How to Pick the Right Backhoe Tires



Your backhoe tires can improve the performance of your vehicle. Conversely, you could waste time on the jobsite with the wrong tires. Yes, the tires you choose can affect your backhoe's productivity. If you want to maximize your work with minimal effort, find out how the right tires can help. Keep these few things about the specifications of the tires in mind when choosing the best backhoe tires.

Importance of Backhoes on the Jobsite

These are workhorses on the jobsite. Though not the biggest machines, these vehicles move a significant amount of material. These vehicles also have multiple attachments to make them even more versatile. Some of the accessories you may get for your backhoe include:

- **Excavator Buckets** and **Stump Buckets**: Buckets scoop up and carry a variety of load types. Some buckets have a design to allow you to clean out ditches easily. Others tip over and load from the side for use in narrow spaces.
- **Hammers:** When you need to break through tough surfaces and don't want to pull out a jackhammer, get a hammer attachment for your backhoe.
- **Grapples and Root Rakes:** For forestry, demolition, scrap yard work, or land-clearing, grapples are a mainstay. Log grapples can grip and pull trees out. There are many grapple types, clam shell double tine and solid bottom. They all securely grip their load and can carry items that may not safely fit on a pallet.
- **Forks:** A backhoe operates like a forklift with a fork attachment that can pick up and transport pallets easily.
- **Dozer Blade/Snow Blade:** To clear out roadways with debris or snow conditions, you need a dozer balde/snow blade. These snow blades have an auxiliary hydraulic system for added power, and their materials withstand harsh temperatures and wet conditions. Tilt action of 4-way and 6-way blades offer more versatility.

Typically, these vehicles operate in off-road applications, driving over rocks, sand, gravel and other rough terrains during operation. However, you can also move them on the road when transporting them to a jobsite. Backhoes may often drive longer distances at higher speeds compared to compact excavators or other smaller construction vehicles. To ensure your machines run as needed with as little downtime as possible, you must put careful thought into selecting the best tires for the task.

How to Choose Backhoe Tires

Quality backhoe tires should have the following attributes:

- **Long-lasting:** How long tires last depends on their construction and application. You could shorten the lifespan of your tires by choosing the wrong tread for the ground you drive over. Also, failing to care for the tires properly can negatively impact how long they last.

- **Correct tread:** Select tread based on the typical terrain you drive your backhoe over. Whether the vehicle is 4WD or 2WD will also help you decide on the proper tread to use.
- **Size:** The tire size is crucial for ensuring the parts fit on your backhoe. Typically, you'll find the size stamped on the tires' sidewalls. You may need different sizes for the front and rear tires. Carefully check if the replacement tires you order include rims.
- **Adequate load capacity:** The load your tires can support depends on their design. Large backhoes and those used for heavy-duty work need more durable, sturdier tires with higher plies. Always consider the weight of a full load your backhoe may carry when calculating the load for the tires.
- **Correct tire type:** You will have the choice of pneumatic or solid cushion tires. Both have advantages and disadvantages in certain situations. Which you choose depends on your application and budget.

Overview of Pneumatic Tires

Pneumatic means air, and this type of tire is air-filled just like the tires you use on your commuting vehicle. You will have the choice of two types of pneumatic tires — bias and radial. These have different designs that make them better for some uses:

- **Bias:** The most commonly used pneumatic tires have a bias design. These have a lower price than radial tires. Bias tires have reinforced sides to prevent debris caught in the sidewalls from causing flats.
- **Radial:** Radial tires are relatively new in the pneumatic tire market. Steel belts inside the tire improve puncture resistance but increase the cost. The more durable construction of radial pneumatic tires may get offset if you drive your backhoe relatively long distances at high speeds, such as frequently traversing a construction site.

While pneumatic tires are more familiar to most people, they have other advantages, too. You will need to compare these to the benefits of solid cushion tires to know how to pick the right backhoe tires.

Benefits and Disadvantages of Pneumatic Tires

Pneumatic tires cost less than solid cushion tires, which makes them a popular option for fleet vehicles. Additionally, the air inside the tires cushions the ride better than some solid or filled tires on the market. Many owner-operators prefer the softer ride and lower cost of pneumatic tires. These benefits come at a price, however.

While pneumatic tires cost less initially, they have the problem of going flat from debris breaking through the rubber construction. When driving a backhoe on construction or demolition sites filled with sharp rocks, nails and other debris, you raise the likelihood of damage to the tires. Punctured tires can put your vehicle out of commission for the rest of the day, costing you in productivity on your jobsite.

Overview of Solid Cushion Tires

Solid cushion tires never go flat because they lack air-filled chambers inside. Instead, some have a solid construction throughout. The exact materials inside solid cushion tires depend on the manufacturer. Some use a single layer of material inside the tires that does not provide any cushioning. On the other hand, our tires have three layers, including a middle layer that allows air inside to improve the ride.

Advantages and Disadvantages of Solid Cushion Tires

The solid construction of these tires provides many benefits over pneumatic tires. Because they do not have air inside them, solid cushion tires never go flat, which ensures you won't have a tire problem disrupt your day. You also don't have to check the air pressure in the tires before and after each shift. The lower maintenance of solid cushion tires makes them a better option than pneumatic.

Unfortunately, the downside to solid cushion tires is their upfront price. Many people don't consider the lifetime cost of the tires and only look at the initial amount they spend on backhoe tires. With solid cushion tires, though, because they will never go flat and last longer, you will get more time from your investment. These tires only cost more when comparing the initial costs to that of pneumatic tires. Because solid cushion tires need less maintenance and last longer, their initial value lasts three to five times longer than the lifespan of pneumatic tires, making them a better investment over time.

