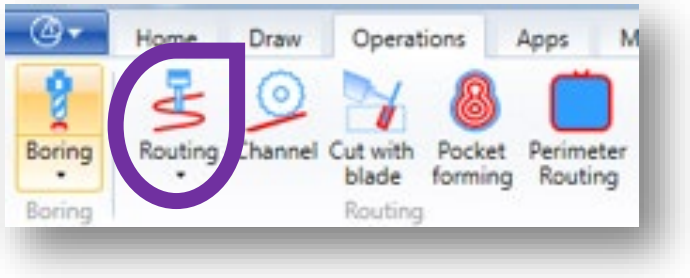
Maestro CAM Routing Operations

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 apply routings to vectors go to "Operations" tab.
For routing select the "Routing" Button.

Routing can be applied to all geometry open or closed excepting cartesian points.

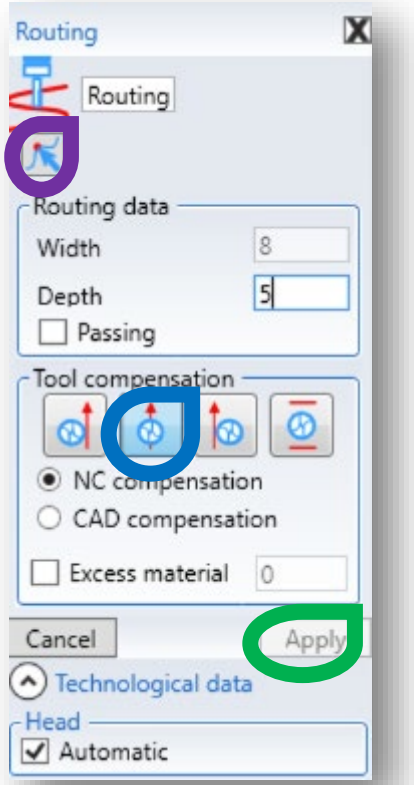
Drilling should come first in order of tool-pathing priority, then routing.

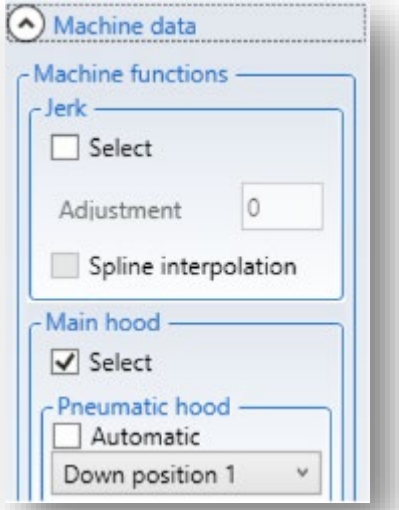


For general "Zero" compensation set up select a suitable tool for desired diameter/profile. This is what would be used for engraving. Drills can't be used for these operations but any milling tool can be selected. Don't forget to enable the "Main Hood" down position.

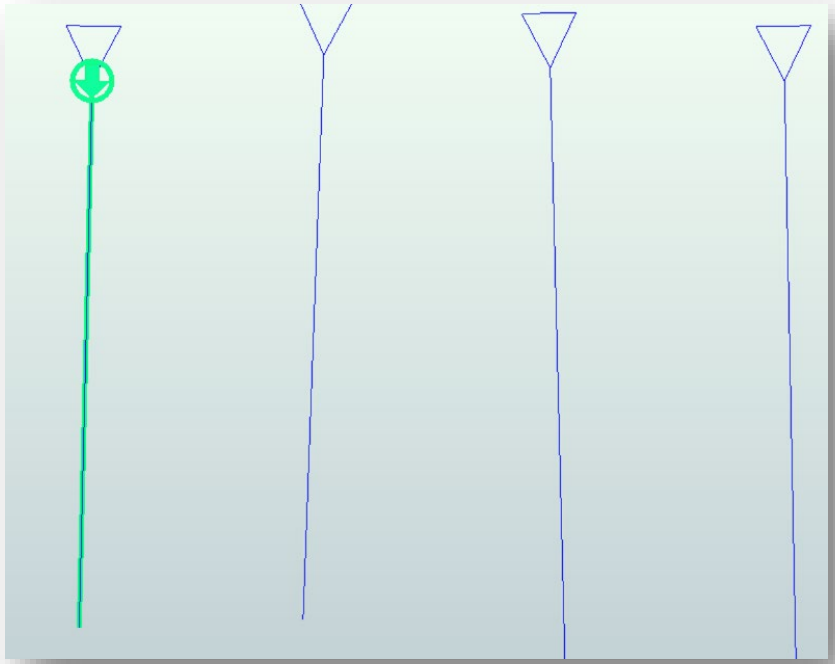
Click the button for "Select Geometry" once you have configured the setup. Hold down shift key for multiple selections.

