

Cushion Tire Forklift

Used Cushion Tire Forklift Ontario Canada - 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. 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 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 are designed for smooth surface applications such as work that takes place mostly indoors or around loading docks. These tires are designed to maneuver well within tight locations, due to their specific turning 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. Pneumatic tires provide better traction compared to cushion tires; especially on wet surfaces and outdoor locations. Cushion tires forklifts are commonly used for organizing inventory, moving items to and from different loading docks, unloading shipments and similar applications.

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 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 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

Forklifts fitted with cushion tires are a good option for operation on smooth surfaces, both indoor and outdoor. 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 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 and lights much easier.
- 3) **Durability** With little to no risk of a tire puncture, cushion forklift models are easy to maintain and ultra-durable.
- 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 Most forklift frames only allow for either a cushion tire or a pneumatic tire. 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 Cushion tire forklifts are popular for a variety of job sites. 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. This gives them better clearance for fitting through doorways and avoiding overhead obstacles. Although, cushion tire forklifts offer less ground

clearance, this can cause damage to outdoor obstacles when the surface is uneven or unclear. One solution is to outfit traction tires on the front of the cushion tire forklift. Traction style tires will give better traction on rough terrains like asphalt or packed gravel or wet surfaces. These tires are not recommended for travelling on grass or dirt. Traction tires are utilized on the opposite sides, the steer and drive 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. 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 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. Measuring wider and longer in comparison to cushion tire forklifts, pneumatic tire models are mostly utilized outside. There are two kinds of pneumatic tires; the air-filled pneumatic tire is less expensive than the solid pneumatic tire. This is because a solid pneumatic tire is not susceptible to punctures or gouges because they are made of solid rubber and do not have air in them. Outdoor areas including lumber yards and scrap yards that feature copious amounts of metal debris and nails often rely on solid pneumatic tires. Air pneumatic tires work great outside on gravel and asphalt applications. However, air pneumatic tires are susceptible to being punctured or gouged. 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. 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. 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 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.