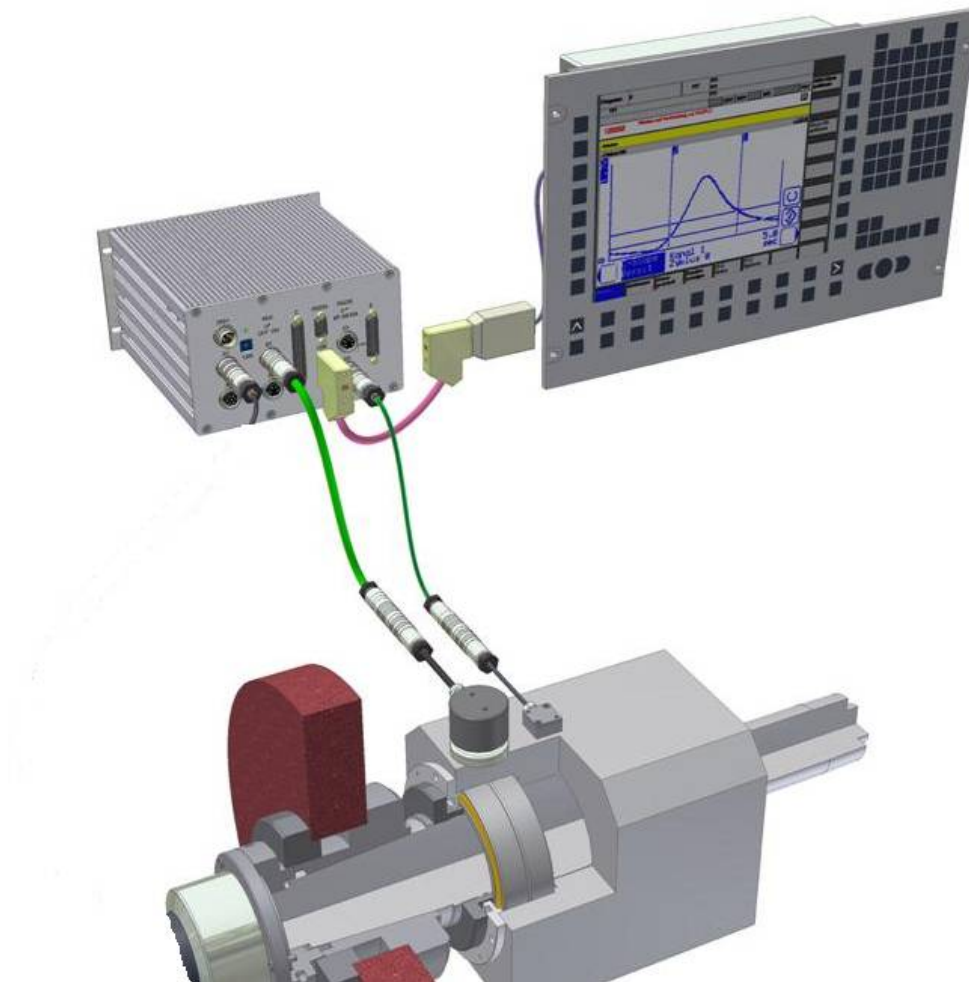
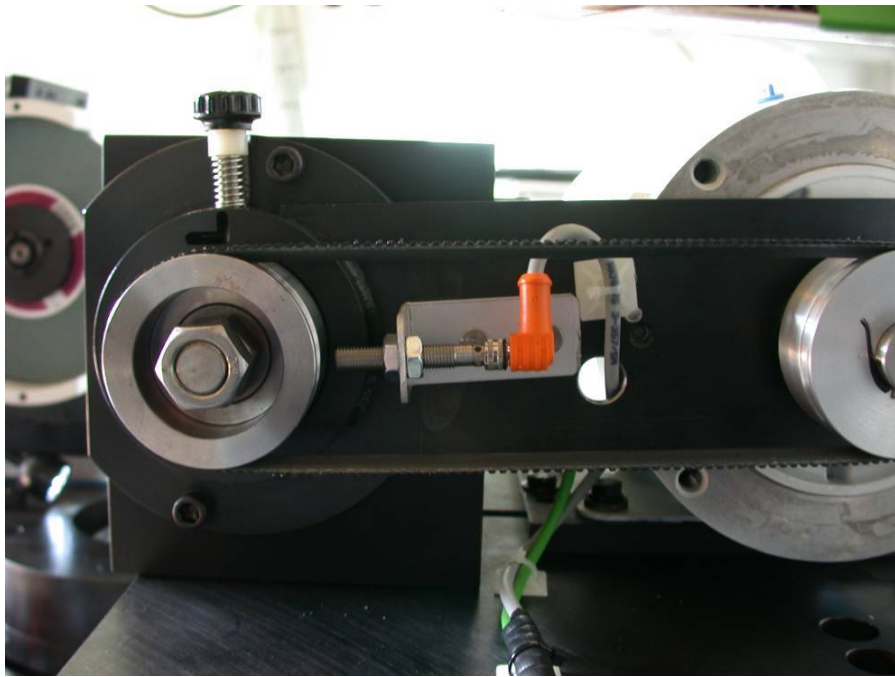


