



Maximize Uptime and Profits Through Effective Fleet Management Practices



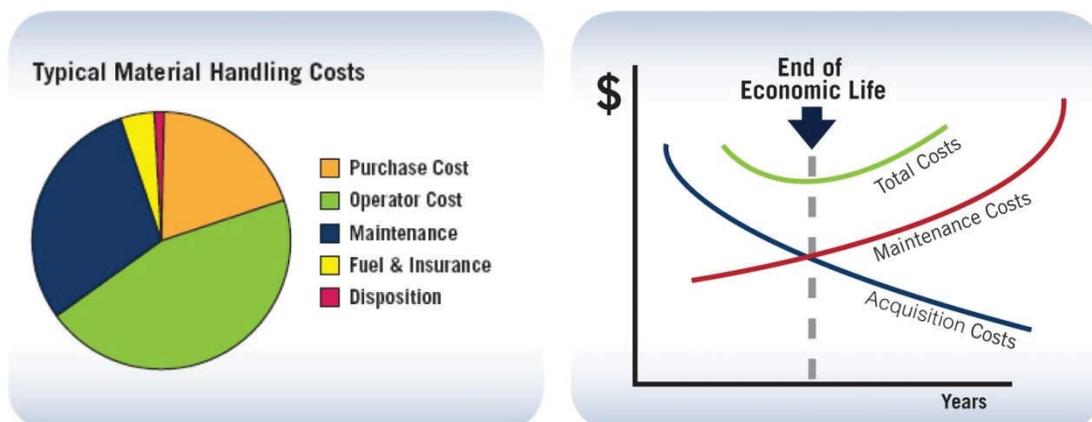
Overview

Operating a lift truck fleet is a reality of your business, but managing a lift truck fleet in addition to focusing on your core business responsibilities can get complicated. Trying to keep tabs on service schedules is tough enough; when you add in the varying degrees of usage per unit, multiple facilities in different locations, and the possibility of having several service providers and part suppliers, it gets even trickier.

When lift truck fleets are not properly maintained or utilized efficiently, downtime increases, productivity is reduced and you may end up spending money when you should be making money. The challenge of properly maintaining your fleet can be resolved through an effective fleet management program. Fleet management programs help navigate hidden opportunities to reduce your materials handling spending. As you are confronted with some of the most difficult economic hurdles in decades, the need to shed cost for sustainability is a must if you are to emerge these economic times leaner, stronger and poised to take advantage of economic recovery. A strong fleet management program is essential to maximizing uptime and productivity and ultimately saving money over the long term.

Challenges

There are many common challenges that lift truck fleet owners face. One of these challenges is the failure to recognize the hidden costs associated with having multiple service providers. Multiple service providers can expose you to a costly administrative burden and incremental maintenance-related expenses. It is estimated that only 20 percent of the total materials handling cost of a lift truck is tied to the initial purchase. The remaining 80 percent is attributed to maintenance, the operator and fuel costs. Additionally, the lack of visibility of true materials handling costs and actual asset utilization data may prevent you from exposing significant cost reduction opportunities. Finally, the possession of an aging fleet with high hours typically indicates the absence of a dynamic replacement program. Based on an economic life cycle model (shown below), a materials handling asset may be subjecting you to higher costs per hour and reduced productivity.



Key Elements of True Fleet Management

Many individuals do not have enough time in the day to identify and implement cost compression techniques. With a best-in-class fleet management program, fleet users can fully realize the benefits of a productive materials handling operation at the lowest possible cost. No two materials handling operations are alike. That's why it takes a fleet management solution that is both flexible and customizable to deliver bottom line results.

