

The humble hamburger leads to a competitive edge for logistics group

The hamburger giant McDonald's serves an estimated 70 million customers around the world every day of the year.

McDonald's is the undisputed king of fast food and regardless of how you feel about the Big Mac, the McDonald's reputation is huge. As a vast institution they are always on the media radar, so food safety and quality can never be compromised.

Every beef patty, every box of fries and every other perishable product is delivered to McDonald's stores, wherever they are, by refrigerated trucks. It's probably the biggest daily logistics exercise in the world, and all based on the humble hamburger, first made by the McDonald brothers in 1940.

The responsibility for maintaining vigil over McDonald's refrigerated food worldwide is in the hands of Euroscan.

It's a relationship based on product performance and trust, which began in Europe and has now spread to many other



Jessy Peir, Regional Director of Quality Assurance for HAVI Logistics Asia, oversees Euroscan implementation across the Asian fleet

countries, including the whole of Asia. The Asia Pacific Euroscan operation is managed from the Australian headquarters and demands a high level of client-supplier interaction.

In Taiwan, Jessy Peir supports a massive operation to ensure compliance with McDonald's quality standards in her role as Regional Director, Quality Assurance for HAVI Logistics Asia, itself a global logistic provider across two continents.

HAVI Logistics Asia is not only responsible for moving goods from A to B, but they also source and process the food requirements for McDonald's. Their job ends when the ordered products are taken from their trucks and transferred into the thousands of McDonald's outlets from the Indonesian islands to the top of China.

'My main responsibility is to put in place the quality standard and the systems to ensure the proper execution of our whole operation, and we drive that quality culture to all levels of employees in the company,' Jessy said.

That's a lot of hamburger

'Based on 2012 figures, our

annual total shipping volume of McDonald's produce is more than 84 million cases throughout Asia, which is the equivalent of around one million tonnes. Of that total about 450,000 tonnes of product is temperature sensitive,' said Jessy.

'We have self-owned trucks and we also use an outsourcing fleet, making a total in Greater China and South East Asia of around 380 trucks. Japan came on board in the last quarter of 2012, effectively doubling the fleet to almost 800 trucks.

'This year, with Japan coming on stream, we will be moving product to a total of almost 7,000 stores in our region,' Jessy added.

The Euroscan continuous temperature monitoring technology was adopted in 2011 following an intense appraisal of products on the market by both McDonald's and HAVI.

'We checked the hardware capability, the temperature reading accuracy, future extension possibility, and of course the cost,' Jessy said.

'Previously, we only had continuous air temperature monitoring during the delivery phase and this was not enough.

'The ultimate goal is to make sure the product temperature is

The McDonald's HAVI Logistics Centre in Guangzhou, China



under control at all phases of the journey, even in the truck pre-cooling phase.

'We concluded that Euroscan's process would be a big competitive advantage for us because using probes and sensors, we could continue to monitor product temperature as well as the ambient temperature inside the truck.

'In the past, the store's receiving manager had to go with our driver into the truck, open a case and use their pyrometers to measure the product temperature and ensure it was within the right range for chilled and frozen product before unloading could start.

'The Euroscan journey reports have replaced spot checks. Ambient and product temperatures are monitored throughout the whole delivery process. Now we can verify if a driver has complied 100 per cent with the cold chain control standards and use that



You want a printout with your fries?

'And being able to provide the temperature information to the customer on a docket printed in the truck cabin is a huge plus for us and a great benefit to the store.

'The whole process of unloading and verifying temperatures is simplified, therefore saving time and money,' Jessy said.



information to correct drivers' behaviours and generate time and money savings for the company,' she said.

HAVI has found many benefits with the Euroscan installations. Being able to check on such simple processes as door opening times at store destinations can help ensure that temperature sensitive food is handled in a timely manner with a minimum escape of cold air.

Technology rings warning bells for maintenance

Even with refrigeration maintenance, the journey reports can indicate that a truck is reading a borderline temperature in a compartment, alerting maintenance crews to a potential risk to a cold cargo.

A pattern of borderline temperatures can alert the company to the need for a whole fleet overhaul or modification.

HAVI has even found that a store rejection of goods through temperature abuse could point to a breakdown in procedures at the warehouse, rather than in transport or at the delivery end.

A journey report can verify if the right amount of time was taken to pre-cool the truck before loading.

Before Euroscan, the company could only verify manual records, but could not exactly be sure that the critical cooling temperature was reached before loading began.

There's a busy time ahead for both HAVI and Euroscan Asia Pacific.

The entire Greater China and South East Asian fleet of 380 trucks will be fitted with Euroscan during 2013 and 200 of these are already using the technology.



Euroscan will be installed in the Japanese fleet over the next two years.

Jessy Peir is impressed with Euroscan's experience with integrating their devices with market-available telematics solutions.

'This will allow an extension of our fleet management capability

because we can look at journey reports from our offices at any stage of the transport delivery. In Asia, this capability is still quite new, so for HAVI, such an investment in Euroscan is likely to be an important step for the company to take this competitive advantage to grow our business with other clients,' Jessy said.