

## Tyre inflation pressure and its influence on service life and performance

Proper tyre inflation pressure is very important for an excavator to function properly. Unlike a truck tyre, the load on an excavator tyre changes greatly when loaded and unloaded. It is impossible to adjust the tyre pressure every time the load changes. Therefore, different rules apply here.

In practice, all axles normally have a maximum load. This means that the maximum tyre pressure must also be set on the front axle and rear axle of the excavator. For CALIBER tyres, for example:

For the 315/70 R 22.5 CALIBER Power Grip 23 RE, a minimum tyre inflation pressure of 9.5 bar should be set at full load of 19.0 to 22.0 tonnes.



Notes and recommendations:

1. **Check the tyre inflation pressure at least every 2 to 3 weeks.**

In the meantime, a loss of load may occur, for example due to a leaking valve, a rusty rim or a sharp object. Note: Filling with nitrogen does not reduce the need for regular tyre pressure checks.

2. **Check the valve sealing cap regularly.**

If this dust cover is missing, dirt or mud can damage the inner valve and allow air pressure to escape, damaging the tyre.

3. **Always determine the load using the maximum load.**

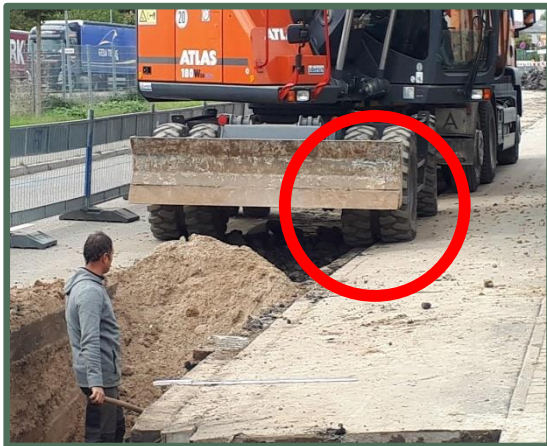
This has the consequence that with an unloaded excavator or under partial load the load is initially too high. However, we recommend this circumstance over too low tyre inflation pressure at full load. Especially if the tyre inflation pressure is too low, the sealing edge no longer closes properly. This allows mud and dirt to penetrate between the two rims.

And this can damage the side of the tyre, as the following pictures show.



Especially when digging trenches, care must be taken to ensure that the entire load is distributed completely and as evenly as possible among the axles and tyres. This is because if, for example, the entire load acts on only one axle or even only one tyre, the total load can lead to serious tyre damage, as the photos below show.

Ideally, the entire excavator weight should rest on both axles so that all tyres are subjected to the same load. If you follow these recommendations, you will benefit the longest from your CALIBER tyres.



If you have any further questions, please do not hesitate to contact us: [tech-dep@calibertyres.nl](mailto:tech-dep@calibertyres.nl)