

## Cushion Tire Forklift

Used Cushion Tire Forklift Washington - While forklift trucks are often classified by the type of work they perform under most circumstances, forklift trucks can also be classified by the type of tire they are fitted with. 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 benefits and potential drawbacks of the cushion tire models can only be compared when the pneumatic benefits and drawbacks are equally discussed.

**Forklift Tire Classifications**

**Cushion Tires** Cushion tires are comprised of treaded or smooth, solid rubber which is positioned around and affixed to a metal ring or baseband. These kinds of forklift tires are cheaper to make and easier to maintain. This type of tire is made to work on smooth surfaces such as indoor concrete floors and loading docks. Cushion tires make travelling in tight locations much easier to navigate around corners due to their tight radius. Cushion tires enable the forklift to be situated closer to the ground, increasing the vertical clearance in comparison to other models that rely on pneumatic tires.

**Pneumatic tires** provide better traction compared to cushion tires; especially on wet surfaces and outdoor locations. There are many jobs suitable for cushion tire forklifts such as unloading shipments, transporting items to and from the loading areas, order picking, unloading inventory and more.

**Pneumatic Tires** Pneumatic tires have two categorizations as either solid resilient pneumatic or standard air pneumatic. They are popular for rough terrain applications and uneven surfaces. The solid resilient pneumatic tires are comprised entirely of rubber and the standard air pneumatic tires feature a layered rubber design filled with air. For locations with uneven surfaces and unpaved ground, pneumatic tire forklifts are prime choices. Locations that have sharp debris or objects that could puncture a standard air pneumatic tires such as junkyards or lumber yards will benefit from solid resilient pneumatic forklift tires.

**Benefits of Cushion Tire Forklifts** Cushion tire forklifts can be used inside and outside on smooth surfaces. The forklift designed for use with cushion tires, is intended to be used mostly indoors, with some limited outdoor use. Cushion tire forklifts are commonly used in warehouses and manufacturing plants. Cushion tire models excel in tight locations including narrow aisles and accessing high shelves. Some benefits of using a cushion tire forklift over a pneumatic tire forklift are:

- 1) **Maneuverability** Most cushion tire forklifts intended for indoor use are electric, which means they are usually smaller and more maneuverable because they do not require the extra room needed to accommodate the larger 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** Because the majority of cushion tire forklifts are powered by battery or fuel cell, instead of an internal combustion engine, they are much less noisy than propane or diesel powered forklifts.
- 5) **Environmentally Friendly** Powered by electricity instead of relying on an internal combustion engine enables cushion tire forklifts to make zero dangerous emissions.

**Forklift Tire Choice** The majority of forklift frames specify either a pneumatic tire or a cushion tire. The forklifts' lifting capacity and frame are specific to the axles and tires in the design. Forklift manufacturers create models that safely operate with certain tires and wheels, typically pneumatic tires or cushion tires. Because of this, it is more useful to choose the best forklift type, considering the type of tires the forklift will require and how it fits the job application, rather than attempting to modify the forklift by choosing the right tire for the application.

**Workplace Applications**

**Suitable Work Applications for Cushion Tires** Cushion tire forklifts are popular for a variety of job sites. If there is moderate use of the forklift outside on smooth surfaces and the majority of the lifting, loading and transporting will be occurring inside on smooth floors, a cushion tire model is an excellent tool. Cushion tire forklifts typically feature a smaller frame and sit much lower to the ground compared to pneumatic tire models. This gives them better clearance for fitting through doorways and avoiding overhead obstacles. It is

important to note that cushion tire forklifts showcase less ground clearance and the machine may get caught up on exterior obstacles if the ground is uneven. 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. These tires are not recommended for travelling on grass or dirt. Traction tires are utilized on the opposite sides, the steer and drive axles. One of the top advantages of the cushion forklifts is their tight turning radius. Their ability to work in compact locations makes cushion tire forklifts excellent for warehousing and manufacturing operations. Areas that are designed with narrow aisles such as warehouse facilities will enjoy the tighter turning radius offered with cushion tire forklift models. Cushion tire forklifts are also less expensive and are more readily available than pneumatic tire forklifts. Suitable Work Applications for Pneumatic Tire Forklifts Pneumatic tires forklifts have air in them and are better for outdoor use such as in yard work or on gravel. Pneumatic tires can also be used inside but do not provide the advantages of low clearance, maneuverability or small turning radius. Pneumatic tire forklifts operate with an internal combustion engine and these harmful emissions are dangerous for use indoors. Pneumatic tire forklifts are longer and wider than cushion tire forklifts which is why they are primarily used outdoors. The solid pneumatic tire costs more compared to the air pneumatic tire. This is because a solid pneumatic tire is not susceptible to punctures or gouges because they are made of solid rubber and do not have air in them. These solid pneumatic tires are best for scrap yards and lumber yards where the possibility of running over sharp metal scrap and debris, such as nails, is greatly increased. Similar to solid pneumatics, air pneumatics work well outdoors on asphalt, in gravel and in yards. However, air pneumatic tires are susceptible to being punctured or gouged. Due to their susceptibility for getting gouged or punctured, the work location must be free from sharp debris before driving the 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. Much less bouncy than air-filled pneumatic tires, the solid pneumatic forklift tires provide the operator with a smoother ride. Foam filling is also used to help prevent flat tires. It takes roughly three days to fill and cure an air pneumatic tire with foam. Difference in Load Capacity The load capacity of cushion tire forklifts and pneumatic tire forklifts are about equal. Lift limits are given for certain electric-powered cushion tire forklifts. Pneumatic tire and cushion tire forklifts are available in practically any load capacity. There are numerous load capacities ranging from less than 2000 pounds to more than 200,000 pounds.