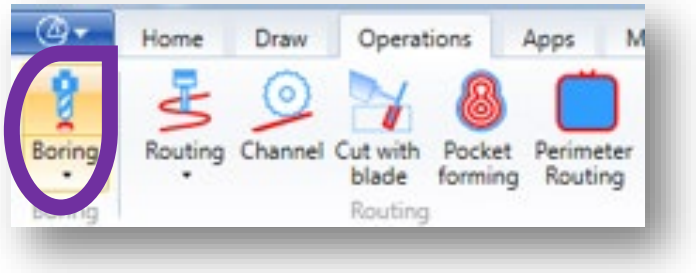
Maestro CAM Drilling Operations

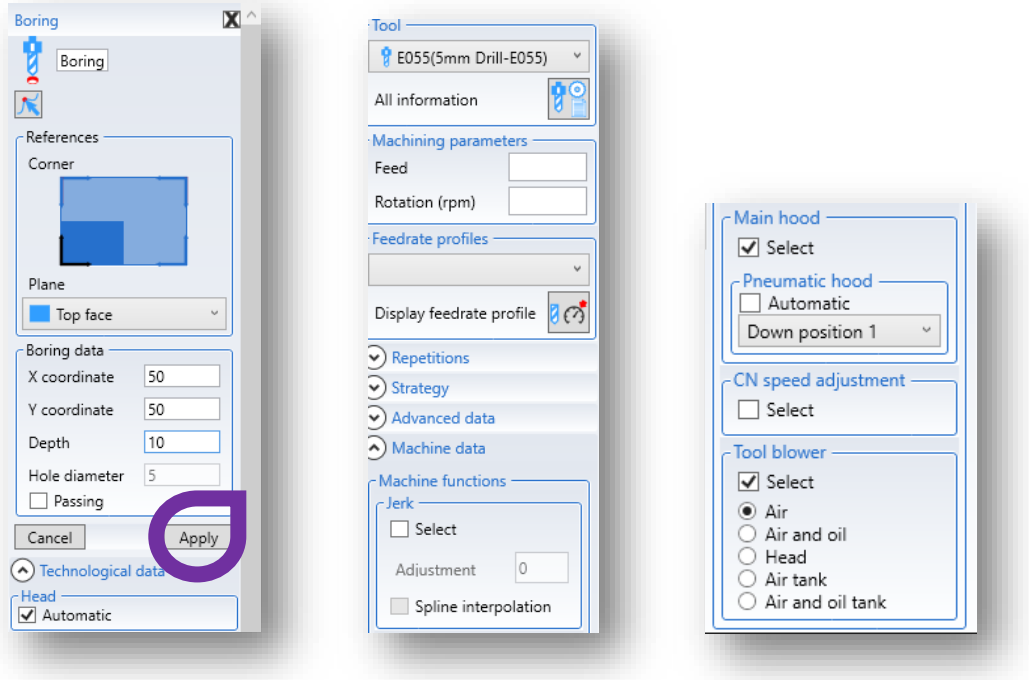
If you are unsure of anything, please don't hesitate to ask UQ Innovate Staff.

Once you have finished with Maestro CAM Getting Started and you want to drill holes go to "Operations" tab.
For Drilling select the "Boring" Button.

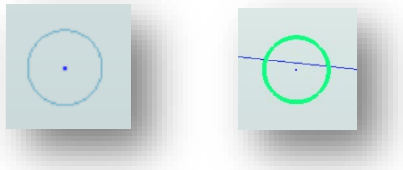
Drilling should come first in order of Tool-pathing priority.
The beginning of this document will cover basic data input tool-pathing. To apply to "geometry" jump to below.



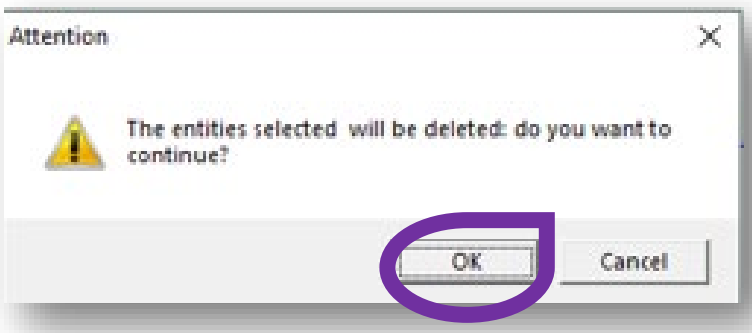
For general set up you can apply X & Y location and depth, select a suitable tool for desired diameter. No Face Mill or Drag Knife!
Drills are best for these operations but any end mill can also be selected. Don't forget to enable the "Main Hood" down position.
Click "Apply" once you have configured the setup.

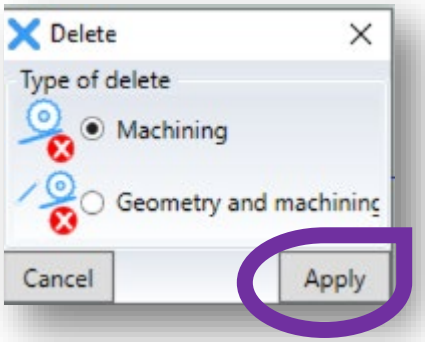


Output should look as below, tool-pathing will be representative of the tooling diameter on screen.
Blue grey when unselected and bright green when selected.

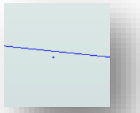


To delete anything make sure it is selected and hit the Delete key on the keyboard.
At the 1st dialogue click “OK” at the 2nd choose either “Machining” or “Geometry and Machining”, then click “Apply”.