Then click "Apply". Make sure you do the selection & application in the correct order.

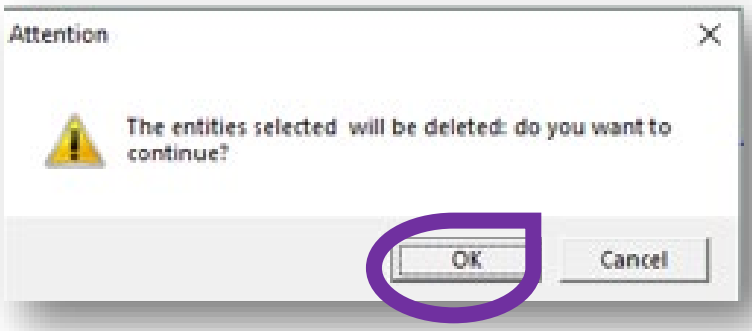


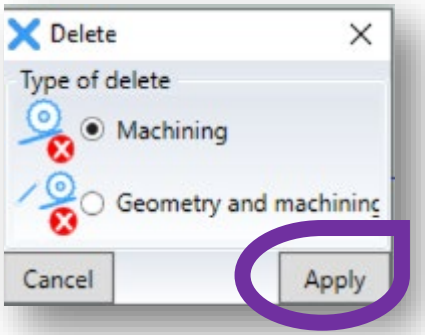


Output should look as below, tool-pathing will be representative of the tooling diameter on screen.
Blue grey when unselected and bright green when selected.
The tool diameter is represented by the circle with the arrow at the beginning of the tool path.
Note that with this setting the tool diameter is centred on the vector geometry for its full length.



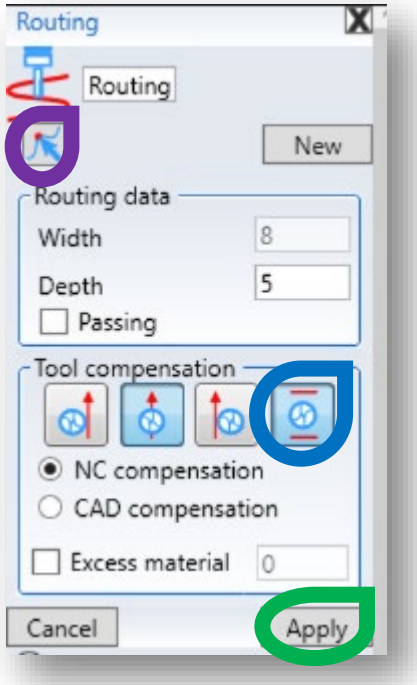
To delete anything make sure it is selected and hit the Delete key on the keyboard.
At the 1st dialogue click “OK” at the 2nd choose either “Machining” or “Geometry and Machining”, then click “Apply”.

