



Enhanced Tracking of Returnable Transport Items (RTIs) with RFID in Fish Processing

OVERVIEW



Problem

Manual Management of RTIs and Harsh Environments can Shut Down Operations



Background

Major Challenges Tracking Effectively in a Demanding Environment



Solution

T6000e Enterprise Industrial Printer for Difficult Tag Materials



PROBLEM

Manual Management of RTIs and Harsh Environments can Shut Down Operations

Fish processing is a multi-billion-dollar industry that involves extremely expensive machinery and facilities, labor, expertise, and numerous Returnable Transport Items (RTIs) to transport the fish and byproducts during their journey. Even basic plastic RTIs can cost hundreds of dollars. They must be made of highly durable, food-grade materials that are able to withstand the harsh conditions and handling of a fish-processing facilities.

Tracking RTI inventory, location, and their roles in work-in-progress (WiP) has traditionally been very difficult, with hundreds of RTIs lost or mis-routed every year. Additionally, manual inventory and tracking processes require many labor-hours to accomplish and can shut down operations, all while still being error prone. Even with manual inventory processes, RTIs get lost.



BACKGROUND

Major Challenges Tracking in a Demanding Environment

Fish-processing facilities, including those on large processing vessels, use hundreds, even thousands of RTIs in their daily operations. Keeping track of these RTIs has traditionally been a major challenge for fish-processing operations. Manual inventory and tracking can slow down the workflow immensely, leading to a loss of revenue, delayed arrivals, and errors.

Fish-processing operations are also demanding environments, so any RTI-tracking solution needs to be robust to handle the moisture, cold, and debris. Because the labels often used for RTIs need to be made of thick, durable, and stiff material, most commercial printers are unable to feed the media and provide the print quality necessary.

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SOLUTION

Integrated Software with RFID Printers Allows for Easy RTI Tracking and Management

RTI inventory, location, and Work in Progress (WiP) are all ideally known and managed using automated processes and business systems. Management should have full visibility into RTIs and their associated workflows at any time.

A TSC Printronix Auto ID partner recently implemented such a solution for one of the world's largest fish-processing operations. This solution consists of software integrated into the processor's main business systems, RFID readers, tunnels and portals, and RFID-enabled printers from TSC Printronix Auto ID.

This partner selected our [T6000e Enterprise Industrial RFID Printers](#) for the job. The printers are being used both on site at processing facilities for direct RTI labeling and in a Service Bureau capacity at the company's main offices, where large quantities of new RTIs can be labeled in masse before being routed to processing facilities. The RTI labels are printed and encoded with unique serial numbers, then affixed to the various RTIs based on type and function. RFID-labeled RTIs are then tracked in real time, ensuring full visibility in the field. Inventory counts, location data, and sophisticated WiP optimizations are all achieved automatically.



RECOMMENDATION

T6000e Enterprise Industrial RFID Printer

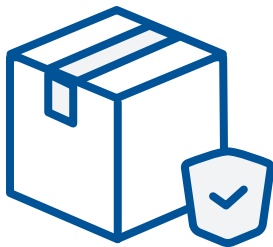
TSC Printronix Auto ID's T6000e Enterprise Industrial RFID Printers were selected for both their rugged, industrial design and their ability to work with the challenging tag materials used for RTI labels.

The T6000e printers have a solid metal construction, which can withstand the harsh conditions of fish-processing facilities. Cold, heat, moisture, and even physical jolting cause daily challenges in a fish-processing facility. With a wide operating temperature range of 23° to 104 °F (-5° to 40 °C) and humidity range of 10% to 90%, the T6000e RFID Printers offer a robust solution for onsite printing and encoding.

The T6000e Series also supports a wide-range of label types and constructions with industry-leading, robust media-handling capabilities. RTI labels are often thick, stiff, and must be made of highly durable materials which present print-quality challenges. These printers can be used with many different ribbon types and support a multitude of printer settings to ensure the best print quality and long-lasting labels.



T6000e



CONCLUSION

Enterprise-Grade RFID Printer Brings Peace of Mind

The TSC Printronix Auto ID [T6000e Enterprise Industrial RFID Printers](#) are an integral component of the solution providing full visibility and real-time tracking of RFID-labeled RTIs. The printers are driven by automated processes and business systems, either on site or remotely. Large quantities of labels are produced quickly, and there is no need for manual inventory counts or tracking, helping to cut back on labor-hours and errors. Constructed of solid, durable materials, these printers are built to withstand the harsh conditions of fish-processing facilities. The T6000e printers are engineered for excellent performance with many different ribbon types, providing the best print quality needed for this demanding application.

To learn more about RFID solutions, please contact your local sales representative.