KATHREIN

The optimal room-based Solution

Source: KEMAS

Challenge: The intelligent laundry depot

The Saxon company KEMAS is a leading provider of automation oriented solutions based on RFID technology for customers and employees. These so-called **self-service solutions are particularly useful for workwear** administration. However, the optimisation of the dispensing process is a necessary process as much potential is still lost due to the high level of complexity. Holistic safety management, considering operational processes, is a prerequisite for hospitals to fulfill their care mandate and duty of care. This is the only way to protect and maintain patients' health and life. **Providing employees with workwear is a personnel and logistical challenge**. The aim is to provide employees with the right amount of workwear round-the-clock using UHF RFID technology and intelligent laundry dispensing cabinets. This way, employees can use their time for their core tasks.

Initial situation: Manual handling

Central and manned laundry dispense services are still very common. However, these are often not open round-the-clock. Other systems may work automatically, but are far from having the same dispense time. In addition, **laundry is often in short supply for employees**. Different employee categories must be distinguished through different model variations. Consequently, **the automated laundry dispensing cabinet needs to be able to identify every item of clothing**. The entire laundry depot must be able to identify items of clothing and their stock. **This way, workwear administration becomes an intelligent laundry depot**, that is able to analyse shortages, peak times, employee habits, etc. and prevent negative effects.

Solution: The IoT solution masters the entire flow of textile goods, from stocking to disposal

With its extensive configurability, a room-based solution offers many possible approaches. The built-in RFID technology enables the reliable identification of all textiles. This IoT solution from Kathrein Solutions is simply installed in the respective room-based solutions, and used in conjunction with the ARU3400 RFID reader with its integrated WRA7070 antenna from Kathrein Solutions. The readers are further equipped with the Wide Range 70° antenna **to ensure a high detection rate even when stocking the laundry depots**. The prerequisite for this textile workwear management solution is that **each individual clothing item is tagged with a UHF RFID label**. This label is identified at the supply points during stocking, removal, return, and disposal. Through the simple configuration of the depots, the room-based system remains very flexible with regard to the dispensing conditions for the employees. The IoT solution described can be expanded technically and organizationally in various ways: **Permissions, messages, reading points, data evaluations, and other functions can easily be implemented into the system**.

Result: Intelligent workwear management system

Thanks to Kathrein Solutions RFID technology, the laundry management system makes a significant contribution to simplifying and rationalizing daily work. The **availability of clean textiles round-the-clock is therewith ensured**. Reliable and transparent data acquisition is guaranteed and allows optimal control of the use of textiles. **At the same time, authorization management regulates all accesses to the depot**. Therewith, the central laundry warehouse becomes an intelligent clothing depot. **Moreover, a real-time inventory of the textiles is made possible at any time**. Detailed **reports about the life cycle of all textiles** and simplified dispensing are further advantages of real-time transparency.

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