Maestro CAM Pocket Forming 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 pocketing to vectors go to "Operations" tab.
For pocketing select the "Pocket Forming" Button.

Pocketing can only be applied to closed geometry, not open geometries or cartesian points.

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

For set up select a suitable tool for desired outcome.
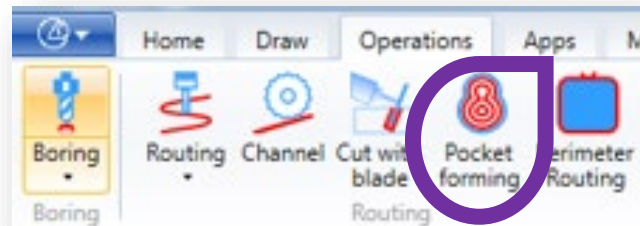
For set up select a suitable tool for desired outcome.

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.

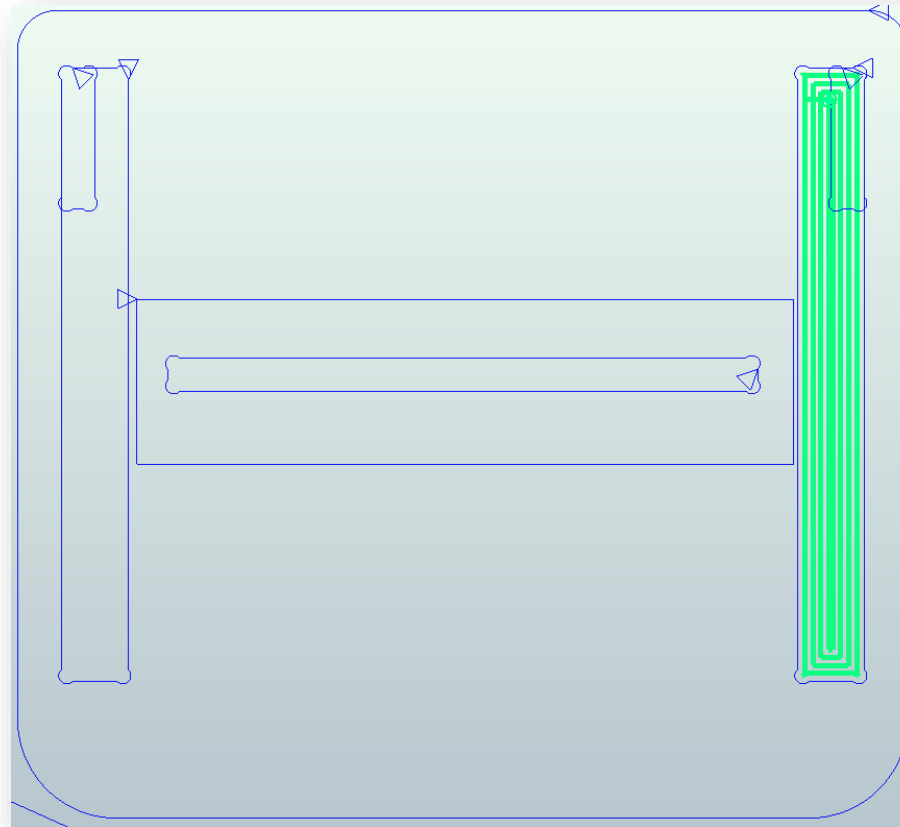Then click "Apply". Make sure you do the selection & application in the correct order.
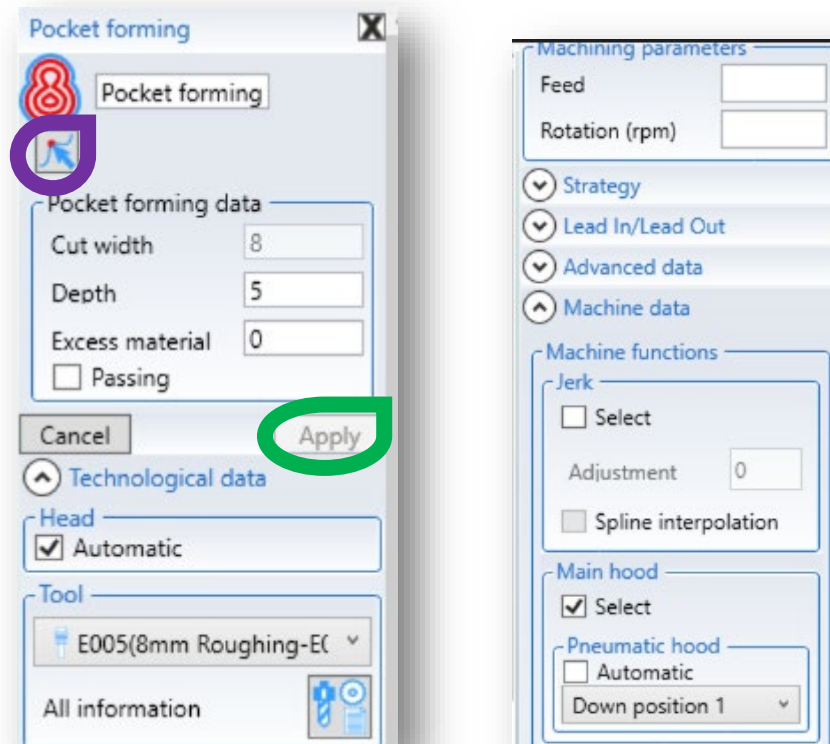
Output should look as below, tool-pathing will be representative of the tooling diameter on screen.

