

Cushion Tire Forklift

Used Cushion Tire Forklift Kent - Most forklifts are classified by the kind of work they do and some are classified by their type of tires. 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 are comprised of treaded or smooth, solid rubber which is positioned around and affixed to a metal ring or baseband. Cushion tires cost less to make and are easier to take care of. Cushion tires have been designed to work on smooth surfaces such as interior loading docks and warehouse floors. Cushion tires make travelling in tight locations much easier to navigate around corners due to their tight radius. 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 tire forklifts are used for a wide range of applications, including order picking, unloading shipments, organizing inventory, transporting to and from a loading dock and other similar applications.

Pneumatic Tires Pneumatic tires, on the other hand, are primarily designed to operate in rougher terrain, with uneven surfaces. These tires have two categorizations: The difference between these two pneumatic categories is that the first is made entirely of rubber, while the latter is a layered rubber, filled with air. Pneumatic tire forklifts are good options for work that takes place outdoors on unpaved ground. The solid resilient pneumatic forklift tires are best used in areas such as lumber yards or junkyards and construction sites where there may be sharp metal items on the ground which could puncture the tires.

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. Work which requires forklift operations in tight areas, such as narrow aisles, are ideal for the use of a cushion tire forklift. 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** Cushion tire forklifts do not use an internal combustion engine and instead rely on a battery or fuel cell, making them significantly quieter than their propane or diesel cousins.
- 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. 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 There are many work applications suitable for using cushion tire forklift models. 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. Sitting closer to the ground, cushion tire forklifts have a tinier frame compared to pneumatic tire forklifts. This compact design facilitates easier clearance through doorways and overhead obstacle avoidance. 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. Traction based tires will function in rough terrain environments that have wet surfaces, packed gravel and asphalt. However, it is still not recommended to drive on dirt or grass and it must be noted that the same type of tire must be used on the opposite sides, drive and steer axles. One of the largest advantages of using a forklift with cushion tires is the smaller turning radius. Their ability to work in compact locations makes cushion tire forklifts excellent for warehousing and manufacturing operations. Warehouses that utilize a narrow aisle layout will especially benefit from the smaller turning radius of cushion tire forklifts. Cushion tire forklifts are more cost-effective and available compared to pneumatic tire models. Suitable Work Applications for Pneumatic Tire Forklifts Outdoor applications working on gravel benefit from pneumatic tire forklift models thanks to the air in their tires. 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. There are two kinds of pneumatic tires; the air-filled pneumatic tire is less expensive than the solid 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. Solid pneumatic tires are commonly used in lumber and scrap yards where there are tons of sharp, metal debris including nails. Similar to solid pneumatics, air pneumatics work well outdoors on asphalt, in gravel and in yards. Air-filled pneumatic tires can easily become punctured and their working environment needs to be evaluated carefully. 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. It is possible to foam fill the pneumatic forklift tires for a smoother ride. 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. Filling an air pneumatic tire with foam usually takes approximately 3 days to fill and cure. Difference in Load Capacity The load capacity on for pneumatic tire forklifts and cushion tire forklifts are fairly equal. 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. Load capacities come in a wide range - from less than 2,000 pounds to more than 200,000 pounds.