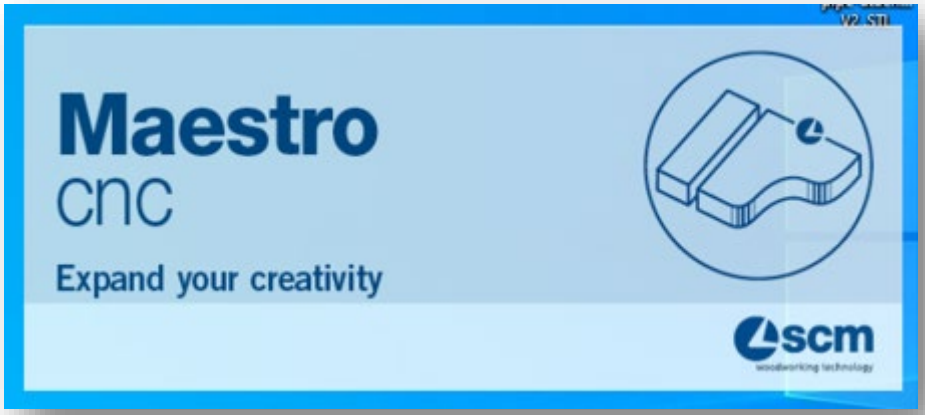
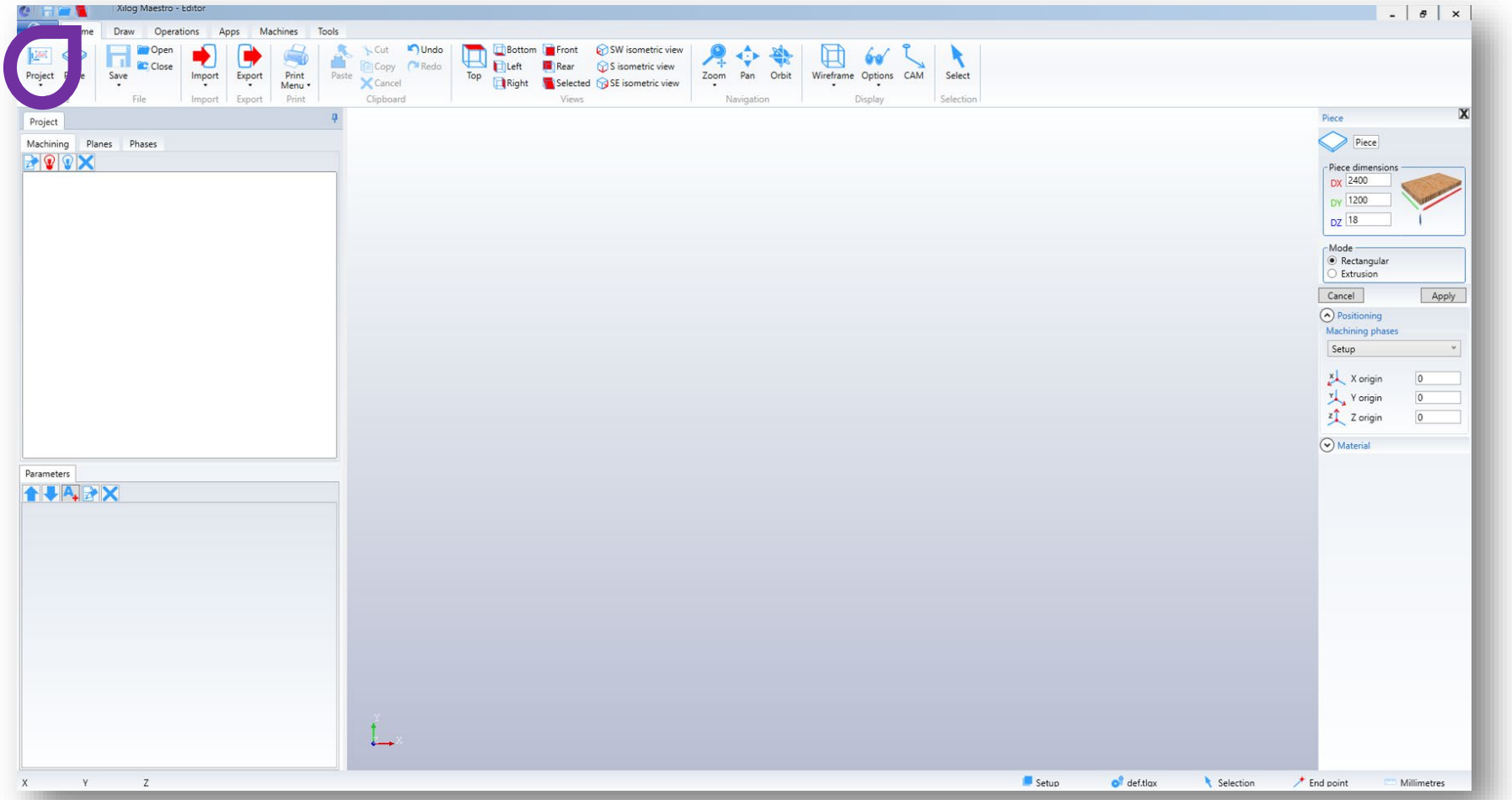
Maestro CAM Getting Started

