

Hy-Line Australia: moving to the next level



By PETER BEDWELL

uality, reliability, and service have become expectations of the Australian layer industry and collectively driven internal upgrade and expansion of Hy-Line's production, incubation and delivery systems, according to Managing Director, Dr Greg Underwood.

"As the largest supplier of layer pullets in Australia, Hy-Line is leading the charge in raising the bar of quality and meeting the higher standards required by the growing layer industry in Australia," Dr Underwood said.

Having been recruited to the Company in 2006, Greg Underwood has directed the development vision to meet these challenges stating, "Where possible, our aim is to exceed our customers expectations".

Greg claims that he owes the improvements made at Hy-Line to the collective achievements of the management team and company board of directors.

"It would not be possible without their support, and it's surprising how far we've come in such as short time due to the energy and enthusiasm to provide a quality and professional operation supplying the layer industry," he said.

Genetic improvements achieved at Hy-Line in recent years have seen the Hy-Line brown become the number one brown egg layer strain farmed internationally.

"Some of our customers are achieving world's best performance, which requires a more highly technical approach to farming.

"To support the higher demands of our customer base, Hy-Line has focused more on technical support for producers both directly via the customer support team and indirectly via published material and an upgrade of the Hy-Line Australia website."

Most of the company upgrade and construction works have occurred at the Hy-Line operations in Bendigo. Rearing has been expanded through the construction and upgrade of floor-based and cagebased sheds.

All sheds are now fully-automated



tunnel ventilation sheds equipped with Big Dutchman equipment and Viper climate controllers, and the cage sheds have been furnished with Eurovent Starter rearing systems.

"We're extremely happy with the uniformity and body weight control we're achieving in this system," said Hy-Line's Livestock & Welfare Manager, Tin Phung.

"The upgrades have not only significantly improved our pullet quality, efficiency and biosecurity, but have also allowed expansion of our rearing facility without significantly affecting the environmental footprint, such as water consumption."

Hy Line's Rearing Manager, Cam Tomlins, showed *Poultry Digest* around the most recently upgraded shed and then around a new shed equipped with a 5 tier Big Dutchman Eurovent Starter cage rearing system.

"We can now rear about 90,000 pullets here with a team of about three staff. Previously we could only rear 30,000 pullets and it took about five staff to run the sheds, and the quality was nowhere near as good as the current system."

Cam said that a key feature of the Eurovent Starter cage system is the ventilation and controlled feeding systems that produce uniform pullets and dry manure.

"The dry manure reduces ammonia levels leading to a better environment for both birds and staff working in the sheds. We target high uniformity at five and 12 weeks of age and this system definitely allows us to achieve these objectives."

The Hy-Line production sheds have also been upgraded and new sheds constructed over the past two years incorporating state-of-the art automated controlled environment systems.

Big Dutchman equipment was again the supplier of choice for the controller, climate control systems and egg elevators, while the furnishings, including Vencomatic nests, slats, Cumberland feeders and Impex drinkers, were supplied by the Tea Gardens NSW-based company, Imexco.

Farm Manager, Rob Runnalls, said the upgrades have significantly improved production performance and farm operational efficiency.

"We recorded a maximum temperature of 49 degrees C here on Black Saturday (February 6, 2009) and the sheds didn't get above 27 degrees and there was no negative impact on production or egg quality.

"Indeed we endured 10 consecutive days above 40 degrees, including three at 47 degrees and above, which once would have depressed feed intake under a fogger cooling system resulting in egg production drops and deterioration in egg quality.

"These systems are fantastic and we're >





Top: Richard Dixon does a chick room temperature and humidity check. Particularly with layer pullets, chick room processing and holding temperatures are critical to ensure no overheating and/or chilling of the birds during the process. Centre: New shed R6 in expanded rearing unit. Above: Five tier Big Dutchman Eurovent starter cage system.



 ✓ fortunate with the timing of the upgrade investment that we didn't miss a beat this

'When you're running this number of sheds, system performance and reliability is critical to maintaining production and together with the increased site water storage capacity and new generators for back-up power supply, we've had a few things thrown at us over the past 12 months and thankfully the systems have not failed."

In addition to improving production efficiencies, Hy-Line is also investing in support services such as quality and programing.

Quality Manager, Geoff Baker, joined the business in 2008 and has been upgrading the company quality management system.

"Hy-Line has held ISO9001 and HACCP accreditation for a number of years now, but we're working to make the system more customer and production focused and the systems we've implemented are assisting us achieve our goal of 'exceeding our customers expectations'."

Hy-Line company programer, Shane Farnsworth, said that one of the company aims is to eliminate supply stress.

"We're producing over a million fertile eggs a week that have to be strategically managed. Part of my role has been to oversee the construction of a customised operational database that incorporates all available production and sales data to improve production and hatch date planning demands associated with our expanding customer base."

The topic of the expanding customer base introduces the critical work of Group Hatchery Manager, Richard Dixon, and his team. Richard's operations could be considered the hub of the Hy-Line business and as such there have been a number of key initiatives conducted to improve efficiency in chick incubation, processing and delivery.

"Managing the peaks and troughs in production and matching them to customer requirements is a constant challenge," Richard said.

