



User Manual for

VELOBLADE[®] NEXUS



Contents

Page 1 - 3: Chapter 1 – Machine set up.

Page 4 - 5: Chapter 2 – Tools and their positions.

Page 6 - 13: Chapter 3 – Replacing Blades and Milling ends.

Page 14 - 20: Chapter 4 – Changing tools.

Page 21 – 24: Chapter 5 – TCC/Auto Depth and manually setting depths.

Page 25 – 28: Chapter 6 – CCD Window/Software Modes

Page 29 – 34: Chapter 7 – Importing Files

Page 35 – 37: Chapter 8– Cutting Tool Configuration

Page 38 – 41: Chapter 9 – Editing Files

Page 42 : Chapter 10– Additional Icons

Page 43 – 45: Chapter 11 – Begin a cutting mode

Page: Chapter 12 – Maintenance

Chapter 1: Machine Set up

Depending on the installation, the compressor, Hoover/vacuum and water cooler could be plugged into a separate supply or plugged directly into your Veloblade Nexus.

Please ensure the power is turned on to each appliance.

Compressor: Ensure the Drain Valve is closed; the red emergency stop button is in the up position and the air valve is in line with the pipe. [Figure 1.1]

Small Vacuum/Hoover: This is a dual motor Hoover, we only require one to be in the 'On' position. [Figure 1.2].

Water Cooler: Ensure it is in the 'On' position. [Figure 1.3]



Figure 1.1



Figure 1.2



Figure 1.3

There are 5 emergency stops located at each corner of the machine and on the computer stand. Please ensure these are in the up position by twisting them to the left. [Figure 1.4]

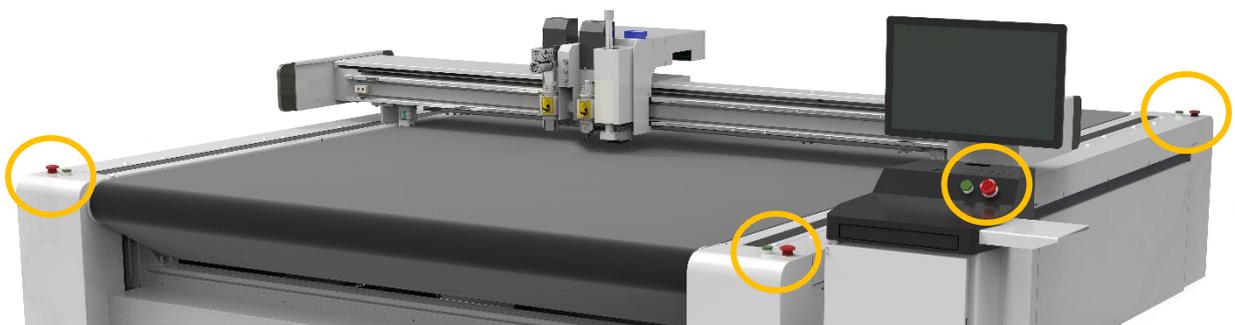


Figure 1.4

Ensure there is nothing on the cutting bed that could interfere with the travel switch. This is located on the sides of the head and it is aligned in front of the tool stations.

Locate the power switch on the right side of the machine and turn to the on position. The Head should move into its home position and align all tools. [Figure 1.5]



Figure 1.5



Locate the VeloBlade Zip Core Software Icon and Double click. [Figure 1.6]



Figure 1.6

Once opened it can take upto a few minutes to come online and show the serial number at the bottom of the screen. [Figure 1.7]

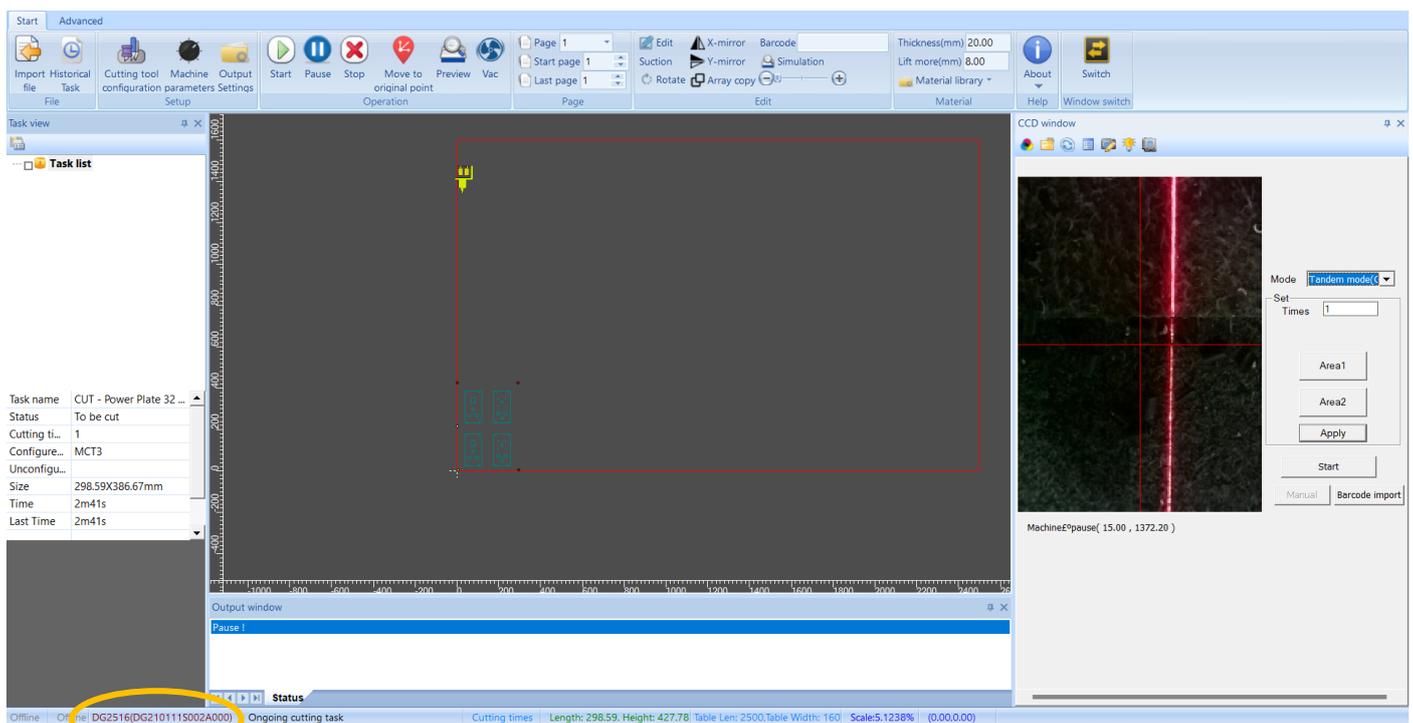


Figure 1.7

If the machine does not go to its home position when being switched on, please check the Output window at the bottom of the software for Errors. [Figure 1.8]

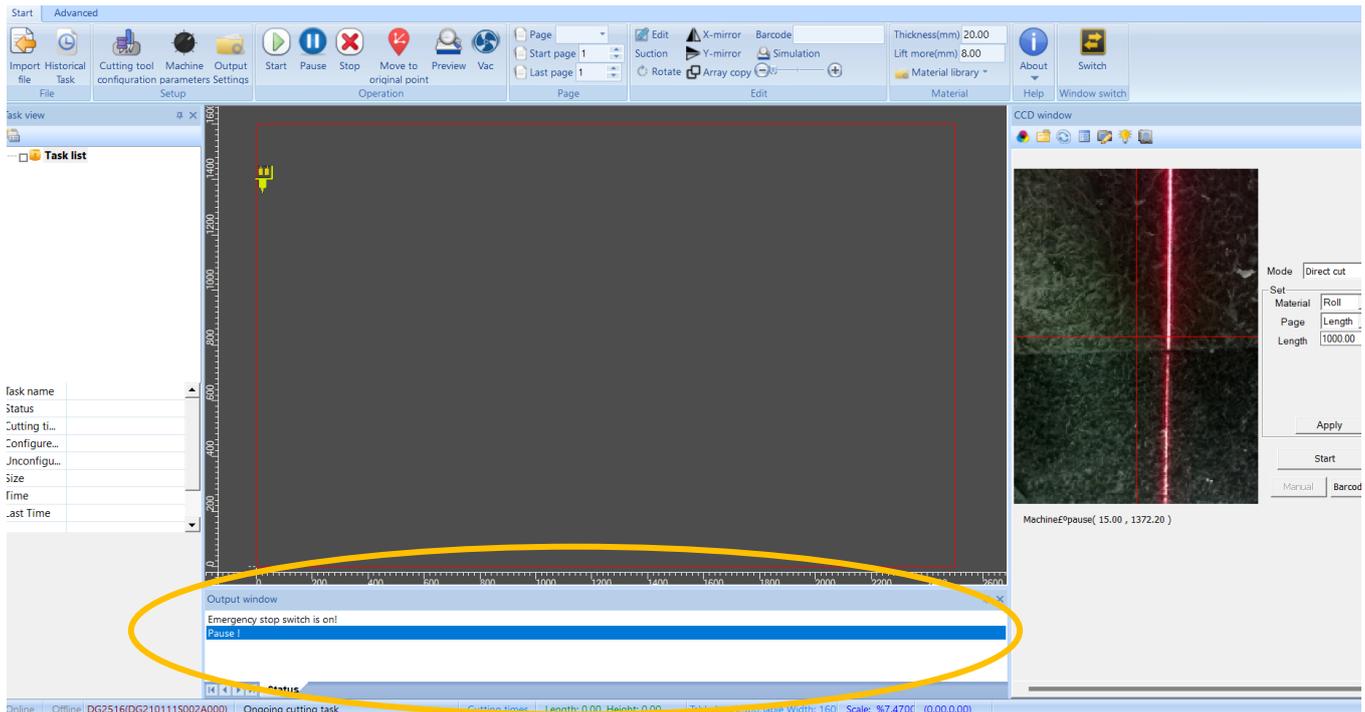


Figure 1.8

You can see from figure 8 the Output Window shows the emergency stop is pressed; these will need to be in the correct position.

Other messages include:

- Low air pressure – ensure the compressor is switched on and has finished charging.
- X11– Machine does not know where the head is, turn the machine off and push the head into its home position [towards the front of the machine and to the far right].
- Z11/Z12 – The tool height is over the limit.
- Z13 – Cutting speed or Idle speed is too high.
- Water Pump Failure – It is not switched on or there is not enough water in the pump [see maintenance section on refilling the water].
- Travel Switch is on -

If X11, Z11, Z12 and Z13 appear in the Output Window you must turn the machine off, wait 20 seconds and switch it back on.

Chapter 2: Tools and their positions

See below for Popular tools used on the Veloblade Nexus Range and their positions on the machine [Figure 2.1]



Figure 2.1

Position 1

- EOT – Electric Oscillating Tool [for materials up to 10mm]
- DCT – Directional cutting tool [for materials up to 5mm]



Figure 2.2

Position 2

- CTT – Crease Trace Tool
- KCT – Kiss Cutting Tool
- VCT – V Cutting Tool

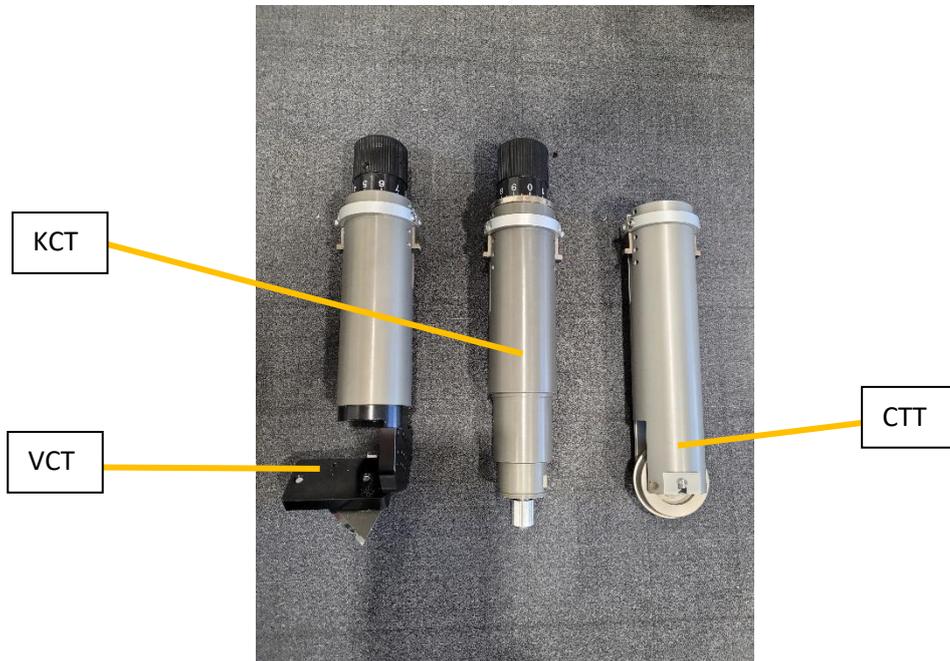


Figure 2.3

Position 3

- MCT – Milling Cutting Tool [for materials up to 25mm]
Allows 3mm/4mm/6mm shank sizes.



Figure 2.4



Figure 2.5

Position 4

- Pen1 – Pen Tool



Figure 2.6

Chapter 3: Replacing Blades and Milling ends

Position 1 - EOT & DCT:

Hold the tool at the side of your body, grip the collar above the spring and pull away from the tool as shown in figure 3.1 & 3.2.



Figure 3.1



Figure 3.2

Loosen the two grub screws. There are Grubs screws on either side of the EOT, please only loosen the side in line with the dot on the tool [Figure 3.3]. For DCT refer to figure 3.4 and EOT refer to figure 3.5.



Figure 3.3



Figure 3.4



Figure 3.5

Take note of the direction of the blade before replacing. The EOT can use any blade we provide. There are two thicknesses of blades 0.7mm and 1mm [Figure 3.6], as standard the EOT will have 0.7mm insert installed [Figure 3.7].



Figure 3.6



Figure 3.7

Once the new blade is secure reattach the collar over the blade. Ensure the dots line up on the collar and tool as shown in figure 3.8. **DO NOT** push the collar on from the bottom as the blade will protrude once located.



Figure 3.8

Position 2 – CTT, KCT & VCT:

CTT: To change the crease wheel for a different thickness, hold the tool and pull the wheel out of the holder [Figure 3.9]. The replacement wheel simply pushes back into the holder.



Figure 3.9

KCT: Locate and loosen the 2 grub screws at the end of the kiss cut tool [Figure 3.10]. The top grub screw will need to be unscrewed more to allow the insert to come out [Figure 3.11]. Push the blade out [Figure 3.12] and remove [Figure 3.13].



Figure 3.10



Figure 3.11



Figure 3.12



Figure 3.13

We stock 2 types of blades N04 [angle 30 degrees] and the N05 [angle 45 degrees].

Notice the angle on the shaft of the blade must coincide with the collar [Figure 3.14]. Please ensure when putting in the new blade it is fully inserted into the collar [Figure 3.15].



Figure 3.14



Figure 3.15

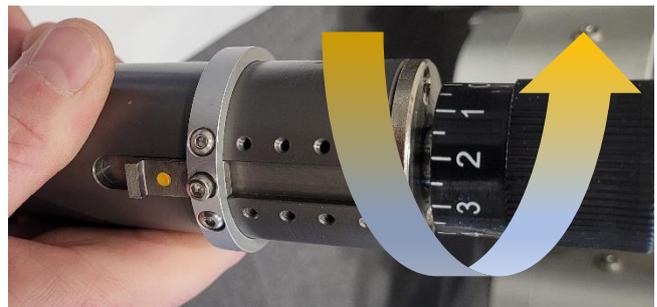


Figure 3.16

Once the blade is inserted carefully push the collar back into the tool holder and tighten the grub screws.

