

Cushion Tire Forklift

Used Cushion Tire Forklift Maine - 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 made up of either smooth or treaded solid rubber and are designed around 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. Forklifts that use cushion tires can be lower to the ground compared to pneumatic tire models and the increase in vertical clearance is welcome for many applications. 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. 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. 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 Cushion tire forklifts can be used inside and outside on smooth surfaces. The majority of forklifts that rely on cushion tires are used mostly indoors with limited outdoor use. Warehousing applications and manufacturing facilities often rely on cushion tire forklifts. 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 cushion tire forklifts have lower clearance compared to pneumatic models; allowing the machine to travel easier through doorways and around lights or sprinkler obstacles.
- 3) **Durability** Cushion tires for forklifts are durable, easy to maintain and have little to no risk of puncture.
- 4) **Quiet** Most cushion tire forklift models use a fuel cell or battery as opposed to an internal combustion engine and are much quieter compared to their diesel or propane counterparts.
- 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 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. Most forklift manufacturers design forklifts to operate safely with specific wheels and tires, namely cushion tires or pneumatic 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. Sitting closer to the ground, cushion tire forklifts have a tinier frame compared to pneumatic tire forklifts. 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. 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 top advantages of the cushion forklifts is their tight turning radius. Cushion tire forklifts are excellent for manufacturing facilities and warehouse operations that are compact with less space. Locations that rely on narrow aisles will benefit greatly from the smaller cushion tire forklifts and their tight turning capabilities. 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 models create harsh fumes with their internal combustion engines, making them unsuitable for interior locations. 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. 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-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. 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 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. 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. There are numerous load capacities ranging from less than 2000 pounds to more than 200,000 pounds.