Textile laundry and rental since 1936, providing services for the healthcare sector, hospitals, the pharmaceutical, chemical and food industry, nursing and retirement homes – these are some key figures of the Geiger Textil GmbH. At the company headquarters in Bad Säckingen, business park Trottäcker near the Swiss border, around 80,000 pieces of laundry and 20,000 pieces of workwear and work protective clothing are processed every day.

Radio Frequency Identification, RFID, enables a maximum degree of automation to the textile management in a laundry business. As an integral part of the radio-based identification processes, Hermes+ systems by cab in the second factory hall (finished in 2016) print customer labels and fully-automatically apply labels to laundry packages in motion.
Different sizes and shapes

When at Geiger Textil a laundry package arrives at a labeling station, the textiles included in the package have already been folded, bundled and sealed in PE foil along the conveyor line. A laundry package includes one to twenty pieces. So, the labeling systems within the conveyor lines have to dynamically apply labels on packages of different heights, widths and geometrics. In addition, the bundles have soft packaging and frequently arrive in very quick succession at the labeling station.

No contact is needed

cab is a market leader in automated labeling. For 20 years, Hermes printing systems have been popular in all kinds of industries, trading and service businesses. To expand a Hermes to a fully-automatic labeling system matching with any demand, a wide range of modules can be added. In the case of Geiger Textil, cab went for an applicator 4614. At this, the labeling goes as follows: During printing, the label is removed by a blow pad in front of the peel-off plate of Hermes+. A stroke cylinder via sensor technology moves the pad above the textiles package. Without having any contact to the surface of the package, the label is blown onto the package from several millimeters atop with a strong air blast. There is no need of stopping the package at the labeling station, so it keeps moving on the conveyor belt.

Rental laundry and RFID - a perfect match

Geiger Textil relies on automation in textile management. Each piece of laundry has an RFID transponder. "This enables to fully record pieces of laundry, even in bulks, and track them throughout the entire processing. In the RFID tunnel, each laundry entry and exit is precisely documented", says Stefan Senger. The owner of STS-Informatik has been co-responsible for the IT at Geiger Textil since 2000. He helped to build up the company's current IT infrastructure and sees RFID technology predestined for use in laundries: "One click provides all statistic data for a piece of laundry. This ensures full traceability as well as customized billing for cleaning and provisioning. Errors in sorting are eliminated." Jochen Geiger, the company's General Manager, adds: "In order to be able to meet the requirements of our customers even better, we have jointly developed a process that had not existed in laundries before." Due to RFID technology including fully automatic labelling as a production line, the machines' capacities can be used more efficiently. As regards the customers, their efforts are reduced to a minimum.
In terms of textile identification and traceability in the company, Mr. Senger gets enthusiastic: “Geiger Textil is very innovative and visionary, as regards technology as well as customer benefits. Several years ago, I was provided a platform to test and further develop RFID during operation. At first we did this with mop covers in the high frequency range, all other pieces of laundry followed.” At first, universal standards were hardly in practice, but they have grown over time. Reading the transponders in bundles via conveyor belt and RFID tunnel has been in use at Geiger Textil for a long time. However, the packages used to be labelled manually. In other words: There has always been a high level of automation, only fully automated conveyor lines were missing.

By integrating Hermes+, practicable role model lines have been completed, in which at the beginning the employee places a piece of laundry on a folder or a finisher and in which further on laundry is packed, sealed and fully automatically labelled, ready to be stored or dispatched. In dispatch, the barcodes on the packages and pieces of laundry are scanned and uniquely assigned to the customer.

The IT service provider located in Rheinfelden, Baden, specializes particularly in RFID systems integration.

Since 2007, STS-Informatik co-operates with cab in terms of printer equipment - very successfully, Mr. Senger states: "Each laundry package gets a unique label with all the chip numbers that are included in the package. Within the conveyor line, an RFID antenna identifies the information that has to be printed on the fly on a package." If during data record an irregularity is detected, for example a wrong piece of laundry or an incorrect quantity of laundry in a package, a label indicating the error is applied. The employee who does the order picking can react and sort out the package. The application continues to grow. To support the signal level, an additional PLC control box has been programmed and integrated in the system. As for the future, it is planned to further increase the speed with which the packages are moved on the conveyor belt. We are prepared ...