Refrigerated food reaches its target location faster

**Application:**
Food must be distributed quickly and reliably. Continuous cooling must be proven.

![RFID read/write head combines simple mounting with excellent performance in a compact housing](image)

**Goal:**
The throughput of the food logistics chain must be increased and distribution errors must be reduced so that the freshest products arrive at the store.

**Requirements:**
RFID tags must be easily attached to a variety of transport and storage bins. The tags have to be read/written using both stationary and handheld readers.

**Customer advantage:**
Products are easily and reliably tracked, and continuous cooling along the entire logistics chain can be determined by logging storage locations with a time stamp. Efficient handling of bins and containers increases the throughput of the cold storage facility.
What is being done:
Modern food storage and cooling facilities make use of large vertical storage facilities. Typically, these facilities have high-speed, high-throughput automated storage and retrieval systems that reduce the distance a product needs to travel while increasing the storage density. It’s extremely important to reliably track products as they travel from the producer through these intermediate storage and logistics facilities.

To meet these requirements, material handling and conveyor systems are equipped with RFID readers that support automatic routing and also provide the ability to obtain an up-to-the-minute view of the products on hand. Data on the RFID tags can be modified anywhere along the logistics path to enable a high degree of handling flexibility. The tags can also log producer information, quantity, and quality of the product as well as the intended destination. Perishable items must be processed according to the first in, first out (FIFO) principle, eliminating extended storage times that would otherwise result in costly losses. Trucks access the cooling facility via a large number of loading docks and have to be processed efficiently. Since virtually every producer marks their products with their own labeling, this information is written in a consistent format to the RFID tag during the incoming inspection. Once written to the RFID tag, identification is automatic and fast, and information is processed error free.

*RFID in cold storage enables proper cooling.*

Low-temperature applications result in condensation. RFID solutions offer significant advantages over optical identification methods like barcodes.