Lift truck maintenance: Long-term planning considered

Tired of throwing good money after bad, fleet managers are turning to training, technology, and dealer support to better understand when to replace, repair, or retire.

By Josh Bond, Lift Truck Columnist, Supply Chain Group

For decades the same call has rung out from lift truck maintenance bays around the world: “Get me the truck and I’ll fix it.” But as companies try to do more with less, lift trucks are too often compelled to stay on the warehouse floor as long as possible, where they can keep the product and the organization moving forward.

The historic tension between the needs of the truck and the demands of the business frequently result in maintenance patterns that lead to avoidable damage, over- or under-utilization, and wasted parts, time, and money.

“It’s a sword that’s not only double-edged, it’s serrated,” says Jim Shephard, founder and president of Shephard’s Industrial Training Systems, which specializes in the development and implementation of operator training programs and has trained more than 1.5 million operators. “It’s something that every company with lift trucks wrestles with.”

However, Shephard argues that with careful planning, operational discipline, and perhaps the help of a dealer or other service provider, most businesses can establish a lift truck maintenance program that will increase productivity while optimizing fleet expenses.

But many companies have yet to take the first step.

“With many of the clients I’ve worked with over the past few years, I’ve seen no plan at all,” says Shephard. “They’re basically running reactive maintenance shops.”

Planned maintenance (PM), the routine oil and filter changes, might be as far as a company’s maintenance planning goes, says Shephard. Sometimes even PMs are a challenge. “Maintenance people are saying:
“The truck’s due for PM, now how do I beg, borrow, or steal it?” says Shephard. “They usually only get the truck after a breakdown. Even then, they’re forced to get it back onto the floor before the full service is done,” he adds. “Before long, that fleet starts to show the attention you’ve put into it.”

According to Shephard, an effective maintenance program starts with the lift truck operator, the person most immediately aware of the needs of any given truck. “They are the first line of defense,” says Shephard. “No one else in that operation is going to be as important as the operator. They are the key.”

But although operators today are better trained than ever, says Shephard, skilled operators on bad equipment will revert from good habits to bad ones. Then equipment dollars are wasted, training dollars are wasted, and companies end up with avoidable costs.

“You push one domino over, it will knock the rest over,” says Shephard. “The funny thing is that most companies put so much emphasis on producing a quality product, from design to manufacture to packaging, then they go and handle their materials with shoddy equipment. It doesn’t make sense to focus so much on the front end just to get shrinkage on the back end.”

Shephard says maintenance is no longer a last resort for trucks pushed to the breaking point. Taking the long view allows businesses to control day-to-day expenses and operations while monitoring the performance and value of each piece of equipment. In this way, the life span of each truck is neither shortened nor needlessly extended.

“Before you cross that line, maintenance costs are an investment in your assets,” says Shephard. “After you cross that line, you’re just throwing money away.”

**KEEPING IT IN-HOUSE**

According to Shephard, lift trucks are not only important at the loading bay. “A lift truck in a building will affect every person in that building,” he says. “You get shrinkage and the plant manager hears about it. You get late shipments and customer service hears about it. You get avoidable costs and accounts payable hears about it.”

Given the ripple effect a lift truck can have on an operation, it might seem surprising that their good health is so rarely a priority. But there are significant challenges to in-house maintenance programs, according to Jim Gaskell, Director of Global Insite Products for Crown.

Below about 50 trucks to 70 trucks, maintenance workers might spend only some of their time actually servicing trucks, with the rest of their day spent on other facility needs. Beyond that threshold, the fleet will sustain dedicated maintenance personnel. Managers might begin to make room for a dedicated maintenance bay, which might naturally begin its life as an offshoot of a battery room.

Then the maintenance bay might begin stocking parts, or consigning parts supply from a dealer. This is where the problems begin. “Companies must have the discipline to track hours of labor and parts costs so they can have an accurate sense of their maintenance costs,” says Gaskell. “That’s the piece they’re most often missing.”

It can be hard to isolate labor hours spent on trucks if maintenance workers are also performing other facility repairs. And parts management can quickly become a cost quagmire. An ideal practice might include a time card for maintenance workers where they could document X hours spent putting X parts on X truck.

“One customer had tool carts in a shop filled with $50,000 in parts in a small area,” says Terry Flanagan, manager of fleet sales for Yale Materials Handling Corporation. “Someone was in the habit of taking parts out of the packaging before shelving them, and although the mechanic knew where the parts were, no one else did.”

“Do you know how many techs are allowed to get their own parts at a dealership?” asks Gaskell. “Zero. When a
user’s in-house technicians are allowed to get their own parts, that’s how customers end up with tens of thousands of dollars in parts they don’t need and hundreds of thousands of dollars in parts they can’t track.”

In order to get things under control, a company must first perform a thorough asset survey, documenting costs and utilization. This simple first step can immediately reveal big problems, like whether a company is using the right trucks for the right job, whether trucks are over- or under-utilized, or whether there are other recurring problems with batteries, parts, operators, etc. With this basic data in hand, a company can begin to know whether to repair, replace, or retire each truck.

