GLOBAL LIFT EQUIPMENT

Cushion Tire Forklift

Used Cushion Tire Forklift Alaska - Most forklifts are classified by the kind of work they do and some are classified by their type of tires. Pneumatic and cushion tires provide the 2 distinct forklift classifications. 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 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 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 are mainly utilized on uneven surfaces and rougher terrain. These tires fall into two categories: standard air pneumatic or solid resilient pneumatic. 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. Pneumatic tire forklifts are good options for work that takes place outdoors on unpaved ground. 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 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. Warehousing applications and manufacturing facilities often rely on cushion tire forklifts. 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 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 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 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 Powered by electricity instead of relying on an internal combustion engine enables cushion tire forklifts to make zero dangerous emissions. Forklift Tire Choice Most forklift frames only allow for either a cushion tire or a pneumatic tire. Axles and tires are specific to a forklift frame and lifting capacity. 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 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. Forklifts fitted with cushion tires

often have a smaller frame and sit much lower to the ground than forklifts fitted with pneumatic tires. 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 style tires will give better traction on rough terrains like asphalt or packed gravel or wet surfaces. 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. This makes cushion tire forklifts ideal for warehouses and manufacturing facilities that have less space. Warehouses that utilize a narrow aisle layout will especially benefit from the smaller turning radius of cushion tire forklifts. Cushion tire forklifts are more cost-effective and available compared to pneumatic tire models. 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. Pneumatic tires can also be used inside but do not provide the advantages of low clearance, maneuverability or small 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. With a wider base and longer frame in comparison to cushion tire models, pneumatic tire forklifts are for use mainly outdoors. Of the two types of pneumatic tires, the solid pneumatic tire is more expensive than 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. Similar to solid pneumatics, air pneumatics work well outdoors on asphalt, in gravel and in yards. The main issue with air pneumatic tires is their ability to become gouged or punctured. 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. The foam filling option creates a more even ride compared to the solid pneumatic tires or the bounciness of the air-filled pneumatic tires. Flat tires can be filled with foam to keep them more durable and prevent flats. It takes roughly three days to fill and cure an air pneumatic tire with foam. 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. However, cushion and pneumatic tire forklifts can basically be obtained with just about any load capacity. These machines come in different load capacities from under 2000 lbs. to over 200,000 lbs. depending on your application.