

Cushion Tire Forklift

Used Cushion Tire Forklift Downey - 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. Pneumatic and cushion tires provide the 2 distinct forklift classifications. 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 are comprised of treaded or smooth, solid rubber which is positioned around and affixed to a metal ring or baseband. These kinds of forklift tires are cheaper to make and easier to maintain. Cushion tires have been designed to work on smooth surfaces such as interior loading docks and warehouse floors. Cushion tires make travelling in tight locations much easier to navigate around corners due to their tight 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. 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. 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, 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 Cushion tire forklifts can be used inside and outside on 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. Cushion tire models excel in tight locations including narrow aisles and accessing high shelves. 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** 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 ad 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** Again, because most cushion tire forklifts are powered by electricity, rather than an internal combustion engine, cushion tire forklifts produce no harmful 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. 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 There are many work applications suitable for using cushion tire forklift models. 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. It is important to note that cushion tire forklifts showcase less ground clearance and the machine may get caught up on exterior obstacles if the ground is uneven. One solution to this problem is to fit the cushion tire forklift with traction tires on the front of their forklifts. 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. Cushion tire forklifts are excellent for manufacturing facilities and warehouse operations that are compact with less space. Areas that are designed with narrow aisles such as warehouse facilities will enjoy the tighter turning radius offered with cushion tire forklift models. Cushion tire forklifts are also less expensive and are more readily available than pneumatic tire forklifts.

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 models create harsh fumes with their internal combustion engines, making them unsuitable for interior locations. 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. Similar to solid pneumatics, air pneumatics work well outdoors on asphalt, in gravel and in yards. The main issue with air pneumatic tires is their ability to become gouged or punctured. Due to their susceptibility for getting gouged or punctured, the work location must be free from sharp debris before driving the air pneumatic tires. Operator fatigue and discomfort can be traced to the bounciness of air-filled tires. 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 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. There may be lift limits on certain electric-powered cushion tire models. 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.