



a **TNA** case study

increased efficiency reduced cost

tna roflo® gateless food distribution solutions into the frozen food market. A fully integrated distribution system with minimal maintenance, changeover and cleaning requirements that improves production efficiency and reduces costs.



frozen food

A leading distributor of food brands including Edgell, Birds Eye, John West, Leggos, Ally, Seakist, Harvest, Plumrose, CHIKO and I&J, Simplot Australia is one of the region's top frozen food brand manufacturers.

challenge 1.**enhance productivity**

The company wanted to replace a high maintenance, intensive labour 15 conventional belt and plastic mesh conveyor system to enhance productivity at its Kelso plant. It turned to TNA as a leading manufacturer of distribution and conveying systems to help to achieve these aims.

solution 1.**reverse flow technology and minimal moving parts**

As Simplot Australia was keen to boost plant efficiency, TNA recommended its tna roflo® gateless food product distribution and conveying solution. A proven system, it provides gentle, low-force operation and transmission of frozen food products for reduced breakage, flavour loss and reduced structural fatigue. Specially designed to seamlessly integrate with other packaging and processing systems, TNA's solution involved the development of a completely integrated tna roflo® distribution system that comprised six tna roflo® horizontal motion servo-driven conveyors. These ensured that Simplot could maximise the use of several infeed and packaging points and meant it no longer had to move the conveyors to different strategies after each run, ultimately reducing downtime.

Conscious of limited floor space at the Kelso plant, TNA designed a system that utilised tna roflo®'s reverse flow technology, allowing Simplot to benefit from using a single tna roflo® in place of two separate conveyors. And with a gateless horizontal servo driven mechanism with minimal moving parts, TNA created a unique system for Simplot with longer stainless steel pan lengths of up to 12 metres (40 feet). Designed with flexibility in mind, the tna roflo® also allowed the company to let product accumulate in the pan when required.

**results**

Ideal for frozen food manufacturers such as Simplot, the tna roflo® provides optimal distribution tray and reverse flow speeds. In addition, the stainless steel construction is extremely effective in keeping food frozen in a sanitary environment, with minimal maintenance, changeover and cleaning requirements. The system is also extremely quiet in terms of noise output, which is particularly important when dealing with the transfer of frozen products across steel. "We wanted to have an easy-to-clean, hygienic conveying solution that would inflict minimum damage or stress to a frozen coated product, but improve our production efficiency," says Glenn Hope, Simplot Project Engineer. "The tna roflo® gives us the ability to clean via 'spray & wipe' methodology so we can clean the idle conveyors while others are being used. Cleaning time is therefore minimal," says Hope. He continues, "We run with the new machines 24/7 so do not need a cleaning shift as we have had in the past. Labour previously used for cleaning is now used elsewhere in the plant. Plus, our product changeover times are now just 20 minutes instead of several hours which enhances our productivity even further."

TNA is a leading global supplier of integrated food packaging and processing solutions with over 14,000 systems installed across more than 120 countries. The company provides a comprehensive range of products including materials handling, processing, cooling and freezing, coating, distribution, seasoning, weighing, packaging, inserting and labelling, metal detection and verification solutions.

TNA also offers a variety of production line controls integration & SCADA reporting options, project management and training TNA's unique combination of innovative technologies, extensive project management experience and 24/7 global support ensures customers achieve faster, more reliable and flexible food products at the lowest cost of ownership.



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