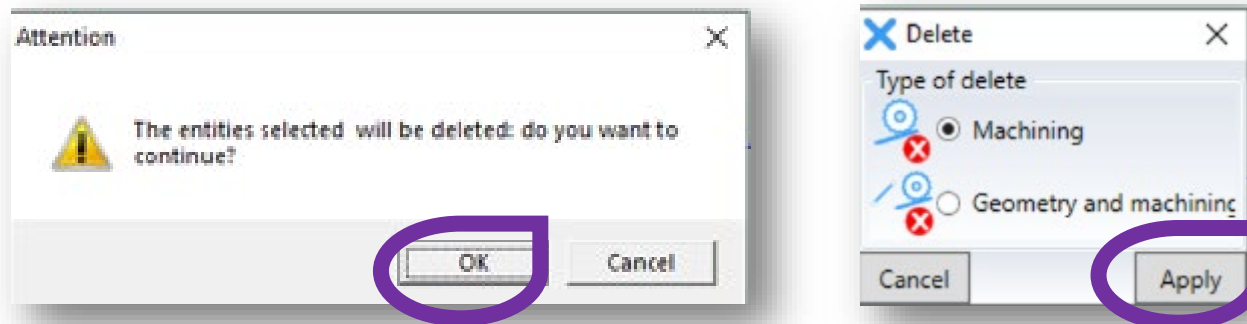Blue grey when unselected and bright green when selected.

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 toolpath for its full length. Standard overlap is 50% of tool diameter.

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.

If the material being machined is quite hard or brittle, "Overlap" in percentage can be increased under "Strategy".

"Emptying direction" is the only other thing that works here. Do not attempt to use helicoidal or multiple passes they are broken.
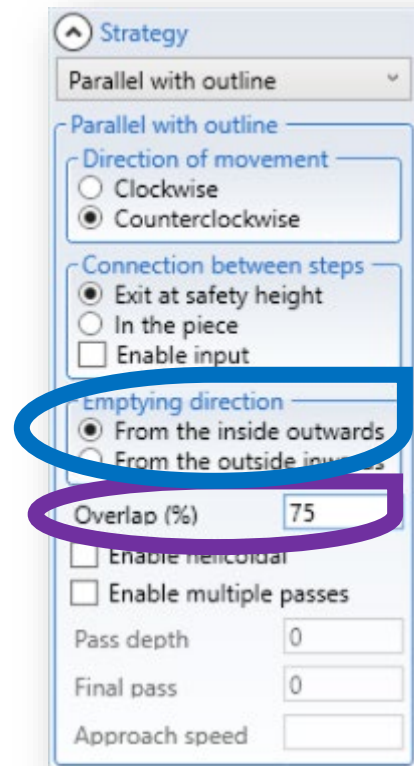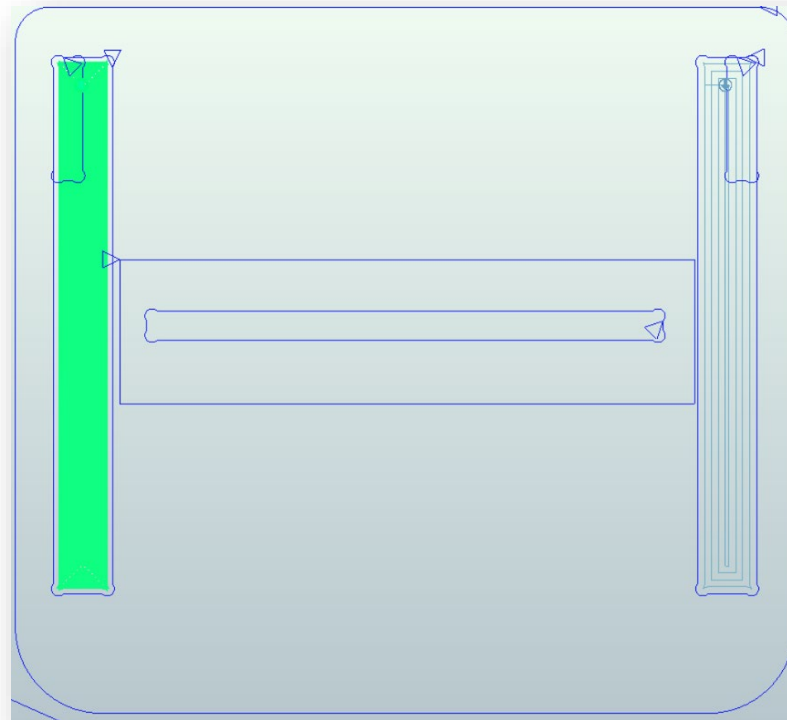
Output should look as below, tool-pathing will be representative of the tooling diameter on screen.