We stock 3 types of spring pressures, Red is the strongest, Yellow is medium, and Green is the weakest. Yellow is usually used for vinyl that has been laminated and Green for non-laminated.

To change the spring loosen the knob at the top of the tool anti-clockwise direction [Figure 3.17].



Remove the collar [Figure 3.18 and 3.19] being careful not to lose the black spring for the collar [Figure 3.20].



Figure 3.18



Figure 3.19



Figure 3.20

Choose the desired spring [figure 3.21] and reassemble the tool.



Figure 3.21

Setting the amount of blade needed is determined by the silver knurled knob on the bottom of the tool [Figure 3.22]. To show less blade turn anti-clockwise. We advise the minimum amount of blade showing as possible.

To test the blade depth, drag the tool towards you while applying firm pressure. The yellow dot on the tool should be facing you [Figure 3.23]. You will need just enough blade to cut your vinyl without damaging the backing paper [Figure 3.24].



Figure 3.22



Figure 3.23

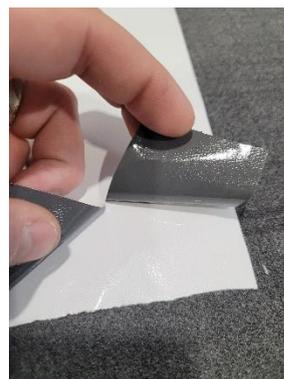


Figure 3.24

VCT: The V cutting Tool can house 3 different lengths of blade [Figure 3.25] and have 5 different angles for the blade. The angles include 45, 30, 22.5, 15 and 10 degrees. As standard the tool will come set up for 45 degrees.

Loosen the knob anti-clockwise holding the tool in place [Figure 3.26]

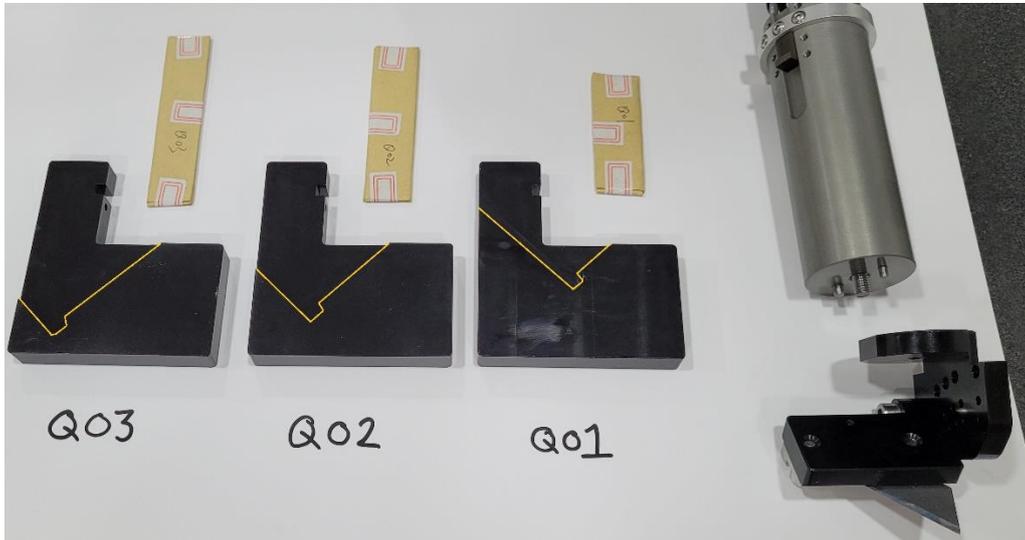


Figure 3.25



Figure 3.26

Loosen the 2 bolts holding the blade in position [Figure 3.27] and then loosen the bolt holding the Angle bracket [Figure 3.28]. Choose which length blade you require and the corresponding guide [Figure 3.25].

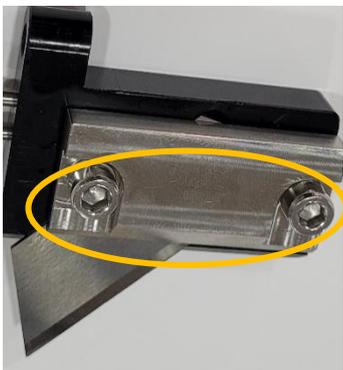


Figure 3.27



Figure 3.28



Figure 3.29



Figure 3.30

Insert the Angle bracket into the guide [Figure 3.29 and 3.30] and start to slide in the blade into the insert under the blade clamp [Figure 3.31].

The Angle bracket has a recess for the blade, ensuring it sits flush to the bracket [Figure 3.32]. Insert the blade until it reaches the end of the guide [Figure 3.33] and tighten the blade clamp using the 2 bolts as shown in figure 3.27.



Figure 3.31

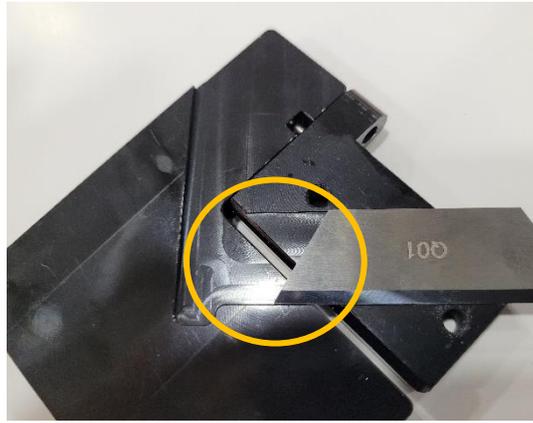


Figure 3.32

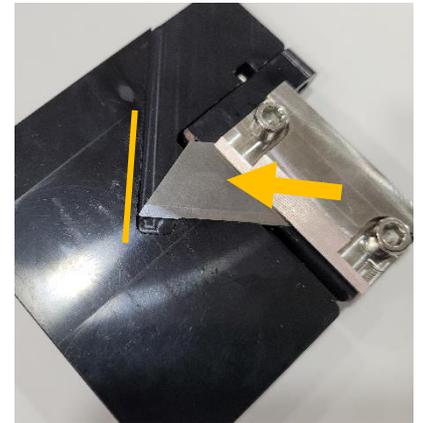


Figure 3.33

Now the blade is secure choose the angle desired [Figure 3.34] and tighten the bolt to secure the bracket [Figure 3.35]. I have chosen the 45-degree angle.

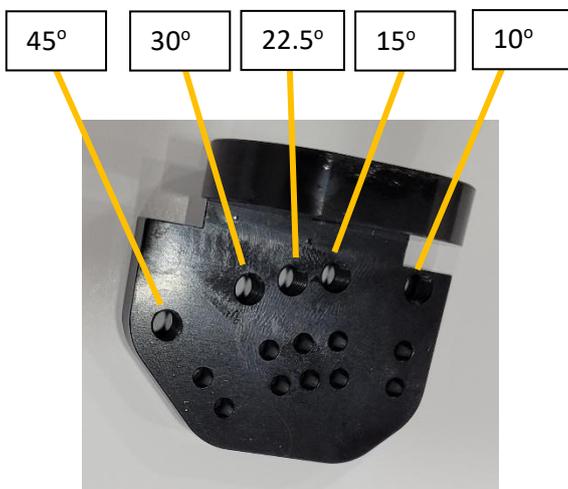


Figure 3.34



Figure 3.35

When reassembling the bracket to the tool please ensure the larger pin is aligned with the larger hole [Figure 3.36].



Figure 3.36

Position 3 – MCT:

Lift the router brush to gain access to the milling ends. Use the 13mm spanner provided and place onto the flat spot of the router shaft [Figure 3.37 and 3.38].



Figure 3.37

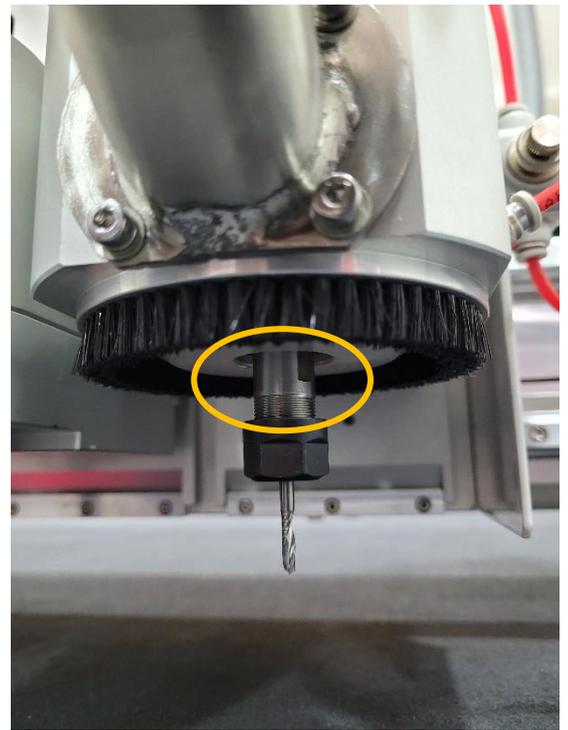


Figure 3.38

While holding the 13mm on the shaft, use a 17mm spanner and place on the locking nut and pull the 17mm spanner clockwise direction to loosen [Figure 3.39]. Once loose, unscrew the locking nut from the shaft [Figure 3.40].

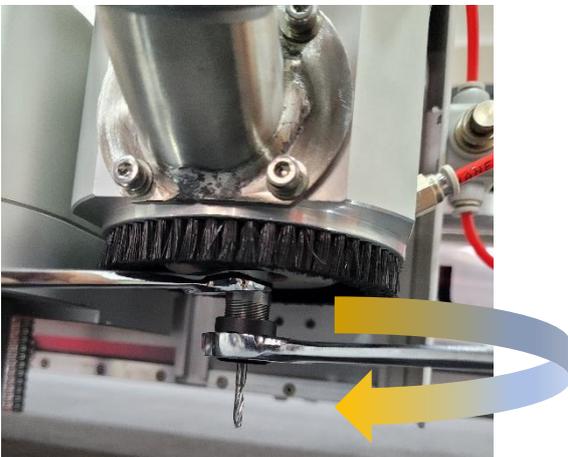


Figure 3.39



Figure 3.40

Remove the milling end from the collet and then remove the collet from the locking nut [Figure 3.41].

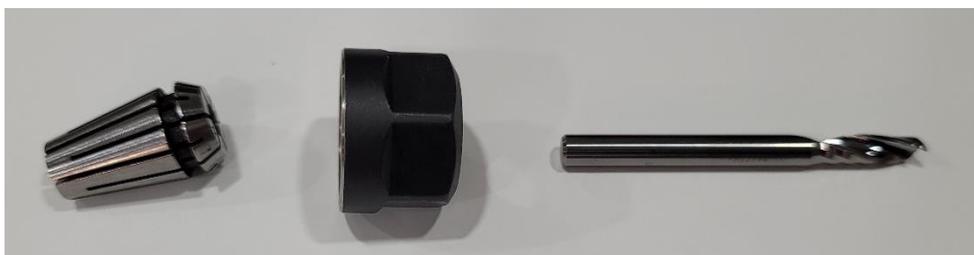


Figure 3.41

Choose which size drill bit and corresponding collet you require. Push the collet into the locking nut firmly to lock it into place [Figure 3.42].



Figure 3.42

Push the selected milling end into the collet ensuring it is flush with the top part of the collet [Figure 3.43] and tighten back onto the router shaft [Figure 3.44].



Figure 3.43

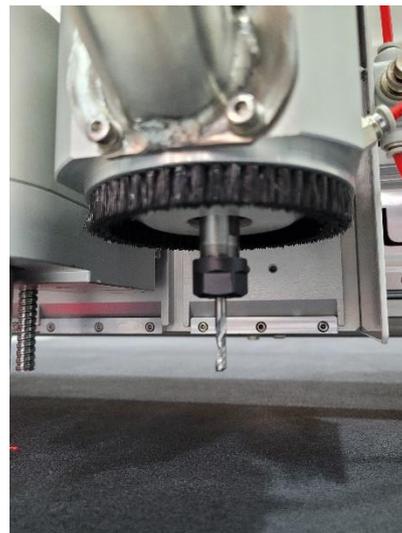


Figure 3.44

When tightening onto the shaft don't apply too much pressure as this will cause the milling end to be unbalanced.

Chapter 4 – Changing tools

Tool Position 1:

DCT – Locate the yellow dot on the DCT tool [Figure 4.1] and in the tool holder [Figure 4.2]. Ensure the locking collar is in line with the tool housing [Figure 4.2].

Slide the tool into the holder ensuring the yellow dots are facing each other [Figure 4.3].



Figure 4.1

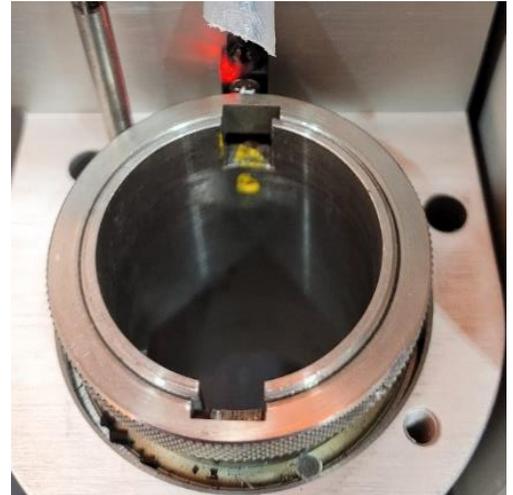


Figure 4.2

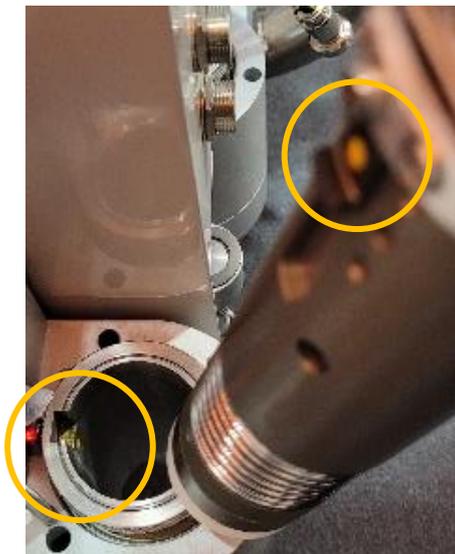


Figure 4.3

Once the tool is in its position [Figure 4.4] tighten the locking collar by turning it clockwise [Figure 4.5].

When using Auto Depth for this tool, you will need to remove the white nylon spring cap before inserting the tool into its holder [Figure 4.6].



Figure 4.4



Figure 4.5



Figure 4.6

EOT – Locate the yellow dot on the tool and in the tool holder, Slide the tool into its holder ensuring the yellow dots are facing each other [Figure 4.7] and the motor clip is aligned with the support [Figure 4.8].

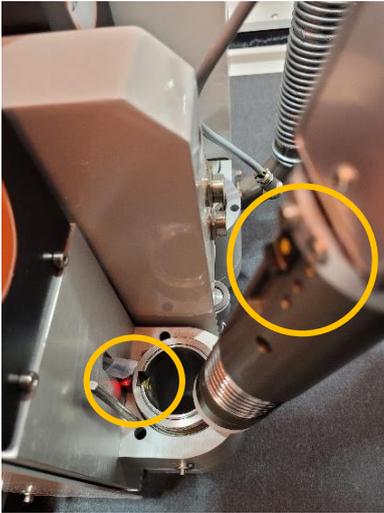


Figure 4.7



Figure 4.8



Figure 4.9

As the motor and shaft turn separately, you may need to align the shaft to the tool holder [Figure 4.9].

