

Cushion Tire Forklift

Used Cushion Tire Forklift Fairfield - Most forklifts are classified by the kind of work they do and some are classified by their type of tires. 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 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. 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. 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. 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 main difference with these categories is that the standard air pneumatic tires consist of a layered rubber design filled with air and the solid resilient pneumatic type is made completely out of rubber. Pneumatic tire forklifts are excellent choices for working in locations with uneven or unpaved ground outdoors. 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. Cushion tire forklifts are commonly used in warehouses and manufacturing plants. 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 required the extra room needed to accommodate the larger internal combustion engine.
- 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** 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 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. The majority of forklift manufacturers create models to coincide with specific wheels and tires, usually 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 there is moderate use of the forklift outside on smooth surfaces and the majority of the lifting, loading and transporting will be occurring inside on smooth floors, a cushion tire model is an excellent tool. Forklifts fitted with cushion tires often have a smaller frame and sit much lower to the ground than forklifts fitted with pneumatic tires. This compact design facilitates easier clearance through doorways and overhead obstacle avoidance. 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. Traction based tires will function in rough terrain environments that have wet surfaces, 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. The smaller turning radius on the cushion tire forklifts is one of their main advantages. 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. Pneumatic tire forklifts operate with an internal combustion engine and these harmful emissions are dangerous for use indoors. Measuring wider and longer in comparison to cushion tire forklifts, pneumatic tire models are mostly utilized outside. 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. Due to their susceptibility for getting gouged or punctured, the work location must be free from sharp debris before driving the 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 also used to help prevent flat tires. 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 The load capacity of cushion tire forklifts and pneumatic tire forklifts are about equal. There may be lift limits on certain electric-powered cushion tire models. Pneumatic tire and cushion tire forklifts are available in practically any load capacity. Load capacities come in a wide range - from less than 2,000 pounds to more than 200,000 pounds.