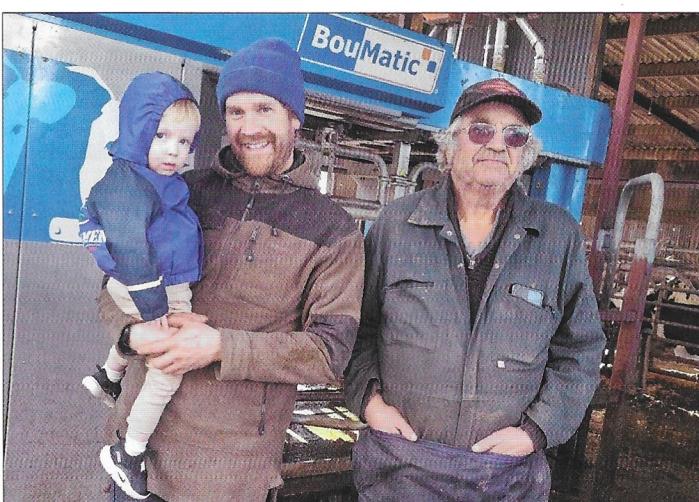
- Gemini double box robot: £139,000
- Air compressor and water installation: £7,000
- Building work: £5,000

same and intakes are not affected by the weather." The farm is in a good maize growing area, so the outside ration consists of 50:50 maize to grass silage, worth maintenance +22 litres, before the cows are topped up in the robot to a maximum of 12kg/head of concentrates per day.

The herd is very young and is made up of 70% first and second calvers, giving an average yield of 30 litres/cow per day, with an average daily milking of three.

"The aim is to move the yield up to 35 litres/cow over the next 12 months, and to produce around 3,000 litres/day," continues Mark.

"We know this is still well within the range of the double box, so we will still have plenty of free time (available milking time when the robot is not being used), without putting huge pressure on us and the cows."



Robotic milking has taken the pressure off both Mark (L) and Brian (R)