On-farm Grain Storage – Decisions for the Future

When Hamish and Colin Sinclair decided it was time to increase storage capacity on their farm, it became apparent their were a lot of things to consider. Father Colin and son Hamish have a mixed farming enterprise near Devenish in North East Victoria.

They 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 not hard to make, ensuring it would meet future market requirements was very important.

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

Their on farm storage gives them greater harvest effiencies and spreads their cash flow over the year. They are able to maintain their harvest, without hold ups at the local silo. Hamish also sees the need to plan for the scenario that their local silo may shut down, putting pressure back onto their 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 storage enables grain to be fumigated correctly and efficiently, providing insect control without chemical residues. Positioning themselves in the market place by providing residue free grain gives Hamish a marketing advantage now, and into the future. Hamish was also aware of the problems with phosphine resistance, and that the alternatives such as carbon dioxide and nitrogen gas require sealed storage to work effectively.

Hamish also wanted to get away from using contact pesticides at harvest time. This was from an OH&S and a cost saving point of view. Employing labour at harvest, Hamish wanted to be sure that exposure to chemicals was minimised as much as possible, sealed storage provided a way around 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 bagchain.

The cost of applying a contact insecticide is approximately $2.50 - $3.00 per tonne, compared with 36 cents per tonne for phosphine, significant cost savings can be achieved when using phosphine in sealed storage.

Hamish and Colin also market some grain into milling markets in Melbourne. They wish 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.

Colin and Hamish decided the best system they could put up would have an element of sealed and aerated storage. They have erected two 240 tonne sealed and aerated silos and two 240 tonne sealed silos. They believe they can confidently store grain and market into insect and residue free markets. They are also confident that any changes in the market place they will be able to meet as their system can be used without having to use chemicals, 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.