Ex80 Balancing System

The Ex80 uses an MPM brand balancing system which is integrated into the machine. The balancing software is displayed on the main display monitor and is operated through the windows based software program which allows for many different balancing methods. In the manual that follows drilling method and is explained in detail. The most popular method is using movable weights which are integrated into the spindle nut of your we'll pack. Max Engineering can provide these nuts to fit your machines wheel adapters.



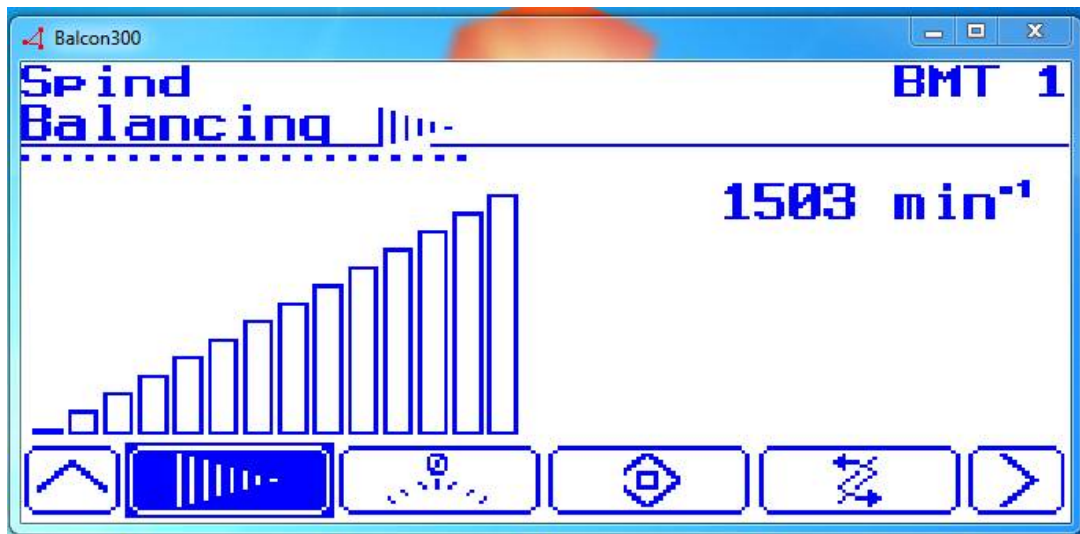




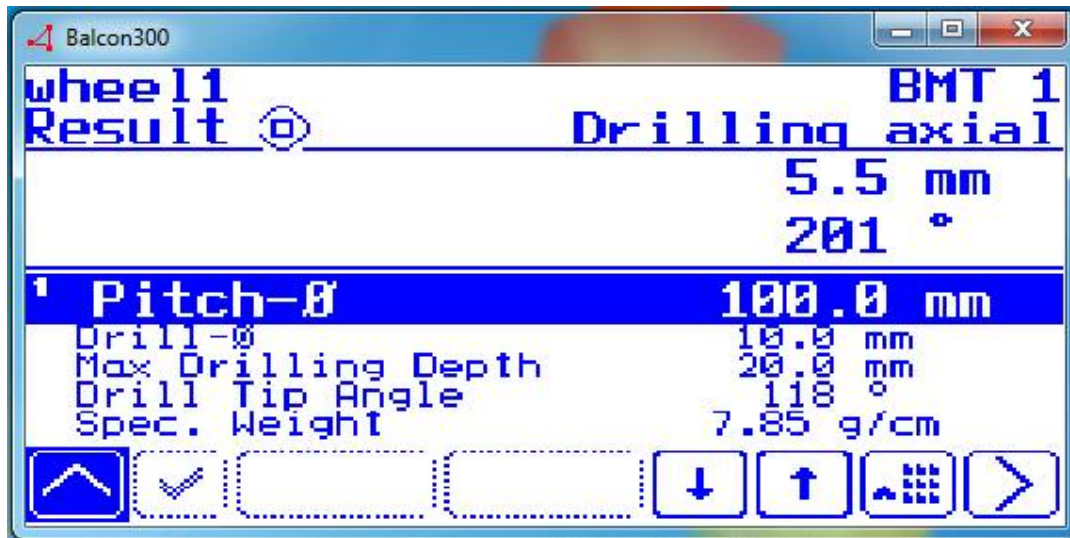
After opening the MPM balancing software it will display the main menu.



