

Cushion Tire Forklift

Used Cushion Tire Forklift Manitoba - 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. 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 feature solid rubber that is either smooth or treaded and fixed or positioned around a baseband or metal ring. These types of forklift tires are easier to maintain and less expensive to manufacture. This type of tire is made to work on smooth surfaces such as indoor concrete floors and loading docks. 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. 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 are mainly utilized on uneven surfaces and rougher terrain. These tires fall into two categories: standard air pneumatic or solid resilient pneumatic. 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 excellent choices for working in locations with uneven or unpaved ground outdoors. 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

Forklifts that use cushion tires are a wise option for interior and exterior locations that feature smooth surfaces. The forklift designed for use with cushion tires, is intended to be used mostly indoors, with some limited outdoor use. They are often designed for use in areas such as manufacturing plants and warehouses. 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** Since cushion tire forklifts do not need to house a larger internal combustion engine, they are more compact and easier to maneuver.
- 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 usually the best option for many workplace applications. 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 compact design facilitates easier clearance through doorways and overhead obstacle avoidance. 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 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. 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. 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. 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. The main issue with air pneumatic tires is their ability to become gouged or punctured. Because of this, it is necessary to make sure the work area is free of any sharp objects before using forklift fitted with air pneumatic tires at that site. Since air-filled tires deliver a bouncy sensation, they contribute to operator fatigue and discomfort. Therefore, many air pneumatic tire forklift users prefer to foam fill their tires. 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 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. 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.