

Robotic dairy transcript

Robotic milking

These cows are busy making beautiful fresh milk! They spend most of the day outside, grazing on pasture. When they have eaten a lot of the pasture from their paddock and it is time to move to another paddock they know that they need to go through the dairy first.

This dairy is a robotic rotary dairy. That means that cows come to the dairy and are milked by robots as they stand on a platform that is rotating – *a bit like a very slow merry-go-round!*

There are four robots, each using laser to locate the cow's teats. The first one cleans the teats with warm water and air. As well as cleaning, this stimulates the cow's udder so that she lets down her milk and it flows freely into the milking machine.

The next robot puts milking cups on the front two teats.

Each cow has her own identification number and the blue tag around the cow's neck (called a transponder) tells the computer which cow is on the milking platform.

The next robot puts cups on the back two teats. Then as the milking platform rotates, the cow is milked ... she will be finished by the time she has gone all the way around once. Twenty-four cows can fit on this milking platform, all being milked at the same time.

This screen shows all of the information that the computer collects from each cow, including how much milk the cow gave from each teat or if there is something different about her milk – changes in the milk can mean the cow is getting mastitis - an infection in the udder of a cow that can be very painful.

From the milking platform the milk travels through a series of pipes to the storage tank. This tank can hold 12,000 litres – that's about 18,000 milkshakes! The milk is collected by truck every day at this dairy and they take a sample to make sure that it is the best quality milk.

When the computer senses that each teat is finished milking, the cups are removed and the cow stays on the platform until the exit gate. In the meantime her teats are sprayed with disinfectant by the last robot to keep her udder healthy. The milking cups and the milking platform are also cleaned ready for the next cow.

If the milking was normal and the cow is healthy she heads straight out the gate to the feeding troughs, if not the gates direct her to a separate yard and an alert is sent to the farmer to attend to her.

At the feeding trough, the computer reads her transponder and dispenses just the right amount of supplementary feed for each cow.

And then it's off to the fresh paddock ... until it's time for milking again.