Click on the icon shown above (highlighted in blue). This will take you into the balancing screen shown below.

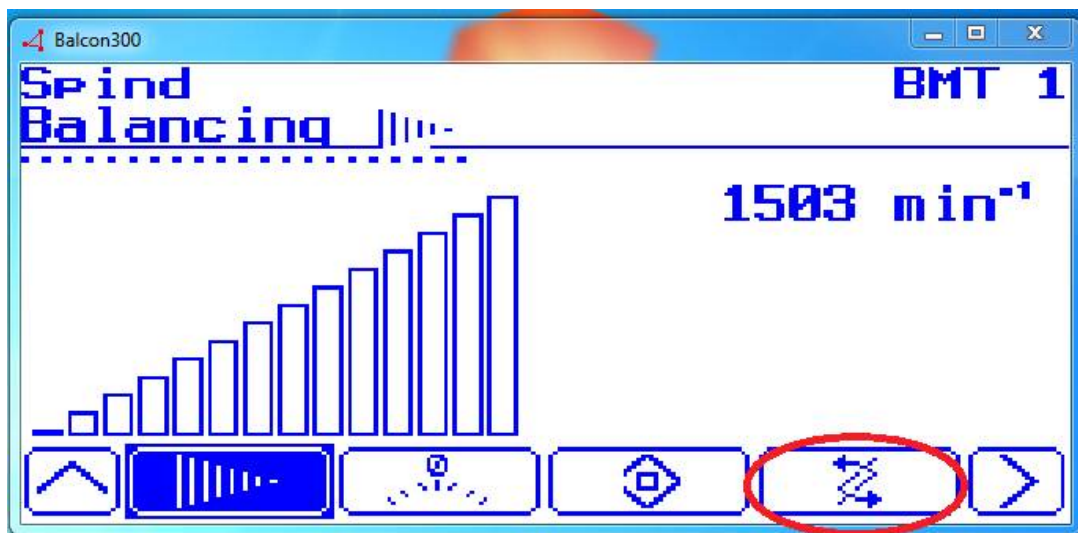


From here you can simply click the balancing icon (in blue) to start running a balancing test. Once finished the following screen will display.

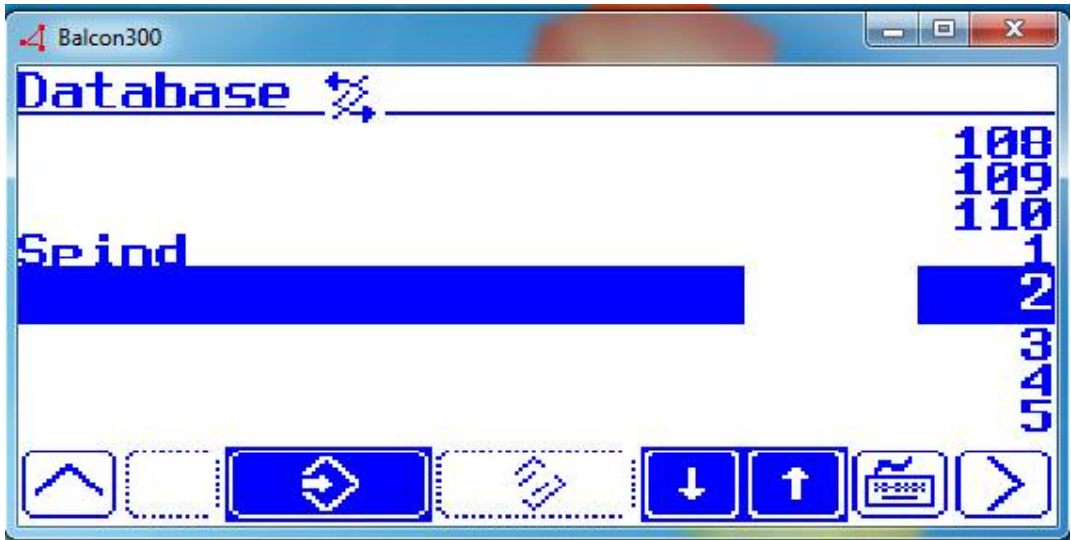


After altering the wheel to be balanced according to the results, you can select the Up arrow on the left to go back to run subsequent balancing tests until you are satisfied with the wheel balance.

