

Cushion Tire Forklift

Used Cushion Tire Forklift Scottsdale - Forklift trucks are commonly classified by the kind of work they complete as well as the kind of tire they use. 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 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 feature solid rubber that is either smooth or treaded and fixed or positioned around a baseband or metal ring. Cushion tires cost less to make and are easier to take care of. This type of tire is made to work on smooth surfaces such as indoor concrete floors and 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. Cushion tires also allow the forklift to sit closer to the ground. The advantage of a lower forklift is the increased vertical clearance when compared to forklifts with pneumatic tires. It is important to note that cushion tires do not offer as much traction compared to pneumatic models and this is noticeable on wet locations and outdoor surfaces. 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, on the other hand, are primarily designed to operate in rougher terrain, with uneven surfaces. These tires have two categorizations: The main difference with these categories is that the standard air pneumatic tires consist of a layered rubber design filled with air and the solid resilient pneumatic type is made completely out of rubber. For locations with uneven surfaces and unpaved ground, pneumatic tire forklifts are prime choices. 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 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** Maneuverability is one of the key pneumatic tire forklift benefits since these models do not require a larger frame to facilitate a bigger 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** Cushion tire forklifts are more environmentally friendly as they use electricity and produce no harmful emissions, compared to internal combustion engine models.

Forklift Tire Choice

Most forklift frames only allow for either a cushion tire or a pneumatic tire. 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. 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 usually the best option for many workplace applications. 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. Cushion tire forklifts typically feature a smaller frame and sit much lower to the ground compared to pneumatic tire models. This compact design facilitates easier clearance through doorways and overhead obstacle avoidance. 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. 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. Traction tires are not used on dirt or grass locations and need to be installed on opposite sides, the drive and steer axles. One of the top advantages of the cushion forklifts is their tight 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 more cost-effective and available compared to pneumatic tire models. 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. 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. There are two kinds of pneumatic tires; the air-filled pneumatic tire is less expensive than the solid pneumatic tire. The solid pneumatic tire is comprised of solid rubber without any air inside, making this type more resilient against gouges or punctures. Solid pneumatic tires are commonly used in lumber and scrap yards where there are tons of sharp, metal debris including nails. Similar to solid pneumatics, air pneumatics work well outdoors on asphalt, in gravel and in yards. However, air pneumatic tires are susceptible to being punctured or gouged. 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. Much less bouncy than air-filled pneumatic tires, the solid pneumatic forklift tires provide the operator with a smoother ride. Foam filling is also used to help prevent flat tires. Filling an air pneumatic tire with foam usually takes approximately 3 days to fill and cure. Difference in Load Capacity Both cushion tire and pneumatic tire forklifts offer similar load capacities. Lift limits are given for certain electric-powered cushion tire forklifts. There are numerous forklifts available and a variety of pneumatic and cushion tire models can be found in a variety of load capacities. There are numerous load capacities ranging from less than 2000 pounds to more than 200,000 pounds.