

Harnessing technology to streamline post-harvest handling

Interest in mechanical grain intake pit systems is rising among New Zealand growers keen to improve post-harvest efficiency and labour management.

That's according to REL Group's Hayden Kuyf, who says the company has installed several such systems over the past three years.

A before and after comparison from one of the most recent installations, on a large grain growing business in Hawke's Bay, highlights key advantages of investing in such infrastructure, he says.

Featuring a 13 tonne pit, with a 120 t/hr intake system, the new process completely negated the need for the 13 inch swing away Westfield auger previously required to unload grain trucks, and the tractor used to run it.

Instead of having to use two trucks to transport harvested grain from the paddock to the silos, the farmer was able to fully load one truck and trailer unit instead, freeing up the second truck driver.

That meant each load was 30 t each, compared with 15 t per load previously.

"They found it quicker, easier and safer for their staff, and obviously much more efficient. Dropping one person off post-harvest handling saved money, and at night, they didn't have to shift or pull down the auger as they previously would have."

Because this particular system was built to directly feed two silos, with the option to indirectly feed five others, there was also no need to shift the auger between loads of wheat and barley.

"One of the other benefits of these systems is that you're not sending trucks and/or trailers back to the paddock with up to 1 t of grain still sitting in the corners," Hayden adds.

"Rather than being limited to what can be removed through the grain door and the auger, the whole load can be dumped cleanly."

Skandia Elevator equipment imported from Sweden comprises the bulk of these systems, with REL Group customising installation per farm requirements and conditions.

Bin sizes range from 6-20 t plus depending on the farm, and each install takes about two weeks, including

ground works, Hayden says.

It is a big outlay compared to the cost of an auger, but increasingly growers are looking to more sophisticated post-harvest handling technology to hone their efficiencies.

"We're seeing a bit of change in attitude, especially on large operations. There's less emphasis on harvesting grain at the perfect moisture level, and more on getting the crop off faster, reducing the amount of labour involved, and using the technology available to streamline the process as much as possible, whether it's in handling or drying."

Demand for Schmelzer drying floors is another good example of this, he says.

REL Group is the first Schmelzer distributor in the Southern Hemisphere.

Key points of difference between these and traditional hard wood drying floors are cost-efficiency, durability and customisation, with faster drying and a much lower maintenance cost.

The reason for this is the steel and concrete model ensures materials have a much longer lifespan and quicker drying turnaround than their counterparts.

Based at Rakaia in Mid Canterbury, with offices throughout NZ, REL Group is a privately owned company founded



Each load can be dumped cleanly, so trucks and trailers don't go back to the paddock with grain still sitting in the corners.

in 1987 to fill a void in the New Zealand market for steel sheet fabricated silos.

Today it has over 40 team members involved in production, sales, service, installation and delivery of a wide range of grain storage and handling systems; meal feeding systems; dairy sheds and wintering barns; effluent and water tanks; and machinery.

For more detail visit www.relgroup.co.nz.

No auger needed, and no tractor to run it, either. Trucks simply dump into the drive-over pit.

