

Cushion Tire Forklift

Used Cushion Tire Forklift Nebraska - 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. When considering the benefits and drawbacks of cushion tires in forklift uses, it is important to discuss the benefits and drawbacks of the other available forklift tire option: the pneumatic tire. 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. These types of forklift tires are easier to maintain and less expensive to manufacture. 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 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 are mainly utilized on uneven surfaces and rougher terrain. These tires fall into two categories: standard air pneumatic or solid resilient pneumatic. 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

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. 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 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 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 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. 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

There are many work applications suitable for using cushion tire forklift models. 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. Forklifts fitted with cushion tires often have a smaller frame and sit much lower to the ground than forklifts fitted with pneumatic tires. This gives them better clearance for fitting through doorways and

avoiding overhead obstacles. 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. 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. 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 forklifts operate with an internal combustion engine and these harmful emissions are dangerous for use indoors. With a wider base and longer frame in comparison to cushion tire models, pneumatic tire forklifts are for use mainly outdoors. 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. 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. Air-filled pneumatic tires can easily become punctured and their working environment needs to be evaluated carefully. It is essential to ensure the work site is free from any sharp materials before using a forklift with air pneumatic tires. Since air-filled tires deliver a bouncy sensation, they contribute to operator fatigue and discomfort. 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. 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 on for pneumatic tire forklifts and cushion tire forklifts are fairly equal. Lift limits are given for certain electric-powered cushion tire forklifts. Pneumatic tire and cushion tire forklifts are available in practically any load capacity. Load capacities come in a wide range - from less than 2,000 pounds to more than 200,000 pounds.