

Cushion Tire Forklift

Used Cushion Tire Forklift Lancaster - 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. There are drawbacks and benefits to both pneumatic and cushion forklift tire options. The drawbacks and benefits of cushion tire models can be only compared when the drawbacks and benefits of the pneumatic tires are also discussed.

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. 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 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. 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 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 forklift designed for use with cushion tires, is intended to be used mostly indoors, with some limited outdoor use. Warehousing applications and manufacturing facilities often rely on cushion tire forklifts. 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 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** 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** 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 majority of forklift frames specify either a pneumatic tire or a cushion tire. 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 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. Cushion tire models can fit through doorways easier and avoid overhead obstacles. 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 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. One of the top advantages of the cushion forklifts is their tight turning radius. This makes cushion tire forklifts ideal for warehouses and manufacturing facilities that have less space. Locations that rely on narrow aisles will benefit greatly from the smaller cushion tire forklifts and their tight turning capabilities. Cushion tire forklifts are more cost-effective and available compared to pneumatic tire models. 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. Of course, they are often powered by internal combustion engine so do produce harmful emissions which are not recommended for normal indoor use. 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 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. Air-filled pneumatic tires can easily become punctured and their working environment needs to be evaluated carefully. 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. Operator fatigue and discomfort can be traced to the bounciness of air-filled tires. Due to this, numerous air pneumatic forklift users fill foam in their tires. Much less bouncy than air-filled pneumatic tires, the solid pneumatic forklift tires provide the operator with a smoother ride. Foam filling is also used to help prevent flat tires. It takes roughly three days to fill and cure an air pneumatic tire with foam. Difference in Load Capacity The load capacity of cushion tire forklifts and pneumatic tire forklifts are about equal. Some electric powered cushion tire forklifts do have lift limits. 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.