This completes the balancing procedure for a single wheel. To set up new wheels in the database or change the parameters of the wheel to balance you'll have to go to the database menu by selecting the circled icon from the balancing screen:



This will display the database screen:



Using the Up/Down arrows from here you can select another wheel/part from the list. As shown above only the spindle has been configured. The name of the wheel can be changed by selecting the keyboard icon.



By going to the next database number and clicking the icon (shown in blue) you can change the balancing configuration. The parameters are all shown in the following screens. Note that you access the next page using the blue icon with the number on the left.

Balcon300

Record ↕ General

Two Planes	-
Plane 1	✓
Plane 2	-
⊙ Spindle = ⊙ Scale	E1 ✓
Balancing RPM	1500 min ⁻¹

Balcon300

Record ↕ Result

Result in gmm	-
Quality Grade	-
Gramm	-
Angular Method	-
Fixed Position	-
Drilling Axial	✓
Drilling Radial	-
Milline	-

Balcon300

Record ↕ Special

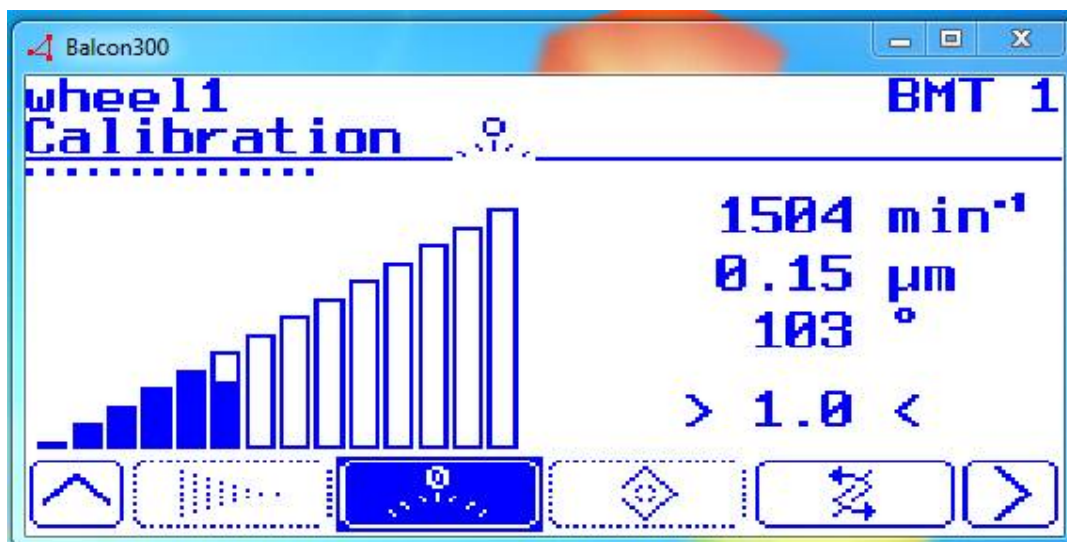
Vibration Sensor	1:1
Speed Sensor	NPN
Pre-adjusted RPM	Off
Pre-adjusted RPM	1500 min ⁻¹
Integ.-Periods	100
RPM Tolerance	200
Delay Periods	75

Once the balancing configuration settings have been set (you can change the values using the red circled icon on the right) you may need to change the pitch parameters. These can be accessed by the red circled icon on the left.

