

## Cushion Tire Forklift

Used Cushion Tire Forklift Richmond - Forklift trucks are commonly classified by the kind of work they complete as well as the kind of tire they use. The two types of tire classification for forklifts are: 1. Cushion; and 2. Pneumatic. There are drawbacks and benefits to both pneumatic and cushion forklift tire options. The cushion tire benefits and drawbacks can only be understood in the context of what the pneumatic tire offers in terms of forklift operation.

**Forklift Tire Classifications Cushion Tires** Cushion tires feature solid rubber that is either smooth or treaded and fixed or positioned around a baseband or metal ring. These kinds of forklift tires are cheaper to make and easier to maintain. Cushion tires have been designed to work on smooth surfaces such as interior loading docks and warehouse floors. Cushion tires are also better suited to applications in tight spaces. This is because they offer a turning radius that allows for movement around tight corners. Cushion tires also allow the forklift to sit closer to the ground. The advantage of a lower forklift is the increased vertical clearance when compared to forklifts with pneumatic tires. It is important to note that cushion tires do not offer as much traction compared to pneumatic models and this is noticeable on wet locations and outdoor surfaces. Cushion tires forklifts are commonly used for organizing inventory, moving items to and from different loading docks, unloading shipments and similar applications.

**Pneumatic Tires** Pneumatic tires are mainly utilized on uneven surfaces and rougher terrain. These tires fall into two categories: standard air pneumatic or solid resilient pneumatic. The main difference with these categories is that the standard air pneumatic tires consist of a layered rubber design filled with air and the solid resilient pneumatic type is made completely out of rubber. Pneumatic tire forklifts are excellent choices for working in locations with uneven or unpaved ground outdoors. Solid resilient pneumatic forklifts are a better option in areas that may have objects which could puncture a standard air pneumatic, such as junkyards, lumber yards and the like which may have sharp metal objects.

**Benefits of Cushion Tire Forklifts** Cushion tire forklifts can be used inside and outside on smooth surfaces. The type of forklift that utilizes cushion tires are for mainly inside applications with some limited outside use. Cushion tire forklifts are commonly used in warehouses and manufacturing plants. Warehousing and narrow aisles and tight locations all rely on the benefits of cushion tire forklifts. Some benefits of using a cushion tire forklift over a pneumatic tire forklift are: 1) **Maneuverability** Maneuverability is one of the key pneumatic tire forklift benefits since these models do not require a larger frame to facilitate a bigger internal combustion engine. 2) **Lower Clearance** Forklifts built for indoor use with cushion tires generally have a lower clearance than pneumatic tire equipment, allowing the forklift to more easily navigate doorways and other obstacles such as lights and sprinkler systems. 3) **Durability** With little to no risk of a tire puncture, cushion forklift models are easy to maintain and ultra-durable. 4) **Quiet** Most cushion tire forklift models use a fuel cell or battery as opposed to an internal combustion engine and are much quieter compared to their diesel or propane counterparts. 5) **Environmentally Friendly** Again, because most cushion tire forklifts are powered by electricity, rather than an internal combustion engine, cushion tire forklifts produce no harmful emissions.

**Forklift Tire Choice** The forklift frame typically depicts whether a cushion tire or a pneumatic tire will be utilized. Tires and axles are specific to the lifting capacity and the machine's frame. Most forklift manufacturers design forklifts to operate safely with specific wheels and tires, namely cushion tires or pneumatic tires. Due to their special tire design, it is best to choose the forklift type that will suit the job in terms of forklift tire types.

**Workplace Applications Suitable Work Applications for Cushion Tires** Cushion tire forklifts are popular for a variety of job sites. If most of the transporting, lifting loads and placement happens inside or with limited outdoor use on smooth surfaces, cushion tire forklifts are your best choice. Forklifts fitted with cushion tires often have a smaller frame and sit much lower to the ground than forklifts fitted with pneumatic tires. This gives them better clearance for fitting through doorways and avoiding overhead obstacles. Although, cushion tire forklifts offer less ground clearance, this can cause damage to outdoor obstacles when the surface is uneven

or unclear. To combat this issue, the cushion tire forklift can be fitted with traction tires on the front. Tires that offer traction will perform better on wet surfaces, rough terrain, packed gravel and asphalt. Traction tires are not used on dirt or grass locations and need to be installed on opposite sides, the drive and steer axles. One of the top advantages of the cushion forklifts is their tight turning radius. This makes cushion tire forklifts ideal for warehouses and manufacturing facilities that have less space. Locations that rely on narrow aisles will benefit greatly from the smaller cushion tire forklifts and their tight turning capabilities. Cushion tire forklifts are also less expensive and are more readily available than pneumatic tire forklifts.

#### Work Applications for Pneumatic Tire Forklifts

Since pneumatic tires contain air, these forklifts are better suited for exterior applications. Some interior locations may utilize pneumatic tire forklifts; however, they do not offer a small turning radius or the lower clearance and maneuverability that the cushion tires provide. Pneumatic tire forklifts operate with an internal combustion engine and these harmful emissions are dangerous for use indoors. With a wider base and longer frame in comparison to cushion tire models, pneumatic tire forklifts are for use mainly outdoors. Of the two types of pneumatic tires, the solid pneumatic tire is more expensive than the air pneumatic tire. The solid pneumatic tire has no air inside and is made from solid rubber. This design makes the tire stronger against punctures or gouges. Outdoor areas including lumber yards and scrap yards that feature copious amounts of metal debris and nails often rely on solid pneumatic tires. Air pneumatic tires work great outside on gravel and asphalt applications. However, air pneumatic tires are susceptible to being punctured or gouged. It is essential to ensure the work site is free from any sharp materials before using a forklift with air pneumatic tires. Air tires are also known to give a bouncy ride, contributing to operator discomfort and fatigue. Therefore, many air pneumatic tire forklift users prefer to foam fill their tires. This provides a smoother ride for the operator than the one experienced on solid pneumatic tires but also a less bouncy ride than air filled pneumatic tires. Foam filling is also used to help prevent flat tires. It is necessary to plan for enough time when foam filling an air pneumatic tire as it can take up to 3 days to fill and cure properly.

#### Difference in Load Capacity

Both cushion tire and pneumatic tire forklifts offer similar load capacities. There may be lift limits on certain electric-powered cushion tire models. There are numerous forklifts available and a variety of pneumatic and cushion tire models can be found in a variety of load capacities. There are numerous load capacities ranging from less than 2000 pounds to more than 200,000 pounds.