



Case study : Asset Management in Fresh Food

With EPC/RFID, Kibun gains visibility on location of its trolleys

The Kibun Group operates a diverse array of businesses, all centered on chilled food, and principally surimi-based products. Headquartered in Japan, the group's 3100 employees strive to not only respond to consumer demands for tasty and safe food, but also to anticipate them. Kibun recorded sales of ¥101,000 million last year.



Missing trolleys created costs and delays

To transport ingredients and products across their supply and distribution chain, the company uses wheeled metal cage trolleys that travel from location to location. But these trolleys were not being capitalised as a company asset, and Kibun teams noticed that too many of these cage trolleys were being lost. Worse, the missing trolleys were generating both costs and delays. When workers didn't have enough trolleys, new ones had to be purchased; and in some locations insufficient trolleys were causing delays in shipping. This is a problem in any business, but in fresh food, shipping delays are particularly problematic.

GS1 standards to track their cage trolleys

To resolve these issues, Kibun decided to implement an asset management system for their cage trolleys. Kibun Trading Inc developed a solution built upon GS1 standards and EPC/RFID, which was implemented by Kibun Fresh Systems Inc at major distribution centres for refrigerated food. Today, each individual Kibun cage trolley is equipped with an EPC/RFID tag encoded with a GS1 Global Returnable Asset Identifier (GRAI). This GRAI is a GS1 identification key specifically designed for use with capital assets that move across the supply chain, but belong to a particular company.

Inventory of trolleys can now be done in minutes instead of days, and shipping logistics are smoother and faster. Only one single trolley has been lost since the system was launched.



Destinations in the Kibun supply chain are identified by barcodes. When trolleys are shipped, the destination store's barcode and each trolley's EPC tags are read by a handheld reader and linked together. In this way, the location of each trolley is known. When empty trolleys return to a Kibun distribution centre, they pass through a gate equipped with EPC/RFID readers that automatically record the arrival of each trolley and log them in the central Kibun database as being properly returned.



Full visibility over assets leads to faster inventory and reduced losses

Thanks to the system, Kibun can now know the exact location of any and all of its cage trolleys at any point in time. Inventory of the trolleys, which previously took several days to complete, can now be done in less than 15 minutes. The time and labor necessary to manage trolleys has been reduced. And perhaps most importantly, the quality of the company's overall logistics process is better and smoother, because no location is ever without the quantity of cage trolleys it needs to ship fresh food promptly.

A return on investment within the year: the cost of the system was less than the cost of replacing lost assets every year.

Since its launch, only one single cage trolley has been lost – and that was due to a human error. The reduction in lost cage trolleys easily justified the investment. For example, Kibun was spending ¥10 million per year replacing lost cage trolleys at one distribution centre.

“Thanks to GS1 standards, it is now possible to know who owns each cage trolley. This system makes it easy to claim our trolleys as our assets – and because many of our partners are also using these standards, they can also know which trolleys, pallets and containers in the warehouses are theirs.”

Mr. Toru Suzuki

Manager, Packaging Materials
Department - Kibun Trading Inc.

This was more than the one-time cost of the hardware and software needed to install the EPC/RFID system at that centre, ie. ¥9.8 million. Thus, in one year, the company had recouped its investment.

Next steps

With such concrete cost and quality benefits apparent, Kibun is gearing up to deploy this tracking system at all of their distribution centres, and to extend it to other assets such as egg carts, stock carts and shipping crates.

GS1 EPC/RFID standards

GS1 is a neutral, not-for-profit organisation that develops supply chain standards. EPCglobal, a subsidiary of GS1, is leading the development and adoption of industry-driven standards for real-time, automatic identification of information in the supply chain to support the use of RFID. For more information on GS1 EPC/RFID standards, visit: www.gs1.org/epcglobal

Contact information:

- Interested in learning more about this case?
- Watch the video from GS1 Japan about the implementation of EPC/RFID at Kibun: www.gs1.org/epcglobal/implementation
 - Contact GS1 Japan at epcdesk@dsri.jp

Interested in learning more about tracking your company's returnable assets?
Contact your local GS1 Member Organisation at www.gs1.org/contact

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