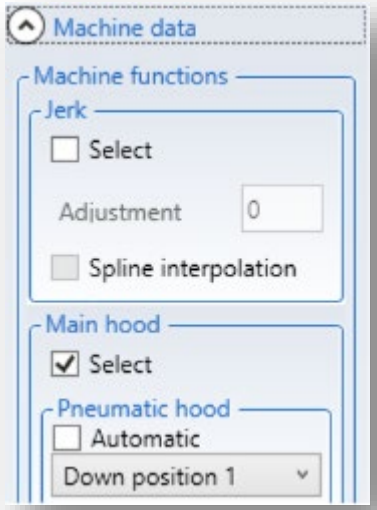




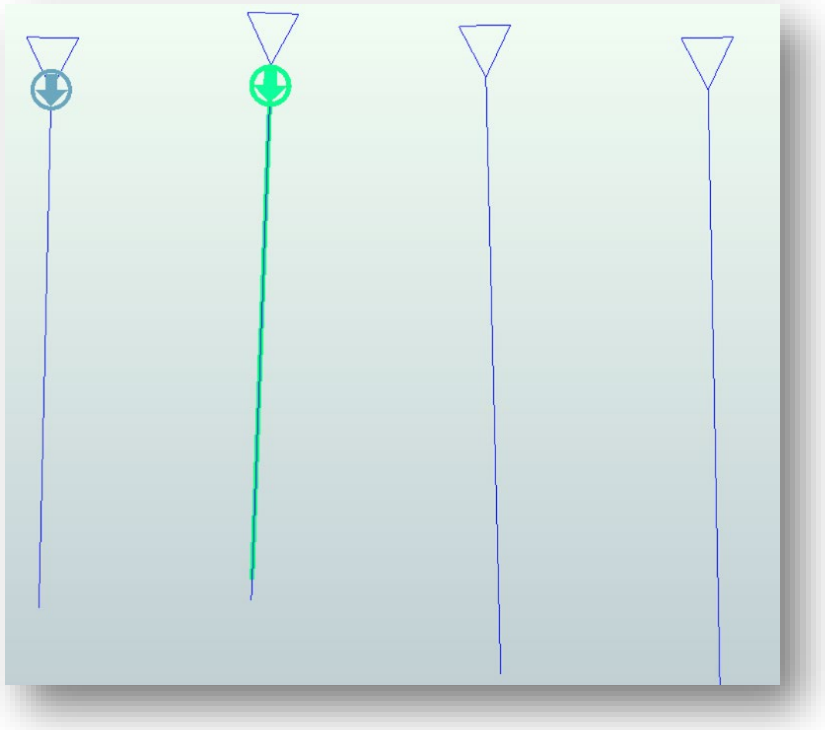
If you delete machining only the geometry will be left behind.

Zero compensation can be a problem if you want a slot of a length to match your geometry.
In this case use "Length Compensation" select a suitable tool for desired slot width.
Drills can't be used for these operations but any milling tool can be selected. Don't forget to enable the "Main Hood" down position.
Click the button for "Select Geometry" once you have configured the setup. Hold down shift key for multiple selections.
Then click "Apply". Make sure you do the selection & application in the correct order.