Few things can seem less clear than your materials handling picture. Purchase price, financing, repairs, downtime, maintenance, operator training, administration, retiring aging equipment are just a few of the things that contribute to a complex, ever-changing and potentially profit-draining operation. A quality fleet management solution is comprised of a number of key elements and includes a broad range of tool sets and capabilities. A fleet management program can create efficiencies and cost savings for your company. A fleet management program can help bring it all into focus and resolve issues such as:

- **Understanding the total cost of ownership:** Sometimes purchasing the lift truck is the cheapest part.
- **Underutilized or excess equipment:** Comprehensive fleet and facility analysis determines optimum fleet size and best use of each unit.
- **High operating costs:** Outsourced maintenance programs and parts consignment programs offer cost effective solutions for immediate and long-term fleet expense reduction.
- **Specification/configuration inconsistencies:** Fleet surveys identify opportunities for commonality of specifications and configurations to provide flexibility for fleet rotation and relocation.
- **Aged fleets:** Planned replacement programs keep lift truck fleets operating within the optimum economic life cycle.
- **Low productivity:** Maintenance programs and planned replacement strategies maintain fleet productivity and reduce downtime.
- **Mix of makes and models; range of service plans and providers:** A single source solution for service and parts, no matter the make or model of lift truck.
- **Short-term rentals used to supplement fleets long term:** Improved equipment uptime helps reduce the need for short-term rentals; competitive leasing programs can help address acquisition issues.



- **Inability to determine and review fleet operating costs:** Continuous monitoring and analysis of fleet data ensures strategy remains relevant.
- **No formal training programs:** Comprehensive operator and technician programs help increase productivity and cut down on equipment repairs, product damage and risk of injuries due to accidents.

A well-defined fleet management program helps determine your overall materials handling costs and identifies ways to reduce them through lower service expenditures and increased productivity. This can accomplish several goals including:

- Lowering operating costs
- Reduced fleet size
- Improving or eliminating onsite parts inventory
- Monitoring costs
- Reduced supplier base
- Maximized fleet efficiency

Consider that on average companies have 10 to 20 percent more units in operation than are necessary to maintain desired productivity. A well-structured fleet management program can help eliminate unnecessary expenses and improve bottom line performance.

It is estimated that fewer than 6 percent of companies are able to accurately identify their lift truck operating expenses. Without a process in place to capture and analyze maintenance data, effective management of your material handling fleet is not feasible.

Most companies deal with fleet maintenance on an as-needed basis rather than having a formal Periodic Maintenance (PM) program. A comprehensive PM program is the best way to identify and correct problems while they are still small rather than waiting until repair issues have reached crisis mode.

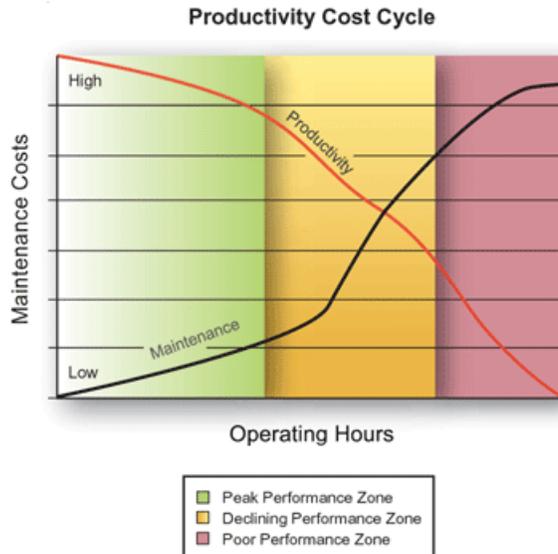
Planned Replacement Is the Key to Success

As a general rule, lift trucks have an economic life of approximately 10,000 to 12,000 hours. This varies based on maintenance practices, operating conditions and the type of equipment used.

