

# Achieving Freshness and Accuracy

WMS software program streamlines operational functions at one of Canada's foremost food-processing companies.

BY RICHARD RIX

In a fast-paced order-filling environment, two things are essential. You must have an accurate up-to-the-minute inventory count, and you must know exactly where everything is. That takes the right combination of software and hardware, plus having the right people responsible for making it happen.

Macgregors Meat & Seafood Ltd. focuses on the poultry, beef, lamb, veal, pork, and seafood business. The level of personalized service is so high that the people at its Toronto distribution centre actually break cartons to fill orders, and they work around the clock to make sure everything is supplied as fresh as possible.

Activities includes cooking items such as meatballs, and undertaking private-label packaging for big-name frozen-food brands that are found at the major grocery chains. Macgregors also supplies top-quality restaurant chains all across the country—some of them household names, others 'mom and pop' affairs.

Macgregors knows that inventory accuracy

isn't just an essential element from a warehousing- and distribution-efficiency point of view. It is absolutely vital to the order entry function and for keeping customers satisfied. If you can't respond to inquiries and orders confidently and immediately in this fast-paced environment, you won't keep your customers happy for long.

Batch processing just won't cut it. By the time you relay data to anyone—the customer or order-picker—it can be way out of date. That's bad enough in a simple stock-and-pick operation, but when there are intermediate steps, such as picking part of a carton and returning the balance to stock, as they do at Macgregors, batch processing is truly suboptimal, especially for an operation running 20 hours per day.

That's why Macgregors now operates in "real-time," with WMS software from RF Pathways and hardware from Symbol Technologies, combining to provide an order-entry and -fulfilment system that puts the company on the leading edge of the industry. The RF Pathways system has allowed

Macgregors to shorten order leadtime and respond quickly to changes and emergencies. As well, it accommodates date codes and can create more complex pick lists, in the interest of efficiency.

The main facility is located in the Weston area of Toronto, near Highway 400, and employs over 150 people, year round. It has over 46,000 sq. ft., divided into separate cooler zones and freezer space as well as processing and packaging areas. The RF Pathways system and Symbol portable laser terminals function smoothly in all parts of the facility, including the freezers.

The adoption of the RF Pathways system in October, 2003, was facilitated by the people who work at Macgregors. They are known throughout the industry as being among the most dedicated. Turnover rate for staff is less than three percent per year. A profit-sharing program was introduced in 1974; and a variable wage raise program, introduced in 1992, has proved extremely successful in developing a team of highly motivated and dedicated staff members. Nevertheless, the people still had to develop the internal discipline to use the system properly.

"We tested and played with it for two to three months before full implementation, recording inventory moves and retraining our people to pick orders," recalls Ed de Vries, controller/treasurer. "When certain key people have a thorough understanding of a manual system, as ours had, it is a challenge to encourage them to change their work habits, but everyone realized the benefits to be gained and it was a relatively smooth process."

De Vries explains that Macgregors implemented the system to address eight main functional areas:

- Dedicated putaway
- Picking
- Cross docking
- Production
- Inventory control
- Initializing inquiry transaction
- Replenishment
- Tracking.





"There was a lot of communication back and forth during the process of system configuration as our requirements crystallized," de Vries says. "A project such as this demands responsiveness on the part of the supplier and the ability and willingness to listen, prior to implementation. System flexibility is also key, and we were not disappointed in regard to any of these issues."

Among other considerations, an interface had to be created with the UNIX-based ERP system. While the link is in real time, invoice printing is not immediate but batch-processed, mostly the same day. One of the reasons it is not immediate is that a costing exercise must be performed by the accounts department due to the unique nature of the orders being filled. The system must take into account finished goods by weight and allow for shrinkage—no mean feat, but one that is successfully performed with data produced by the RF Pathways system.

The Weston facility, which dates back to 1969, has just three shipping/receiving doors, and there are storage constraints due to an 18-foot clear stacking height. This puts even more pressure on the software to optimize available resources in a way that promotes efficiency and business growth. That largely achieved, attention can now focus on optimization, which includes making the whole operation run faster and smoother than ever before.

To help gauge the complexity of the system, bear in mind that product is sold by weight and that not everything is totalled on the skid, at the pallet level. However, once the RF Pathways system scans everything on a pallet, total and individual weights become part of the inventory record. The total weight becomes the license plate for that pallet load

and is a major contributor to inventory accuracy.

Most of the order-picking is performed at night, though there is continuous picking throughout the day. Since picking takes place in the early hours of the morning for shipments to arrive at their destination same day, the RF Pathways system has to be absolutely foolproof and accurate. The system also must make intelligent decisions on the fly, since there are no customers to call to discuss variances and substitutions at 4:00 a.m., and not to ship is simply not an option.

As an example of the system's versatility, a box of four New York steaks can be sold as a unit or divided into separate steaks, so if the warehouse runs out of individual steaks it can transform a box into four of them, and vice-versa. Additionally, fresh can be substituted with frozen, and the RF Pathways software ensures it is reported to the warehouse management system in an intelligent way, for pricing purposes.

As product enters the facility fresh from suppliers, the UCC 128 codes are scanned to capture product information and establish expiry dates. The codes are used for tracking the product throughout its stay. There is almost total reliance on scanners for capturing and processing data prior to transfer to the host. The RF technology functions through five access points for the Symbol Spectrum 24 11MB wireless LAN, with scanning by 4 Symbol truck-mount scanners and 16 portable scanners.

In addition to its order-filling role, the WMS software is instrumental in make-to-stock functions, such as when the warehouse determines that more lamb chops or other cuts are needed, to hold in inventory. Orders for the inventory are issued by the RF Pathways

system through a function designed into the hand-held terminals. As well, the system accommodates all customization of finished products, or custom cuts, all the while maintaining intelligent communication with the host thanks to the programmed interface.

"One of the software program's key elements is the inquiry program, which allows any team member to determine how much inventory of any particular item is available for filling an order," says warehouse manager Tim Wilson. "A key part of it is the picking program that relieves inventory in real time."

Wilson adds that inventory checking is another key area to be impacted by the system. "Inventory checking takes place every four weeks and used to be a gruelling chore. We had to count everything. It used to take a whole week to prepare, exposing hard-to-reach stuff and ensuring nothing was overlooked.

"Then, after the prepping, it would take ten people approximately three hours to do the job, and no one was keen to volunteer for it. Now, there is little or no prepping and the job can be performed by three people in two hours, for significant savings there alone."

As well, discrepancy checking is down to about 10 minutes checking every fourth Friday—an exercise that could take days before. "Even that is gradually dwindling and the need for it can maybe be cut to quarterly or half-yearly. Cycle counting is our next goal."

The RF Pathways system was able to accommodate the portable scanners that previously were used in direct-connect mode to the host, which minimized the expense of purchasing new scanning equipment, though some new ones have since been added. As well, the flexibility remains to switch back to direct-connect mode if necessary for a complete physical inventory, but the accuracy of the system means that such a switch may never be necessary.

De Vries says that the system is performing right up to expectation with the promise of further benefits as more demands are placed upon it. As the prepared-food business expands and becomes more complex in terms of recipes and customer preferences, accurate inventory and product tracking will become an even greater challenge. The control and management qualities of the RF Pathways system are designed to meet that challenge and will doubtless help reveal new opportunities for business growth. ■

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