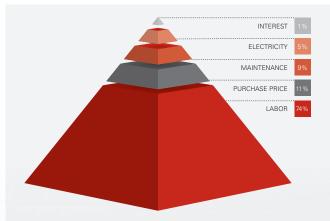
10 REASONS IT'S TIME TO UPGRADE YOUR FORKLIFT

How often are lift trucks replaced? According to a survey conducted by Peerless Research Group and Modern Material Handling, lift trucks are replaced on average every seven to eight years. But how do you know when to replace your forklift? There are many benefits to knowing the right time to upgrade your forklift and improve the quality of your fleet. Read on to learn 10 reasons to upgrade your forklift — and how.

- 1. Your Fleet Has Internal Combustion Forklifts.
- 2. Your Forklift Has More Than 10,000 Hours.
- 3. Your Forklifts Are 7 Years Old Or Older.
- 4. You Have High Maintenance Costs.
- 5. The Equipment Doesn't Meet Your Needs.
- 6. You Aren't Using Updated Technology.
- 7. Productivity Is Dropping Off.
- 8. You Need More Space.
- 9. You Have Battery Issues.
- 10. Your Downtime Is Increasing.



TYPICAL LIFT TRUCK COST OF OPERATION

Having an upgraded forklift fleet can affect productivity - and with labor accounting for 74% of a lift trucks operating costs, you need to make sure that your trucks are running at peak efficiency to get the best return on investment.



1. YOUR FLEET HAS INTERNAL COMBUSTION FORKLIFTS.

Operations are discovering that electricity offers a variety of benefits to power their lift trucks when compared to internal combustion options. Representing nearly 65% of the market and gaining in popularity, electric forklifts better support sustainability efforts by lowering carbon emissions.

While electric forklifts can cost more upfront than propane lift trucks, they offer a lower total cost of ownership by saving you money on fuel, maintenance and repairs over the life of the truck. With fewer moving parts, no spark plugs, and no required oil changes or tune-ups, electric trucks require less maintenance and repair than propane forklifts, cutting costs and keeping your fleet on the floor for superior productivity.

Electric forklifts offer a more pleasant operating experience than propane-powered trucks, enhance operator comfort and reduce fatigue with fewer vibrations, providing a quieter ride, less heat, and zero emissions resulting in a cleaner, healthier working environment.

2. YOUR FORKLIFT HAS MORETHAN 10,000 HOURS.

Being proactive about maintenance is one way to increase the life of your forklift. However, no matter how vigilant your operation is about service, eventually you will start to experience downtime as the fleet ages. You can expect major repairs when the trucks reach 10,000 hours. This drives up maintenance costs and downtime.

3. YOUR FORKLIFTS ARE 7 YEARS OLD OR OLDER.

Like hours, the age of the forklift can affect maintenance cost. Major components, such as motors, drive units and electronics, will need to be replaced, ultimately driving up downtime and increasing maintenance costs.

A recent Modern Materials Handling study conducted by Peerless Research Group (see graph on page 4) shows that in the last seven years, lift trucks are being replaced on average about every seven to eight years. Track the hours, age and maintenance costs to see if it is time to upgrade your forklift. When your truck is 7 years old, start to consider upgrading.

4. YOU HAVE HIGH MAINTENANCE COSTS.

Age is not the only factor to consider when evaluating whether to upgrade your forklift. Maintenance costs, which include parts and labor, will increase as the truck ages. One suggestion is to give serious thought to retiring a truck when the average maintenance cost per month approaches or exceeds the monthly payment for a new lift truck, or is greater than 10% price of new truck.

The below chart illustrates the trigger points operations should monitor over the life span of the lift truck. If a truck meets one trigger point, start to keep an eye on the truck and monitor the other factors. The more trigger points you hit, the more analysis you should do.

TRIGGER POINTS TO EVALUATE IF THE LIFT TRUCK SHOULD BE UPGRADED

TRUCKTYPE	AVERAGE AGE	HOURS	TOTAL MAINTENANCE COSTS
Internal Combustion	4-6 years	10,000-11,000	
Electric Stand-up Counterbalanced	7-10 years	10,000-14,000	\$28,000-\$30,000
Narrow Aisle Reach Truck	7-9 years	10,000-14,000	\$28,000-\$30,000
Orderpickers	7-10 years	10,000	\$20,000-\$25,000
Turret Trucks	7-10 years	10,000-12,000	\$36,000-\$45,000



5. THE EQUIPMENT DOESN'T MEET YOUR NEEDS.

After several years, the needs for a particular type of forklift in an operation may have changed. If the piece of equipment is underutilized, it probably doesn't meet your current need. To identify underutilization, consider the following:

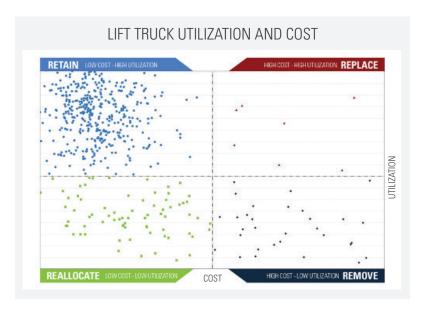
Analyze maintenance costs along with utilization. Plot your maintenance costs on the X-axis and the utilization on the Y-axis. Then draw a line down the center vertically and across the center horizontally. Evaluate each quadrant to determine if the trucks should be removed, replaced, retained or relocated.