Once the tool is in position, tighten the locking collar as shown in figure 4.5 on the previous page and attach the power cable to the bottom connection [Figure 4.10].



Figure 4.10

Tool Position 2:

CTT – Remove the crease wheel from the tool and put in its holder. Once the tool is in position tighten the locking collar by turning it clockwise [Figure 4.11 and 4.5]. Push the crease wheel back into its holder [Figure 4.12].



Figure 4.11

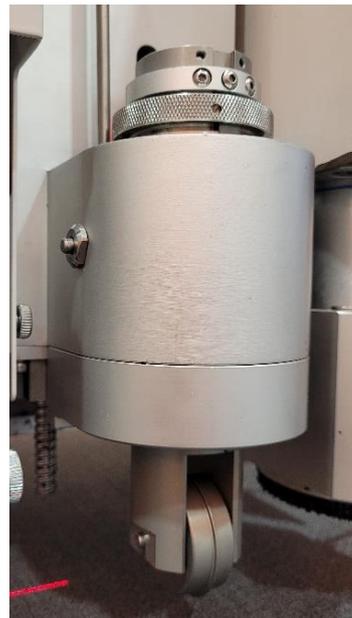


Figure 4.12

KCT – Locate the yellow dot on the KCT tool and in the tool holder. Slide the tool into the holder ensuring the yellow dots are facing each other as shown in Figures 4.1, 4.2 and 4.3. Once the tool is in its position tighten the locking collar by turning it clockwise as shown in figure 4.11.

VCT – Loosen the knob anti-clockwise holding the tool in place [Figure 4.13] and detach the angle bracket and blade from the tool [Figure 4.14].

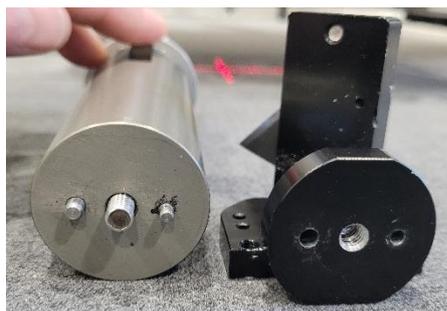


Figure 4.14



Figure 4.13

Locate the yellow dot on the VCT tool and in the tool holder. Slide the tool into the holder ensuring the yellow dots are facing each other as shown in Figures 4.1, 4.2 and 4.3. Once the tool is in its position tighten the locking collar by turning it clockwise as shown in figure 4.11.

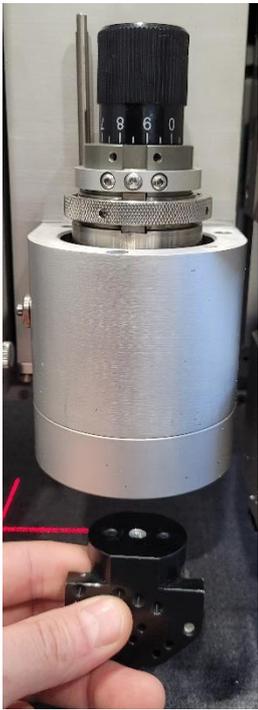


Figure 4.14

Then attach the angle bracket with blade to the tool [Figure 4.14] ensuring the larger pin aligns with the larger hole [Figure 4.15].

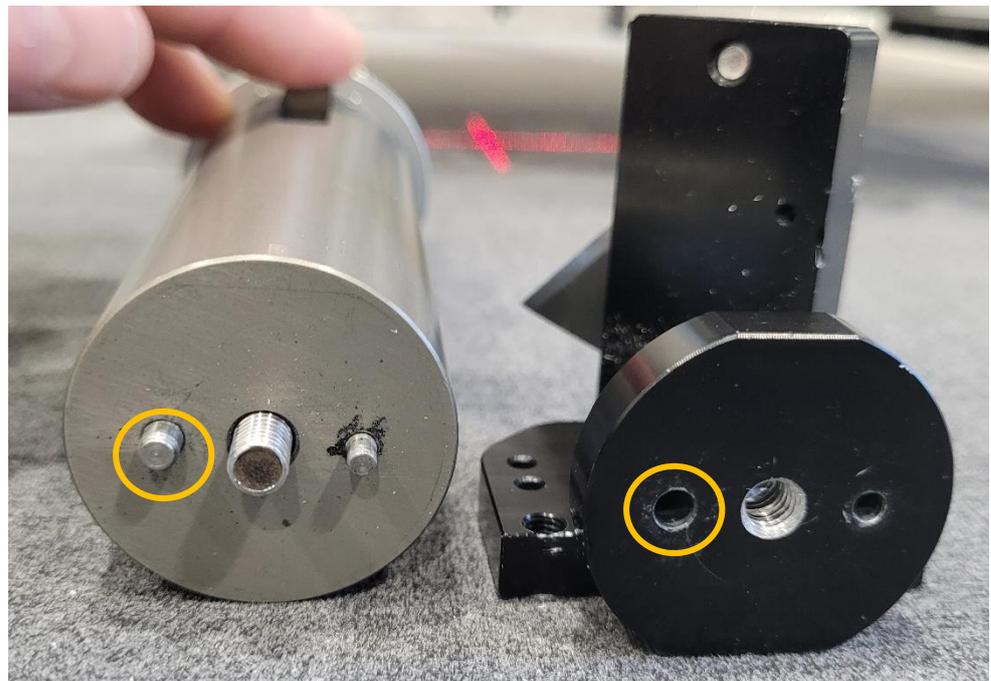


Figure 4.15

The Angle bracket and blade must be fully inserted into the pins and sit flush to the tool [Figure 4.16].



Figure 4.16

When changing the tool, or the size of the milling end you will need update the software to which tool/milling end you are using.

If the CCD Window is open, click on the switch button [Figure 4.17] to change the screen to the debug view [figure 4.18].

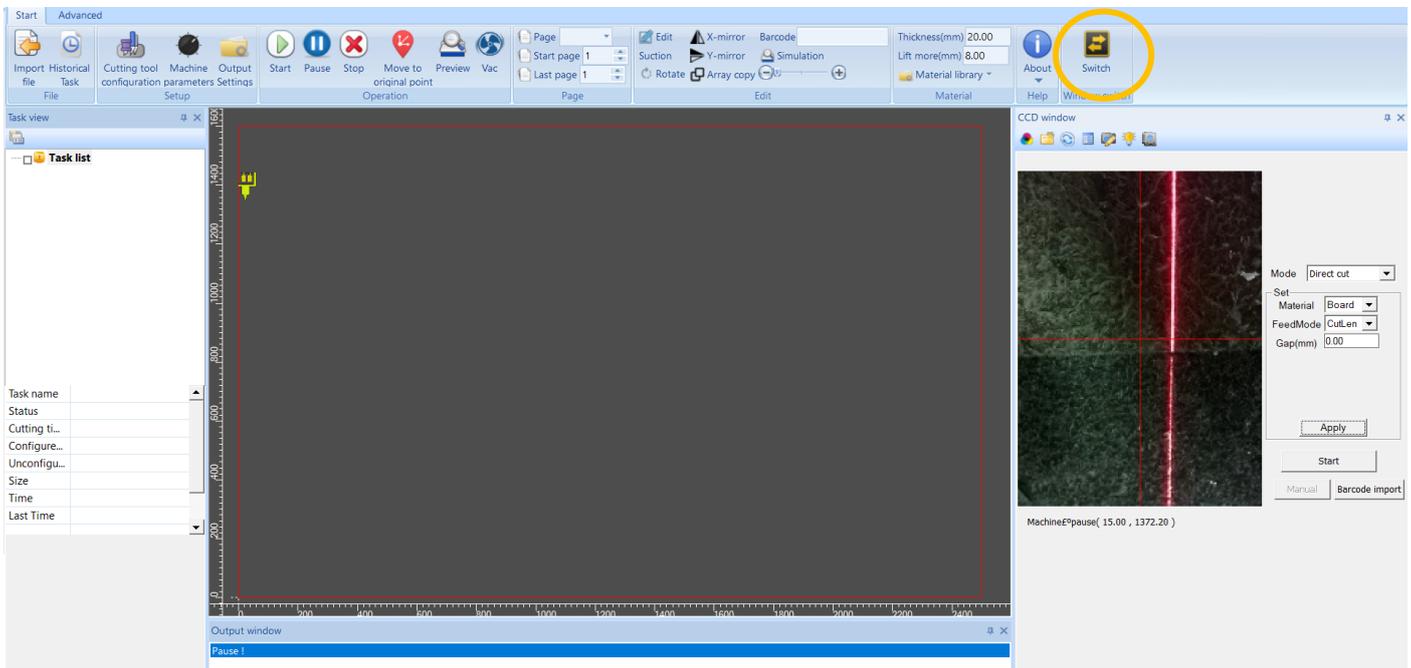


Figure 4.17

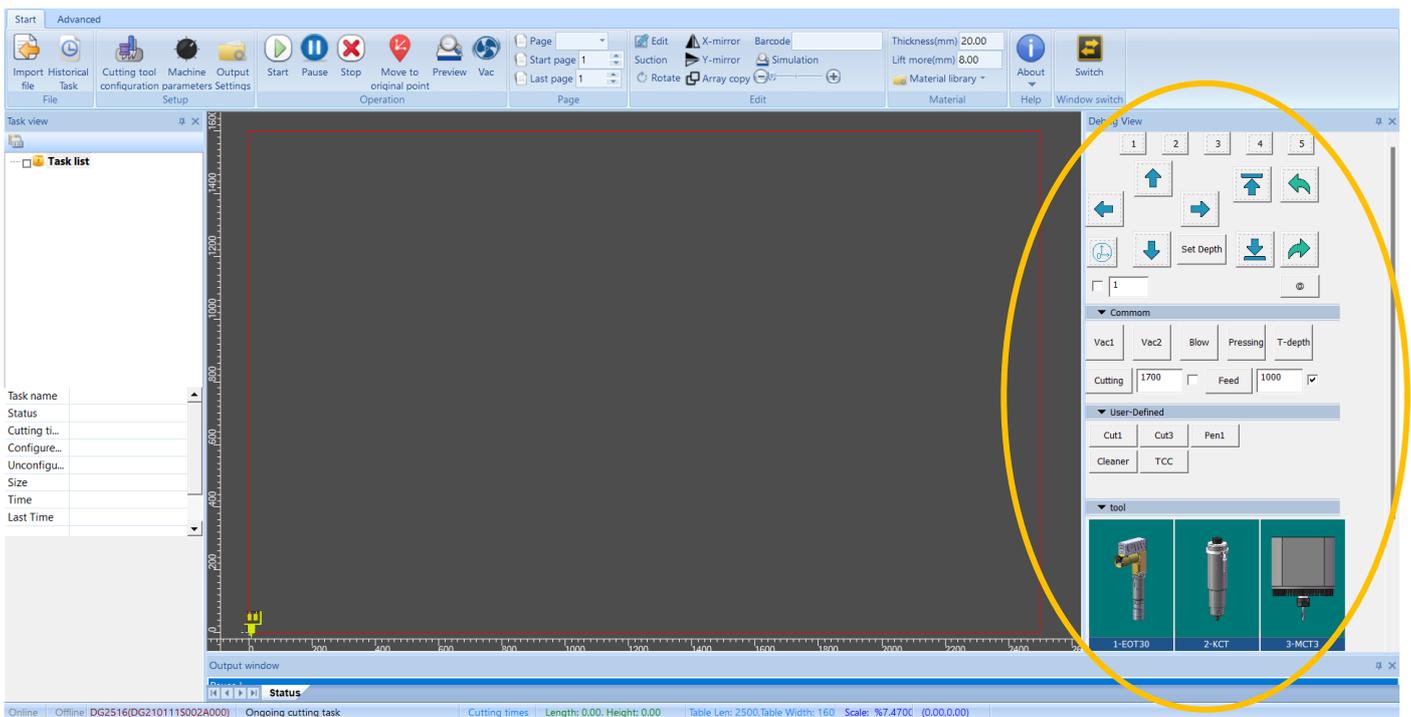


Figure 4.18

In the debug view click on the picture of the tool you are changing [Figure 4.19].

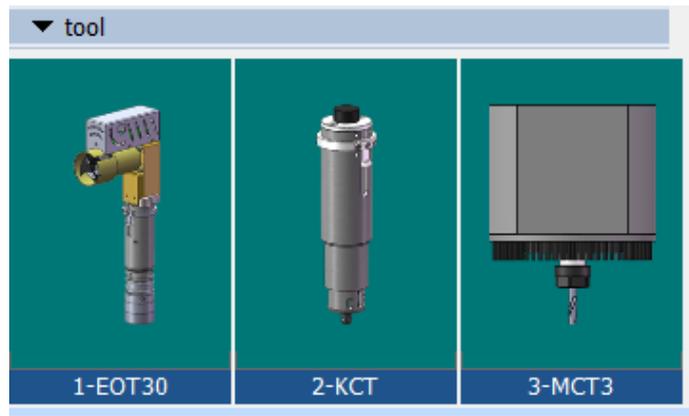


Figure 4.19

Once clicked it will open the cutting tool configuration for this tool position. Click on the name inline with the control mode and it will give you a drop-down arrow to the right of the column [Figure 4.20].

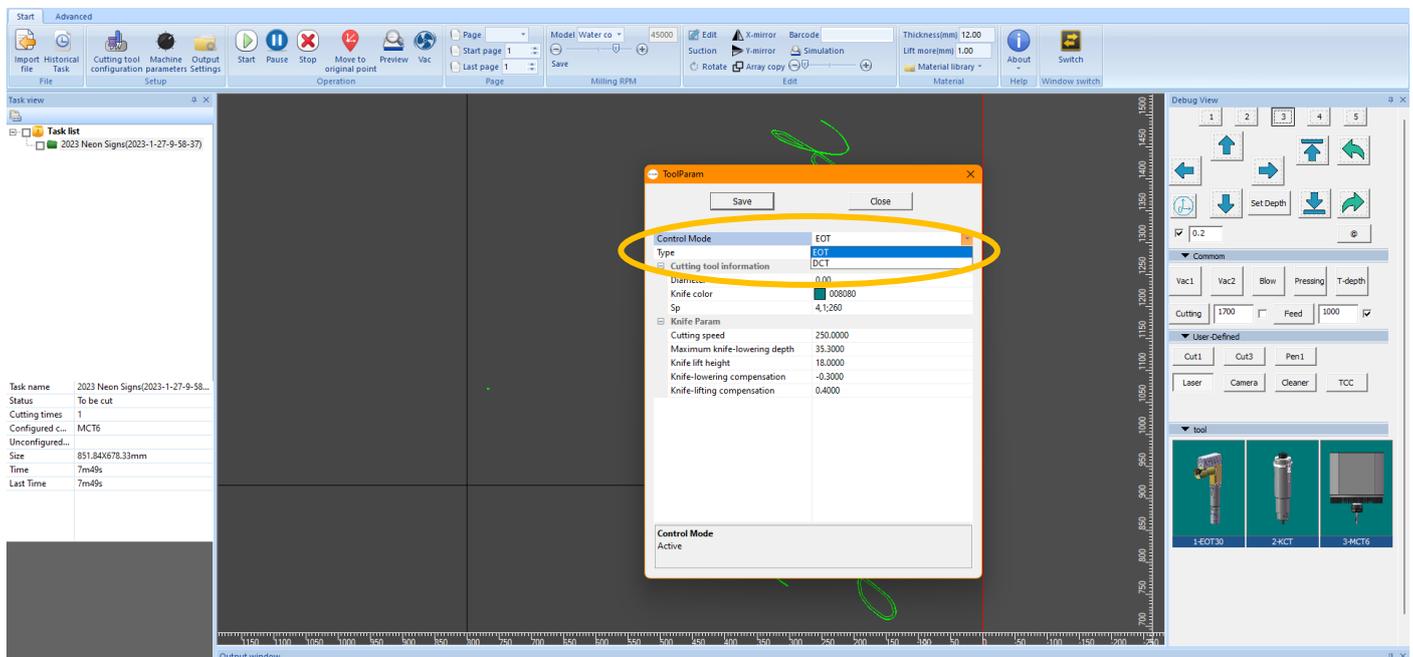


Figure 4.20

Select the tool you want to use, once selected the picture and parameters will change [Figure 4.21].

