cloakroom service

The automation of logistic services is useful for rationalizing costs and extending their benefits to the users. For automatic work uniform distributors, technological evolution makes access to uniforms possible 24 hours a day.

The interest of industries, hospitals, large hotels and other establishments in installing automatic work uniform distribution systems has increased in recent years. Needs have indeed evolved concerning:

- New labour market trends - increase of fixed-term contracts and temporary work; rapid changes in internal company organization.
- Service cost management - unequivocal identification of users and items; monitoring of distribution and collection of garments; improvement of uniform turnover rhythm; reduction of garment losses and at the incidence of the cost of labour for uniform distribution.
- Observance of health rules - clean uniforms available 24 hours/day, 7 days/week; monitoring of how often uniforms are changed; limited handling of items.

Choosing an automatic work uniform distribution system means giving an appropriate answer to the evolution and increase of such needs.

These systems enable the storage and conveying of hanging garments thanks to single-rail conveyors that interact with the distribution gates where the ready garments are delivered to the users. The handling of the uniforms is controlled by a software logic programmed differently on each system to adapt to the users’ requirements and particular features (for example for customized garments, garments by size or a mixed system).

All the garments handled by the system are identified by a coding device such as a barcode or a microchip.
Operating principles of an automatic distributor

- Garment identification
  In order for the system to operate correctly and to enable garment tracking, all items have to be equipped with a microchip. The first time they enter the automatic distribution cycle, the garments have to be identified (registered) by the computerized system. The distributor can deliver laced/sized garments or garments by size.
  In the first case, each user of the automatic distribution system is assigned a certain number of personal uniform items which only he or she can wear.
  In the second case, each user of the automatic distribution system is assigned a certain model in a certain colour and size.
  The distributor can also operate in a mixed way with both customized and size garments.

- User identification
  Not only the garments but the users too have to be registered by the computerized system and therefore identified, by a magnetic device such as a badge or electronic key. When registered in the system, each user is assigned a credit, i.e. the maximum number of uniform garments or kits he or she can retrieve.

- Clean garment delivery
  The users identify themselves at the ready garment distribution gate by means of their badge; there, a touch screen supplies various information including the different garments available for this user, amongst which to choose from. After confirmation, the system distributes the uniform kit in a time that can vary from 1.5 to 20 seconds, depending on the size of the system.

- Soiled or worn garment collection
  The users insert their worn garments (this through the opening of the soiled garment collection gate without having to identify themselves with their badge). The inserted garment is identified by means of a chip reading antenna, and the software is therefore able to identify the garment and its user to update the user's credit status.

- Distributor restocking
  The cleanroom operator only has to load the batches of clean garments into the dirty laundry conveyor connected to the automatic loading device. Thanks to a chip reading antenna placed at the automatic loading station, the software can register the incoming clean garments and transfer them to the storage conveyor.

- Storage conveyor
  On medium-sized and large installations, i.e. installations serving more than 700-800 users, a buffer conveyor is often included, used for storing garments and enabling the distribution of garments at any time; indeed, the buffer conveyor continuously feeds the garments onto the distribution conveyors depending on what is missing in order to serve the users who come to collect their uniforms.

- Distribution conveyor
  The distribution conveyor is the conveyor connected to the clean garment distribution gate; it supplies the requested garments to the automatic distribution gate where the users collect them.

Experiences made by hospitals, industries, hotels throughout Europe

The features and operation principles of the Metabreguet automatic system described above are applied to modern automatic work uniform distribution systems installed in many hospitals, industries, and hotel groups throughout Europe.

The list alongside gives a few examples with the name of the company, the branch, the country, the year the distribution system was installed and the number of users.

Centre Hospitalier Universitaire Vaudois, Switzerland

An example of a Metabreguet automatic work uniform distribution system, designed to serve about 3500 employees, called B2K, was installed at the Centre Hospitalier Universitaire Vaudois in Lausanne (Switzerland).

Conclusions

The advantages connected to the use of the automatic work uniform distribution systems are of benefit both to the company and to the laundry that supplies the cleaning service, for example:

- rational use of the space available for the work uniform distribution;
- global saving on the cost of labour; the assembly of the different items of a uniform kit and the loading of the garments on the system are fully automatic;
- almost complete elimination of garment losses and therefore of the related costs;
- improved turnover of work uniform stocks;
- control both of service costs and health rules observance thanks to the tracking of every single item;
- extension of the cleanroom service to 24 hours a day, 7 days a week;
- possibility of planning clean work uniform restocking according to which garments are missing on the distributor;
- possibility of printing a whole range of different statistics;
- speed and efficiency in work uniform delivery, even at peak times, using a system with several gates.

One can therefore say that the cleanroom service offered by the manufacturer Metabreguet S.A. represents a useful tool for rationalizing work uniform distribution costs, offering a round the clock service to the users and improving the business relationship between the companies where the systems are installed and the laundries and work uniform rental companies.