

Case Study

Sky-Trax bears fruit for EastPack

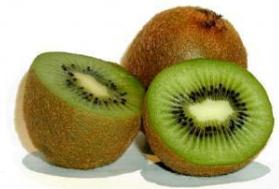
EastPack, one of the largest kiwifruit packing houses in New Zealand, has implemented the revolutionary Sky-Trax indoor vehicle and inventory tracking supply chain solution. The solution tracks all kiwi pallets in three facilities with 42 refrigerated warehouses, or cool-stores, and 30 forklifts.

Shipment penalties for the regulated New Zealand kiwi industry are severe, up to \$500 for a wrong pallet or wrong truck. For example, four pallets switched on two trucks resulted in an eight-pallet fine in excess of \$3,000. In 2007, EastPack had penalties totaling more than \$280,000.



Continuous monitoring of activities allows for full inventory reporting on the stock location, quantity, expiry date and much more, as well as analyzing the performance of indoor vehicles to ensure optimal efficiencies within the warehouse.

“The problem was finding specific pallets in the cool stores and eliminating supply chain mistakes”, says Erik Sunderman of GS1, a senior consultant to EastPack during the implementation program. “A bar code solution was found to produce only 70% accuracy.”



A successful pilot of the Sky-Trax System, which accurately tracks each forklift and pallet, in combination with RFID readers, which identify the pallet, led to a full roll-out for the 2008 packing season. The resultant system tracks the movement of all fork lift vehicles and pallets within centimeters, every second of the day in every facility. In 2008, more than 13.5 million trays of kiwifruit were packed and shipped using the system.

All forklifts are fitted with the Sky-Trax System (STS), an optically enabled real-time location system. STS determines the exact position of each vehicle using an on-board sensor that views optical position markers suspended from the warehouse ceiling. Location data is fed to a vehicle-mounted computer which continuously relays location, heading and speed to the main warehouse management system.



Donna Smit, EastPack Company Administrator said, "We have already moved over 2 million more trays than this time last year due to the new system. Knowing the exact location of a pallet at any given time is vital", Donna explains, "because kiwifruit is a perishable product, we have to be sure that the pallet taken by the forklift is the right one every time."

Warehouse operational efficiencies have improved dramatically thanks to the Sky-Trax System, which also provides the warehouse manager with a real-time pictorial view of vehicle movements and stock locations. Because all activities are being monitored to an accuracy of a few centimeters, the system can provide information on vehicle use, stock status, and warehouse layout usage, greatly assisting in the operation of the high activity environment.

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The Results:

EastPack has realized a 30% increase in overall productivity, reduced their forklift fleet from 24 trucks to 16, and achieved a 40% reduction in fruit loss for the 2008 season. Shipment penalties were reduced from \$280,000 to just \$90,000, and penalties for noncompliance of on-time delivery were reduced from \$250,000 to zero.

"The new system has freed up people's time to do the things they are supposed to do instead of firefighting" says Sunderman. "Having ten people line up outside the manager's door with problems of lost pallets is no longer a problem."

The Sky-Trax Solution

- Exact inventory and vehicle location in real-time
- Fewer accidents and picking errors
- Decreased warehouse operating costs
- High value reports, statistics, & audit trails
- Above normal return on investment

