



How Rubber Compounds Affect Solid Skid Steer Tire Life



The lifespan of a solid skid steer tire is largely dependent on the rubber compounds used to create it. Ultimately, there are three different compounds that impact tire life, which are known as the base rubber compound, the cushioning compound, and the tread compound. While some tires may have four or five compounds, these three have the most direct effect on the lifespan of a solid skid steer tire. To learn more about how rubber compounds affect solid skid steer tire life, continue reading.

Base rubber

Base rubber refers to the rubber on a skid steer tire that makes contact with the wheel. The base rubber must be firm, hard, tear resistant, and have grip to create a good lock with the tire. If the base rubber of a solid skid steer tire does not possess these characteristics, the wheel will slip inside the tire.

Wheel slip refers to when the rim spins inside the tire. When the rim spins even just one time, the seal of the tire breaks. In such a case, the operator will have to press the tire off and repress and reseal it.

In other cases, however, the tire may become damaged from the slip, and the operator may have to purchase a replacement. To prevent wheel slip and damage it is important to purchase tires with a quality base rubber compound.

Cushioning compound

The cushioning compound, which makes the aperture holes in a solid skid steer tire, also greatly impacts solid skid steer tire life. This cushioning provides suspension and shock absorption for the skid steer. If a cushioning compound is too hard, it won't provide adequate shock absorption, regardless of whether it includes a large number of aperture holes with good sizes and depths.

Ideally, the cushioning compound should have elongation and tear resistance, in addition to flexibility. Such qualities allow the cushioning compound to flex tremendously without cracking or tearing prematurely. Poor quality compound in this area will lead to cracked aperture holes

Tread compound

Tread compound is another example of how rubber compounds affect solid skid steer tire life. If the tread compound of a solid skid steer tire is poor, then the tire's life will often be shortened due to chunking out, cracking, and premature wear. Chunking is one of the largest issues associated with poor tread compound. It refers to when a tire cracks and tears off, and pieces of it break off.

If a tire has a bad tread compound, it will get cuts and tears very easily, which will ultimately lead to chunking. In addition, a tire with poor tread compound also has poor wear resistance. However, a tire with poor tread compound will likely become unusable from excessive chunking before it has the chance to wear out fully.

At McLaren Industries, we design our solid skid steer tires with superior compounds to ensure maximum tire life. As a result of extensive testing and years of development, we have developed exceptional base rubber, cushioning, and tread compounds that will help reduce tire slip, chunking, and premature tearing. To learn more about our industry-leading [skid loader tires](#), contact us today at [\(800\) 836-0040](tel:8008360040) or [click here](#) to request a quote.