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

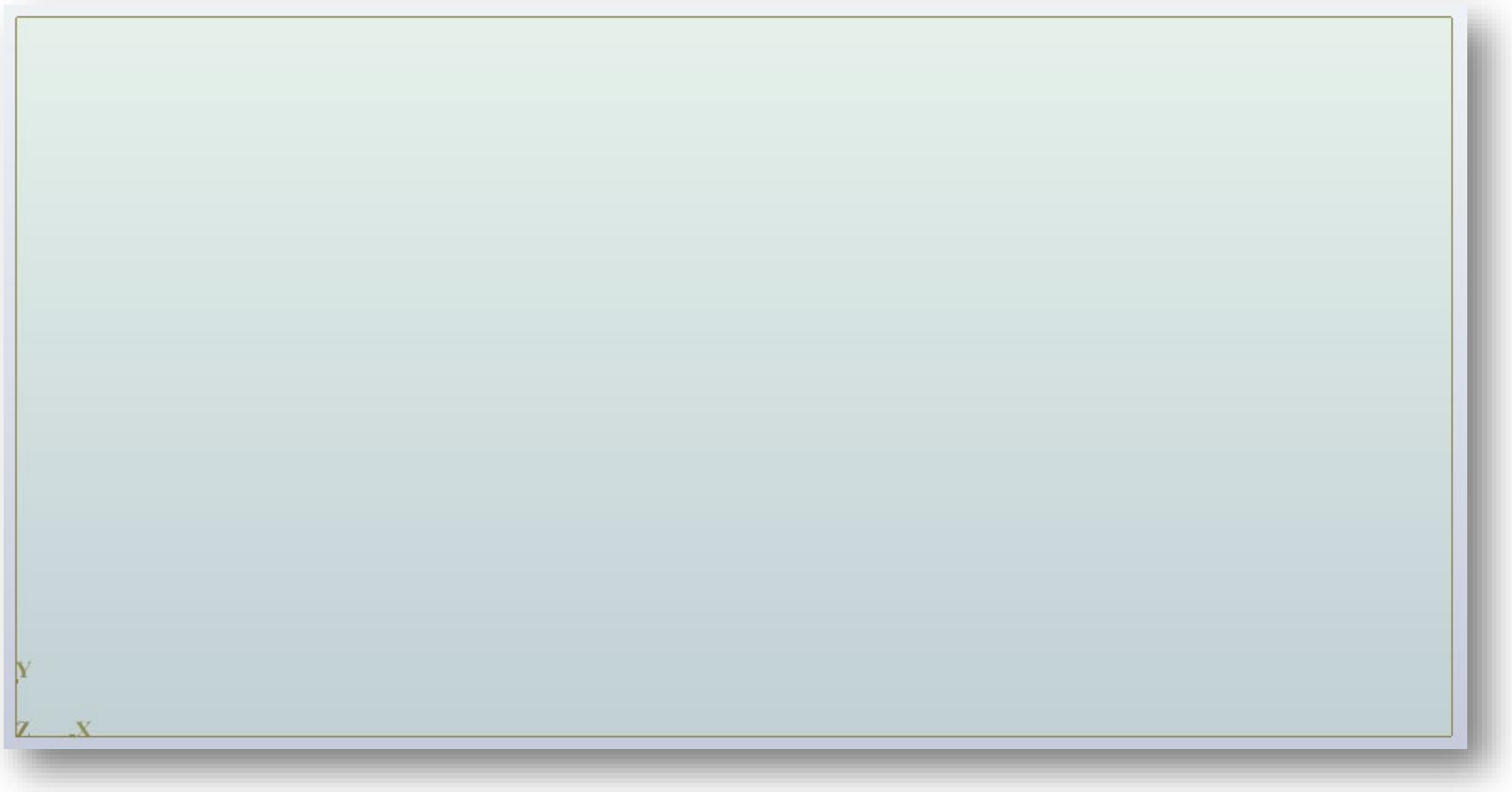
Open Maestro



Start by clicking on “Project” you will then be prompted to fill in “Piece” data. This where you set the size of your stock. Length=X, Height=Y and Thickness=Z. Once you have entered your values click “Apply”.

