RETURNABLE SHIPPING ASSET TRACKING SYSTEM

OVERVIEW

The mismanagement of returnable containers, such as crates, pallets, carts and other shipping containers can have massive effects on the time, labor and costs associated with their shipment and return from the customer.

SOLUTION

A full real-time visibility of returnable assets can be achieved by deployment of a Returnable Shipping Asset Tracking System (RSATS), which provides this capability through the use of cloud based applications, forklift mounted tablets, UHF RFID Tags, RFID enabled portals, RFID handheld scanners and bar code scanners.

A cloud based application is the heart of the system. For our client we designed an RFID RSATS based on our **TAGMATIKS™ Rapid Development Platform**, that has been performing following tasks:

- Provide inventory control for returnable assets
- Interface with the corporate asset tracking system (VESTIGO) to download the shipping information
- Automatically collect the crate tracking data from RFID tags attached to crates using RFID portals
- Upload the RFID collected asset tracking data to the corporate asset tracking system
- Commission the UHF RFID tags and bar code labels though an easy to use application (Bar Code Printer Application)
- Provide secure user access and visibility controls
- Create and distribute dashboard information and reports

CUSTOMER PROBLEM

Our client's company has five locations and at each location there are thousands of crates (not counting lids and dividers). In the past, when the crates were shipped out, it was difficult to find out which customers they where sent to, how long they have been at customer's site and when and if they were returned.

This created problems, when there were not enough crates to fill new orders. Consequently, the company had to procure more crates, wasting money and time.

To address this issue, the customer approached RFID4U to create a returnable asset management control system to provide complete visibility of their shipping containers.

HARDWARE USED

To enable tracking individual crates, **UHF RFID tags** were affixed to each crate, lid of the crate and inside divider. Each tag has a unique serialized ID number and a barcode printed on a label. The choice of a particular tag was based on the container material, material of what's inside the container, reading distance, need for visible markings such as barcode and other considerations.

In order to capture the information from the RFID tags, **RFID portals** were installed. These were placed at dock doors. For mobile reading and verification, **RFID handhelds and barcode scanners** were deployed as well.

We have, also, helped develop **business operational procedures** for efficiently functioning system using our platform and technology.
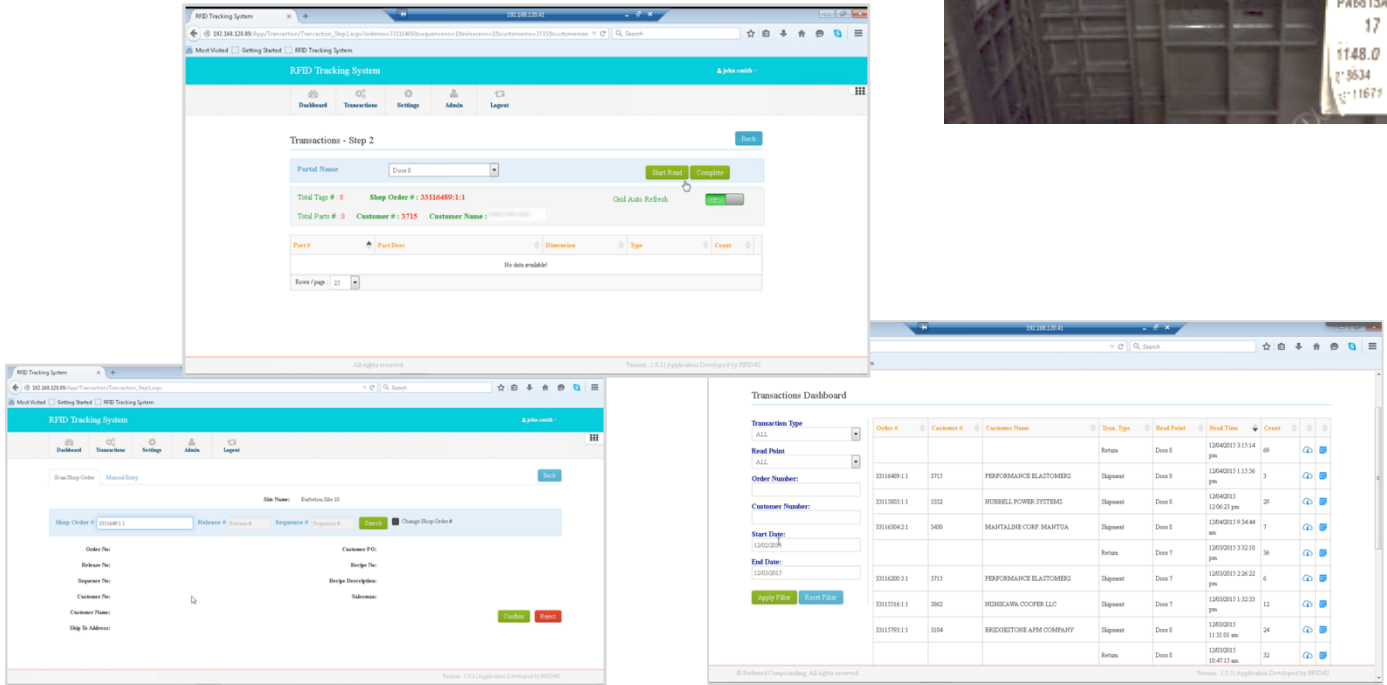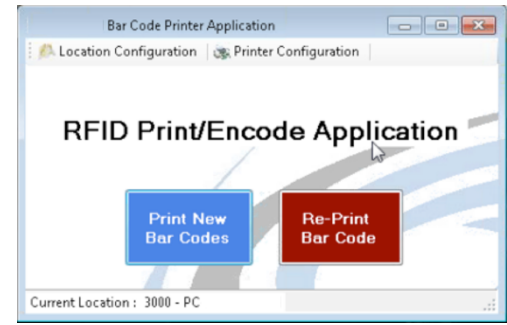
BENEFITS

The RSATS system provides a complete visibility of the returnable assets within the supply chain. Based on the tracking information, it is easy to manage container inventory, to see which containers are in inventory and which out at the customer.

RSATS provides a complete container history, including the time they were shipped or returned. This prevents unnecessary manual searches, investment in additional containers and increases efficiency of container usage.

Crates not returned within the scheduled time frame, create alerts, which direct the sales staff to contact the customer to remind them of the return.

The system also makes it possible to quickly verify that the containers carry the correct shipment and go to the right customer thus increasing shipment accuracy and customer satisfaction.