

World-first robotic logging truck scalers

The world's first two automated logging truck scalers, commissioned by Mount Maunganui-based ISO Limited, are now scanning logs at Port of Tauranga, New Zealand.

The Robotic Scaling Machines (RSM) give a faster, safer and more accurate measure of logs on the trucks and trailers than the manual process. Tauranga-based agritech company Robotics Plus designed and built the automatic logging truck scaler using materials from several local suppliers.

Robotics Plus co-founder Steve Saunders said he and his staff worked with ISO, which came up with the concept in 2017, and came up with a final prototype in just 12 months.

"This is a technology company working with a well-established local company looking into the future to actually solve these sorts of problems. I think we need a lot more of that in New Zealand," Saunders said. The technology was now being rolled out across the country, starting with two scalers at the Port of Napier, then Gisborne and at Marsden Pt next year.

ISO Limited's chief executive, Paul Cameron, said the technology offers huge health and safety benefits to staff. "The robotic scaler measuring process eliminates exposure to hazards and moves those people into a safer environment," he said.

Cameron said the existing manual system used throughout the world requires people to hand scan the logs by climbing between trucks and trailers, taking up to 40 minutes. The robotic arm passes over the logs taking between three and four-and-a-half minutes, he said.

The automated process improves productivity not only for ISO but for the entire supply chain through to the port, and has created new skilled jobs, Cameron said. More than 200 trucks are processed through the site each day, so the machine offered a huge cost and productivity saving, as well as being far safer for staff, he said.

Cameron, who would not be drawn on the cost of developing the new technology, said the benefits to the industry "far outweighed" the costs.

Local suppliers, who contributed to the development of the RSM, were RFT Engineering (structural steel); Festo Linear (guides and controllers); SICK NZ (safety systems, distance sensors); FLIR (imaging cameras); Mulcahy NZ (laser cutting); and Gamman Engineering (precision machining).

Last month Robotics Plus snapped up two awards at the 2019 NZ Hi-Tech Awards, winning the Callaghan Innovation Hi-Tech Maori Company of the Year Award as well as the NZTE Most Innovative Hi-Tech Solution for the Agritech Sector Award.

Source: nzherald