

STRIVING FOR EFFICIENCY



Tony Wilson, “Applegrove”, The Risk, north of Kyogle, in his new 24-hour robotic dairy, which has reduced labour requirements and is expected to boost production.

THE introduction of robotic milking and the construction of a state-of-the-art dairy on the Wilson family’s Northern Rivers farm is paving the way for production increases where purchasing additional land and increasing herd size is not an option.

By having more time to feed their herd optimally and better manage each cow on an individual basis via in-depth computerised analysis, the Wilsons believe they can obtain the improved efficiencies critical for the survival of smaller family dairy operations today.

Tony and Jillian Wilson and sons Nic and James milk 200 Holsteins and Holstein-crosses on 80 hectares at “Applegrove”, The Risk, north of Kyogle.

They have switched from an eleven-a-side double-up herringbone system to three Lely Australia computer-controlled robots, with the new dairy kicking off in May.

It’s a trailblazing move – their robotic dairy is only the second in NSW and 20th in Australia and with a price tag of \$200,000 for each robot plus hefty costs for new dairy infrastructure – it was a big investment in an industry facing tough times in terms of costs rising faster than returns.

However, Mr. Wilson, who is also the deputy chairman of Lismore-based dairy co-operative Norco, believes by taking advantage of all that technology has to offer, farmers can cement a solid future in dairying.

The “24 hour factory” has taken the Wilsons from the need for two people to spend seven hours each a day milking to a fraction of the labour requirements – apart from limited monitoring and robot maintenance and floor wash-downs, nobody will be required in the dairy for any length of time once teething issues have been sorted.

The cows are averaging 2.3 milkings per day, producing an average of 25 kilograms (the equivalent of about 24 litres of milk) per cow per day.

They are fed four to five kilograms of dry matter on an eight hour rotation between three feed options – feedpad between 5pm and 1am; ryegrass between 1am and 9am and onto a second ryegrass area for the remainder of the day.

Cows also receive 1.5 to 9kg of mixed grain pellet, determined by the system’s computer depending on how much milk each cow gives.

The plan is for production to lift by 15 per cent – half of that at the cost of additional grain and fertiliser.

“Norco agronomist Bill Fulkerson is training Nic and James in electronic pasture measurement so we ensure we are feeding the right amount to encourage movement through the system,” Mr. Wilson said.

“It’s all about getting the most out of your cows and your farm and that’s going to be easier with less time taken up milking.”

Naturally, cow education is a big part of the process and the Wilsons still need to muster their cows to some degree so they move through the robotic dairy.

“It’s hard to break the habit in cows of milking every morning and evening and we expect it to take a year before things are running completely smoothly,” Mr. Wilson said.

Each cow has a responder around its neck which activates a computer when it enters the dairy.

In-line sensors measure and record traits like milk fat and protein levels and yield, along with detecting any abnormalities in milk and diverting it if need be.

Two sorting gates in the dairy allow automatic drafting for herd health and artificial insemination and direct cows to their feed options.

The modern dairy also features a revolving Lely Luna brush for back and head scratching, which Mr. Wilson says is a “must-have”.

Cow comfort, he said, is a key component of productive dairying.

Farm laneways have been constructed around another two computer-operated gates which sort cows too early to be milked from those that are ready, depending on the time each one has been away from the dairy.

Mr. Wilson said once things were running smoothly, he would consider low-key educational and tourism options.

“We’d like to do our part to bridge the disconnect between the city and farms,” he said.

Shan Goodwin

The Land