INTELLIGENT PALLET VIDEO ANALYSIS
OPTIMISES WAREHOUSE SUPPLY CHAIN MANAGEMENT

Logistics And Transportation
Customer Success Story

Giving Shape to Ideas

"WE CHOSE KONICA MINOLTA OWING TO THE QUALITY AND BREADTH OF THE TECHNICAL SOLUTION. IT OFFERED US A SINGLE, UNIFIED VAS FOR SMARTER AND SIMPLER MANAGEMENT OF PALLETS AND OTHER ASSETS WITHIN OUR SUPPLY CHAIN. THE ENTIRE TEAM AT KONIA MINOLTA WERE PEOPLE WE COULD DO BUSINESS WITH TOO"

INTELLIGENT PALLET VIDEO ANALYSIS OPTIMISES WAREHOUSE SUPPLY CHAIN MANAGEMENT

EXECUTIVE SUMMARY

This leading logistics and transportation provider has standardised processes using Konica Minolta's intelligent video analysis system (VAS) to record and monitor pallet shipments across the supply chain. Robust and flexible, the innovative solution provides the actionable insights to track pallets, rapidly implement troubleshooting measures, automate logistics billing, and ensure a consistently rewarding customer experience.

- Manages 200 pallets per hour, per forklift truck

- Streamlines movement of stock and optimises inventory between logistic hubs

- Proactive consulting helps customer surface and analyse new supply chain insights

CHALLENGES

Pallets are a critical component of almost every manufacturing supply chain. This leading logistics and transportation organisation has tens of thousands of pallets in operation at any one time. Identifying, locating, and tracking these pallets in real-time is a key differentiator – both in terms of operational efficiency and ensuring a rewarding customer experience.

Until recently, internet of things (IoT) solutions have been expensive or impractical to implement in the logistics sector. One key challenge has been linking remote sensors wirelessly to the Internet across different sites, both indoors and outdoors, reliably and in steps with all phases of the supply chain.

The specific challenge facing this customer was to measure the size of pallets and recognise the associated barcode information. The organisation needed a rugged video and sensor surveillance system that could be mounted on forklift trucks, both to automate the tracking of shipments through the customers' hubs and identify damaged pallets. The business case also called for automation of the billing cycle.

SOLUTION

As part of a modern, forward-thinking logistics management strategy, Konica Minolta is collaborating with the customer to deploy an innovative VAS. A spokesperson for the customer explains, "We chose Konica Minolta owing to the quality and breadth of the technical solution. It offered us a single, unified VAS for smarter and simpler management of pallets and other assets within our supply chain. The entire team at Konia Minolta were people we could do business with too. They understood our industry and our goals. They walked us through the steps of the configuration. And we trusted them to provide expert, proactive insights."

The solution comprises the following:

- 2x S16 camera systems and four sensors deployed in ruggedised housings to measure height / width / depth of pallets.

- Sensors used to capture barcode data.

- Wi-Fi connection reports data to VAS server.

- Automated billing sizes to recognise accurate billing costs.

- Barcode tracking to automate tracking of shipments through the customers' hubs.

- Visual verification to dispute damage.

- Customised configuration for the customer.

The customer is extremely positive about the collaboration with Konica Minolta. "The team worked as one, to plan, install, and configure this innovative system," says the spokesperson. "They demonstrated commitment, professionalism, and a proactive response at every step."

BENEFITS

By standardising on this intelligent VAS, the organisation is streamlining the supply chain and logistics management. The following benefits are being achieved:

- Accessible and actionable data enables users to track pallets and monitor anomalies quickly and efficiently.

- Monitors 200 pallets per hour, per forklift truck (140 forklifts in operation)

- The team also has the flexibility to view high-definition images and visually identify damaged pallets, thereby quickly implementing troubleshooting measures.

- Exceptionally durable, IoT-enabled devices deliver excellent pallet image quality and data analysis.

- The customised configuration also supports automated logistics billing.

"THE TEAM WORKED AS ONE, TO PLAN, INSTALL, AND CONFIGURE THIS INNOVATIVE SYSTEM," SAYS THE SPOKESPERSON. "THEY DEMONSTRATED COMMITMENT, PROFESSIONALISM, AND A PROACTIVE RESPONSE AT EVERY STEP."

S16

- Mx6 system platform with H.264 and ONVIF compatibility

- Recording on an internal MicroSD card (4 GB as standard)

- Diverse installation options and mounting accessories for sensor modules

- Max. length of each sensor module cable: 3 m

- Microphone can be used in sensor module

- Additional microphone and speaker connections

- Integrated shock detector

- Weatherproof and robust camera housing (IP66, IK06)

LET'S TALK

Giving Shape to Ideas