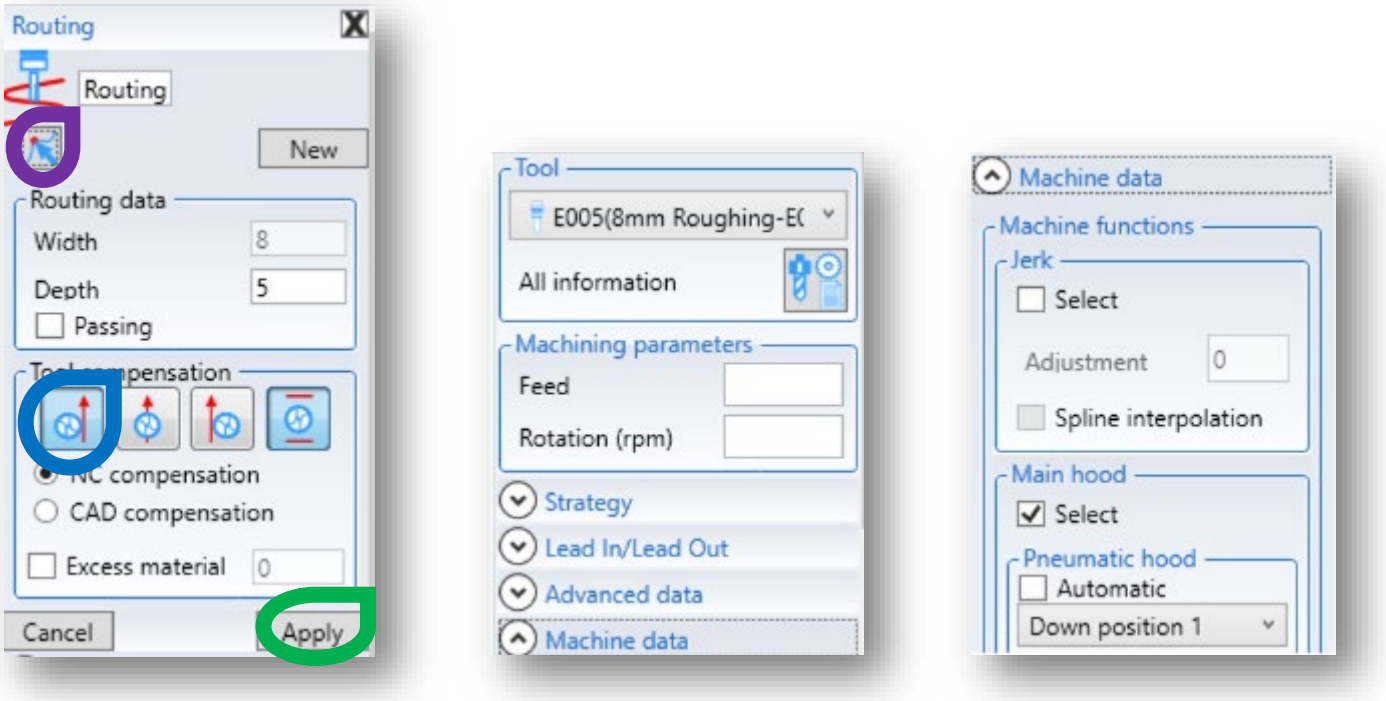




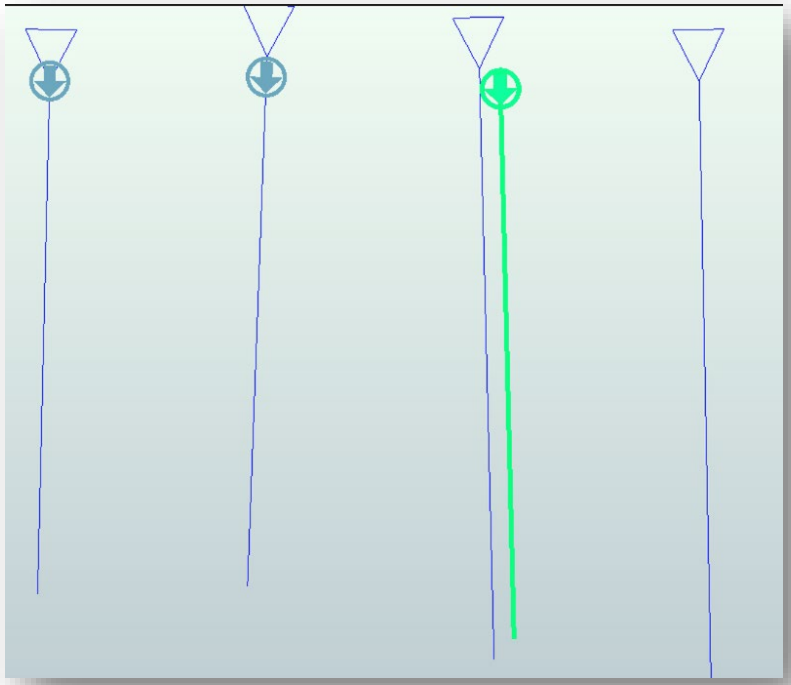
Output should look as below, tool-pathing will be representative of the tooling diameter on screen.
Blue grey when unselected and bright green when selected.
The tool diameter is represented by the circle with the arrow at the beginning of the tool path.
Note that with this setting the tool diameter is centred on the vector geometry and is compensated for length.



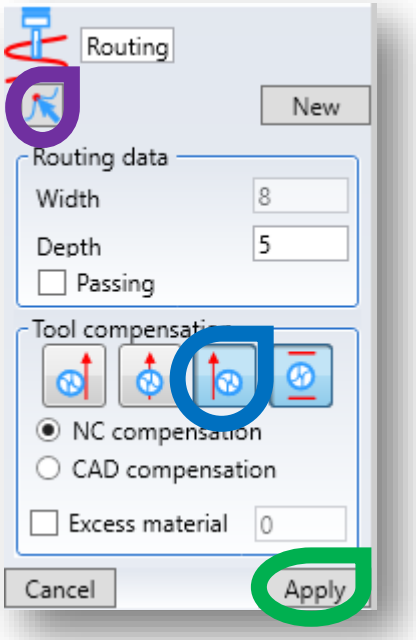
Zero compensation can be a problem if you want a cut out aligned to your geometry.
In this case you can use "Left Compensation" select a suitable tool for desired cut out radius.
Drills can't be used for these operations but any milling tool can be selected. Don't forget to enable the "Main Hood" down position.
Click the button for "Select Geometry" once you have configured the setup. Hold down shift key for multiple selections.
Then click "Apply". Make sure you do the selection & application in the correct order.