For many companies, data captured manually can be helpful enough to begin making decisions and improvements. But technology can also help collect detailed information to help make long-term investments, develop programs, and improve day-to-day operations.

**TECHNOLOGY’S ROLE**

Gaskell shared a story about a manager who saw an unused lift truck parked in an odd corner of the warehouse. He fired it up, saw nothing immediately wrong, and drove the truck over to the loading bay only to find out it had an oil leak, leaving an oil slick on the loading bay.

“Truck-mounted technology can now allow managers to quickly assess which trucks are down and why, saving time that might have been wasted investigating on the warehouse floor. And while the fleet maintenance person might only be concerned with the status of the trucks, the same technology can enable operator tracking as well, providing further assurances that the right operator is using the right truck in the right way.”

“If you find you’re using one truck at 3,000 hours per year and another truck at 1,000 hours per year, you’ve got a problem,” says Flanagan.

“But while data can illustrate utilization and efficiency with more clarity, it must be coupled with action.”

“Today’s managers do not want more data,” says Gaskell. “Instead they want information that is delivered in a simple format, that is easy to understand and that can be quickly acted upon. This way management can change operations before it’s too late.”

Data collection might lead managers on the path to make better use of their existing equipment, or reveal that they have been a bit too successful at right-sizing their fleet.

“A fleet that just barely meets utilization will not make it into the shop,” says Shephard. “They’ll need them on the floor. They’re hamstring to solve their maintenance problems.”

Often, the picture that emerges is a need for improvements on an overwhelming scale. If the changes needed and the resources available don’t add up, a company might consider a maintenance agreement with a dealer or other service provider.

**MAINTENANCE AGREEMENTS**

Companies are increasingly relying on contracted maintenance services in an effort to control costs and make them more predictable. Unlike many dealers, in-house facilities often lack the ongoing training to keep mechanics up-to-date with rapidly changing lift truck technology, says Shephard. A company might also lack the perspective to know when a facility’s maintenance costs are in a good place when compared to other sites or the industry average.

“Thirty years ago, each facility had its own security department, maintenance department, they did everything,” says Michael McKean, fleet management sales and marketing manager for Toyota Material Handling. “Companies have since focused on core business and have outsourced all they can. It’s driven the maintenance business back to where it should be, which is at the dealership.”

In recent years, more and more companies are pursuing this option, says Shephard. There are plenty of choices for outsourced maintenance agreements, but dealers are frequently best prepared to offer a full range of services and reporting tools. One reason is simple, says Shephard: No one knows the trucks like the people who made them.

At one end of the maintenance agreement spectrum, the company need only grease the truck every so often and perform pre-shift inspections, with a dealer handling all other maintenance needs. The dealer might run a full-time, on-site maintenance bay, or make visits as needed. Somewhere in the middle of the spectrum, a dealer might handle major repairs only, and leave PMs and other routine maintenance to the company staff.

The key to fleet maintenance, says McKeen, is the agreement between the

“As lift truck technology rapidly changes, ongoing training for technicians is essential.
company and the maintenance service provider. “It’s checks and balances,” he says. “It can not only lock in business for the dealer, but it also results in predictable costs for the company.”

Any good maintenance agreement requires good communication, he says, with a clear understanding of what the customer needs and what the dealer can offer. A good outsourced maintenance proposal, according to Flanagan, should aim for at least 15 percent reduction in maintenance costs.

Following an asset survey, says Flanagan, a dealer might confer with managers to identify an appropriate core fleet as well as a standby fleet. “So, if the truck is down, you aren’t down,” he adds. They might also identify a swing fleet suitable for use in two or more applications, says Flanagan. This avoids the likelihood of a dedicated fleet being over- or under-worked.

By becoming involved in all aspects of fleet maintenance, a dealer agreement can also allow a company to bridge the natural gap between fleet managers and staff managers. “Outsourcing in-house maintenance requires time to understand what is best for the company,” says McKean. “In the end, a company might find that unnecessary fleet maintenance staff can be redirected to other areas of facility maintenance, resulting in optimized resources instead of layoffs.”

And instead of parts languishing in a maintenance bay or disappearing onto the warehouse floor, the dealer can assume responsibility for tracking each and every item.

“They don’t get paid unless they keep good records, whereas an in-house program might not have such an incentive,” says Gaskell.

According to Gaskell, the most important thing to consider when selecting a service provider is uptime, not the cost of each repair.

“If I had 100 percent uptime, I’d gladly pay twice as much for the service,” says Gaskell. “That said, you also need robust reporting to benchmark company costs against industry averages.”

Flanagan agrees. For companies with sites across multiple states or countries, how do you know what’s world class? How do you benchmark costs internally from site to site? You might have a site that has a lower cost per hour than the others, so you decide to benchmark to that site. But what if that cost is still above industry average?

With a targeted goal and the support to reach it, companies can replace waste and reactive maintenance with confidence and efficient resource management.

“That’s long-term thinking,” says McKean. “If you don’t have that mentality, that’s where a competitor will come in and get that contract.”

Josh Bond is the lift truck columnist for the Supply Chain Group