

## **"HOW TO CHOOSE THE LIFT TRUCK THAT'S RIGHT FOR YOU"**

Choosing the right forklift truck can save a company money. Unfortunately, however, that's not always a simple task. With costs for a single truck ranging from \$15,000 to \$100,000, many buyers are tempted to select a truck on the basis of the sticker price. Yet by choosing a certain model without thought to the costs of maintenance over the vehicle's life, they may end up paying more than the initial cost just to keep that lift truck at work on the docks or in the warehouse. What follows are some general guidelines to consider when buying a lift truck. Because individual applications may vary considerably, it's best to discuss any specific work conditions or plans with the dealer before making a purchase.

### **OUTDOOR EQUIPMENT**

The first factor to consider in purchasing a lift truck is whether it will operate outdoors or indoors. If the truck will be used outside the warehouse, then it's necessary to choose an internal-combustion-engine model powered by gas, liquid petroleum, or diesel fuel. If the truck will operate primarily outdoors in a cold climate, a gasoline-powered truck is the most logical choice. This is particularly true if the operations call for constant engine starts and stops.

Diesel-engine lifts, on the other hand, are designed to perform in more rugged conditions and terrain. The diesel truck should be used constantly so the engine doesn't have to be shut off. You'll kill a diesel truck if you have to crank the engine every two minutes. Frequent ignition starts spray excess fuel into the engine crankcase, thus contaminating the oil. For that reason, we recommend that owners of diesel lifts change their oil regularly.

The other type of lift truck designed for outdoor use is powered by liquid petroleum, commonly dubbed LP, and competes for the same market as gasoline-fueled models. LP trucks, however, are generally favored for operations that call for both indoor and outdoor use because their fumes are less toxic than those of gasoline trucks. Fuel costs for operating LP or diesel lift trucks are about equal, but maintenance costs for diesels tend to be lower.

Users sometimes equip LP trucks with a hood or heater to volatilize the gas in a cold climate. If that isn't enough to ensure trouble-free operation it is easy to convert LP trucks to gasoline fuel.

Not only does the outdoor terrain help determine the choice of internal-combustion engine, it also will dictate the type of truck tires used. Pneumatic tires are designed for bumpy surfaces. Cushion (airless) tires are used outdoors on smooth, hard surfaces as well as for most indoor purposes.

### **WIDE RANGE OF INDOOR TRUCKS**

When it comes to loading and lifting indoors, such as in a warehouse, electric trucks make more sense. Unlike internal-combustion-engine trucks, electric-powered models are quiet and non-polluting.

Though electric trucks are more expensive to purchase than internal-combustion models, they boast a lower cost per year of operation over the life of the vehicle. Electric lift trucks save money because they don't require fuel, oil changes, or replacement parts like points and plugs. The cost of maintenance for an electric vehicle runs from 40 cents an hour to \$1.80 an hour in a normal life cycle. (A truck in a single-shift operation is typically used about 1,700 hours a year.)

Still, electric trucks aren't headache-free. Companies using electric lift trucks have to pay attention to their batteries and check their water levels frequently. Letting the battery go dry is a very expensive mistake. A battery can be worth several thousand dollars alone.

Once they have settled on an electric truck, buyers must then choose from a number of models. The most important factors to consider in lift truck selection are the intended application and the warehouse design. If the lift truck will be used to load and unload trailers, for instance, then a front-wheel drive, sit-down rider counterbalanced model is preferred. (The term "counterbalanced" means that the truck is weighted in back so that it won't tip over when lifting a pallet in front.) Three-wheeled counterbalanced models offer more maneuverability, while four-wheeled vehicles can handle larger loads.

If lift trucks are used to shuttle loads into trailers, another factor for consideration is the amount of "free lift". Free lift refers to the amount of height forks can be raised without causing the mast to be raised. Forklifts working in trailers need a great degree of free lift. Otherwise, if the mast were to rise to accommodate the rising of the fork, the mast could poke a hole through the trailer's roof.

Warehouse aisle width is another major consideration in selecting a type of truck. A three-wheeled sitdown counterbalanced truck requires 10-foot-wide aisles. A four-wheeled version, on the other hand, needs more space; it requires aisles between 12 and 13 feet wide.

For operation in narrower aisles, buyers often favor reach trucks. A reach truck equipped with outriggers for retrieving pallets can function in aisles about 8 feet wide. Double-reach trucks designed to handle pallet loads two deep require aisles that are 8 feet, 9 inches wide.

For even smaller workspaces, there are turret trucks, which are generally steered by wire or rail guides on the warehouse floor. Although expensive, turret trucks can rotate loads 180 degrees and therefore negotiate aisles as narrow as 4 feet, 6 inches. It's important to note, however, that if slipsheet attachments will be used, the aisles must be at least 8 or 9 inches wider.

Capacity is another factor that lift truck purchasers must take into account. Most experts recommend buying a truck with more capacity than ordinarily required. For example, if the lift truck will move mostly 2,000-pound pallet loads, then a truck with 3,000-pound capacity would be appropriate.

When purchasing a truck that will handle loads of combustible or hazardous materials, the buyer should check its safety rating. If an electric truck carries an E designation, it may spark. If the truck has an EE designation, it contains more safeguards and therefore is apt to spark less. The safest rating is an EX, which means that model is built with no metal parts to cause sparking. Diesel trucks, in general, are even safer than an EX truck. Diesel trucks specially designed for safety carry a DX designation.

## **PRICE VS. EFFICIENCY**

Once they have determined which type of truck to purchase, many buyers then make their final decision based on the sticker price of a particular model. But most experts say price should be only one factor. The ability of the dealer to provide parts and maintenance services is as important as the truck price itself. If the nearest authorized dealer is located 250 miles from the plant, you would do better to select another brand with parts 10 miles from your plant even if it costs more initially or the make doesn't perform as well.

It is recommended that buyers look at the overall cost of the vehicle over its life and not just the purchase price. The buyer can obtain an idea of the lift truck's overall cost from the dealer's preventative-maintenance service charge. Generally, that charge indicates the truck's reliability and its "real cost of ownership" in the dealer's estimation.

Most experts advise against buying a used forklift truck, unless the equipment will be used only as a spare for supplemental work. If the lift truck still had life in it, the dealer would recondition it for resale. If you only need one truck, you can buy a reconditioned one, but make sure it's a good one.

A smart strategy for determining the right lift truck is to rent it before buying it. Most reputable dealers will rent a lift truck for 60 days and apply the rental money toward the vehicle's purchase.

## **TAKE THE LONG-TERM VIEW**

In short, although a lower-priced truck may seem attractive at first, its lifetime maintenance and operational costs could ultimately exceed the initial price. For that reason, buyers should consider the efficiency of the truck, the amount of dealer support, and future uses for any vehicles. Smart buyers are the ones who consider both the long and the short term in purchasing a lift truck.

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