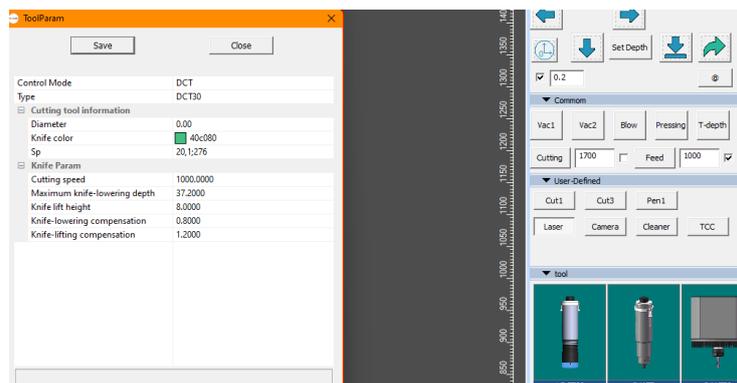


Figure 4.21

If changing the MCT for a different size milling end, click on the Type and a drop-down arrow will appear on the right [Figure 4.22]. Select which size milling end you want to use.

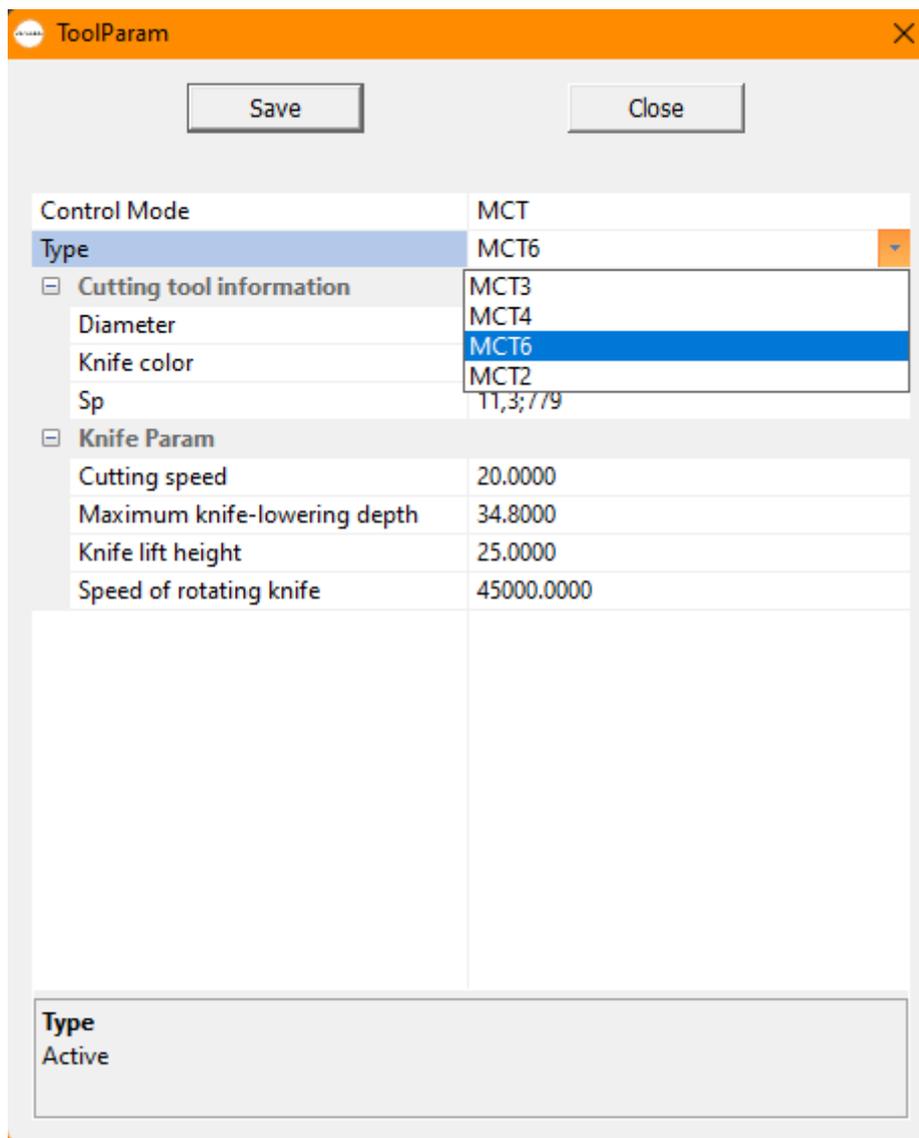


Figure 4.22

Chapter 5: Setting tool/blade depths and TCC/Auto Depth

TCC [Tool Cutting Calibration] / Auto Depth:

The Veloblade Nexus has 2 stations for TCC on either side at the front of the machine, the left side is for Tool Position 1 [DCT and EOT] and the right side is for Tool Position 3 [MCT].

Please Note: The TCC/Auto Depth is set up only for one Blade or Milling end.

- EOT = VV-BLADE-N73
- DCT = VV-BLADE-N17-05
- MCT3 = VV-BLADE-X01
- MCT4 = VV-BLADE-X02
- MCT6 = VV-BLADE-X03

If you are using a different blade please follow the manual depth setting on the following page.

The numbers at the top of the Debug View [Figure 5.1] relate to the tool positions.

When using the TCC it is important the blade or milling end can be seen by the sensor.

For DCT please remove the white nylon spring cap [Figure 5.2].

For MCT please ensure the Vacuum attachment is in the up position. [Figure 5.3].

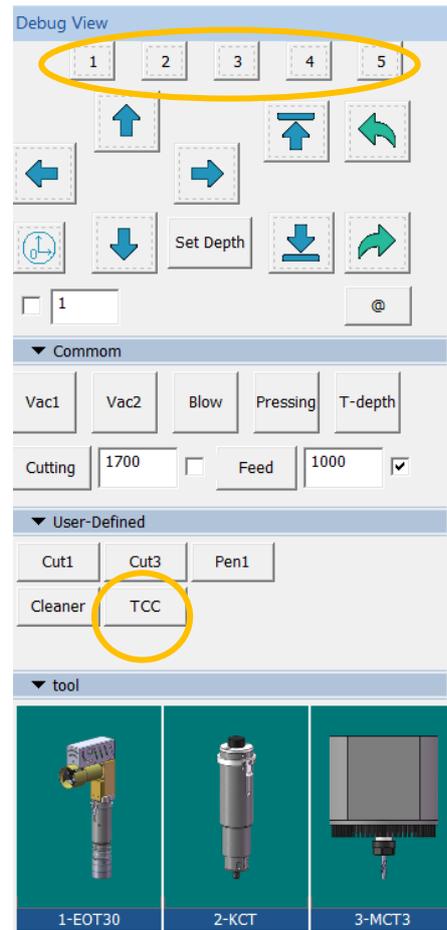


Figure 5.1



Figure 5.3



Figure 5.2

Click on the tool position you want to Auto Depth and press TCC.

Setting the blade depth manually:

For DCT please remove the white nylon spring cap [Figure 5.2].

For MCT please ensure the Vacuum attachment is in the up position. [Figure 5.3].

Select which tool position you want to manually set the depth for at the top of the debug view [Figure 5.4]. The number in Figure 5.5 is the distance you want the tool to move down, select the distance require and tick the box as per Figure 5.6.

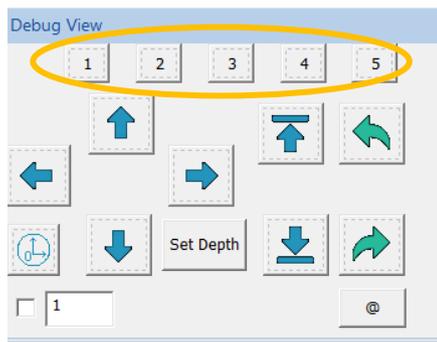


Figure 5.4

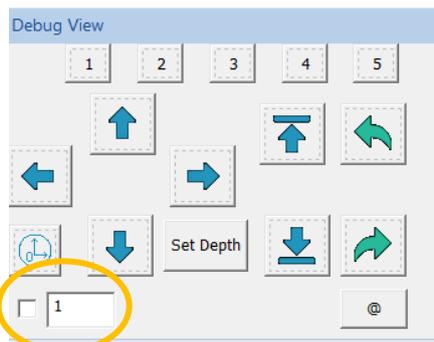


Figure 5.5

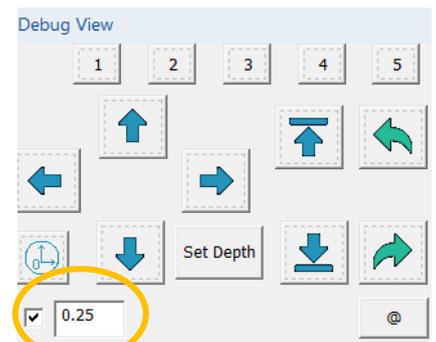


Figure 5.6

Move the cutting head out of the way to load material onto the cutting mat, this can be done by using the keyboard arrow keys see figure 5.7. To move the head more quickly, press and hold 'ctrl' and select the direction you want to move.



Figure 5.7

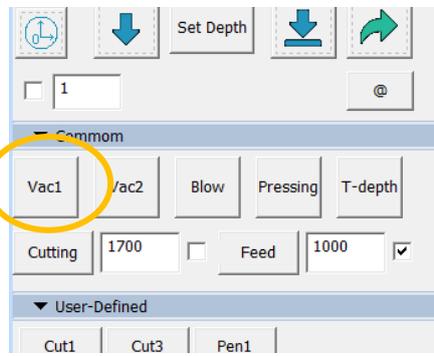


Figure 5.8

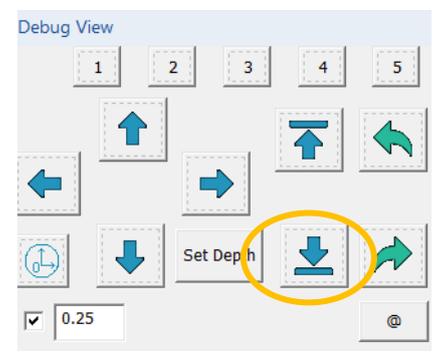
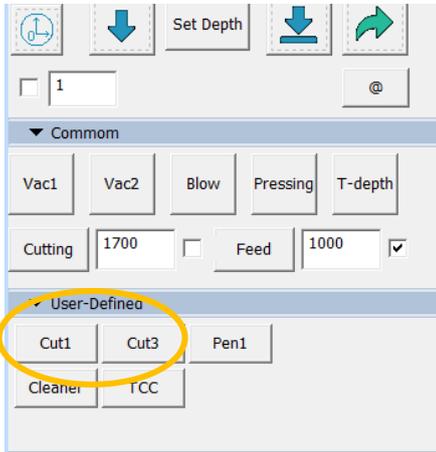


Figure 5.9

If you are using the tool position 3 [MCT] please use the sacrificial mat provided over the cutting bed, this will protect the cutting bed from being damaged when using the router.

Place a piece of paper/media (no more than 500 gsm) onto the cutting bed near the computer stand and move the head ensuring the tool you are setting is over the media. For the MCT you will not require the paper as you will be lowering the tool to the sacrificial mat.

Press the down arrow with the line underneath [Figure 5.9], the tool will begin to move down each time you click the down arrow. When the blade/Milling end is just above the media turn on the vacuum [Figure 5.8].



When lowering the EOT/MCT you will need to turn on the motors for that tool [Figure 5.10].

EOT- Cut1

MCT – Cut3

Figure 5.10

Tool Position 1: Keep lowering the blade until it just scratches

the media, this can be checked by moving the head using the arrows on the keyboard in the direction the blade is facing. Please note if you use any other direction, it could damage the blade.

Once it scratches the media, you will need to lower the tool another 0.3 and then click set depth [Figure 5.11].

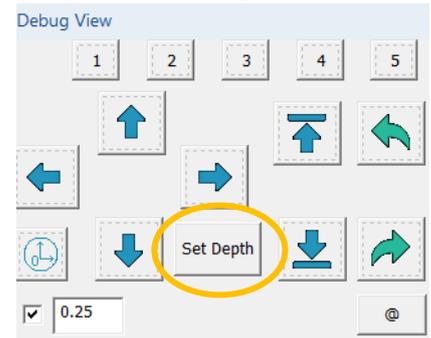


Figure 5.11

Tool Position 2:

CTT – This will require a firm indent into the media.

VCT – Depending what is required it can be lowered all the way through the material or if using for folding, it needs to be lowered to the skin of the media. This is usually the thickness of 300gsm, for this method use a 300gsm media and scratch the surface of the media before setting the depth.

KCT – this will need to be lowered until the silver knurled knob is fully pressed into the kiss cutting material ensuring it activates the compensation spring [Figure 5.12] pushing the top black knob upwards.



Figure 5.12

Tool Position 3: Keep lowering the milling end until it touches the sacrificial mat. Ensure it is making good enough contact but not cutting through the mat. Once done set the depth as per Figure 5.11.

Once the manual depth setting is complete, we would advise to test the depth. This can be done by clicking on 'T-Depth' [Figure 5.13].

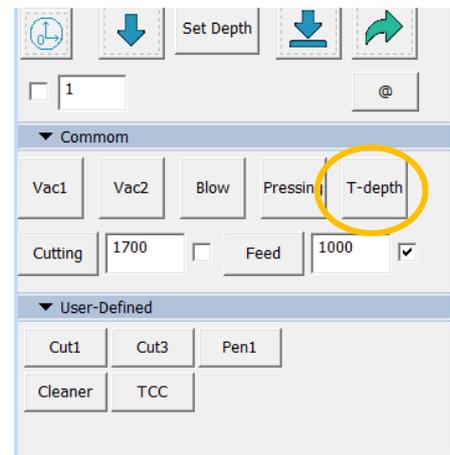


Figure 5.13

To change the depth of a tool by +/- 1mm. Click on the picture of the tool [Figure 5.14] and change the Maximum knife lowering depth [Figure 5.15]. Increasing the value of this will lower the height by mm, for example if you require 0.2mm extra to cut through your material change the value from 35.3 to 35.5.

