

## Cushion Tire Forklift

Used Cushion Tire Forklift Newfoundland - 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. 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 made up of either smooth or treaded solid rubber and are designed around a metal ring or baseband. 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 enable the forklift to be situated closer to the ground, increasing the vertical clearance in comparison to other models that rely on pneumatic tires. Pneumatic tires provide better traction compared to cushion tires; especially on wet surfaces and outdoor locations. 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 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. 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 that use cushion tires are a wise option for interior and exterior locations that feature smooth surfaces. The type of forklift that utilizes cushion tires are for mainly inside applications with some limited outside 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** 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** 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 forklift frame typically depicts whether a cushion tire or a pneumatic tire will be utilized. The forklifts' lifting capacity and frame are specific to the axles and tires in the design. 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 popular for a variety of job sites. 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. Tires that offer traction will perform better on wet surfaces, rough terrain, 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. 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. Areas that are designed with narrow aisles such as warehouse facilities will enjoy the tighter turning radius offered with cushion tire forklift models. Pneumatic tire forklifts are more expensive and less available compared to cushion 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. Some interior locations may utilize pneumatic tire forklifts; however, they do not offer a small turning radius or the lower clearance and maneuverability that the cushion tires provide. 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. 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-filled pneumatic tires work well on gravel and asphalt exterior surfaces. 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. Therefore, many air pneumatic tire forklift users prefer to foam fill 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 commonly used for flat tire prevention. Filling an air pneumatic tire with foam usually takes approximately 3 days to fill and cure. Difference in Load Capacity The load capacity on for pneumatic tire forklifts and cushion tire forklifts are fairly equal. Some electric powered cushion tire forklifts do have lift limits. However, cushion and pneumatic tire forklifts can basically be obtained with just about any load capacity. There are numerous load capacities ranging from less than 2000 pounds to more than 200,000 pounds.