

INSIDER INSIGHTS

STRADDLE CARRIERS

EQUIPMENT SAFETY



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INTRODUCTION

Background

Port Otago Limited (POL) operates a busy container terminal in Port Chalmers on the South Island of New Zealand.

The Port wanted to identify issues and trends in the safe operation of the Container Handling Equipment (CHE). The Port wanted to take action based on quantifiable metrics and then measure the effectiveness of the management initiatives and training undertaken.



The driving factors

In July 2015, a 14 metre high Kalmar Straddle Carrier toppled over onto the quayside.

Early in 2016, Worksafe NZ, the New Zealand health and safety regulator, concluded that the Straddle Carrier had been traveling at 8 kph above the 12 kph maximum recommended speed for cornering. The Straddle Carrier was less than 18 months old and was fitted with the manufacturer's stability alarms and safety features, yet the accident still happened.

OPERATIONAL MONITORING

The solutions!

In 2017 the Port fitted **PORTAUTOMATION Mobile Systems** on every item of container handling equipment on the terminal. These systems report stability alarms and the driver's identification via the driver's ISPS access pass.

In addition to **PORTAUTOMATION Mobile Systems**, the Port also implemented **PORTSPECTIVE Management Suite** to manage and visualise the collected data. The system gathers and displays several key metrics for engineering operations and safety. The safety information includes tip alarms for Straddle Carriers, firefighting system active and emergency stop activation.



MEASURABLE SAFETY RESULTS

Proactive management

According to the Port: *“The number and incidence (topple alarms) generated is shared with drivers. Drivers that record any tip alerts in a two-hour driving shift are required to have a safety discussion with a supervisor”.*



The results

The Port went on to say that: *“within three months, the number of red alerts fell from 350 per week to less than 20. Within a year, the number had fallen to less than five”.*