MediReva Revalidatie integrates RAIN® RFID in rental process and stock management of medical aids

MediReva Revalidatie is a specialized company within the MediReva group. The company's activities are rental, sale and stock management of medical aids. From its head office and warehouse in Maastricht, Netherlands and additional warehouses in Helmond and Gronsveld, Netherlands, MediReva Revalidatie delivers medical services and materials to private persons, hospitals and health care institutions throughout the Netherlands.

THE CHALLENGES

At MediReva Revalidatie, thousands of orders are processed every week. The orders contain both consumable goods as well as rental equipment. Rental equipment returns to the warehouse after each rental period, where they are cleaned and/or disinfected, inspected, repaired if necessary and stored. The administrative follow-up, processing, and operation management is done using Microsoft Dynamics NAV ERP application.

MediReva Revalidatie engaged with HID Global’s partner Aucxis to streamline and eliminate as many manual operations as possible by integrating RFID technology during the administrative rental and stock management processes. The goal is to achieve a higher efficiency, as well as a clear and accurate overview of all products’ status.

The project contained two challenges for Aucxis, namely the selection of the most suitable tag for the application and the development of a compact warehouse management system (WMS) that seamlessly connects to Microsoft Dynamics NAV.

The RFID tag must be safe for patient interaction. Moreover, the tag needed to be easy to apply, yet durable to resist heat and waterproof. During the cleaning process, many materials are exposed to high temperatures. Additionally, the link to the WMS system required a transparent communication layer via Microsoft Dynamics Services. This layer communicates the processing, feedback and offline synchronization of the order status of products equipped with an RFID tag.

Solution:
- HID Seal Tag Mini
- HID RAIN UHF Badges
- Aucxis WMS and integration
THE SOLUTION

Procedure

All service materials and a majority of the user products are equipped with an RFID tag. When an order is registered, an order entry is created in the ERP application, which it is immediately available for the employees in the warehouse to process. A warehouse worker calls up the order using a handheld RAIN UHF wireless scanner that can read barcodes as well as RFID tags. All required data of the item to be picked appear on the display: product, serial number, and warehouse location. The items equipped with an RFID tag are scanned one by one, confirming the serial number to eliminate mistakes. At the end of the warehouse picking, the order is placed in the transport zone. Another scanning is executed upon delivery at the customer.

Hardware and Software

Aucxis selected the HID Seal Tag Mini RAIN UHF tags that met all of the requirements including flexibility, secure tamper evident functionality, durability and easy to use. The tags are programmed with unique information for each product. To scan the articles, Aucxis recommended the Nordic ID Medea RAIN UHF reader, which is a future-oriented handheld allowing scanning via 3G. Aucxis developed a WMS package that offers a visually managed, intuitive registration for picking, transport, delivery, return, cleaning, control and reparation. All process steps are linked back in real time to the ERP application to immediately alert workers of the order status. Also, the service material return process is achieved using RFID; they are collected, cleaned and returned to the warehouse using a return order. Furthermore, all employees are issued a HID RAIN UHF badge to register and identify who processes the order and executes the required action.

THE OUTCOME

The RFID solution delivered by Aucxis and HID Global grants a clear and accurate overview of the status of all products sold and delivered by MediReva Revalidatie. By the efficient use of RFID tags and RFID scanners, mistakes are reduced to a minimum. MediReva Revalidatie has a clear and accurate overview of all articles’ statuses, as all process steps are linked to the back-office system in real time.