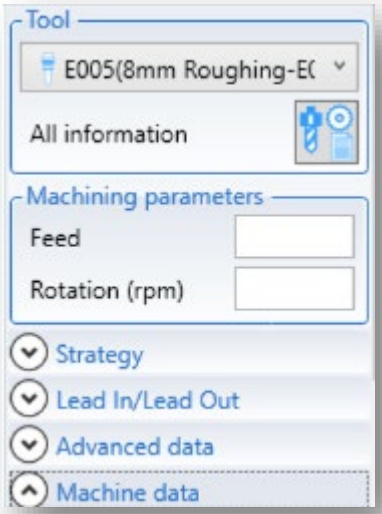


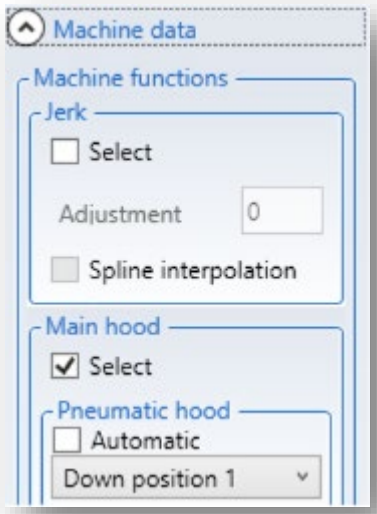
Output should look as below, tool-pathing will be representative of the tooling diameter on screen.
Blue grey when unselected and bright green when selected.
The tool diameter is represented by the circle with the arrow at the beginning of the tool path.
Note that with this setting the tool diameter is to the left of vector geometry direction and not left of screen.



Zero compensation can be a problem if you want a cut out aligned to your geometry.
In this case you can use "Right Compensation" select a suitable tool for desired cut out radius.
Drills can't be used for these operations but any milling tool can be selected. Don't forget to enable the "Main Hood" down position.
Click the button for "Select Geometry" once you have configured the setup. Hold down shift key for multiple selections.
Then click "Apply". Make sure you do the selection & application in the correct order.





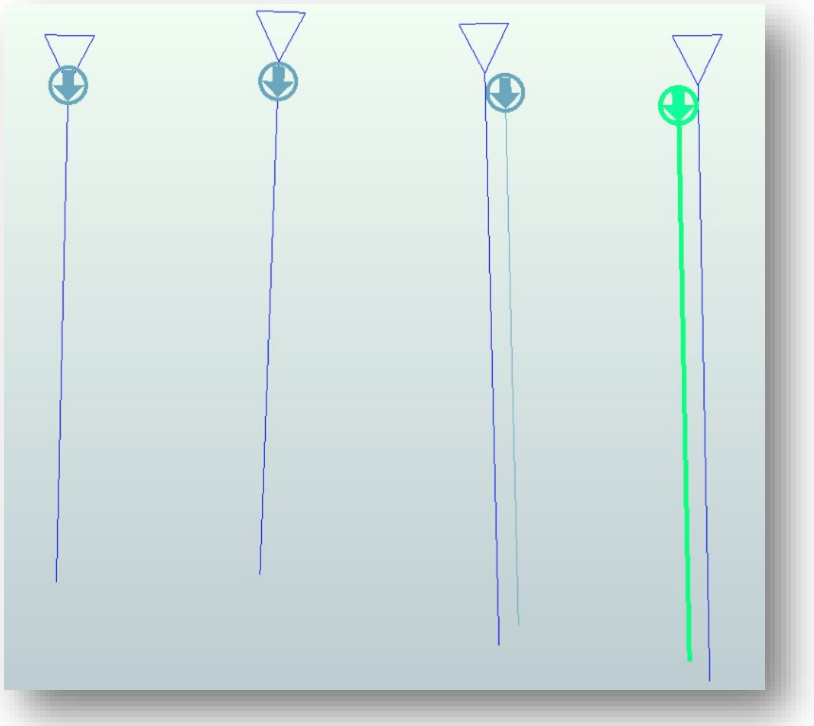


Output should look as below, tool-pathing will be representative of the tooling diameter on screen.

Blue grey when unselected and bright green when selected.

The tool diameter is represented by the circle with the arrow at the beginning of the tool path.

Note that with this setting the tool diameter is to the right of vector geometry direction and not right of screen.



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