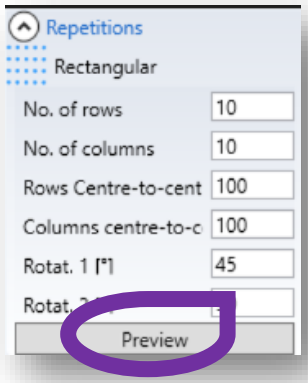




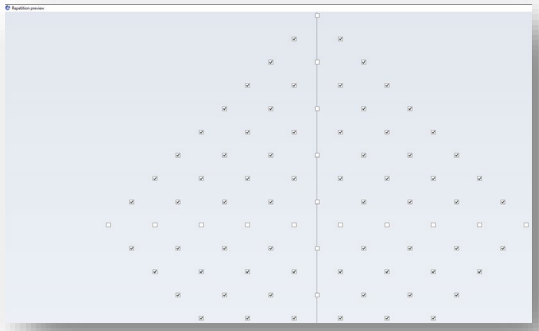
If you delete machining only a tiny point will be left behind.



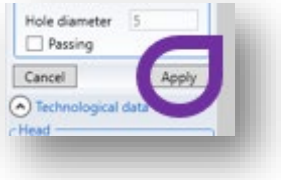
By using “Repetitions” on the Boring function an array of holes can be created without the need to do CAD.
Set the number of rows and columns and centre to centre distance, Rotation of both row and columns can also be controlled here.
Rotation 2 is in relationship to rotation 1.



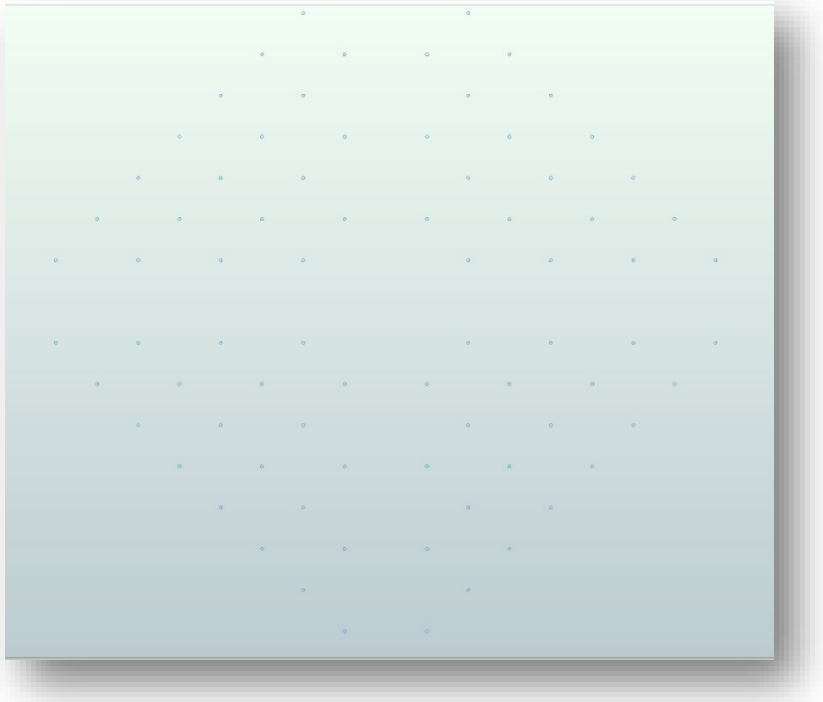
By clicking “Preview” holes can be selected or deselected within the array (selection via ticked box).



As before click the “Apply” button.



Output should look like this.



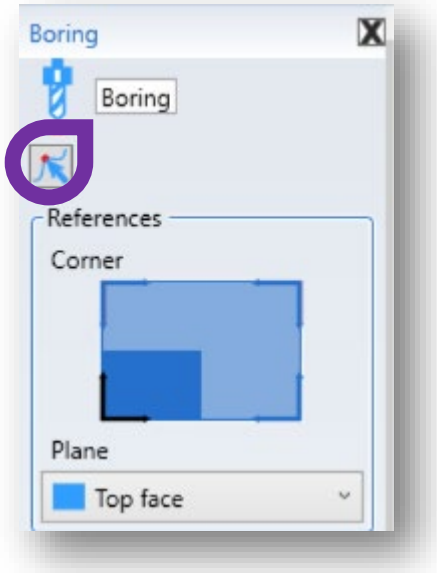
Application of “Boring” command to Geometry.

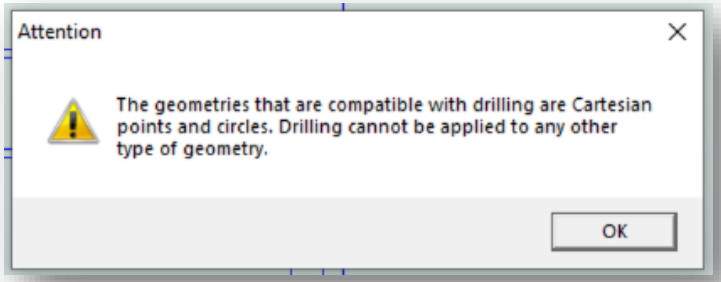
The most convenient way to get drilled holes where you need them is the use of geometry from CAD.

At the top LH corner of “Boring” there is a button for “Select Geometry”.

Only Cartesian points and circles can have boring applied to them. The axis of a circle will be the centre point of the drilled hole.

Multiple selection can be done by holding down the shift key.





If done successfully you should see a nice long list of Borings under the “Machining” tab.
Before applying the next kind of “Operation” (tool-path) ensure the last previous is highlighted in this list.