



Microlistics
WISETECH GLOBAL GROUP

HOW TO ENSURE BRAND PRESERVATION IN YOUR COLD STORE



How to Ensure Brand Preservation in Your Cold Store

Regardless of your role in the food supply chain – retailer, cold store operator, frozen food distributor or manufacturer, food safety is, and should be, top of mind. Nothing can damage a brand more than a spoiled product, or worse, a public recall due to contamination. Date sensitive inventory management, stock quarantine protocols when required, and recall track and trace capability are critical to preserving brand value. Limiting spoilage and responding quickly to contamination and recalls when they happen is essential. Confidence in your food safety processes can enable you to go beyond compliance to optimize your operations for safety and performance.

“ Cold chain providers are a direct extension of their customers’ brands, perception, and value with consumers. ”

Global Cold Chain Alliance’s Cold Chain Customer Research Report

Waste, Recalls, and Food Safety Facts

- In North America, over 380 lbs per capita food losses and waste per year between production and retailing, or almost one hundred million tons per year (Source: Food and Agriculture Organization of the United Nations)
- From 2012 to 2019 there were 18,747 food and cosmetic recalls (Source: US Food & Drug Administration)
- There were 125 recalls in 2018, affecting over 20 million pounds of beef, poultry, pork, and fish (Source: United States Department of Agriculture)
- 77% of customers agree that “My cold chain provider plays an important role in my company’s food safety.” (Source: Global Cold Chain Alliance’s Cold Chain Customer Research Report)

What’s Inside

- Your guide to identify and manage risks in your cold storage operations
- How to ensure compliance with relevant standards and regulations
- Going beyond compliance to achieve speed and efficiency

Three Brand Threats in Most Cold Storage Warehouses

#1 Spoilage Due to Incorrect Temperature

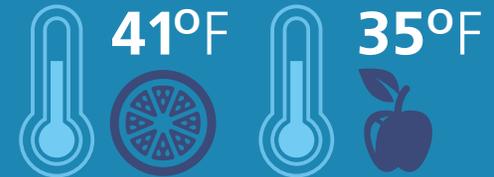
North American food loss and waste between production and retailer is close to one hundred million tons every year¹. A significant amount of this loss occurs in the distribution and warehousing phases of the food chain. The amount of pitch and waste in the average cold storage facility can amount to millions of lbs per year and thousands of dollars. This spoilage is harmful to food safety and profitability.

Spoilage begins to occur the moment the distribution center takes possession of a product. In many cold stores there is no clear definition of temperature zones for the different products housed. Setting, maintaining and monitoring the correct temperature for each product is critical to the quality and safety of a perishable food product.

¹ Source: Food and Agriculture Organization of the United Nations.

Zone Temperature: You Can't Compare Apples to Oranges

Apples (35 degrees F. with 90 to 95 percent relative humidity) do not get stored at the same temperature as clementine's (above 41 degrees).



Three Brand Threats in Most Cold Storage Warehouses

#2 Untraceable Contamination

Sources of product contamination vary, but they will often result in safety alerts, market withdrawals, and in worst-case scenarios, a recall. All three outcomes are bad news for any brand.

Paper-based systems cannot accurately track and trace contaminated product to location or lot number. This means there is no way to monitor whether inventory shipped from your cold store is contaminated. Moreover, there is no visibility into whether you have received contaminated stock or not.

#3 No Accounting for a Recall

Recalls are damaging to any brand, but they are also labour-intensive. In addition to tracking the distribution of a recalled product to remove it from the shelves as quickly as possible, it is critical to account for the costs of the recall properly. Intermingled stock locations from various vendors can make it nearly impossible to find the contaminated product identified in a recall notice.

Beyond that, many distribution centers have no way of tracking the actual labor costs associated with enacting the withdrawal or recall. Therefore, they cannot seek proper reimbursement due to a lack of auditing and validation through material records and timesheets.

Cold Storage Warehouse Management Best Practices that Preserve Brand

Be Mindful of Inventory Date and Zone Temperatures

Capture the product temperature at the time of receipt and know the exact temperature of each storeroom, zone, pallet location, and production area. Only putaway product to the correct temperature zone for maximum freshness.

