Robotic dairy to Revolutionise Industry

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INNOVATIVE niche Northcliffe milk producer and processor, Bannister Downs Dairy, is about to install WA's first robotic rotary dairy.

The 24-stand DeLaval voluntary automatic milking rotary (AMR) system will be part of a new multi-million dollar combined dairy, processing plant and tourist facility development known as the creamery.

There are three DeLaval AMR systems - capable of milking 540 cows three times a day - in Australia where much of the design and development work took place.

That includes the world's first commercial AMR installed on a Tasmanian farm in 2012.

The system is designed to milk big herds like Bannister Downs'.

Automatic recognition technology identifies each cow stepping onto the platform which rotates her to a station where a laser-guided robot washes and dries her teats.

She is then rotated to a second station where a second laser-guided robot places milking cups on her teats.

Milk meters monitor the flow and quality of milk from each quarter and when milking is completed the cups are automatically retracted and washed ready for the next cow.

With two teat-washing robots and two milk-cupping robots, the AMR system can process four cows for milking at a time.

Bannister Downs managing director Sue Daubney last week confirmed DeLaval had been selected to install the robotic rotary dairy and the Australian arm of German-based GEA Group had been chosen as process equipment supplier.

Bannister Downs, which pioneered use of biodegradable soft packs for its milk, uses a low-temperature pasteurisation system which is claimed to preserve natural heat-sensitive enzymes and proteins in its milk.

Ms Daubney also last week announced Bunbury-based family construction company Perkins Builders had been appointed to build the creamery on a greenfields site 1.8 kilometres from the existing Bannister Downs dairy and production facility.

Managing director Dan Perkins said his company was "honoured to be chosen as the head contractor" for the creamery project, with construction scheduled to start early in the new financial year.

"The creamery will truly deliver a new benchmark for dairy production in WA and as a company we are privileged to be associated with such a prestigious development," he said.

Ms Daubney said local tradespeople and suppliers would be used wherever possible "which is very important for our region".

"It has taken a long time to finalise our design and select the best equipment in order to meet our total focus on quality, however the wait has been worth it as we are now confident to commence construction

of a truly unique and iconic creamery which will have a wide range of benefits within our community and industry," she said.

As previously reported, the creamery will feature a glass-walled, second-floor public viewing gallery enabling visitors to oversee the whole Bannister Downs process, from cows being milked, the milk being processed, to it being packaged and despatched to customers.

Ms Daubney said the creamery was expected to be opened in 2017.

Ms Daubney praised Manjimup Shire Council for its help in obtaining development approvals.

"The shire has been extremely helpful and co-operative," she said.

She also acknowledged Banister Downs' partner Gina Rinehart and her company Hope Dairies (WA).

The project was only possible because of Hope Dairies' investment after the partnership was formed 18 months ago, she said.

"As a business, community and industry we are very fortunate to have the support, encouragement and opportunity provided by Mrs Rinehart which enables us to commit to complete the creamery project together, without any compromise on quality," she said.

The development application estimated the cost of the creamery at \$20 million but Ms Daubney has previously said that figure was well short of the expected ultimate cost.

Bannister Downs, started by Mat Daubney's grandparents in 1924, already milks about 1100 Holstein cows in a 90-stand rotary dairy and buys milk from neighbours Brian and Julie Armstrong who share the same ethical dairy views.

It began marketing its own milk in 2005 and established a niche market with Perth coffee shops.

It now produces and sells a range of premium full-cream, lite, flavoured and non-homogenised milk and cream and exports to Singapore.

In October Bannister Downs moved into the ice-cream business with the purchase of Azzura Gelati in Perth from the Odorisio family, established nearly 30 years ago.