



PROJECT PROFILE



Hartwood Farms Partnership

Hartwood Farms Partnership located just south of Tokoroa is co-owned by Harry & Linda Mowbray and Jed & Liz Goode. Over the past 8 years they have set about redeveloping their 790 hectare property.

The property is made up of a milking platform of 400 hectares effective. A further 160 hectares is used as a support block for grazing and making supplements such as grass silage and hay. The remainder of the land comprises of forestry and some additional land which is currently under development to complement the support block.

'Do it once and do it right' is the owners motto. They also have an eye on environmental sustainability and animal welfare. With these core principles guiding their decision making they have undertaken some pretty extensive projects on the property.

With cow numbers having grown to 750 and a plan to reach 1200, one major development that had been put off far too long was a new milking facility. The old herringbone had been extended several times to a total of 50 units which meant milking was slow and stressful. On average the cows spent 4.5 hours at each milking and this was not only hard on the staff but it was costing valuable production.

Planning for the new milking parlour took its time. Harry and Jed had a vision for the parlour being the central hub of the farm, a place where the staff were happy to be. They wanted milking time to be enjoyable, not the chore it had become. They also wanted to provide a facility that stood out from the rest, one that had a real presence on the property and was true to their moto of 'doing it once, doing it right.'

When you drive up the tanker track you can't help but be taken back a little. The curved styling of the roof line and the smooth lines of the portal structure and solid cast concrete beams make an impressive sight.



Farm Stats

Farm Owner: Hartwood Farms Partnership

Size: 790 hectares

Location: Tokoroa, North Island, New Zealand

Number of Cows: 750

Farming Type: Pasture Based

System Design referred to in this Profile

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• iCOMPAC		5.4
• iCONVEYEREX		6.4
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The architecturally profiled windows at the front of the building give you a feeling that this isn't just any milking parlour (see image on [9.0](#)).

What must seem like many years planning has paid off for the shareholders. What they have achieved is nothing short of world class facilities with real attention to detail.

The parlour has a 60 point iCOMPAC rotary platform with INTEGRA bail cabinets. It features an iCONVEYEREX milking system loaded with all automation options such as milk purge, variable speed milk pumping and valve automation so the operators do not need to touch a thing apart from a single button. The platform automation is taken care of by the INTELCENTER control system, the INTELVAC controls the vacuum level and reduces the power consumption of the system.



The machine is automatically cleaned using the iNTELWASH. The machine can be cleaned while it is still being rotated and washed down thanks to the 4 port wash gland.

A small 16 point iXPRESS4 herringbone is installed at one end of the rotary to milk colostrum and sick cows independently of the main milking herd. This speeds up milking as the machine can be operated at the same time as the rotary. Vacuum is supplied from the main vacuum system, washing is manually done and milk is pumped away to separate storage tanks.

The facility has many other smart features like heat recovery from the chillers, iNTELSPRAY system to teat spray cows automatically as they exit the parlour. The staff area is well laid out; the luxury item here is the under floor heating. The heating extends into the board room that doubles as an office. The area around the outside of the rotary is elevated which is great for inspection of cows during milking. A specially designed platform is automatically raised out of the floor and used for vet inspection and inseminations on the rotary.

However the jewel in the crown is the automation package that the shareholders wanted to analyse their business and the performance of the herd. They wanted to make better decisions, faster. With the iDATAFLOW Herd Management system this is precisely what they will be able to achieve.

At each milking point, iNTELSKAN PRO has been installed. The large LCD screen displays the cow number when she enters onto the platform. This is due to the cows having activity with rumination collars located around the neck. The collars carry the cow identification number along with activity and rumination data, any cow that is on heat is displayed on the milking point.

She is also sorted automatically as she exits the parlour. If the cow has an alert, a message is displayed. The cluster can be locked for cows with treatments. iNTELSKAN PRO has many other functions, apart from controlling the milking process and retracting the cluster exactly when she is finished milking, the system controls the pulsation. Any cow that is slow to let down is stimulated, pulsation is also adapted to each cows milking style. Milk is metered and displayed on screen, conductivity of the milk is measured for each individual cow and compared to her previous milkings, and any change is alerted to the operator. Bail restraints control the cows exiting the rotary, any cow not finished or needing further attention is rotated back past the cups on operator.

The iDATAFLOW Herd Management software is used to analyse the data that is collected during milking. Production records are kept for each cow. With current production at 365kg of milk solids per cow, their challenge is to use the data and grow the production level of the herd and replace those cows that are not performing. "We are working to maximise the current land we have to generate the best possible production from a mainly grass based system at the lowest cost. This means that we will push up our stocking rate and we can't afford any passengers in the herd" says Jed.

