Protecting the Fleet

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When a lift truck makes impact with a rack, there is the potential for damage to the lift truck, racking and products. Damage can be extremely costly and, if not repaired, may create hazards for equipment and personnel.

In June 2009, Masters Gallery Foods, a full-line supplier of cheese products with headquarters in Plymouth, Wis., made it a top priority to address lift truck impacts and reduce damage. Simultaneously, the company increased its lift truck fleet from 12 lift trucks to 19 trucks and more than doubled the size of its main warehouse from 40,000 square feet to 110,000 square feet. The expansion included adding new racking and hiring new personnel, which meant 50 lift truck operators were now working over the course of three shifts each day.

The cheese supplier quickly determined it needed a fleet optimization system to help manage its Raymond lift trucks and operators, so by August 2009, it installed the *iWarehouse* fleet optimization system from The Raymond Corporation. Within five months, Masters Gallery Foods reduced impacts by 88 percent, tracked lift truck usage to encourage productivity and efficiency, managed lift truck speeds for new employees and eliminated paperwork for the OSHA-required pre-operation checklist. The company anticipates the fleet optimization system will play a vital role in helping manage its expected future growth.

First Priority: Reducing Impacts

Prior to installing the *iWarehouse* system, Masters Gallery Foods' warehouse managers wanted to reduce damage occurring to new racks, products and lift trucks. They felt damage could be better controlled by working with the operators or providing additional training as necessary. Managers asked lift truck operators to report incidents immediately so any damage could be assessed and repaired. However, the busy operators did not always report impacts immediately.

“Eventually, lift trucks would require premature maintenance to hoses or wheels as a result of impacts,” says Dan Murphy, warehouse manager for Masters Gallery Foods. “We really needed to find out when impacts were occurring, so we could assess the cause and determine if additional operator training was required or if something in the facility was contributing to incidents.”

Masters Gallery Foods already worked with Raymond for its fleet of *Reach-Fork* and stand-up counterbalanced lift trucks. The company appreciated the quality and durability of *Raymond* trucks, which are serviced by Stoffel Equipment Company, Inc., a Raymond Sales and Service Center in Milwaukee, under a contract maintenance agreement. So, when Stoffel suggested utilizing the *iWarehouse* system to monitor and assess lift truck impacts, Masters Gallery Foods was quickly intrigued.

The *iWarehouse* system draws real-time, accurate information from the on-board computers — the vehicle managers — of *Raymond* lift trucks. Data from the *iWarehouse* system is accessible through an online Web portal, called the *iWarehouse Gateway*™. Warehouse managers, like Murphy, log in to the system from any desktop computer to monitor data and set operating parameters. The system offers a suite of modules that aid facility managers in activities such as rightsizing lift truck fleets, increasing operator productivity, preventing product loss and reducing facility damage.

The *iImpact* module of *iWarehouse* notifies warehouse and service managers if there is an impact or other significant event while the truck is in motion. It offers two levels of notification: a warning that triggers a horn, buzzer or light when there is an impact; and an alert that is immediately sent to a supervisor via e-mail or text message to indicate a higher level of impact.

“In our first full month of using *iWarehouse*, we experienced a total of 45 alerts,” Murphy says. “We provided additional training for the operators involved. Five months later, we reduced the number of alerts to five.”

Masters Gallery Foods has programmed *iWarehouse* to automatically e-mail all supervisors regarding any impacts, including those judged to be low-level. The notification provides information on the G-force of the impact, so supervisors can quickly determine the severity of the impact, which helps Masters Gallery Foods promote safe operation practices.

Encouraging Productivity & Efficiency

In addition to reducing impacts, Masters Gallery Foods uses *iWarehouse* to monitor the average uptime and productivity of its lift trucks. This is especially helpful to Murphy because he also oversees Masters Gallery Foods’ facility in Cedar Grove, Wis., 20 miles from its headquarters. The fleet optimization system enables Murphy to remotely monitor activity and gauge productivity in Cedar Grove.

