## Case study

# **Mission Foods**



### At a glance

#### **Profile:**

Mission Foods, headquartered in Irving, Texas and parent company Gruma S.A.B. de C.V., a Mexican corporation, was founded in 1949, and is one of the largest tortilla manufacturers in the United States.

## **Business Problem:**

- 100 percent replacement of containers annually resulting in \$3.5 million annual loss
- No viable means for asset control

#### Goals:

- Increase in inventory traceability
- 80 percent improvement in container replacement
- Improve operational costs through asset control

#### Solution:

Intermec IF61 readers, antennas, labels and PM4i printers

#### **Results:**

- \$700,000 in initial savings
- Average of 25 turns per container (seven turns equals breakeven point)
- 4 percent container replacement rate



## Mission Foods Boosts Asset Control, Increases Inventory Traceability with RFID Technology

As one of the world's leading tortilla producers, Texas-based Mission Foods is an industry innovator in manufacturing quality tortillas, chips, salsa, taco shells and more for consumers throughout the country and around the world. Their daily operations in three Texas warehouses require accuracy and proficiency as they process and prepare nearly 20,000 containers of product on a daily basis for a vast network of independent distributors.

As part of the distribution process, Mission Foods places all of their packaged products in returnable plastic containers (RPCs), which independent distributors then load onto their trucks. Such independent distributors then return these RPCs after their sales are complete. However – Mission Foods found that after the RPCs left the warehouse for deliveries, they were likely never seen again. With a paper-based tracking process that wasn't streamlined across their various warehouses and distribution centers, they had no way to track if RPCs were returned to a different facility, or if they were ever returned at all. Because of this, Mission Foods lacked basic asset tracking - and the results were staggering. Nearly 100 percent of their RPCs were being replaced each year.

The company sought an asset control solution that would prevent this drastic loss of RPCs, which resulted in millions of dollars in lost revenue each year. The solution: RFID technology, utilizing Intermec IF61 readers, antennas, labels and PM4i printers.

#### **Containing Assets**

One of the biggest issues for Mission Foods' warehouse operations was its dire need to improve inventory accuracy.

"We had nearly 20,000 containers going out each day from each of our warehouse facilities in Texas, yet we really had no way to control their return in an easy way," said Eduardo Valdes, Mission Foods Vice President of Management Information Systems (MIS). "Containers would go out, but with all of the independent distributors returning them at different times to various locations, the return process was complex and often we'd never see them back."

Some locations even tried other asset-tracking solutions, from paperbased return forms, to including the number of containers taken on each independent distributor's invoice. Yet the fact that they couldn't track which warehouses the RPCs were returned to still complicated the process. "We really looked at our situation and said 'how can we control this in an easy way'," said Valdes. "But the return process was very multifaceted, and with some of our plants in remote locations, the tracking process we had in place was just not working."

Even more staggering: after doing end-ofyear inventories, the company found they were spending upwards of \$3.5 million annually to replace unreturned RPCs.

#### **Creating Inventory Control**

Mission Foods knew a solution was necessary that would automate the return process and ease their asset tracking dilemma. After a long and positive working relationship with Intermec for past solutions, Valdes said he turned to Intermec to help deploy RFID asset-tracking technology with the Intermec IF61 RFID readers.

In the new process, the packaged products are picked and loaded onto the RPCs, which are labeled with RFID labels. The RPCs are then loaded onto pallets and the RFID label is encoded by the Intermec PM4i Smart Printer, where it is then applied to the pallet wrap. The Intermec IF61 readers record these pallets and associated RPCs as a forklift drives though an outbound portal prior to the loading dock. When the delivery trucks return, the RPCs are again processed through an inbound portal, offering an easy, immediate reconcile of inventory.

This new process offered Mission Foods a streamlined, easy-to-implement solution that tracked where items were returned and was also quickly adopted by staff.

"The RFID technology increased not only efficiency for staff, but also our profitability," said Valdes. "Once the containers are labeled and scanned by the

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Singapore Phone: +65 6303 2100 Fax: +65 6303 2199 outbound portal, we can automatically track where all of our containers are and have a direct course of action if they aren't returned. Also, now that our independent distributors know we have this tracking technology they make sure the RPCs are returned on time."

Currently, even if the containers are returned in batches or to a different warehouse, they are still scanned in as "returned," allowing Mission Foods to see in real-time where they are all located.

#### Packaging ROI

Around the same time the RFID roll-out was made, the company also decided to "go green" by implementing new RPCs – moving to longer-lasting plastic boxes to replace their traditional carton containers.

Though the new containers were more expensive (\$7 each for the new containers compared to \$1 each for the old versions), Mission Foods knew the investment of the sturdier containers coupled with the rollout of the RFID technology would ultimately allow them to be a "greener" facility, as the new containers would last much longer. And, despite the increase in cost per container, the company has actually saved \$700,000 in packaging costs since implementation.

With the new system, the company now budgets a 20 percent replacement rate for damaged or unreturned boxes – and while still a drastically lower number than the 100 percent replacement rate some warehouses were experiencing before, the company now has closer to an impressive 4 percent replacement rate as a result of the RFID technology.

"Our goal was to have about an 80 percent improvement on our container replacement rate. We figured that by

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and Support Toll Free NA: (800) 755-5505 Toll in NA: (425) 356-1799 the time the containers reached seven turns, or were returned seven times, we would break even," said Valdes. "We are now averaging more than three times that number, with containers reaching 25 turns on average. The huge savings are there, and they are very accountable."

#### Expanding Future Control

In the future, Valdes said not only is the company planning to roll out the Intermec RFID solution to all 25 of its plants and warehouses around the country, but they are also looking to develop status reports with overdue notices that would be sent directly to distributors' handheld computers in the event of unreturned containers. Now that they are able to accurately track the inventory, they've also explored charging for unreturned containers.

Mission Foods also plans to utilize Intermec's Advanced RFID Extensions (ARX) to optimize the existing solution by accurately identifying the tagged RPCs moving through the portals versus those that are stationary in the background. This added level of visibility will increase the accuracy and efficiency of the automated process by better identifying the true tags of interest over traditional data filtering techniques.

Until then, they are pleased with the increased efficiency and drastic revenue savings they've experienced with Intermec's RFID solution.

"The Intermec RFID solution has done an incredible job to increase the visibility level of our supply chain processes," said Valdes. "We've eliminated unnecessary costs and really streamlined our way of business. This not only allows us to work on advancing our business, but to offer better customer service as a result."

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