

Cushion Tire Forklift

Used Cushion Tire Forklift Victorville - 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. 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 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. 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 are also better suited to applications in tight spaces. This is because they offer a turning radius that allows for movement around tight corners. 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. Pneumatic tires provide better traction compared to cushion tires; especially on wet surfaces and outdoor locations. 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 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 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

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. 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** 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** 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** 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 The majority of forklift frames specify either a pneumatic tire or a cushion tire. The forklifts' lifting capacity and frame are specific to the axles and tires in the design. 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 There are many work applications suitable for using cushion tire forklift models. 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. Forklifts fitted with cushion tires often have a smaller frame and sit much lower to the ground than forklifts fitted with pneumatic tires. Cushion tire models can fit through doorways easier and avoid 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 largest advantages of using a forklift with cushion tires is the smaller 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 more cost-effective and available compared to pneumatic tire models.

Suitable Work Applications for Pneumatic Tire Forklifts

Since pneumatic tires contain air, these forklifts are better suited for exterior applications. Pneumatic tires can also be used inside but do not provide the advantages of low clearance, maneuverability or small 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. With a wider base and longer frame in comparison to cushion tire models, pneumatic tire forklifts are for use mainly 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. Solid pneumatic tires are commonly used in lumber and scrap yards where there are tons of sharp, metal debris including nails. Air pneumatic tires work great outside on gravel and asphalt applications. 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. Therefore, many air pneumatic tire forklift users prefer to foam fill 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. 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 of cushion tire forklifts and pneumatic tire forklifts are about equal. Lift limits are given for certain electric-powered cushion tire forklifts. However, cushion and pneumatic tire forklifts can basically be obtained with just about any load capacity. There are numerous load capacities ranging from less than 2000 pounds to more than 200,000 pounds.