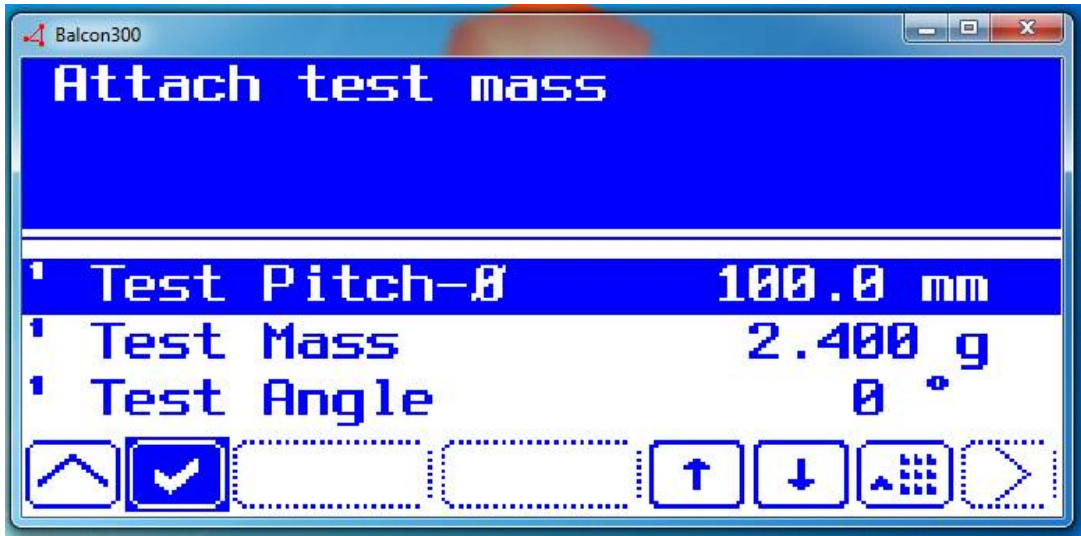


As shown you can adjust the pitch, drill size and also the density of the wheel/hub you are balancing. The default density is for steel (7.85 g/cm³).

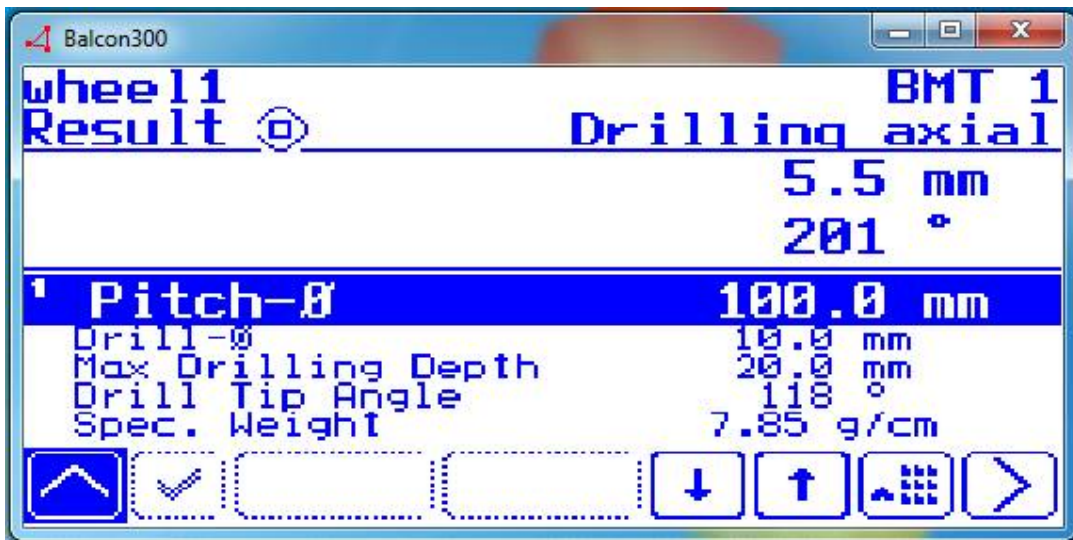
After all of these settings are done you can exit out using the Up arrow on the left. After exiting out of the spindle database page it will take you to the test calibration page:



Here you will start the spindle and then click the calibration icon (in blue) to start the test. Once it starts you will be asked to add a test mass:



Stop the spindle, add the test mass before restarting the spindle and then click the check icon. Note that you are selecting the zero degree reference by where you are placing the test mass. You'll want to somehow mark this position for reference. It will then take readings and ask you to remove the test mass. Stop the spindle, remove the mass before restarting and click the check icon again. It will then take final readings before showing you the results page.



This is the same screen as the balancing result screen shown in the beginning. After modifying your wheel as indicated you can select the Up arrow and run another balance test and continue to do so until you achieve the desired balance result