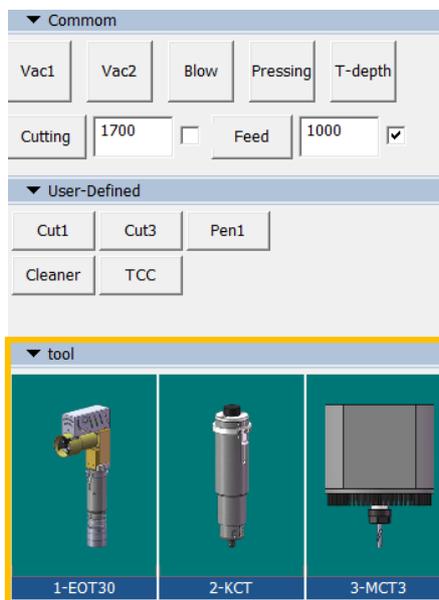


Figure 5.14

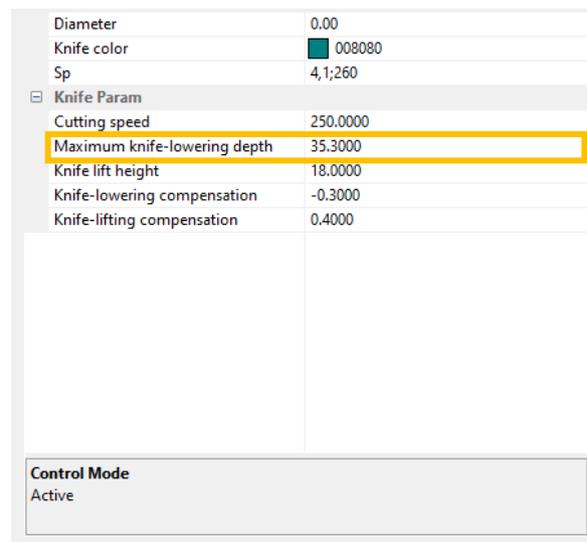


Figure 5.15

Chapter 6: CCD Window/Software Modes

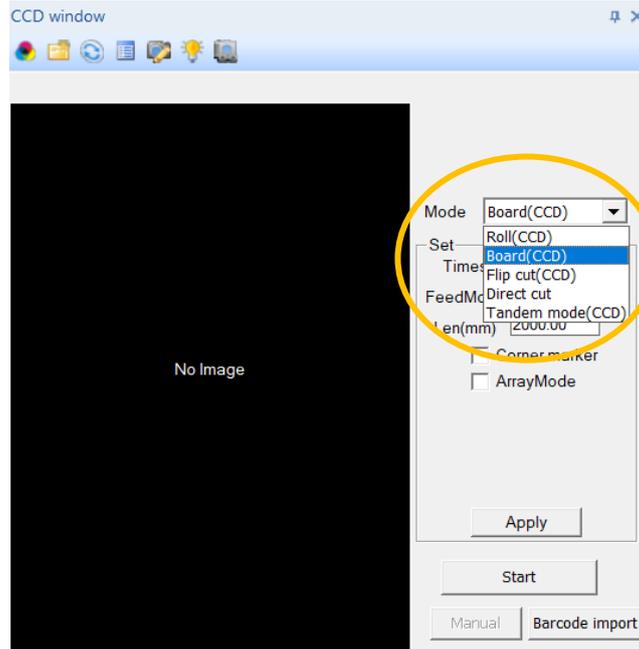


Figure 6.1

There are five Different operating modes to the Veloblade:

- Roll CCD – Media printed on a roll with registration marks.

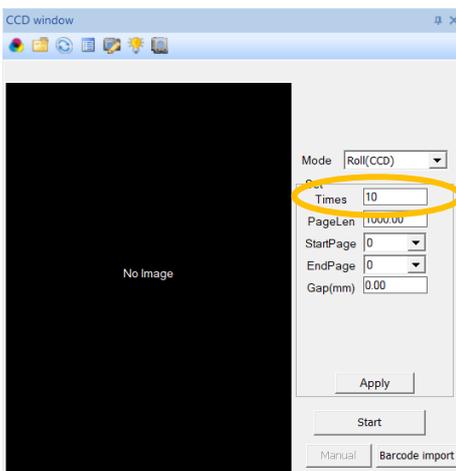


Figure 6.2

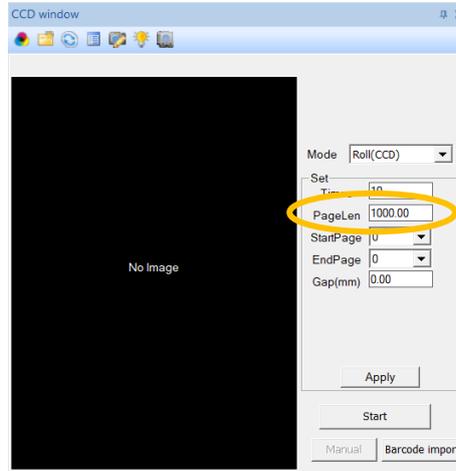


Figure 6.3

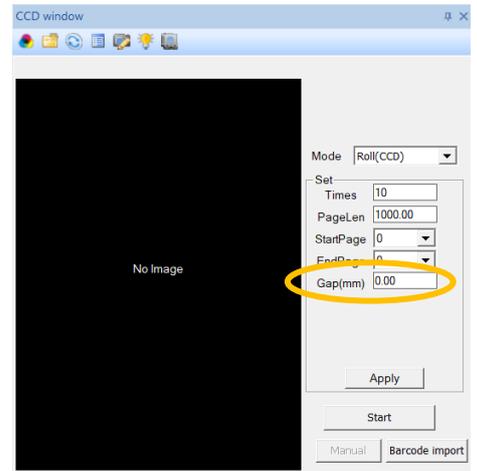


Figure 6.4

Enter how many times you have printed the artwork onto the roll [Figure 6.2].

Enter the page/artwork length including the 6mm registration marks [Figure 6.3].

Enter the distance between the page/artwork including the 6mm registration marks [Figure 6.4].

Once done click Apply.

- Board CCD – Media printed with registration marks.

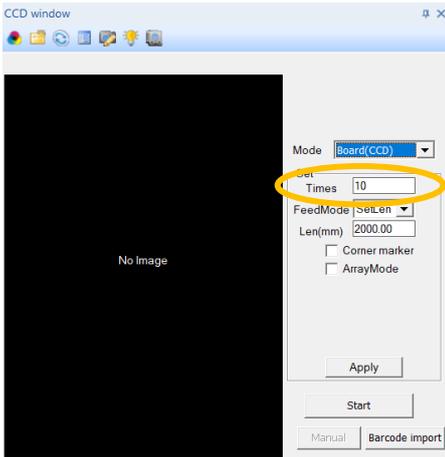


Figure 6.5

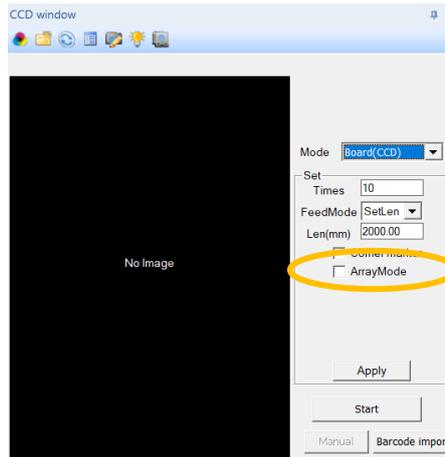


Figure 6.6

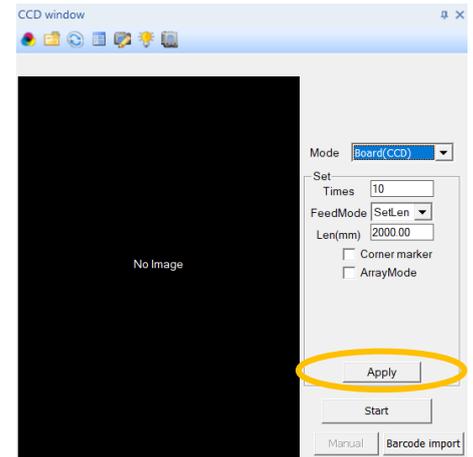


Figure 6.7

If you have a feeder enter the amount of media you have printed, if you do not have a feeder please enter the number as 1 [Figure6.5].

If you have multiple boards that fit on the cutting bed please tick array mode [Figure 6.6].

Once done click Apply [Figure 6.7].

- Flip Cut CCD – Media printed with registration marks cutting from the reverse.

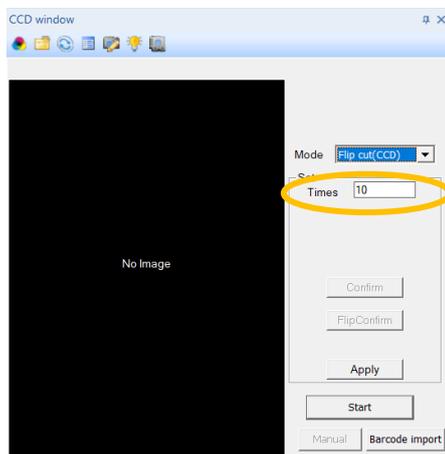


Figure 6.8

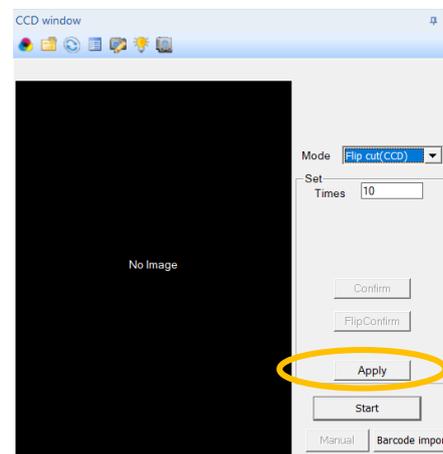


Figure 6.9

This is a mode where you must manually flip the media enter the times as 1 [Figure 6.8], then click Apply [Figure 6.9].

- Tandem Mode CCD – Media printed with registration marks.

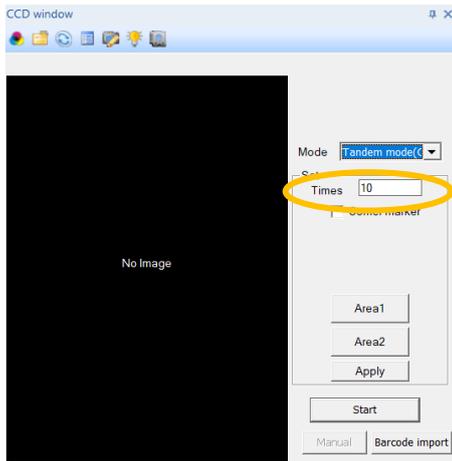


Figure 6.11

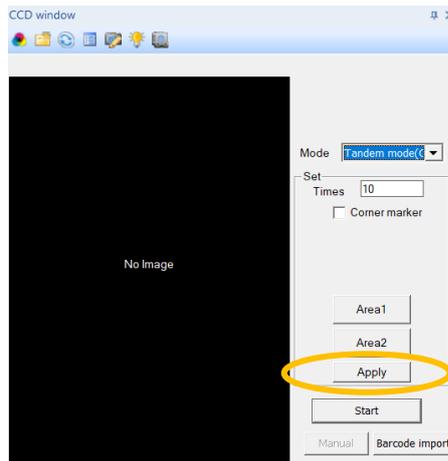


Figure 6.12

In this mode it divides the cutting bed to give you two cutting areas to allow you to remove the media in one area while it cuts in another.

Enter how many boards you have printed into times [Figure 6.11] and then Apply [Figure 6.12].

- Direct Cut

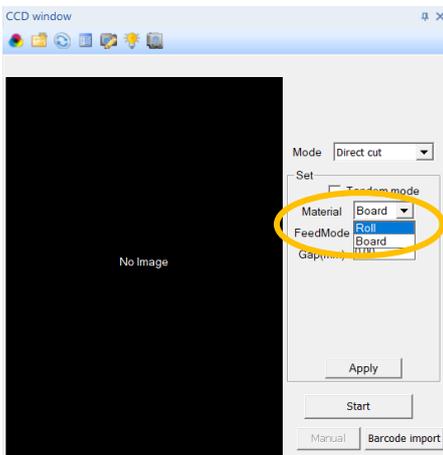


Figure 6.13

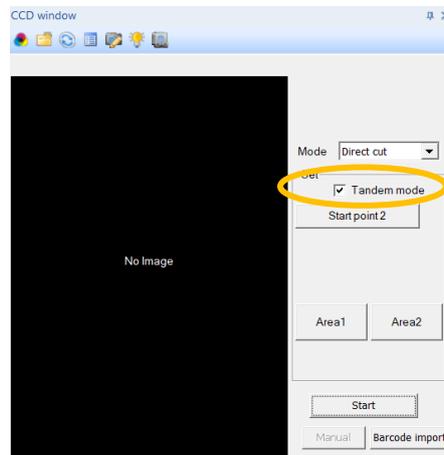


Figure 6.14

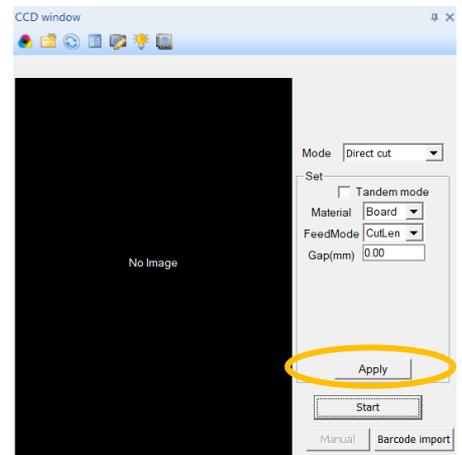


Figure 6.15

This mode is for cutting material with no registration needed.

Choose which material that needs cutting [Figure 6.13], then click apply [Figure 6.15].

If using boards, there is also a Tandem Mode to allow two cutting areas [Figure 6.14].

If you have a feeder enter the number of media you desire to cut, if you do not have a feeder please enter the number as 1 [Figure6.16].

