

Customer RFID Use Case:
Manufacturing - Closed Loop RFID

The Customer:

- Gourmet Food Manufacturer
- Manufacturer and distributor
- Produces more than 35 tons of food daily
- 86,000 square foot facility
- Frozen storage of ingredients
- Maintains a minus 10 F temperature within Freezer warehouse
- Thousands of slot locations for pallets and bins

The Challenge :

- Existing bar code-based inventory system would often freeze up in the cold storage area creating massive inaccuracies and production downtime as forklift operators would have to search for the product required.
- Unacceptable downtime due to lack of inventory visibility created delays throughout the entire manufacturing process.
- RFID compliance requirement with Retailers in 2006

The Solution :

- RFID tagged pallets and bins
- RFID enabled Lift trucks with touch screens, readers, antennas and wireless tag commissioning devices
- Complete integration with enterprise warehouse management system

The Process : The RFID solution flows between the production area and the frozen storage warehouse. Completed food products and ingredients are packaged in bins or pallets and the tags are commissioned by a mobile interrogator. RFID enabled lift trucks provide mobile active portals on the floor. The VMU's (Vehicle Mount Units) communicate with the WMS (warehouse management system) via a WLAN (wireless LAN) in the warehouse. Application logic in the WMS instructs the lift truck operator where the pallet needs to be placed in the frozen storage area. Pick / Move / Put-away information is then displayed on the touch screens of the forklift for next step operations. RFID location tags are used at the entrance to each slot in the rack storage to verify that the product is placed in the correct location.

Summary :

- Improved ingredient and product visibility
- Reduced time of material availability to production
- Eliminated down time due to freezer environment
- Ready for Retailer compliance based upon their schedule and resources, not the retailers
- Gaining internal ROI