

Cushion Tire Forklift

Used Cushion Tire Forklift New Mexico - 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. When considering the benefits and drawbacks of cushion tires in forklift uses, it is important to discuss the benefits and drawbacks of the other available forklift tire option: the pneumatic tire. The drawbacks and benefits of cushion tire models can be only compared when the drawbacks and benefits of the pneumatic tires are also 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. 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. These tires are designed to maneuver well within tight locations, due to their specific turning 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. However, cushion tires do not provide as much traction as pneumatic tires. This is especially true for outdoor areas and wet 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, on the other hand, are primarily designed to operate in rougher terrain, with uneven surfaces. These tires have two categorizations: The solid resilient pneumatic tires are comprised entirely of rubber and the standard air pneumatic tires feature a layered rubber design filled with air. Pneumatic tire forklifts are good options for work that takes place outdoors on unpaved ground. 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 Forklifts that use cushion tires are a wise option for interior and exterior locations that feature smooth surfaces. The majority of forklifts that rely on cushion tires are used mostly indoors with limited outdoor use. They are often designed for use in areas such as manufacturing plants and warehouses. 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** 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** Cushion tires for forklifts are durable, easy to maintain and have little to no risk of puncture.
- 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** Cushion tire forklifts are more environmentally friendly as they use electricity and produce no harmful emissions, compared to internal combustion engine models.

Forklift Tire Choice Most forklift frames only allow for either a cushion tire or a pneumatic 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 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. 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.

However, cushion tire forklifts also have less clearance to the ground which can result in cushion tire forklifts getting easily hung up on outdoor obstacles where the surface is not cleared or even. One solution is to outfit traction tires on the front of the cushion tire forklift. 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 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. Pneumatic tire forklifts are more expensive and less available compared to cushion 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. 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 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-filled pneumatic tires work well on gravel and asphalt exterior surfaces. 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. Since air-filled tires deliver a bouncy sensation, they contribute to operator fatigue and discomfort. It is possible to foam fill the pneumatic forklift tires for a smoother ride. The foam filling option creates a more even ride compared to the solid pneumatic tires or the bounciness of the air-filled pneumatic tires. Foam filling is commonly used for flat tire prevention. It takes roughly three days to fill and cure an air pneumatic tire with foam.

Difference in Load Capacity

Both cushion tire and pneumatic tire forklifts offer similar load capacities. 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. There are numerous load capacities ranging from less than 2000 pounds to more than 200,000 pounds.