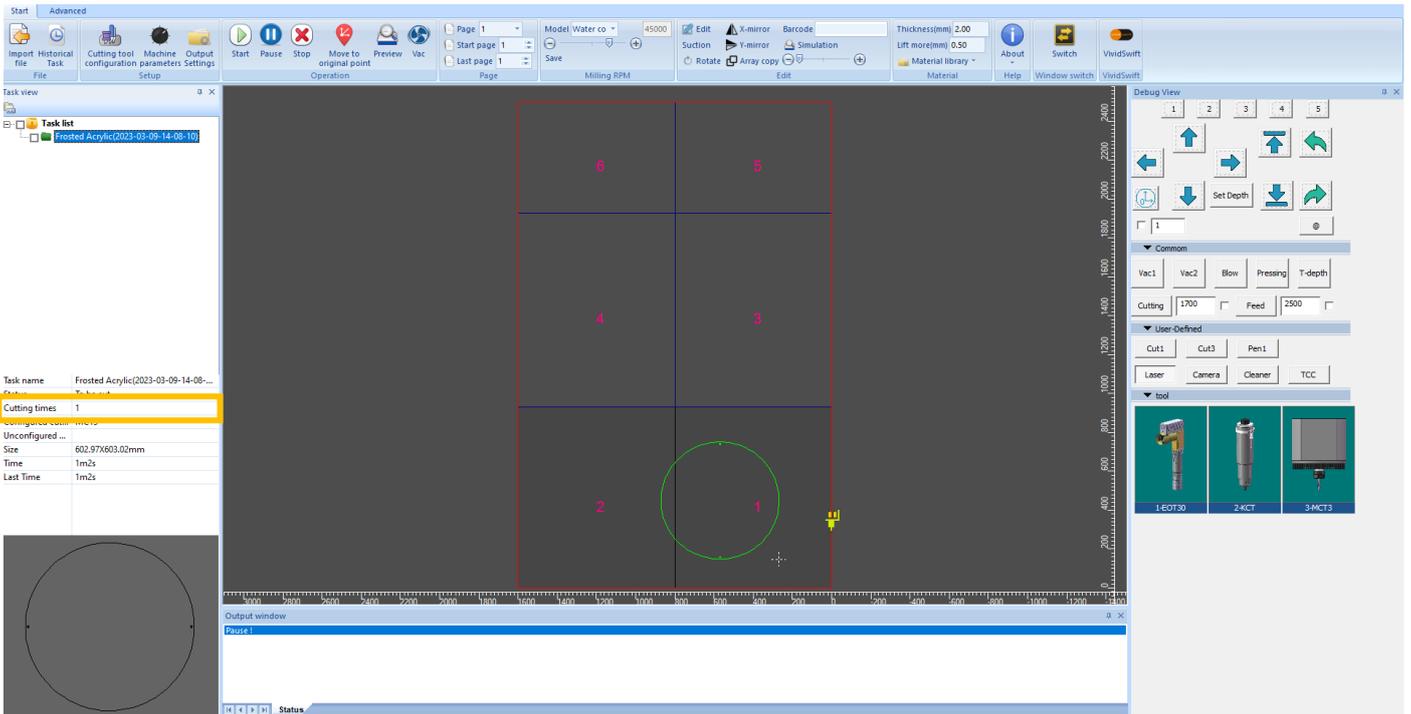


Figure 6.16

Chapter 7: Importing Files

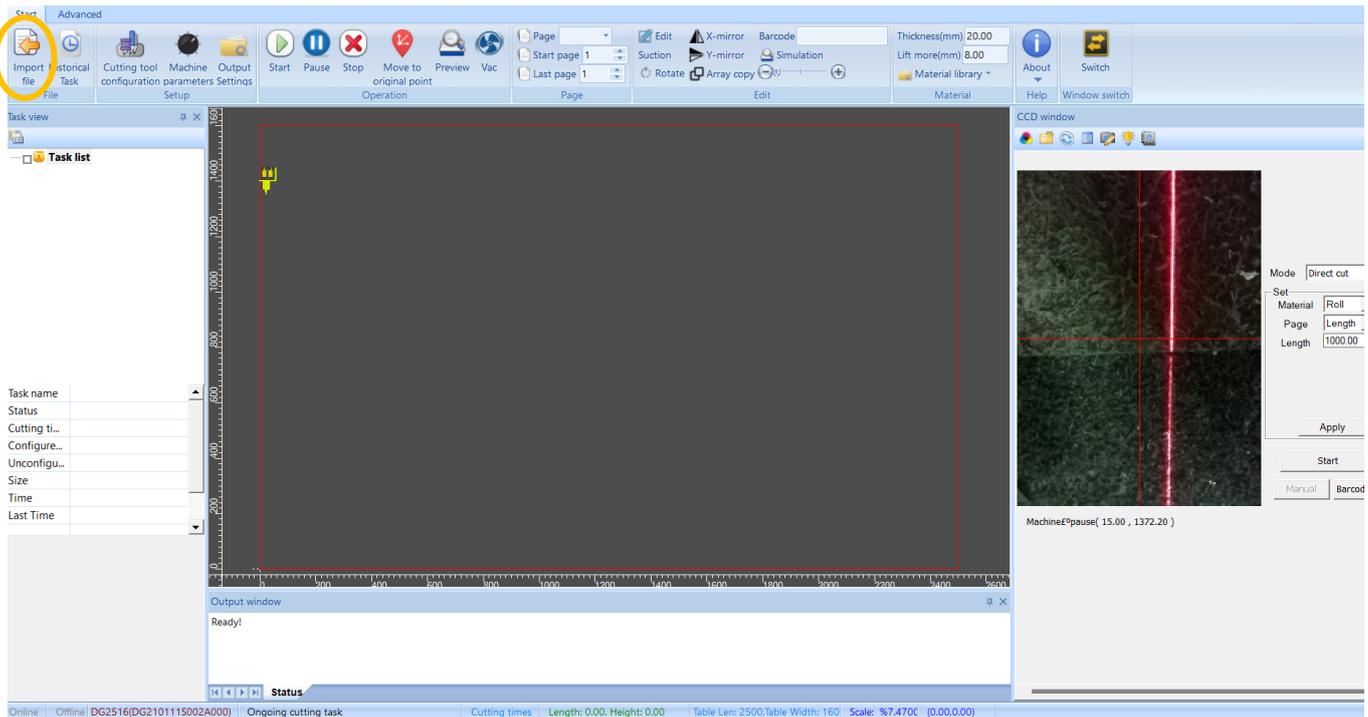


Figure 7.1

Once you have selected the Mode the next step is to import the artwork.

Click on Import File [Figure 7.1] and then click browse [Figure 7.2].

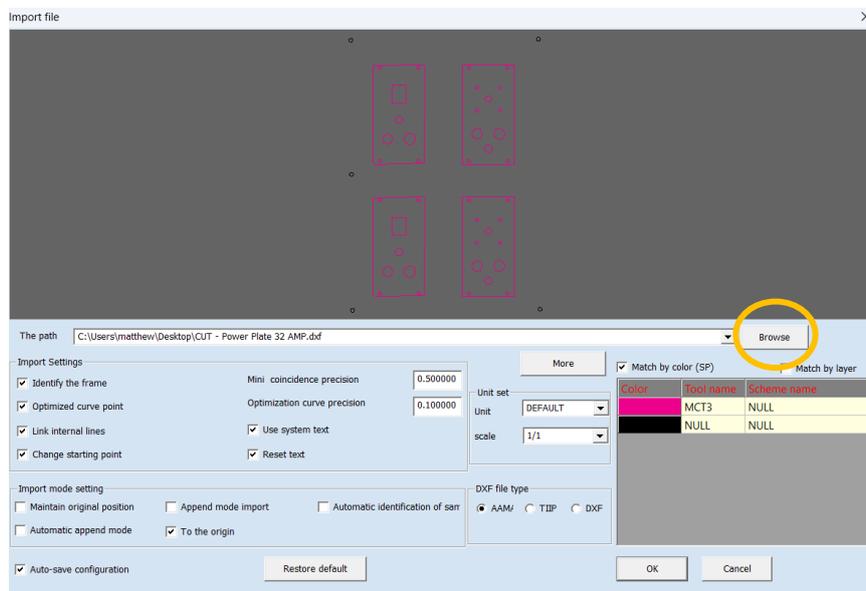


Figure 7.2

Once the file is loaded the next stage is to select which lines are cut by which tools.

There are ways two do this, Match by layer or Match by colour [Figure 7.3].

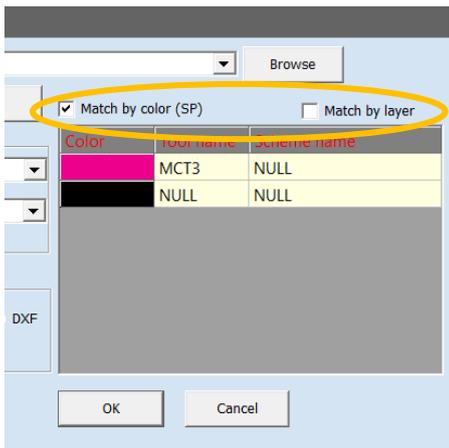


Figure 7.3

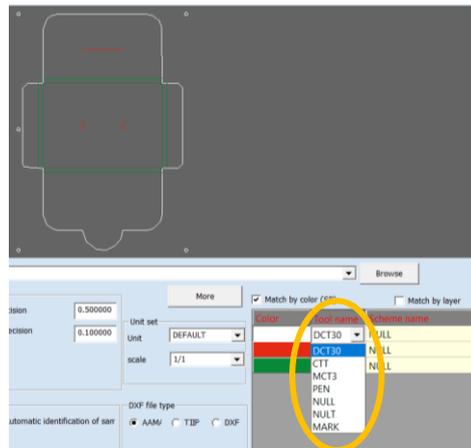


Figure 7.4

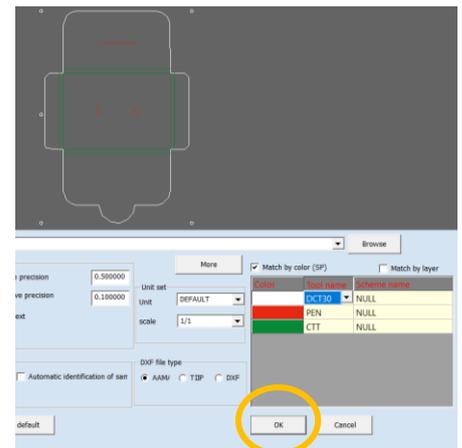


Figure 7.5

Click on the tool name alongside the Layer/Colour, click on the drop down arrow [Figure 7.4] and select the tool you require. Once selected click 'OK' [Figure 7.5].

Additional import settings

Importing more nodes on a curve:

Lower the value of the Optimized curve precision [Figure 7.6]. For example, to add one third more nodes change the value to 0.01.

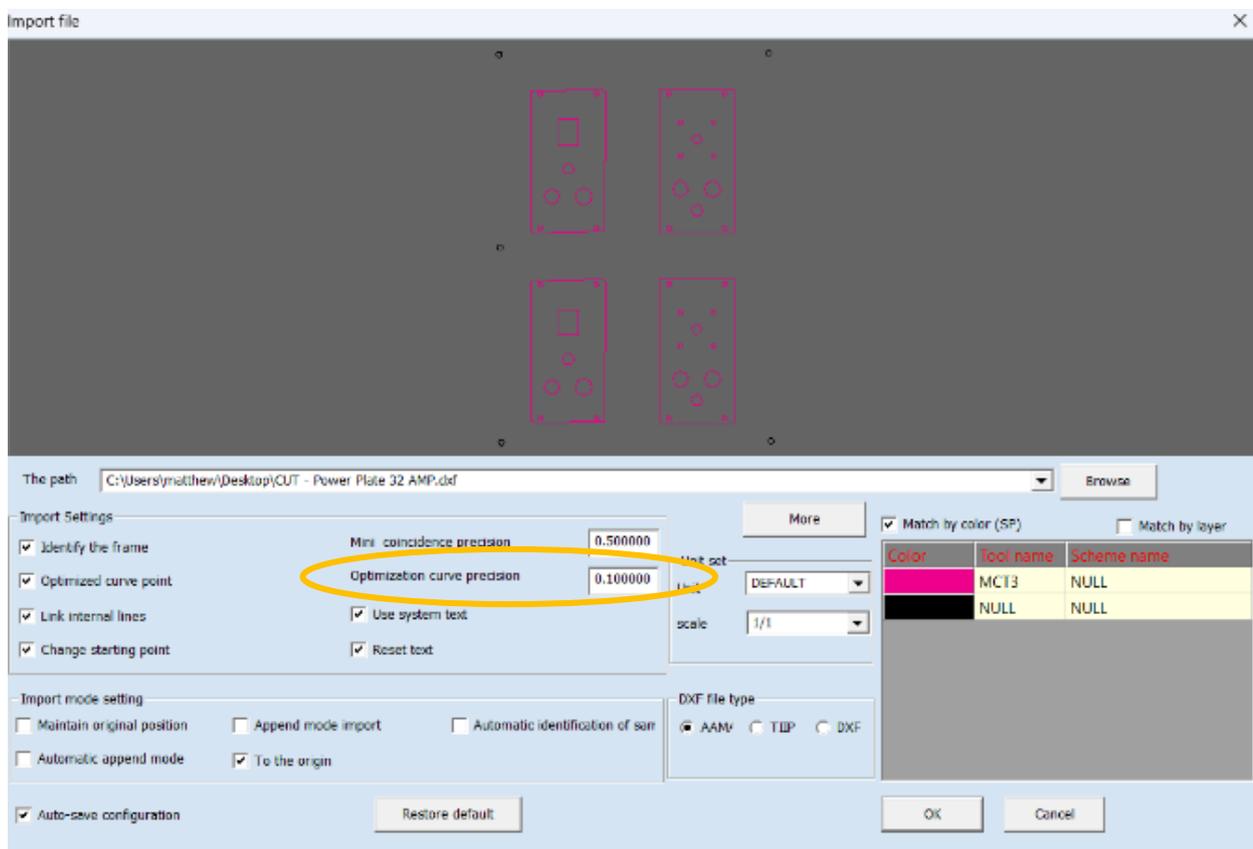


Figure 7.6

Changing the Camera Registration mark size:

Click on More [Figure 7.7] and change the Identify Circle Setting to the desired diameter [Figure 7.8].

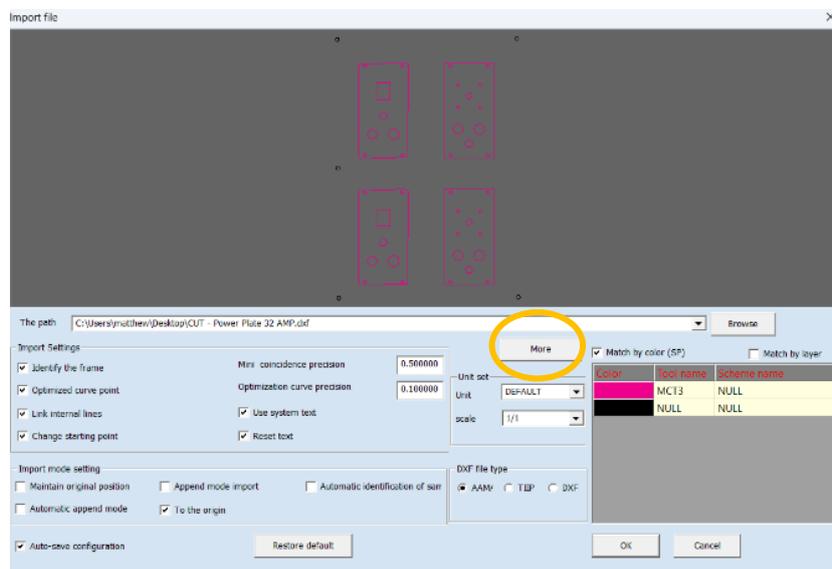


Figure 7.7

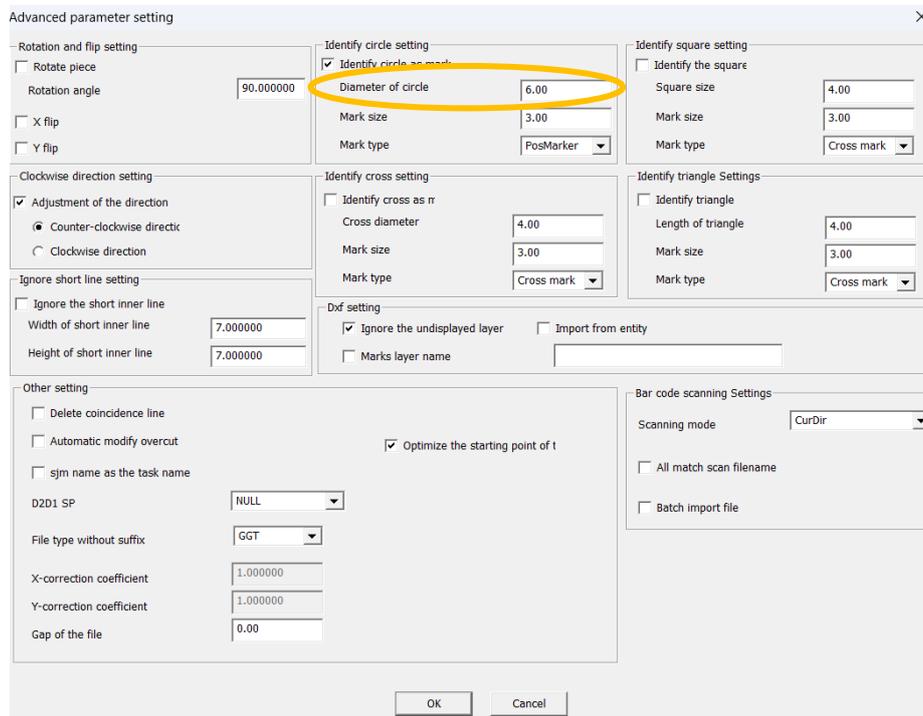


Figure 7.8

Cutting Schemes:

Depending on the density of the material, it may require to be stepped, for example a 3mm Foamex board will need to be cut at 1.5mm and then all the way through as to not break the blade.

