Automating Inventory Tracking for a Global Heavy Equipment Manufacturer using Inventory360

Background

A global heavy equipment manufacturer (recognized by Fortune as one of the top leaders in its sector), faced significant challenges in managing the movement of parts and finished products within their warehouse. The primary issues included the loss of parts during transfers between locations and the inability to effectively track inventory movements. To address these challenges, the manufacturer sought to automate their inventory tracking processes using Inventory360 to enhance efficiency and reduce losses.

Challenges

1. **Loss of raw materials: The** manufacturer experienced frequent instances of lost items as they were moved from one location to another within the warehouse.
2. **Inefficient Tracking:** The existing manual tracking methods were inadequate, leading to inaccuracies in inventory levels and locations.
3. **Need for Automation:** There was a pressing need to implement a system that could automate inventory tracking to streamline operations and improve overall efficiency.
4. **Lack of visibility:** There was no real-time record of where in the warehouse the materials for each production order were located, or if all the expected materials had reached the production line

Proposed Solution

To tackle these challenges, the implementation of Inventory360, using fixed RFID readers, was proposed. This dual-system approach provided several key benefits:

- **Real-Time Tracking:** The fixed RFID readers installed at strategic locations throughout the warehouse allowed for real-time monitoring of inventory as items moved. By attaching RFID tags to each item, the system could automatically update their locations in Inventory360, ensuring accurate tracking at all times.
- Mobile RFID readers at key interaction points allow operators to review and certify the presence of all expected parts in the blink of an eye, allowing raw materials to reach their intended destination faster and more accurately
- **Enhanced Visibility:** Inventory360 provides real-time reports, allowing supervisors and line managers to stay ahead of incoming items and react to exceptions (such as missing items) to prevent disruptions in the production process.

- **Automation of Processes:** With an automated system, manual errors were minimized, and processes such as stock replenishment could be managed more efficiently through alerts and reminders based on predefined thresholds.

Implementation Steps

The implementation process has already been completed with the following steps:

- **Assessment of Warehouse Layout:** The physical layout of the warehouse was mapped out to optimize the placement of fixed RFID readers for maximum coverage and accuracy.
- **Tagging Inventory**: Each part is tagged using RFID technology during the picking process, enabling precise location tracking within the warehouse environment.
- **Training Staff:** Employees were trained on how to use the new system effectively, including how to monitor inventory movements using the RFID technology.

Results

The implementation of the automated inventory tracking solution yielded significant improvements:

- **Reduction in Lost Products:** The real-time tracking capabilities drastically reduced instances of lost items during movement between locations.
- **Increased Efficiency:** Automation led to faster processing times for inventory movements, reducing manual labor and associated costs.

Conclusion

By adopting Inventory360 integrated with fixed and mobile RFID readers, the heavy equipment manufacturer successfully addressed their inventory management challenges. The automation not only enhanced efficiency but also provided a robust framework for ongoing inventory accuracy and visibility, positioning them for future growth in a competitive market. This case study exemplifies how technology can transform traditional warehouse operations into streamlined, efficient processes capable of meeting modern demands.