

Cushion Tire Forklift

Used Cushion Tire Forklift Portland - 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 are made up of either smooth or treaded solid rubber and are designed around 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 enable the forklift to be situated closer to the ground, increasing the vertical clearance in comparison to other models that rely on 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, 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. The solid resilient pneumatic forklift tires are best used in areas such as lumber yards or junkyards and construction sites where there may be sharp metal items on the ground which could puncture the 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. 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** 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** Durability is a key feature with cushion tire forklift models as they are simple to maintain and offer zero to little risk of being punctured.
- 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** 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 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 usually the best option for many workplace applications. 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. To combat this issue, the cushion tire forklift can be fitted with traction tires on the front. 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. The smaller turning radius on the cushion tire forklifts is one of their main advantages. Their ability to work in compact locations makes cushion tire forklifts excellent for warehousing and manufacturing operations. Warehouses that utilize a narrow aisle layout will especially benefit from the smaller turning radius of cushion tire forklifts. Cushion tire forklifts are also less expensive and are more readily available than pneumatic tire forklifts. Suitable Work Applications for Pneumatic Tire Forklifts

Pneumatic tires forklifts have air in them and are better for outdoor use such as in yard work or on gravel. Interior applications may use pneumatic tire forklift models although they will not provide the maneuverability, lower clearance or tighter 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. 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. 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. 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. 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. Flat tires can be filled with foam to keep them more durable and prevent flats. Filling an air pneumatic tire with foam usually takes approximately 3 days to fill and cure. 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. There are numerous load capacities ranging from less than 2000 pounds to more than 200,000 pounds.