

## **Cushion Tire Forklift**

Used Cushion Tire Forklift Hayward - 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. Pneumatic and cushion tires provide the 2 distinct forklift classifications. 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 types of forklift tires are easier to maintain and less expensive to manufacture. This type of tire is made to work on smooth surfaces such as indoor concrete floors and loading docks. These tires are designed to maneuver well within tight locations, due to their specific turning radius. 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 tire forklifts are used for a wide range of applications, including order picking, unloading shipments, organizing inventory, transporting to and from a loading dock and other 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 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. 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 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. 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 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 ad lights much easier. 3) Durability Cushion tires for forklifts are durable, easy to maintain and have little to no risk of puncture. 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 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. 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. 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. 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 based tires will function in rough terrain environments that have wet surfaces, packed gravel and asphalt. 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. Locations that rely on narrow aisles will benefit greatly from the smaller cushion tire forklifts and their tight turning capabilities. 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. 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. The solid pneumatic tire is comprised of solid rubber without any air inside, making this type more resilient against gouges or punctures. Outdoor areas including lumber yards and scrap yards that feature copious amounts of metal debris and nails often rely on solid pneumatic tires. Air pneumatic tires work great outside on gravel and asphalt applications. 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. Since air-filled tires deliver a bouncy sensation, they contribute to operator fatigue and discomfort. Due to this, numerous air pneumatic forklift users fill foam in 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 also used to help prevent flat tires. 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 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. 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.