“The *iMetrics* module helps us examine activities such as average hours of use per truck, and how much time is spent traveling and lifting,” Murphy says. “Our goal is to have 80 percent of our fleet in operation. I can evaluate times of the day when usage is either exceeding or not meeting the 80 percent target. That information helps us determine if we need more trucks or if we should hire additional operators to increase the number of trucks in operation during a particular shift.”

As a result of the operational data Masters Gallery Foods gathered with *iMetrics*, the company plans to expand its third-shift operations. It can use the *iWarehouse* system to aid in its training of any new lift truck operators by setting operating parameters for those new personnel.

Many electric lift trucks enable warehouse managers to set operational parameters for each truck. So, when a new employee is operating a particular vehicle, the warehouse manager can set the maximum travel and lift speeds on that truck to keep the new operator from moving too quickly until he or she has more experience. In most cases, this requires the manager to visit each truck individually to set parameters and change them when a different operator uses the equipment. But with the *iControl* module, Murphy can set parameters by employee, rather than by vehicle.

“In our facilities, the operators’ timecards also are used to allow them to log in to lift trucks,” Murphy says. “Through the *iWarehouse* Web portal, I set profiles for our operators, which includes setting their maximum travel and lift speeds. New employees are set at lower speeds, which are easily increased as their capabilities increase. When an operator changes trucks and logs in using the timecard, the parameters automatically change according to that individual’s profile.”

Murphy notes the ability to change operator profiles online saves him time, because

he does not have to stop at individual trucks to change settings and does not have to take time to change settings between shifts or as operators change trucks to accomplish different tasks.

Reporting Aids Sustainability Goals

The ability for operators to electronically log in to lift trucks has aided Masters Gallery Foods in its goal to be more sustainable. OSHA mandates operators complete a pre-operation checklist before using a lift truck to ensure the truck is operating properly. Prior to the installation of *iWarehouse*, operators at Masters Gallery Foods filled out a paper form, which then had to be filed and stored to confirm compliance with OSHA's recordkeeping requirements. Today, the *iVerify* module requires operators to complete the form on the *iWarehouse* monitor mounted to the truck before the truck will start. The reports are electronically recorded and are accessible through the online Web portal.

"Last month, we had 1,300 pre-operation inspections," Murphy says. "In one month, we saved all the paper that would have been required for those inspections, as well as the time and space that would have been needed for filing and storage. It's an easy initiative that helps us work toward our sustainability goals."

***iWarehouse* Streamlines Maintenance**

iVerify also streamlines maintenance by immediately notifying service technicians if an operator reports a failed item during the pre-operation inspection. The notifications help Stoffel's technicians determine which parts and tools are needed to conduct repairs before they arrive at Masters Gallery Foods. In addition, the technicians are able to complete maintenance on minor issues that have the potential to become larger problems if left undetected or are not serviced, reducing unexpected or lengthy downtime.

When service technicians conduct any type of maintenance, they record it in the *iTrack* module of the *iWarehouse* system. Over time, this allows Stoffel and Masters Gallery Foods to evaluate the costs of parts and labor. They can analyze trends to determine whether a specific truck is requiring more maintenance than others, or whether a certain part requires more replacement than is typical. These trends allow the companies to conduct root-cause analysis to determine what is contributing to maintenance needs, such as something in the operating environment, like an uneven floor or a concrete pole that could use some padding.

"The *iWarehouse* system plays an integral role in our continuous pursuit of increased productivity," Murphy says. "It encourages proper lift truck operation, which helps reduce damage, maintenance, downtime and costs. It reduces time spent managing and storing paperwork because we can access real-time data electronically. It allows us the flexibility to manage our lift truck fleet anytime and from anywhere. At the end of the day, higher productivity is essential to our ability to grow."

Masters Gallery Foods foresees a long future of growth and plans to continue

uncovering ways to use the data from *iWarehouse* to implement new strategies for continued success. By using accurate, real-time lift truck operating data to make management decisions, Masters Gallery Foods expects to improve its competitive edge and meet its goals as an industry leader.

For more information, please visit www.raymondcorp.com *[1].*

Links:
[1] http://www.raymondcorp.com/