

Cushion Tire Forklift

Used Cushion Tire Forklift North Dakota - Forklift trucks are commonly classified by the kind of work they complete as well as the kind of tire they use. The two types of tire classification for forklifts are: 1. Cushion; and 2. Pneumatic. There are drawbacks and benefits to both pneumatic and cushion forklift tire options. 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. 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 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. However, cushion tires do not provide as much traction as pneumatic tires. This is especially true for outdoor areas and wet 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 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 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 Forklifts fitted with cushion tires are a good option for operation on smooth surfaces, both indoor and outdoor. The forklift designed for use with cushion tires, is intended to be used mostly indoors, with some 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** 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. Axles and tires are specific to a forklift frame and lifting capacity. Most forklift manufacturers design forklifts to operate safely with specific wheels and tires, namely cushion tires or pneumatic tires. Due to their special tire design, it is best to choose the forklift type that will suit the job in terms of forklift tire types.

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. 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 style tires will give better traction on rough terrains like asphalt or packed gravel or wet surfaces. 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 top advantages of the cushion forklifts is their tight turning radius. Their ability to work in compact locations makes cushion tire forklifts excellent for warehousing and manufacturing operations. 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 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. Pneumatic tire forklifts are longer and wider than cushion tire forklifts which is why they are primarily used outdoors. 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. These solid pneumatic tires are best for scrap yards and lumber yards where the possibility of running over sharp metal scrap and debris, such as nails, is greatly increased. Similar to solid pneumatics, air pneumatics work well outdoors on asphalt, in gravel and in yards. 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. Operator fatigue and discomfort can be traced to the bounciness of air-filled tires. 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 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. 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. Load capacities come in a wide range - from less than 2,000 pounds to more than 200,000 pounds.