

Cushion Tire Forklift

Used Cushion Tire Forklift Oklahoma - 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 benefits and potential drawbacks of the cushion tire models can only be compared when the pneumatic benefits and drawbacks are equally 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 types of forklift tires are easier to maintain and less expensive to manufacture. Cushion tires are designed for smooth surface applications such as work that takes place mostly indoors or around loading docks. 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. 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 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 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 Cushion tire forklifts can be used inside and outside on smooth surfaces. The forklift designed for use with cushion tires, is intended to be used mostly indoors, with some limited outdoor use. They are often designed for use in areas such as manufacturing plants and warehouses. 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** Forklifts built for indoor use with cushion tires generally have a lower clearance than pneumatic tire equipment, allowing the forklift to more easily navigate doorways and other obstacles such as lights and sprinkler systems.
- 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 majority of forklift frames specify either a pneumatic tire or a cushion 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. 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 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. Sitting closer to the ground, cushion tire forklifts have a tinier frame compared to pneumatic tire forklifts. 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. Tires that offer traction will perform better on wet surfaces, rough terrain, packed gravel and asphalt. 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 largest advantages of using a forklift with cushion tires is the smaller turning radius. 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.

Work Applications for Pneumatic Tire Forklifts

Since pneumatic tires contain air, these forklifts are better suited for exterior applications. 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. Pneumatic tire models create harsh fumes with their internal combustion engines, making them unsuitable for interior locations. Measuring wider and longer in comparison to cushion tire forklifts, pneumatic tire models are mostly utilized outside. The solid pneumatic tire costs more compared to 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. Solid pneumatic tires are commonly used in lumber and scrap yards where there are tons of sharp, metal debris including nails. Air-filled pneumatic tires work well on gravel and asphalt exterior surfaces. 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. Air tires are also known to give a bouncy ride, contributing to operator discomfort and fatigue. 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. Foam filling is commonly used for flat tire prevention. 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.