The Scheme will need to be set up prior to import. Click on Output settings [Figure 7.9] and then Tool Parameter Library [Figure 7.10].

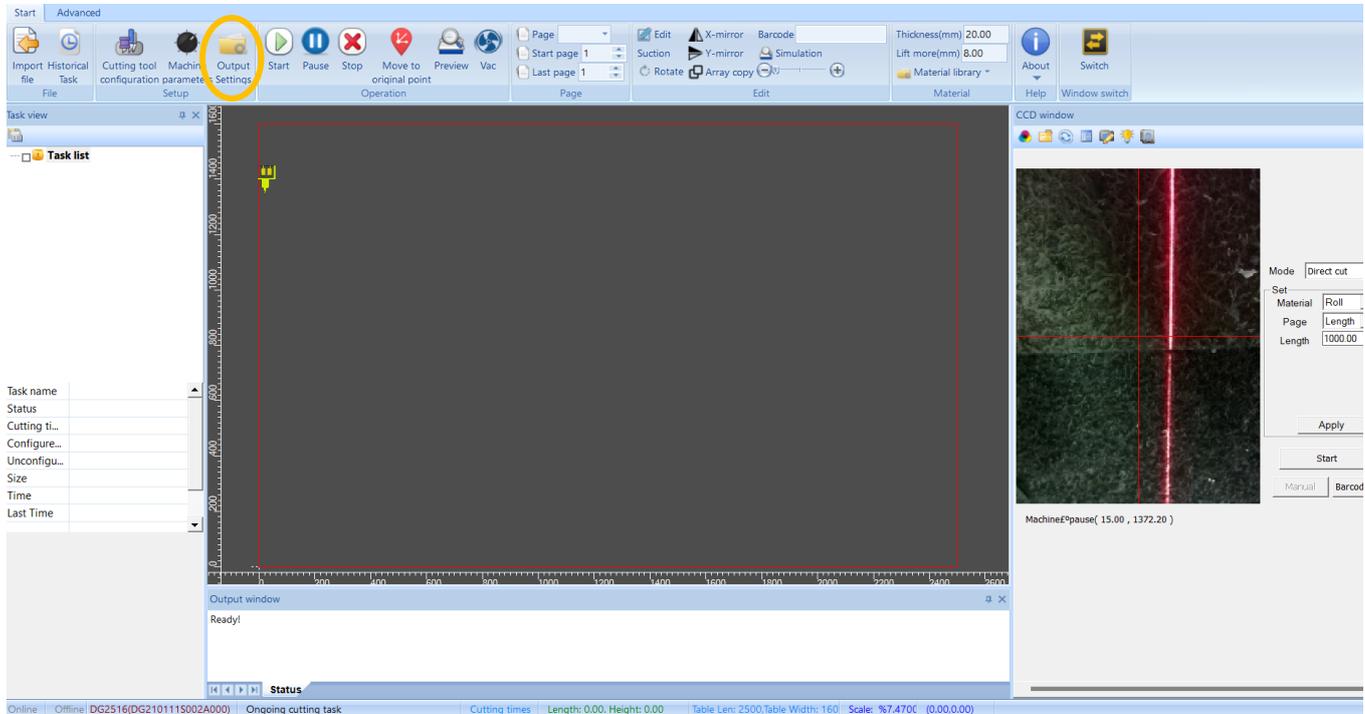


Figure 7.9

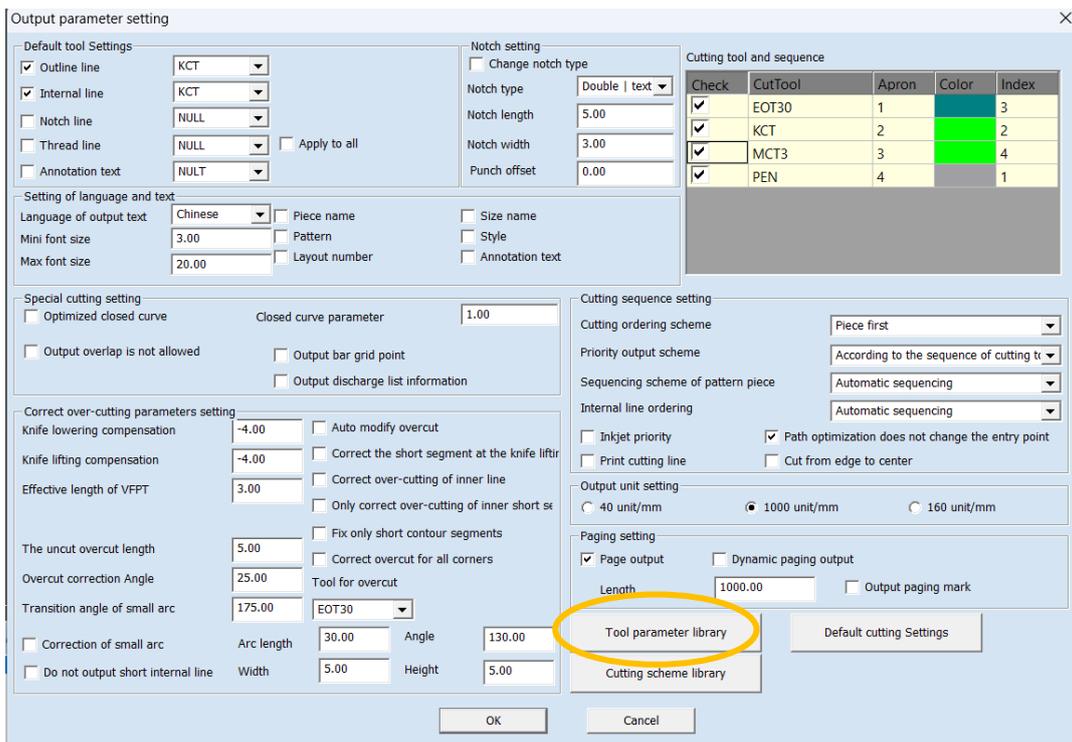


Figure 7.10

Click on the tool [Figure 7.11], Enter the cutting parameters [Figure 7.12], For example the thickness of my material is 10mm, for a through cut the cutting depth is the value of my material - 10mm. The feed amount/ Step Amount is set to 5mm (this will cut the material in 2 passes).

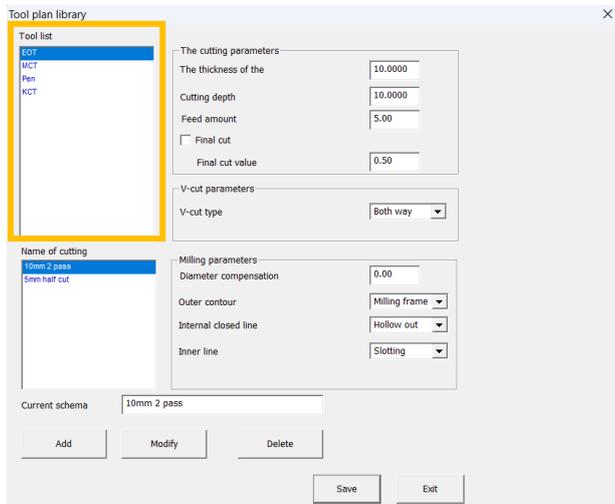


Figure 7.11

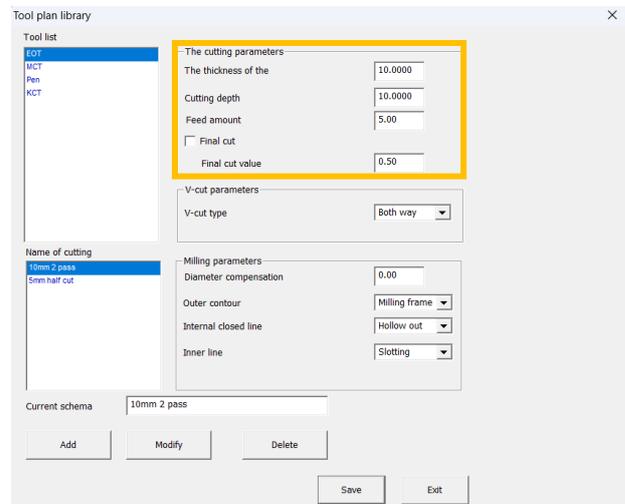


Figure 7.12

The Final cut value [Figure 7.13] when ticked will leave a 0.5mm of material to do a final pass, this is for smaller artwork that moves when being cut all the way through.

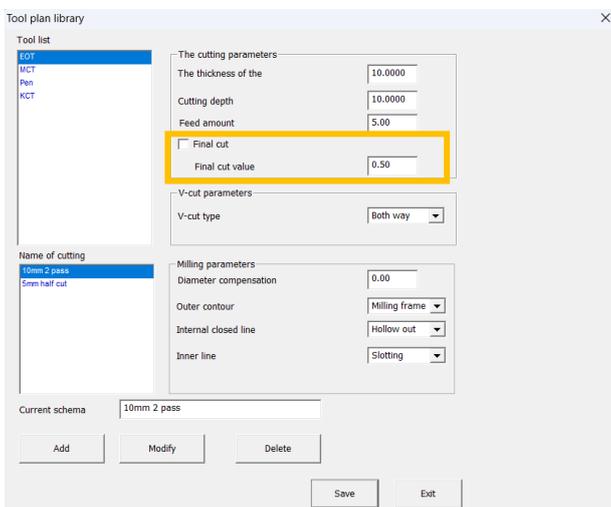


Figure 7.13

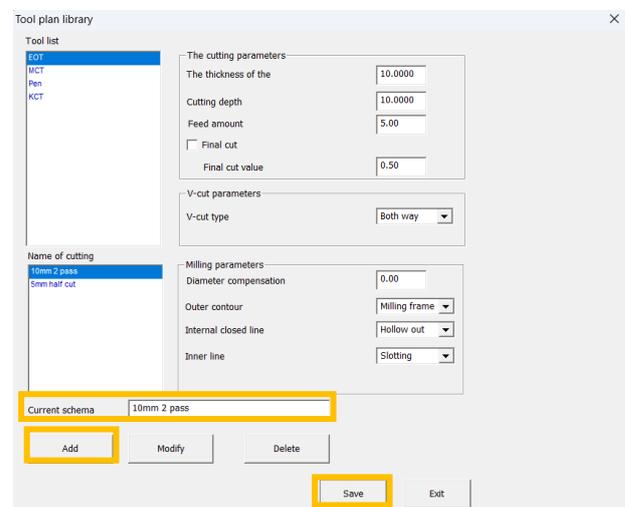


Figure 7.14

Enter the desired name of the scheme, Click Add, and then Click Save [Figure 7.14].

When importing select the scheme you require [Figure 7.15].