The performance of this part of the business is continuously under the scrutiny of our customers and we're required to meet some very high performance targets these days.

"We've refined our operations here such that recently we hatched and processed 93,000 female chicks in a seven hour day, quite amazing given that in late 2007 we were processing a maximum of about 60,000 pullets over about 13 hours.

"We've typically got about 50,000 chicks processed, loaded and dispatched by 11a.m. One of the biggest changes affecting this division has been the customer's expectations on chick quality.

"Our chick quality is assessed by seven day mortality in fractions of a percentage point, even when the chicks may have been in transit for up to 30 hours.

'With the modern cage rearing systems, we're routinely seeing our chicks start at less than 0.5% after 20 hour delivery runs, with our best performance in the 0.2% range.

"We've been advised by our international counterparts that our results are setting international benchmarks for chick quality, and we're able to achieve this by working closely with producers and rely on their feedback to assist our continuous improvement program."

Hy-Line was the first in Australia to invest in the Novatech beak treatment system.

"It is definitely the best system we have for applying a beak treatment and marek's vaccination to day-old chicks without compromising quality," Richard said.

"We're continually applying a quality improvement process on these units, and having good technical expertise within the group, we're advised by Novatech that we're getting the most efficient performance and highest quality out of these units anywhere in the world.'

Hy-Line also owe improvements in processing efficiency to Shepparton-based firm, Trevaskis Engineering.

"The Trevaskis team has been excellent to work through our processing efficiency issues and has delivered the equipment and service we require at Hy-Line," said Richard.

Another major area of investment at Hy-Line has been the state of the art delivery fleet. In 2007 Hy-Line went searching for the worlds best delivery vehicle resulting in the purchase of its first purpose-built climate controlled chick transporter from van Ravenhorst (sold via HatchTech company, One-O-Four) in the Netherlands.

The vehicle is capable of carrying approximately 80,000 chicks and delivering them in top condition to layer farms up to 3,000 km away.

"The far north Queensland deliveries are our longest routine runs at present with a 5,400km round trip," Richard explained. "These trucks, with van Ravenhorst box/ ventilation system, have a flexible partitionbased loading system enabling transport of full or part loads without compromising the very precise climate control system.

Hy-Line has been so impressed with the operational ease and chick quality after delivery over such long distances that they've added another vehicle to the fleet.

"Our second truck with van Ravenhorst box, can carry a maximum of 104,000 chicks, which gives us a little more >







Top: Hy-Line's Rearing Manager, Cam Tomlins with Big Dutchman Viper control unit in the new rearing shed. Centre: Big Dutchman egg elevator system in the upgraded production sheds. Above: Big Dutchman feed conveyor system in rearing sheds.



flexibility in meeting the delivery logistics of multiple long-haul deliveries on a single hatch day.

"We've also purchased a smaller Iveco daily van that will be fitted with a van Ravenhorst ventilation system. This vehicle provides the opportunity to deliver smaller volumes of high-quality chicks over longhaul distances to meet the expanding freerange and organic market."

Reviewing progress at Huntly, Dr Underwood said that they were well on track to achieve the aims of maximising production and productivity.

"Over the past few years Hy-Line has consistently demonstrated to the layer industry that we can reliably deliver high-quality chicks over long distances and this is vital in retaining and even improving our market share.

"We're doing our part in producing quality stock, but our job is made easier in that the genetic selection team at Hy-Line International is leading the world in layer genetics with patented selection techniques and the largest genetic selection process of all breeds

"The Hy-Line bird is performing very well here in a variety of production systems, and we're investing in resources to work with industry to ensure performance is achieved.

"There's no doubt the bird is performing well in intensive systems with excellent production, feed conversion, shell and internal quality, and good egg weight control.

"We're also seeing an increased demand in the alternative production system sector and the Hy-Line Brown is ideal for these growers as it has a quiet temperament and good nesting behavior, providing producers with lower mortality and more eggs." Chris Rowell, National Sales Manager at Hy-Line Australia, is in a unique position to observe the changes that are taking place in Australia's growing layer sector and how the company must respond to them.

"With the influx of new cage and free range shedding over the last few years we are seeing the national replacement flock steadily grow to meet consumer demand.

"I suppose it's logical given the combination of increasing egg consumption and a growing population, but we have to plan to be efficiently servicing an industry experiencing an expansion in national flock numbers," he said.

"Our business mix is also changing with more free range production facilities being established to cater for a growing consumer demand in that sector.

"We are well placed with the Hy-Line Brown to supply a bird that is not only efficient from a production point of view, but also has a calm temperament making it ideal for free range, barn and intensive systems," Chris explained.

Hy-Line's commitment to continuous improvement and expanding demands by its growing customer base is impressive by any standards. The capital expenditure at Huntly is considerable but the planning and adaptation of this long established business to a rapidly changing market is equally impressive.

"We've been serving the Australian layer industry for more than 50 years. Our commitment as a specialist layer company to the supply of quality stock with excellent performance capabilities in a variety of production systems provide challenges that the Hy-Line team has demonstrated our capacity to deal with now and for years to come," Dr Underwood concluded.





Top: Climate controlled system combines with controlled feeding to keep manure dry – whihc means a better shed environment.
Above: New Vencomatic nesting boxes in production sheds.