Source: Brochure for iTrack® fleet and asset maintenance management system

The trucks that are in the top right quadrant should be replaced. These have high cost per hour and high utilization. The trucks in the lower right quadrant should be removed. They have high cost per hour and low utilization. The trucks that fall in the top left quadrant should be retained. They have low cost per hour and are being utilized. The trucks in the lower left should be relocated to another part of the company or traded in. They have low cost per hour but are not being utilized.

There are fleet management programs that can be used to collect data and report the data to guide decisions to upgrade your forklift.

It is also important to determine if the fleet is the correct size. High-hour trucks may indicate you need to add to your fleet. Low hourly usage may indicate you have too many trucks.



6. YOU AREN'T USING UPDATED TECHNOLOGY.

Something else to consider is that new equipment provides new performance, greater reliability, energy efficiency, options and features to meet the needs of today's demanding applications. It's important to consult with a trusted advisor to get the most out of technological advances such as telematics.

Updated technology such as fleet management software can track usage, maintenance history, incidents, up-time and productivity, collecting valuable data that can be used to optimize your fleet and ultimately reduce unnecessary costs. Regularly consulting with solutions providers to determine the necessary upgrades to your forklift fleet will provide you with the benefits of current technology, including advanced telematics systems and new energy storage technologies that will better match today's need for increased productivity.

7. PRODUCTIVITY IS DROPPING OFF.

If you are having difficulties meeting your productivity expectations for your lift trucks, it could be you don't have the proper fleet size, or it could be you have an unacceptable amount of downtime. This could be because the truck is getting older and has several thousand hours. After 10,000 hours, the lift truck can experience major issues that take it out of commission to complete the repairs. Productivity dropping off because of downtime is a sign that you may need to upgrade your lift trucks.

Productivity may be dropping off because of older batteries. Or the batteries may not be matched properly to the truck. Or the battery may not be matched to the charger. It may be a waste to replace the battery in an older, less efficient truck than is available today. Newer trucks can take advantage of newer technology energy storage solutions. A power audit will identify the optimal solution for your operations.

8. YOU NEED MORE SPACE.

Warehouse managers have indicated the need for more space has been a top concern for the last few years. One way to gain more space is to consider narrowing up the aisles. You can save 32% of the floor space by going from 12-foot aisles to 5-foot 6-inch aisles using Raymond Swing-Reach® trucks, meaning you can store 46% more pallets in the same floor space previously required for counterbalanced trucks.



9. YOU HAVE BATTERY ISSUES.

Battery issues are an indication you may need to reevaluate your energy solutions. Energy storage technology has advanced to provide operations more cost-effective options, including lead-acid, lithium-ion and hydrogen fuel cells.

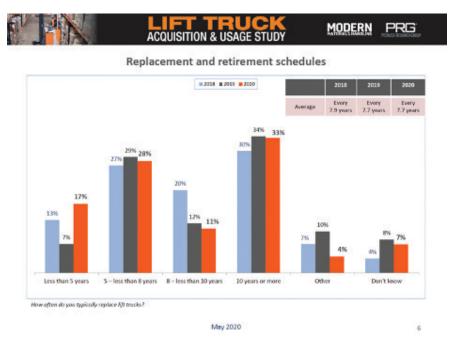
Lead-acid batteries are a tried-and-true technology that provides flexibility, durability and effectiveness within a variety of applications — all with a low acquisition cost. Opportunity and fast-charging applications can help replenish power to your truck during breaks, lunches and shift changes by floating the battery-state-of-charge. With this method, instead of taking a battery from 100% down to 20% before charging, the battery's state-of-charge floats between 60% and 90% of the battery's rated capacity during operation. This helps maintain adequate battery charge and increase throughput throughout a full six-day workweek.

Long-lasting and fast-charging lithium power eliminates the need to buy or store spare batteries for dramatic cost savings. Robust and efficient, this technology can enhance efficiency and productivity in demanding applications, such as cold storage. Lithium power has increased power capacity and no traditional maintenance is required.

There are hydrogen fuel cells as an alternative energy source as well.

10. YOUR DOWNTIME IS INCREASING.

Operator downtime can affect your business' productivity, ultimately resulting in high operational costs. In fact, 74% of lift truck cost of operation is the operator, because when the truck is down, the operator is not working. This means that by adding newer equipment to your fleet, your operators will be able to work more consistently, providing your operation with greater uptime.



2020 Peerless Research Group Lift Truck Usage and Acquisition study for Modern Materials Handling publication

SUMMARY

There are many ways to gauge the right time to replace your forklift. Many of these tips work hand in hand in showcasing the importance of upgrading your old fleets and partnering with a forklift manufacturer that can provide quality trucks. Be alert to the signs, and measure your equipment usage, hours, years and maintenance costs, so you can better understand when to replace your forklift, ultimately improving your overall operational performance.

