

Cushion Tire Forklift

Used Cushion Tire Forklift Yukon - 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. There are two main kinds of tire classification for forklifts, pneumatic and cushion tire. It is vital to note that there are benefits and drawbacks to both types of forklift tires; cushion and pneumatic. 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. These types of forklift tires are easier to maintain and less expensive to manufacture. Cushion tires have been designed to work on smooth surfaces such as interior loading docks and warehouse floors. These tires are designed to maneuver well within tight locations, due to their specific turning 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. However, cushion tires do not provide as much traction as pneumatic tires. This is especially true for outdoor areas and wet surfaces. 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 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. 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 Forklifts that use cushion tires are a wise option for interior and exterior locations that feature smooth surfaces. The type of forklift that utilizes cushion tires are for mainly inside applications with some limited outside use. Warehousing applications and manufacturing facilities often rely on cushion tire forklifts. 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** 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** Indoor forklift models that use cushion tires feature lower clearance compared to pneumatic tire models. This enables the machine to travel through doors and navigate obstacles such as sprinkler systems and lights much easier.
- 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** Powered by electricity instead of relying on an internal combustion engine enables cushion tire forklifts to make zero dangerous emissions.

Forklift Tire Choice Most forklift frames only allow for either a cushion tire or a pneumatic tire. Axles and tires are specific to a forklift frame and lifting capacity. Most forklift manufacturers design forklifts to operate safely with specific wheels and tires, namely cushion tires or pneumatic tires. Instead of trying to modify the forklift by picking the correct tire for a particular application, it is wiser to choose the forklift that will best suit the job at hand.

Workplace Applications Suitable Work Applications for Cushion Tires Cushion tire forklifts are popular for a variety of job sites. If the majority of the load lifting, transporting and placing will occur indoors or with only moderate outdoor usage on smooth surfaces, then cushion tires are likely the best option. Cushion tire forklifts typically feature a smaller frame and sit much lower to the ground compared to pneumatic tire models. Cushion tire models can fit through doorways easier and avoid overhead obstacles. Although, cushion tire forklifts offer less ground clearance, this can cause damage to outdoor obstacles when

the surface is uneven or unclear. One solution is to outfit traction tires on the front of the cushion tire forklift. Traction style tires will give better traction on rough terrains like asphalt or packed gravel or wet surfaces. 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. Warehouses that utilize a narrow aisle layout will especially benefit from the smaller turning radius of cushion tire forklifts. Cushion tire forklifts are also less expensive and are more readily available than pneumatic tire forklifts. 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. Interior applications may use pneumatic tire forklift models although they will not provide the maneuverability, lower clearance or tighter turning radius. Of course, they are often powered by internal combustion engine so do produce harmful emissions which are not recommended for normal indoor use. Pneumatic tire forklifts are longer and wider than cushion tire forklifts which is why they are primarily used outdoors. Of the two types of pneumatic tires, the solid pneumatic tire is more expensive than the air pneumatic tire. The solid pneumatic tire is comprised of solid rubber without any air inside, making this type more resilient against gouges or punctures. 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. 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. Due to this, numerous air pneumatic forklift users fill foam in 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. Flat tires can be filled with foam to keep them more durable and prevent flats. 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. There are numerous forklifts available and a variety of pneumatic and cushion tire models can be found in a variety of load capacities. These machines come in different load capacities from under 2000 lbs. to over 200,000 lbs. depending on your application.