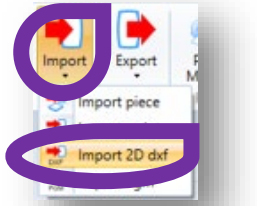


You should now see a graphic view of your stock in the X,Y Plane. Keep this in mind when you make 2D CAD files for Maestro. X is + in movement from Left to Right, Y is + Front to Back. Z differs as it is + from top surface downwards with movement above top surface in the Z-. Ensure your file is Z=0 Plane or it will affect the CAM output.



You can “Draw” geometry in Maestro but it is a difficult interface to use this way and we are better served to create our files in CAD first.

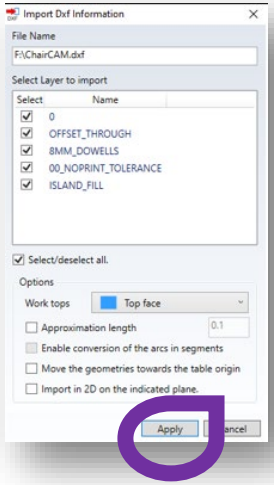
This means you will have to Import your 2D dxf, from the “Home” menu Click on “Import”, “Import 2D dxf”.



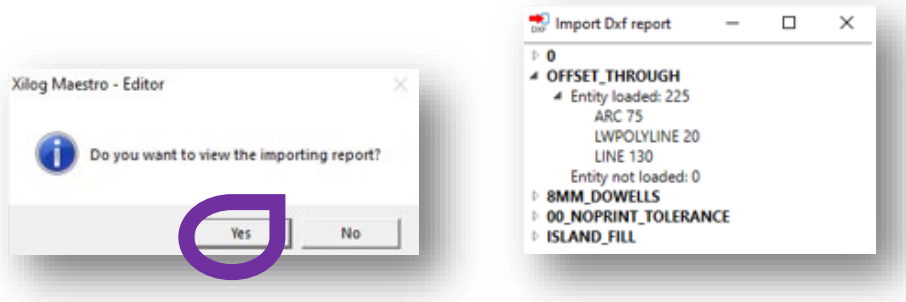
This will bring you to the “Import Dxf Information” dialogue box.

This will be the first and last time you can you layers within the Maestro CAM environment.

If there are layers you do not wish to use untick them otherwise click “Apply”.