Another attribute of solid cushion tires is their weight. This trait could be advantageous or detrimental, depending on your task. Since they don't have air inside them, they weigh more compared to pneumatic tires. While this extra weight makes the tires more cumbersome to move, it can help your backhoe's operation. Higher tire weight could be a benefit, though, because it will help add a counterweight to the load in your backhoe.

Be careful if you purchase solid cushion tires. The construction makes a difference in the tires' performance. Tires with the same solid construction throughout can devastate the landscape, ripping up turf as you drive over grass or soil. Additionally, the robust design negatively impacts the ride. However, you can have the no-flat operation of solid cushion tires without these disadvantages if you opt for our semi-pneumatic design.

While some brands' solid construction tires detract from the comfort of the ride, our semi-pneumatic tires overcome this with a middle layer that adds cushioning without risking flats. You get a comfortable ride from tires that will never go flat. Check the design of the tires to see how flexible they are. With our specialty design, the middle layer flexes for comfort while the outer and inner layers increase strength. Other brands try to imitate our model, but they can never duplicate the perfect balance of strength and comfort our solid cushion tires have.

Applications for Industries and Terrains

Many industries use backhoes, and the tires affixed to those vehicles will depend on the application. Treads and tire type are only a couple of decisions you need to make when choosing tires for your specific industry.

- **Construction:** In the construction industry, you want durable, long-lasting tires that will not puncture from debris. Additionally, construction tires must support extra-heavy loads while driving on pavement. Tread-less tires put the most significant amount of tire in contact with the road, but only use these for 100 percent road use. Using off-road tires on concrete can cause the tread to wear out too quickly.
- **Landscaping:** Backhoes used for landscaping should not mar the grass they drive over. You will need tires designed to leave the least impact on the landscape without sacrificing grip on the ground. When selecting a tread made to preserve turf, be careful because these tires may slip on wet grass.

- **Demolition**: Demolition applications require tires that don't go flat if punctured by rebar, nails or debris. Solid cushion tires are a must-have for demolition and recycling jobsites. Without the durable construction of these tires, you'll lose valuable time refilling and repairing holes in pneumatic tires.
- **Agriculture:** Agriculture workers typically use radial pneumatic tires for their vehicles. However, you will need tread that can grip through mud and other severe conditions. Look for tire treads specially made for the harsh environment of agriculture.
- **Scrap Yards or Recycling Facilities:** For moving scrap or recyclables around, you need tires made for rough surfaces. Rocky terrain tread on your tires gives your backhoe the grip it needs. This tread also fits well on larger backhoes that need extra support and stability, even moving over scrap heaps.

Types of Tread Patterns and Terrains

Tread patterns determine how well the tires grip the ground in a variety of conditions. Because backhoes have multiple potential jobs around your worksite, they can frequently traverse a wide range of terrains. Choose the tread pattern based on the ground you drive over most often in your backhoe. If you use the wrong tread pattern, your backhoe could slip from a lack of traction, damage the landscape from too much grip or wear out prematurely. The right design makes a world of difference in backhoe tire selection.

- **Solid Surface:** Solid surface tires look bald, but these treadless tires are designed to put the largest amount of surface area of rubber in contact with the ground. Use these tires for construction sites where you drive your backhoe frequently over paved roads or asphalt.
- **Rocky Terrain:** Rocky terrain requires hard-wearing tires that grip the inconsistent surface without slipping. Typically, you'll see rocky terrain tires on wider treads with larger backhoes that see use in scrap yards and demolition sites.
- **Dirt Terrain:** Driving through dirt, mud, snow, rocks or sand requires tires with deep treads and lugs. The lugs on our dirt terrain tires measure two to three times deeper compared to those on pneumatic tires. A greater width ensures these tires give you the stability you need on unstable surfaces.
- **All Terrain:** If you have multiple surfaces you drive your backhoe over, consider all-terrain tires. The tread on all-terrain tires allows you to use them on flat asphalt with less wear than dirt tires. You can also drive your backhoe off-road with all-terrain tires and get the grip you need.

Why Having the Right Tires on Your Backhoe Matters

Choosing the right tires for your backhoe means more than just having quality tread. You will need tires that you can rely on for the conditions where you work. Tires that puncture easily could set you back an entire day while you await repairs. If you take your backhoe or its tires offsite for repairs, the delay could last you even longer.

Consider the cost of your operations and how much you spend on maintaining pneumatic tires. While some applications, such as agriculture, require the gentler touch of pneumatic tires on the landscape, with semi-pneumatic, you can get the benefits of extra cushioning without the need to check tire pressure and change flats.

Over time, due to their longer life, solid cushion tires may be a better purchase, despite their initial cost. If you want an investment in tires that will pay you back, consider incorporating solid cushion tires with our semi-pneumatic technology into your construction fleet.

Check out Solid Cushion Tires From McLaren

Stop wasting time checking the air and refilling pneumatic tires. Get your job done more efficiently with solid cushion tires that provide you with a great ride and exceptional reliability. Your productivity will increase when you never have to worry about flat tires again, regardless of the conditions. We created the original flat-free semi-pneumatic tires. Why not get your backhoe tires from the creator of the technology? You'll enjoy longer lasting tires free from flats.

While the terrain and your industry should help you pick the right tires for your backhoe, if you need any more help or for a quote give us at McLaren Industries a call at (800) 836-0040. You can also fill out our online contact form.