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 toolpath for its full length. This shows overlap 75% of tool diameter.

This is denser than the previous 50% but the offset from the geometry boundary will be half the tool width.
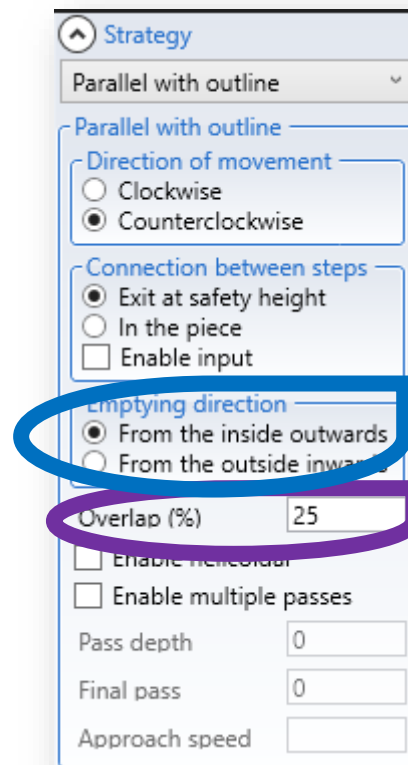
If the material being machined is quite soft and yielding then, "Overlap" in percentage can be decreased under "Strategy".

"Emptying direction" is the only other thing that works here. Do not attempt to use helicoidal or multiple passes they are broken.

You can also select inner and outer geometry boundaries by holding down the shift key upon selection.

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 toolpath for its full length. This shows overlap 25% of tool diameter.

This is less dense than the previous 50% and 75%, however the offset from both geometry boundaries will be half the tool width.
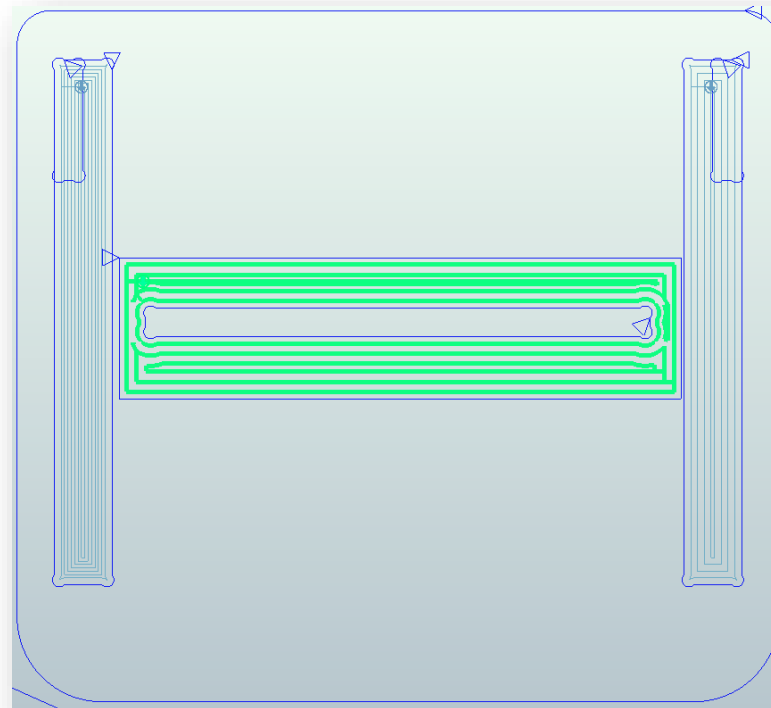
If done successfully you should see a list of Pocket forming under the "Machining" tab.

Before applying the next kind of "Operation" (tool-path) ensure the last previous is highlighted in this list.