Track what product arrived first, it's grade, and where the product associated with the customer order is located despite mixed lot numbers to optimize shelf life. Automate directed picking around date level inventory to meet first-in, first-out fulfillment, execute cross-docking, or lot-number specific customer orders to ensure product freshness and customer satisfaction.

The Benefits of Getting Cold Storage Warehouse Management Right



Keep Food Fresh and Cash Flow Flowing

- Reduce spoilage and lost revenue by managing pitch and waste tracking at the inventory level
- Protect your brand and the brand of your customers
- Retain customers up and down the food chain – wholesalers, retailers, and end consumers



Keep Contaminated Food Segregated

- Improve Return to Vendor (RTV) management
- Recover the costs of labor and other materials in the case of a recall
- Avoid cross-contamination to other products

Cold Storage Warehouse Management Best Practices that Preserve Brand

Have Effective Stock Quarantine Protocols

In the course of receiving product, inspections can identify contamination or spoilage. Is the whole shipment affected? Is it only a few pallets? What about a previous shipment from the same supplier?

After determining the extent of the issue, the affected product should be quickly diverted to a separate and isolated zone. Past shipments need to be tracked and traced by lot and batch numbers for inspection and quarantine as required. A decision can then be made about destruction or return of the product to the vendor. Inventory levels and accounting records should be adjusted appropriately.

Have the Ability to Track and Trace in Case of a Recall

Implement automated systems for USDA, AQIS and GCCA/IARW compliance to respond to an FDA safety alert or product recall quickly. This will enable you to quickly locate, through track and trace, the affected product. Track the product in the warehouse to the storage zone, pallet, and at the carton level.

Moreover, track the product further along in the supply chain to the truck, pallet, carton, or receiving customer. When a contaminated product is scanned out of the supply chain, the time, labor, and product costs can be accounted for accurately.

The Benefits of Getting Cold Storage Warehouse Management Right



React Quickly to Recalls

- Meet FDA requirements for recalls
- Automate the notification of recall management for timely removal from available inventory
- Optimize the picking and quarantining of recalled products right down to the lot number and batch

Go Beyond Compliance to Optimize your Cold Store

Key Benefits to Drive Cold Store KPIs

According to the GCCA's Customer Research Report, the top four KPIs by which warehouse performance is measured are Shipping Accuracy with 75 per cent; Warehouse Cost per Unit with 68 per cent; On-Time Delivery with 63 per cent; and Inventory/Cycle Count Accuracy with 58 per cent.

The same best practices that drive brand preservation will unlock enhanced performance across your cold store operations. Once you are confident meeting food safety and compliance, look to add the following benefits to improve your perishables warehouse performance.

- **Improve shipping accuracy** by eliminating manual processes and human error. Automate orders when they are received, then automatically assign them for picking to the loading area for shipment.
- **Lower warehouse cost per unit** through directed putaway and picking, holding area and quarantine management and will reduce manual process errors.
- **Achieve on-time delivery** with an EDI order management system for quicker response times and order fulfilment.
- **Get greater accuracy on inventory/cycle counts** by removing the guesswork on where inventory is located by vendor or customer, on spot-check inventory, and on min/max inventory levels.

Top KPIs for Warehouse Performance

1. Shipping Accuracy
2. Warehouse Cost Per Unit
3. On-time Delivery / On-Time Shipment
4. Inventory / Cycle Count Accuracy
5. Out-bound Turn Times
6. In-Bound Turn Times
7. Recent Warehouse Audit Scores
8. Warehouse Shrinkage
9. Case Pick Percentage

Source: GCCA Customer Research Report

Keep Your Cool

Microlistics Chilled WMS is ideal for cold storage facilities and third-party logistics providers, featuring:

- IARW reporting and built-in compliance functionality
- Visibility of the entire operation
- Tailored multi-client software
- 3PL client billing



Protect your brand and that of your customers, manage your entire operation at optimum efficiency and provide value-added services to your clients



Microlistics WMS has strong cold storage capabilities not often seen in this strata of WMSs. Examples include catch weight, variable weight and scan weight, as well as temperature capture/product segregation and comprehensive batch/lot/serial/shelf-life management functionality



2019 Gartner Magic Quadrant Report for WMS

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