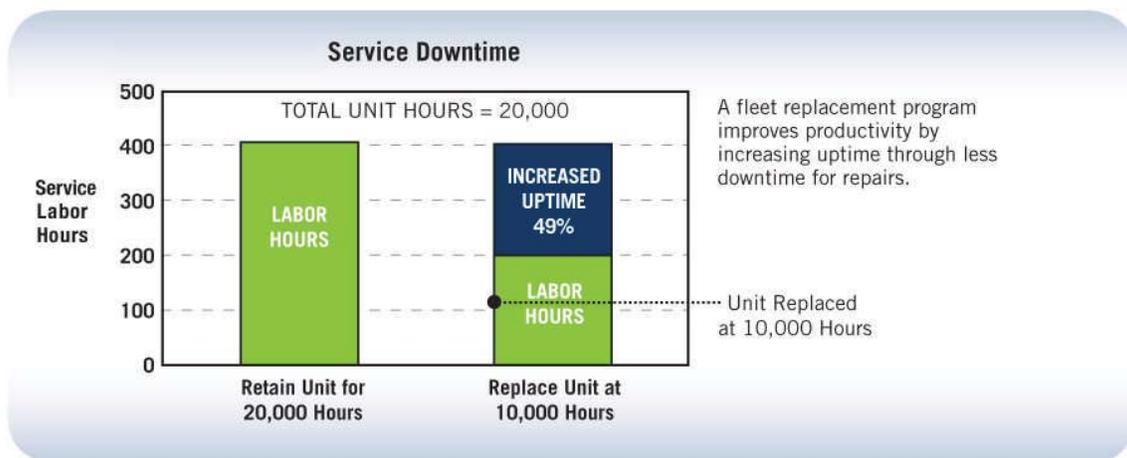
Substantial cost savings are available through the execution of a fleet management program that incorporates the philosophy of planned fleet replacement once a unit has reached its Optimum Economic Life Replacement Threshold. Replacing units based on optimum life is one of the key pillars of a good fleet optimization model. As the asset begins to reach high operating hours, the unscheduled downtime (and associated maintenance costs) can begin to escalate exponentially. It is at this point when



people start to throw good money after bad. The optimum or economical life of an asset can vary by type of truck, its operating environment (application) and estimated annual usage.



The chart below estimates the reduction in service labor hours by replacing a lift truck at 10,000 hours versus 20,000 hours. This chart suggests an estimated 50 percent improvement in uptime can be realized. The cost of maintaining an asset and the subsequent cost of extensive downtime should be key staples in an asset replacement program to ensure optimal cost of operation. It is important that these plans are implemented to guide your asset replacement decisions during times of economic downturn as well as prosperity.



Every operating and ownership situation and application is different. It is important that an experienced, knowledgeable fleet management professional evaluate all relevant costs and determine the optimal replacement point for trucks in a given application/operating environment.



Total Cost of Ownership

You cannot measure or monitor fleet savings without understanding your operating costs. If you can't determine your fleet operating costs then it becomes very difficult to control them. Through web-based fleet management systems, customers have access to the same detailed data that we rely on to make intelligent materials handling recommendations. Yale Fleet Management offers a web-based reporting system that allows managers to monitor and measure truck utilization, cost per hour and total fleet operating costs. The system can even go as far as assisting in identifying costs such as tire expense and avoidable damage repairs. Customers may also view and download maintenance costs by serial number, equipment type and by equipment location.

Why Outsource?

Whether you have one truck or a fleet of trucks, an Outsourced Maintenance Agreement (OMA) will help you spend less time worrying about your lift truck productivity and more time on growing your business. Not only does it help minimize downtime, but the monitoring of maintenance expenses and productivity per vehicle helps in planning your operational costs and simplifying fleet budgeting.

An OMA can provide you with a fixed cost per run time hour for each truck in your fleet. Additionally, your lift trucks can be performance benchmarked to other trucks in your fleet as a productivity guideline.

It is not unusual for the average materials handling fleet to contain 10 to 20 percent more trucks than necessary. Fleet management programs ensure that each truck is fully utilized and its use maximized within its specification. When the "big picture" is understood the fleet population can be driven down, which is the first step in lowering total cost of ownership.

Maximize Productivity and Cost Compression through Telemetry Technology

Close monitoring of your lift truck fleet (and operators) is a key to maximizing productivity and to helping ensure operational cost containment. While there are certain levels of truck and operator monitoring that can be handled by human resources, i.e. hour meter collection for cost per hour and utilization calculations, there are basic telemetry solutions that can compete economically in this arena when compared with the cost of man-hours tied to this routine, labor-intensive process.

There are however, certain performance measurements surrounding operator productivity that cannot be either easily monitored or accurately measured through human resources. While utilization percentages can be used as actionable data, it may not deliver the desired performance objective. Monitoring utilization may not provide you meaningful data as to how many loads the operator moved that day. Installing load sensors on the truck however, will provide a more accurate measurement. As



you look for telemetry solutions to help compress your operational costs and improve productivity, make sure you have the best understanding of what you want to measure, for example, motion/idle time, speed/distance, impact by operator, etc.

