On-farm storage for the future

STORAGE DECISIONS SHOULD BE GUIDED BY MEETING CUSTOMER REQUIREMENTS, REPORTS PETER BOTTA*

COLIN SINCLAIR AND his son Hamish have a mixed farming enterprise near Devenish in north-eastern Victoria, and have stored grain for a number of years, marketing their grain throughout the year. With the dairy industry in the Goulburn Valley on their doorstep, they have a ready-made market for quality feed grains. With the increase in the amount of grain being used by the feed market, a decision to increase their on-farm storage was an easy one to make. Ensuring that the storage met both their own and their clients' future market requirements was a very important consideration.

To date, a combination of silos, sealed and unsealed, and a grain shed have been used to store grain. With changes in the marketplace and workplace, other systems needed to be considered. On-farm storage gave them a lot of flexibility and opportunities, but the way they were doing it might not meet future market requirements.

The Sinclairs' on-farm storage gives them greater harvest efficiency and spreads cashflow over the year. As a result, they are able to continue their harvest without hold-ups at the local depot. Hamish also sees the need to plan for the scenario that their local depot may shut down, putting pressure back on to their on-farm storage system.

Increasingly the feed market is sourcing grain which is stored in a 'residue-free' system without the use of contact pesticides. Storing grain in sealed storages enables grain to be fumigated correctly and efficiently, providing insect control without chemical residues.

Positioning themselves in the marketplace by providing residue-free grain gives Hamish a marketing advantage now and into the future. He is also aware of the problems with developing phosphine resistance, and that the alternatives such as carbon dioxide and nitrogen gas also require sealed storage to work effectively.

Getting away from using contact pesticides at harvest time was also a goal, driven by both health and safety and cost savings. Hamish wanted to be sure that exposure to chemicals was minimised as much as possible and sealed storages helped to achieve this. Instead of setting up a spray system to the auger, the sealed silo can be filled and then quickly and easily treated with phosphine via a phosphine belt or bag chain.

A significant cost saving can be achieved when using phosphine in sealed storage. The cost of applying a contact insecticide is approximately $2.50 to $3 per tonne, compared with 36 cents per tonne for phosphine.

Hamish and Colin also market some grain into milling markets in Melbourne. They wanted to increase their tonnage into this market, and when doing their homework realised aeration was also necessary to meet market requirements. Dough properties can be affected by grain stored in a hot environment, hence the need to keep their grain cool.

The Sinclairs decided the best system they could develop would have an element of sealed and aerated storage. They have now erected two 240-tonne sealed and aerated silos and two 240-tonne sealed silos. They believe they can store grain and market into insect- and residue-free markets and are confident that they will be able to meet any changes in the marketplace, as their system can be used without having to use grain protectants and will control insects.

From an idea to increase on-farm storage, a lot of thinking and questions have guided Hamish and Colin into having a storage system which will meet their current and future needs.

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On-farm storage brings flexibility and opportunities.