

Cushion Tire Forklift

Used Cushion Tire Forklift Fremont - Most forklifts are classified by the kind of work they do and some are classified by their type of tires. 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 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 kinds of forklift tires are cheaper to make and easier to maintain. Cushion tires are designed for smooth surface applications such as work that takes place mostly indoors or around 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 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

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 have two categorizations as either solid resilient pneumatic or standard air pneumatic. They are popular for rough terrain applications and uneven surfaces. 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 type of forklift that utilizes cushion tires are for mainly inside applications with some limited outside use. Cushion tire forklifts are commonly used in warehouses and manufacturing plants. 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** 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** Durability is a key feature with cushion tire forklift models as they are simple to maintain and offer zero to little risk of being punctured.
- 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** 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

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. 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

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. 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. It is important to note that cushion tire forklifts

showcase less ground clearance and the machine may get caught up on exterior obstacles if the ground is uneven. One solution is to outfit traction tires on the front of the cushion tire forklift. 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 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. Of course, they are often powered by internal combustion engine so do produce harmful emissions which are not recommended for normal indoor use. Pneumatic tire forklifts are longer and wider than cushion tire forklifts which is why they are primarily used outdoors. The solid pneumatic tire costs more compared to the air pneumatic tire. The solid pneumatic tire has no air inside and is made from solid rubber. This design makes the tire stronger against punctures or gouges. 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. 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. It is possible to foam fill the pneumatic forklift tires for a smoother ride. This provides a smoother ride for the operator than the one experienced on solid pneumatic tires but also a less bouncy ride than air filled pneumatic tires. Foam filling is commonly used for flat tire prevention. 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 Both cushion tire and pneumatic tire forklifts offer similar load capacities. 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. Load capacities come in a wide range - from less than 2,000 pounds to more than 200,000 pounds.