You're Only Steps Away from a More Efficient Fleet

Fleet management is a step-by-step process that should not be taken lightly. A long-term commitment by your company is vital to your success and bottom line. Follow these steps and you're on your way to better managing your lift truck fleet.

Step 1: Survey

A complete study of your current fleet helps identify your maintenance costs. Gathering information on the age, specifications, application, usage and condition of each lift truck provides the necessary information to conduct a detailed analysis of your fleet.

Step 2: Analyze

Once the initial survey is complete, utilization studies should be prepared to determine baseline costs and projected service needs. Maintenance history is combined with these results to estimate the opportunity for potential cost savings.

Step 3: Propose

Based on the conclusions drawn from the fleet study, gather recommendations for equipment configuration and replacement, fleet redeployment and maintenance options. The proposals you receive should also include recommendations for training, parts capabilities and possible financing alternatives.

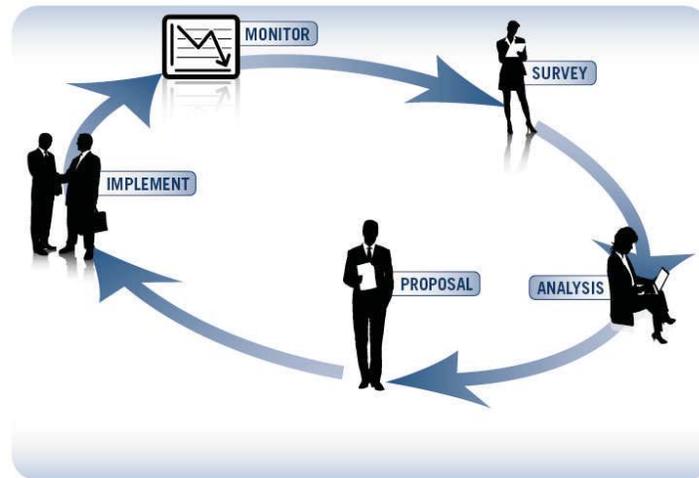
Step 4: Implement

Determine a final action plan based on the product recommendations and a product supply strategy. Schedules for training, maintenance and the disposal and replacement of equipment are implemented, and finance options are resolved. Commitment and support are the keys to successful implementation. Effective fleet management programs are not one-time events, but are long-term commitments that provide year-over-year cost savings for your company.

Step 5: Monitor

Each element of the plan is reassessed at regular intervals to ensure your lift trucks remain in optimal condition and that hours and usage are reflected appropriately in service schedules. This also enables any necessary adjustments to be made due to changes in your business needs. Ongoing tasks include continuous fleet size review and replenishment, maintenance and cost analysis and management reporting.





About Yale Fleet Management

Yale has more than 20 years of experience with managing customer fleets and is the largest and most established fleet management program in the industry. The company has 45,000 assets under the program and 100,000 assets that are managed by Yale dealers. Yale's fully dedicated staff engages in monitoring and managing equipment fleets through call centers, audit processes and program management. The Yale Fleet Management program generated \$35 million in customer savings, including program implementation, management and recommendations over the past five years with customer savings

About Yale Materials Handling Corporation

Yale Materials Handling Corporation markets a full line of materials handling lift trucks and products and services, including electric, gas, LP-gas and diesel powered lift trucks; narrow aisle, very narrow aisle and motorized hand trucks. Yale offers comprehensive Fleet Management services, as well as Yale service, parts, financing and training. Yale[®] trucks are manufactured in an ISO 9001:2008 registered facility and range in capacity from 2,000 to 36,000 lbs. For more information, or to find the Yale[®] lift truck dealer nearest you, call 1-800-233-YALE or visit www.yale.com.

Yale Materials Handling Corporation is part of NACCO Materials Handling Group, Inc. ([NMHG](#)), which employs approximately 4,500 people worldwide. NMHG is headquartered in Cleveland, Ohio and is a wholly owned subsidiary of NACCO Industries, Inc. (NYSE:NC).

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