



## RFID use greatly simplifies often-tedious processes

By Bill Dougherty

**R**FID suppliers talked mostly about merchandise tracking as the technology's prominent feature when it was introduced. This remains a major benefit of its use. It's said, "If you cannot measure it, you cannot control it." RFID has proven to be the easiest and least expensive overall method.

Speed and accuracy increase when fully tied-out garment bundles are scanned and your computer verifies the contents.

(Phelps the Uniform Specialists photos).



With the evolution of laundry RFID into multiple-read, high-frequency (13.56 MHz) technology as the defacto standard for the industry, benefits have grown considerably.

Still, the most visible gains come from merchandise control. Operators using RFID technology driven programs are experiencing a 2 to 4 percentage point reduction in such replacement costs. One operator using the Positek mat sorting and tracking program has reported that he had a negative mat cost (net of losses and damages) for his last fiscal year.

Many applications accomplish both merchandise

control and reduce labor cost substantially, however, compared with traditional methods of textile handling without ID or with man-readable or barcode labels. Here's how:

**Garments.** It is no longer necessary to count or scan one item at a time. A fully tied-out bundle of garments can be scanned at a reading station and the system will verify the contents. You can guarantee 100 percent return of what was turned in soiled.

**Mats.** Our mat sort and tracking capabilities provide you with the exact location of every mat all of the time. It is easy to identify losses and damages and justify the appropriate charges. You reduce mat replacement costs in the range of 3 to 6 percentage points.

**Linen.** A wrapped bundle of high-end linen can be scanned to verify the contents prior to shipping. Items can be assigned to a customer and built to a route at the bundling station, building productivity by eliminating traditional paper load sheets and manual computations. The location of every chipped item is known and losses and damages can be pin-pointed to a specific user.

**Soiled items.** Several items can be scanned simultaneously, eliminating the need to scan one piece at a time. You increase speed by counting soil and identifying items not returned much faster.

### Garment, mat work speed up noticeably

In the past few years, functionality has been added to RFID programs that's resulted in a second major benefit: reduction of plant labor necessary for the sorting of textiles (apparel, linens, mats, and mops).

With minor physical alterations, plant operators have been able to reduce the number of sorts in a plant with a manual clean garment sorting system from three or four to two with garments presented in route or reverse route delivery order by account in the second sort station. Users of our patented CA Sort Systems are experiencing:

- Sorting rates of approximately 1,200 to 1,450



*Bill Dougherty is regional director, business development, Positek RFID, Norristown, Pa. Previously, he headed the North American operation for the RFID provider Datamars SA, after serving as sales and marketing VP for Brent (Ala.) Industries, the shop towel and glove processor that many industrial laundries use as a subcontractor. His experience as a uniform service executive included positions with Coyne Textile Services (Syracuse, N.Y.) as well as the now-divested operations Mechanics Uniform Service (East Hartford, Conn.) and the Servisco and Service Control chains. Before joining the industry, he spent 15 years with Trans World Airlines. Dougherty is co-chair of UTSA's Plant Operations Committee.*



pieces per operator hour on the first and second sorts.

- A reduction of half the number of employees needed to sort clean garments, reducing plant productive labor on an average of 2 percentage points.

- Reduced floor space needed for garment sortation.

The same is true with mats. The normal process without our RFID-driven program for the handling of clean mats is to retrieve them from the wash/dry process, stage them, pull them, and build the routes from the stored inventory. Our RFID-driven patent-pending process goes directly from rolling to building the routes. Benefits realized:

- The average employee is handling 140 mats per hour, received, rolled and sorted to the appropriate route. With over 40 installations, the average reduction in people processing clean mats has been 50 percent.

- Because the majority of clean mats (85 percent) go directly to route building a significant amount of storage area is eliminated. This opens valuable floor space for other uses.

- Once the CA Mat Sort and Track program is initiated, many operators have indicated that their circulating mat inventory has grown; in many cases, substantially.

The latest program released is for the tracking of high end linen items. With multiple-read technology, items can be bundled, contents identified in the finished pack, and a label produced that cross-references a bar coded label to the pack's contents.

The electronically generated load sheet displayed on a monitor at the bundling station identifies what is needed by route. As the bundles are finished they can be assigned to a customer or route and staged directly in the respective route cart.

When the items are actually delivered to customers, the route salesperson can scan the bar code on the label, verifying the delivery of those items to the customer. Benefits include:

- Scanning folded items off the folder identifies their size and type, electronically eliminating the need for an employee to identify the specific item.

- Loading of bundles directly to a route cart eliminates the handling needed to stage bundles before building the loads. This reduces handling and labor.

- When sorting soiled items, it's no longer necessary to separate every size for counting purposes. All items with chips can be



LEFT: Thanks to Positek's RFID enhancement, the usual multi-step procedure of loading out mats is reduced to two: rolling and route-building.

BELOW: Compared with fully mechanized systems, semi-automated sorting doesn't reduce as much labor, but still pays off.



sorted together because the database will identify each. Because the item was assigned to an account, you can scan the chipped items without separating them by account, as the database will identify where they were last. Soiled items can be processed much faster.

## Plant labor elevates to higher efficiency

A significant benefit of all processes mentioned above is that electronic ID removes the need for human judgment in recognizing an item; you don't lose any productivity in this respect when a relatively new hire operates the system. Manual identification works best with an experienced employee.

Training is minimal as the software directs the disposition of the item being scanned. Employees can be cross-utilized easier as:

- There are no exception charts or books required when scanning garments. The computer directs the placement of the item in both normal and abnormal circumstances. Productivity is constant.

- Operators handling mats are not required to identify odd sizes. As an example the operator does not have to identify whether a mat is a 3-by-12-foot or a 3-by-13. The computer IDs it.

- The size or type of high-end linen items coming off the folder does not have to be ID'd by the operator.

As operating costs continue to increase, you are pressed to continue to explore ways to reduce energy cost, comply with regulatory mandates, and reduce payroll and merchandise cost. RFID can't help you with the first two. However, it has been proven to reduce payroll in the plant and reduce merchandise cost, both of which increase the bottom line, while enabling you to provide enhanced service to your customers. **IL**