Vibration

One of the most common issues we encounter is vibration. Most of the cases, while performing a spindle test, you can see if the machine is not stable, or it might be shaking.

What should I do, to get rid of vibration?

There are various factors that can contribute to vibration. Here's a checklist of what you should examine:

Checklist

1. Ensure the machine is positioned on a stable and solid surface.

2. Lower the machine as much as possible. Secure the feet firmly to the ground; there are two nuts on each foot. Tighten the lower black nut to the foot and the other nut to the chassis.

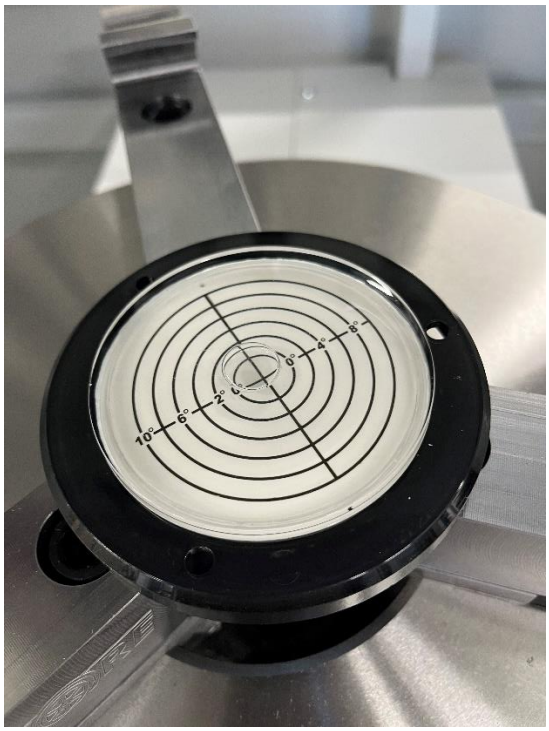
Refer to Picture 1 (marked with a red X) to see how it should not appear, and Picture 2 to see the correct configuration.

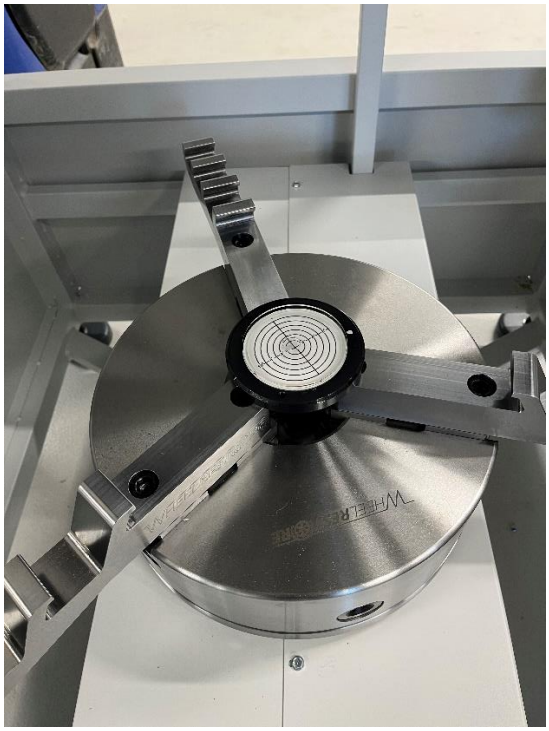
3. If you are working with a large or heavy rim, sometimes using a higher speed of 500 RPM can lead to vibration. We recommend a maximum of 500 RPM for both inner and outer modes, with a feed rate between 0.2-3 or lower, even for shadow cuts.

4. If your rim is bent or uneven, you'll need to straighten it.

5. If you are experiencing vibration only on the outside of your rim, reduce the outer RPM. This is because more material is being removed from the outer part of the rim, increasing the chance of vibration.

6. Check if your spindle is in level. Keep in mind that using a spirit level on top of the machine won't yield accurate results. Place it on top of the spindle inside the machine. If it's not level, adjust the machine's feet accordingly. We recommend that you use ours.





7. You have a maximum limit for how far your cutting tool can extend beyond the tool holder. If you extend it beyond the center, as shown in the picture, there is a higher likelihood of vibrations occurring due to insufficient tool tightening, which could transmit vibrations directly to your workpiece. By referring to the pictures, it's essential to ensure that your tool never extend below the green line.