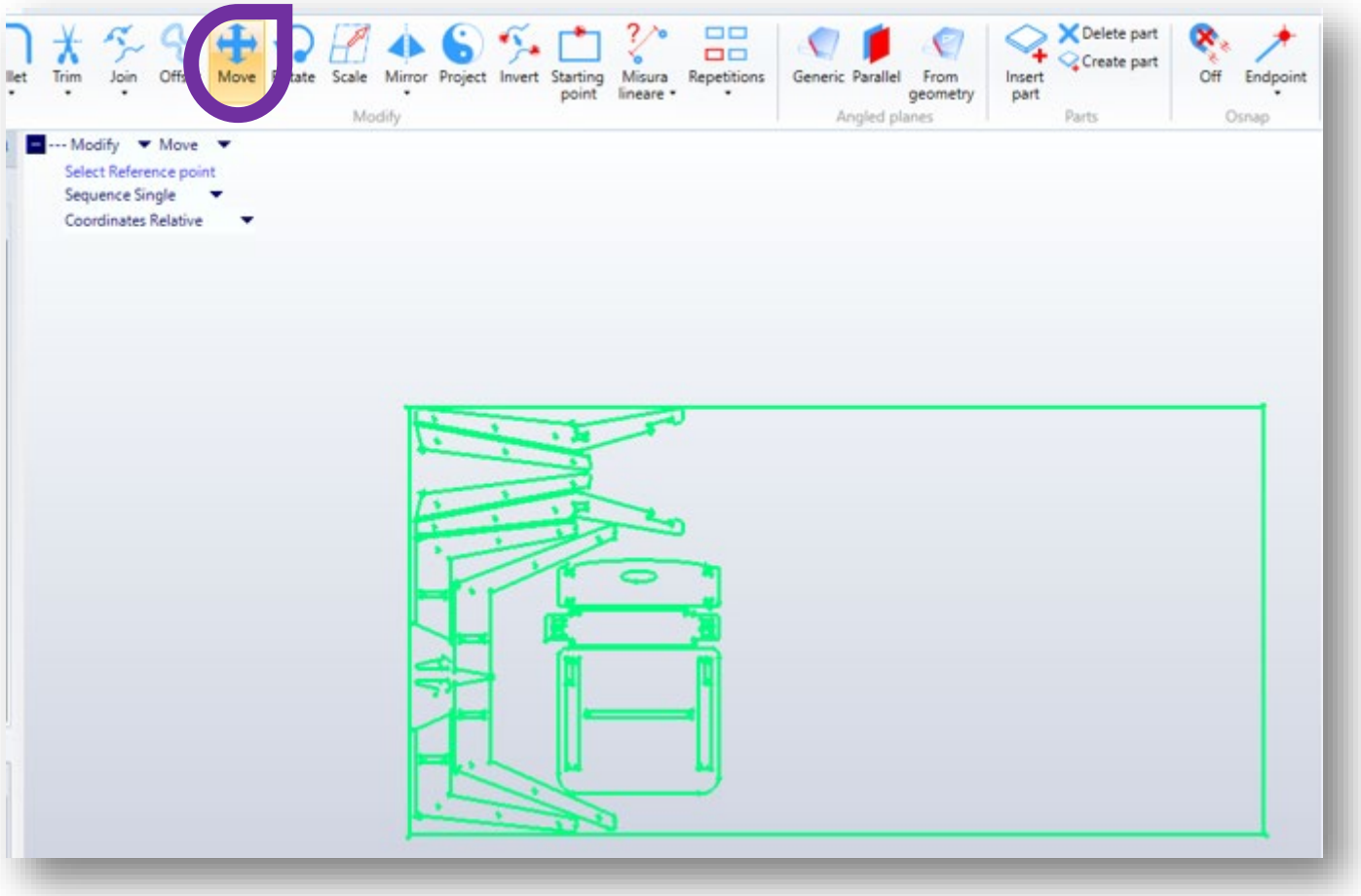


Next dialogue box will be a request to view an “Import Report”.
Normally this can be skipped but if you are having trouble this may reveal vectors that haven’t been imported.
This can be done by clicking the drop down on each layer to see what has been “Loaded” or “Not Loaded”.



When your Geometry imports its position is relative to the original model home position. This can have repercussion with tool pathing.
Sometimes the problem will be obvious such as here in X, Y other times you may be in the wrong plane or worse the Z plane is displaced from 0.

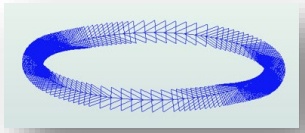
This can be resolved by using “Move” Command found on the “Draw” tab or preferably doing this from your native CAD environment.



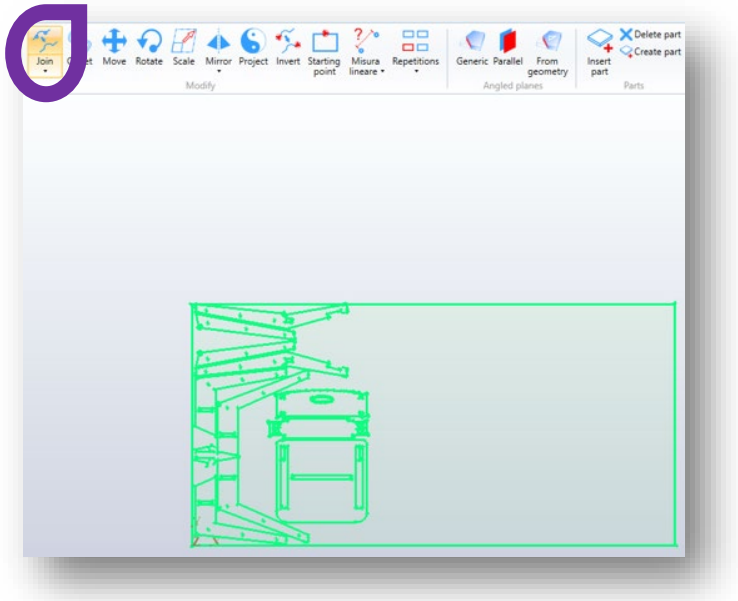
Once you have your geometry aligned with the Origin you may notice that the vectors have triangles all over them.

Each vector has the start point represented with a triangle showing direction of vector.

You may notice that what was thought to be exported as closed geometry is no longer joined together and looks rather messy.



To resolve this, select all your geometries and use the “Join” Command.



Most of your geometry should now be joined but there may be other issues that are best resolved in CAD.
When the mirror command is used in some CAD packages the direction and rotation of the vector changes.
In maestro this is important as it see curves as a start point and end point around an axis.
These problems are best resolved by doing a projection of the geometry in CAD before export.