

Cushion Tire Forklift

Used Cushion Tire Forklift Eugene - 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. It is vital to note that there are benefits and drawbacks to both types of forklift tires; cushion and pneumatic. 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. These kinds of forklift tires are cheaper to make and easier to maintain. Cushion tires are designed for smooth surface applications such as work that takes place mostly indoors or around loading docks. 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. Forklifts that use cushion tires can be lower to the ground compared to pneumatic tire models and the increase in vertical clearance is welcome for many applications. 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 solid resilient pneumatic tires are comprised entirely of rubber and the standard air pneumatic tires feature a layered rubber design filled with air. For locations with uneven surfaces and unpaved ground, pneumatic tire forklifts are prime choices. 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 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. 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** Most cushion tire forklifts intended for indoor use are electric, which means they are usually smaller and more maneuverable because they do not require the extra room needed to accommodate the larger internal combustion engine.
- 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** Because the majority of cushion tire forklifts are powered by battery or fuel cell, instead of an internal combustion engine, they are much less noisy than propane or diesel powered forklifts.
- 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. Forklift manufacturers create models that safely operate with certain tires and wheels, typically pneumatic tires or cushion tires. Instead of trying to modify the forklift by picking the correct tire for a particular application, it is wiser to choose the forklift that will best suit the job at hand.

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. Sitting closer to the ground, cushion tire forklifts have a tinier frame compared to pneumatic tire forklifts. Cushion tire models can fit through doorways easier and avoid overhead

obstacles. Although, cushion tire forklifts offer less ground clearance, this can cause damage to outdoor obstacles when the surface is uneven or unclear. 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. One of the largest advantages of using a forklift with cushion tires is the smaller turning radius. 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. Interior applications may use pneumatic tire forklift models although they will not provide the maneuverability, lower clearance or tighter 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. 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. Solid pneumatic tires are commonly used in lumber and scrap yards where there are tons of sharp, metal debris including nails. 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. Therefore, many air pneumatic tire forklift users prefer to foam fill their tires. The foam filling option creates a more even ride compared to the solid pneumatic tires or the bounciness of the air-filled pneumatic tires. Flat tires can be filled with foam to keep them more durable and prevent flats. 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. Pneumatic tire and cushion tire forklifts are available in practically any load capacity. These machines come in different load capacities from under 2000 lbs. to over 200,000 lbs. depending on your application.