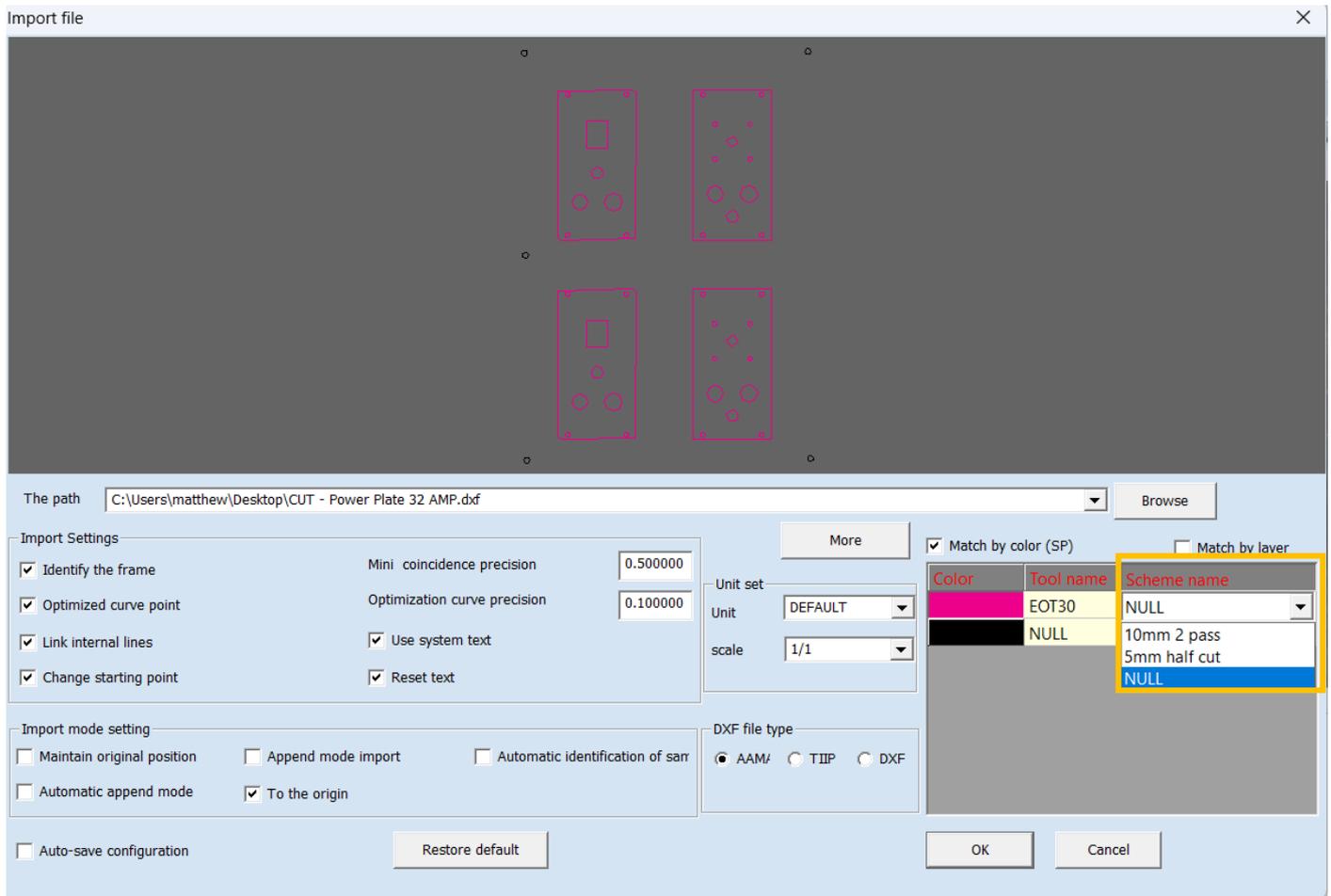


Figure 7.15

Chapter 8: Cutting Tool Configuration

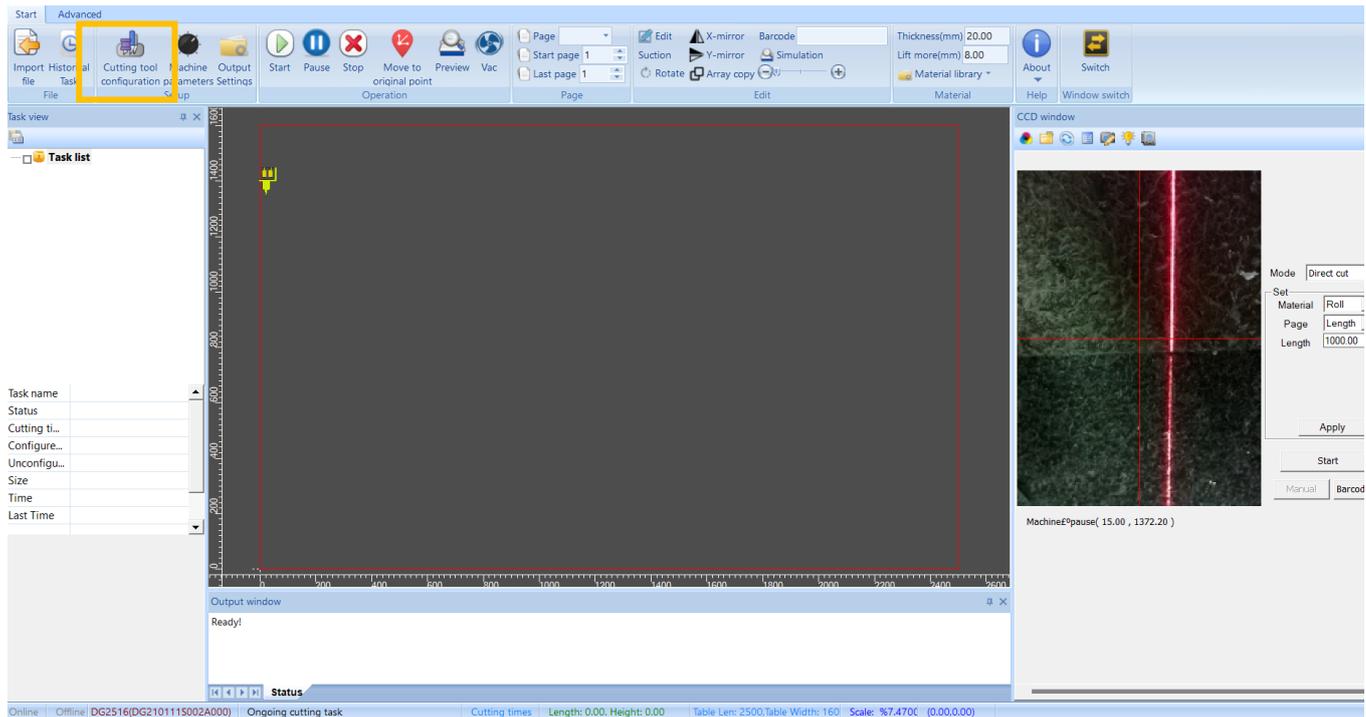


Figure 8.1

Click on cutting tool configuration [Figure 8.1].

Tool station 1 will automatically be on screen, to select a different tool station please click on the number at the top of the window [Figure 8.2].

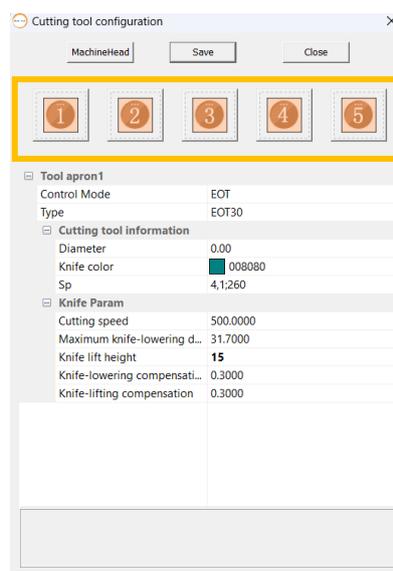


Figure 8.2

Assigning Colours:

Assigning colours to tools will help the Operator know what lines on the cut file are for, for example [Figure 8.3] white/Red is a through cut (DCT/EOT) and Green is a crease (CTT).

To change the Assigned colour, click on the Knife colour and click on the drop-down arrow on the right [Figure 8.4].

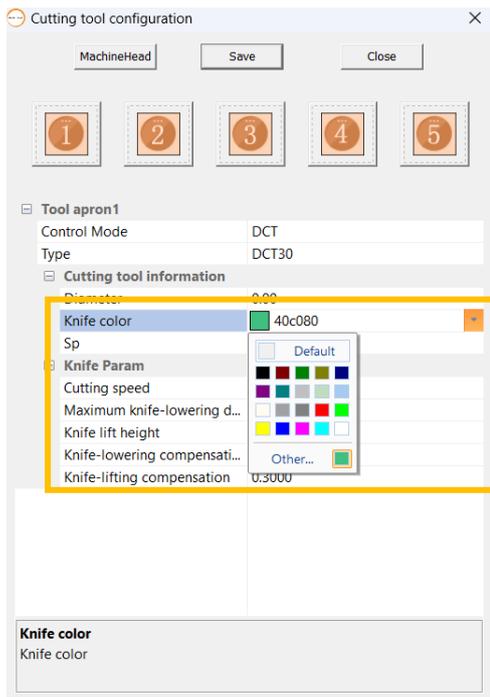


Figure 8.4

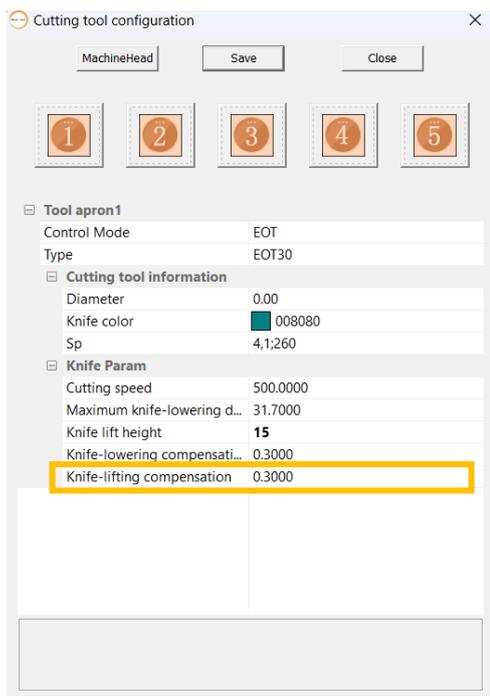


Figure 8.5

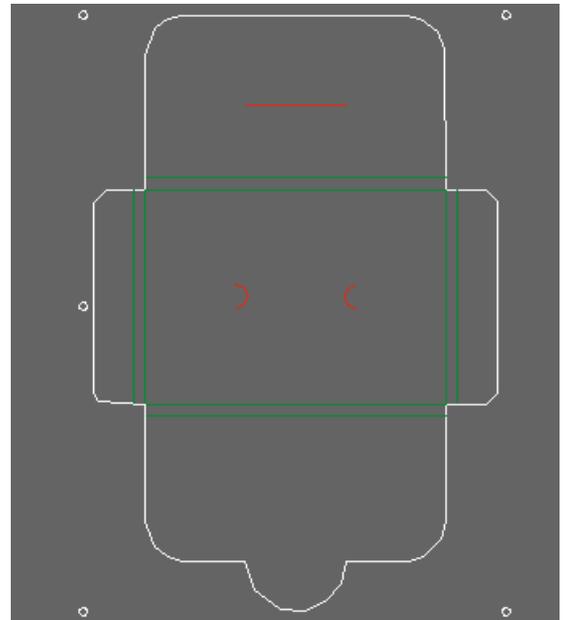


Figure 8.3

Lifting and Lowering Compensation [Figure 8.5]:

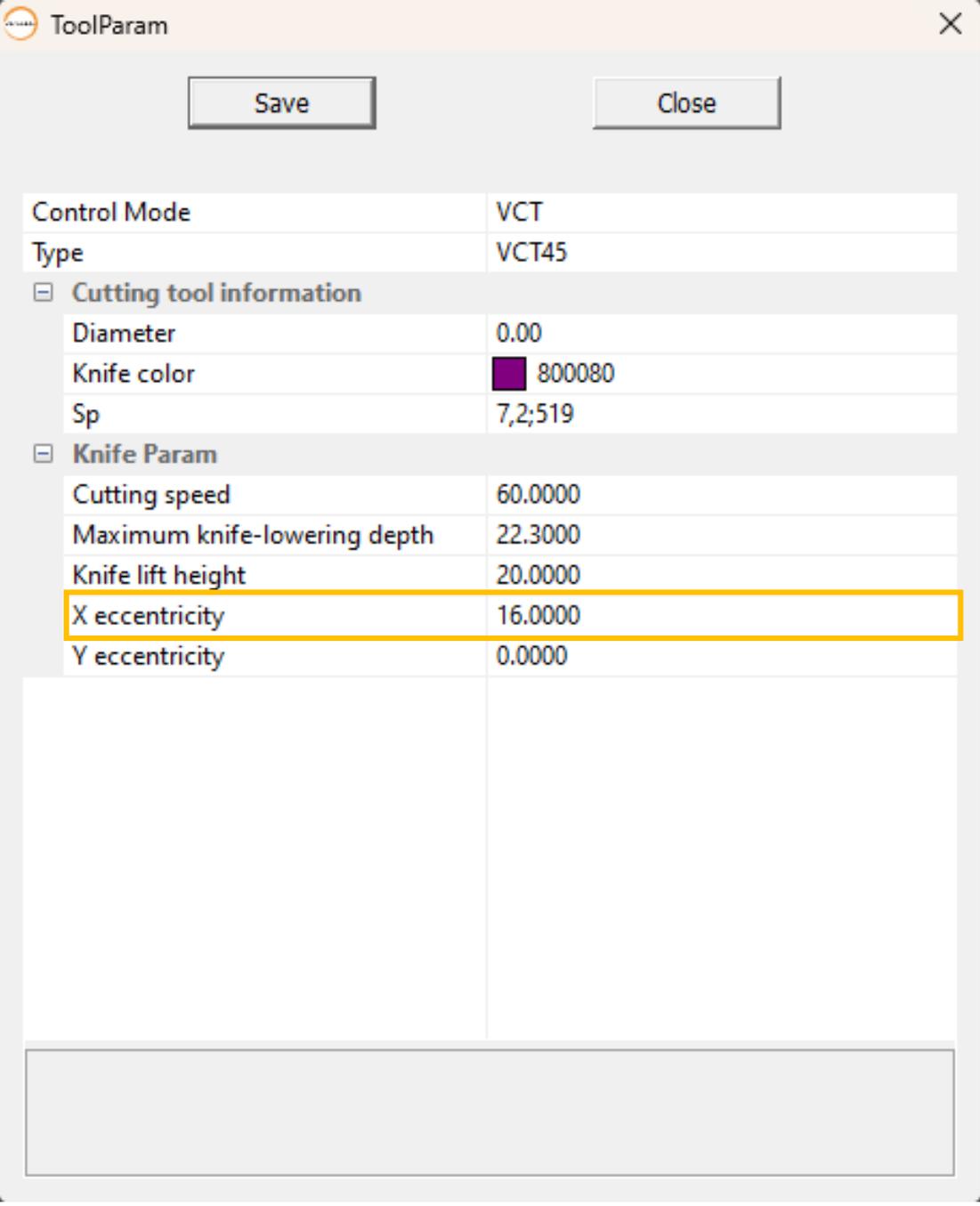
The lifting compensation will need to be adjusted when using different angled blade. The lower the angle the higher the compensation in mm will need to be. For example, N17-03 has a lower angle than the standard N17-05 blade.

Increasing the Value will make the blade travel further.

Other Options:

- Cutting Speed, this can be decreased for intricate or delicate cuts and increased for simple cuts.
- Knife Lift Height, changing this to a few mm above your material can reduce the cutting time.
- Maximum Knife Lowering Depth, this can be changed to increase or decrease the depth of the blade upto 1mm.

The VCT tool has an additional option of X Eccentricity [Figure 8.6], this is the scale between the inside and outside cuts. If the value is increased the scale is increased.



The screenshot shows a dialog box titled "ToolParam" with a close button (X) in the top right corner. Below the title bar are two buttons: "Save" and "Close". The main area contains a table of parameters:

Control Mode	VCT
Type	VCT45
<input type="checkbox"/> Cutting tool information	
Diameter	0.00
Knife color	 800080
Sp	7,2;519
<input type="checkbox"/> Knife Param	
Cutting speed	60.0000
Maximum knife-lowering depth	22.3000
Knife lift height	20.0000
X eccentricity	16.0000
Y eccentricity	0.0000

The "X eccentricity" row is highlighted with a yellow border. Below the table is a large empty rectangular area, and at the bottom is a wide, shallow rectangular box.

Figure 8.6

Chapter 9: Editing Files

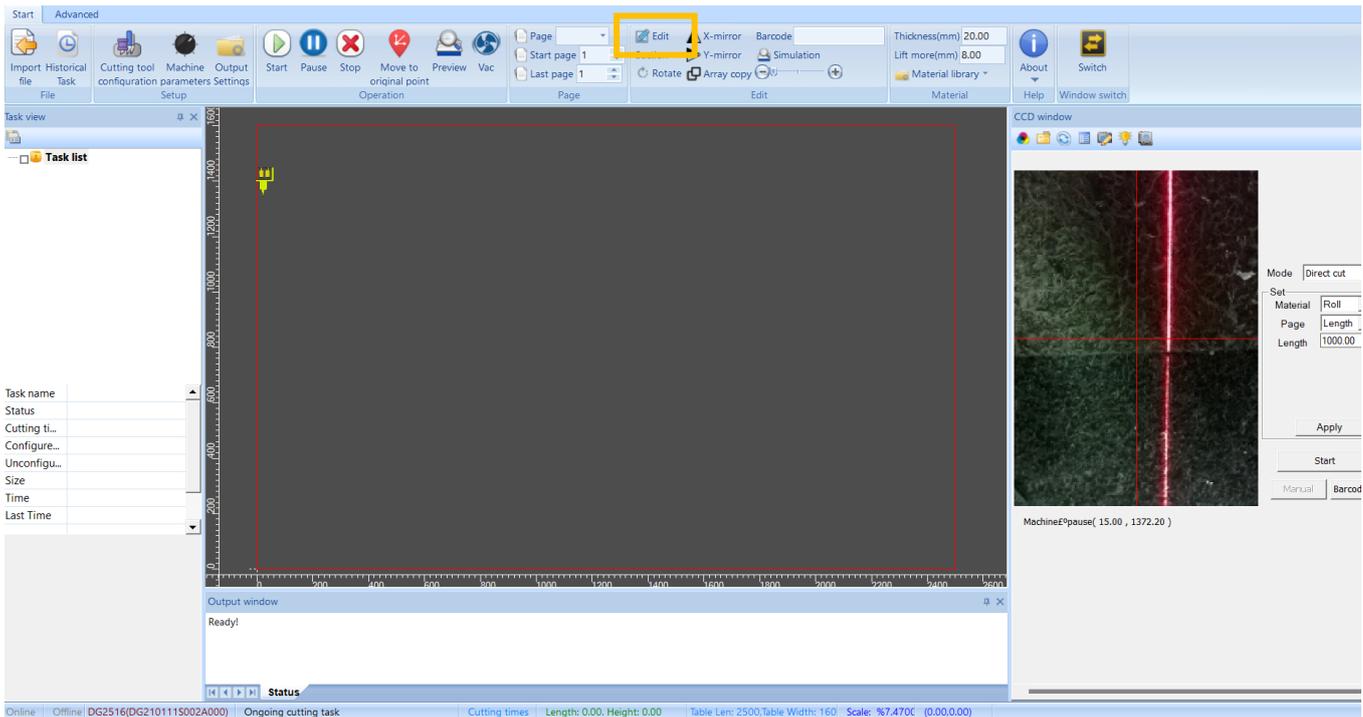


Figure 9.1

Click on Edit.

There are two sub menu options, Start and Advanced [Figure 9.2].

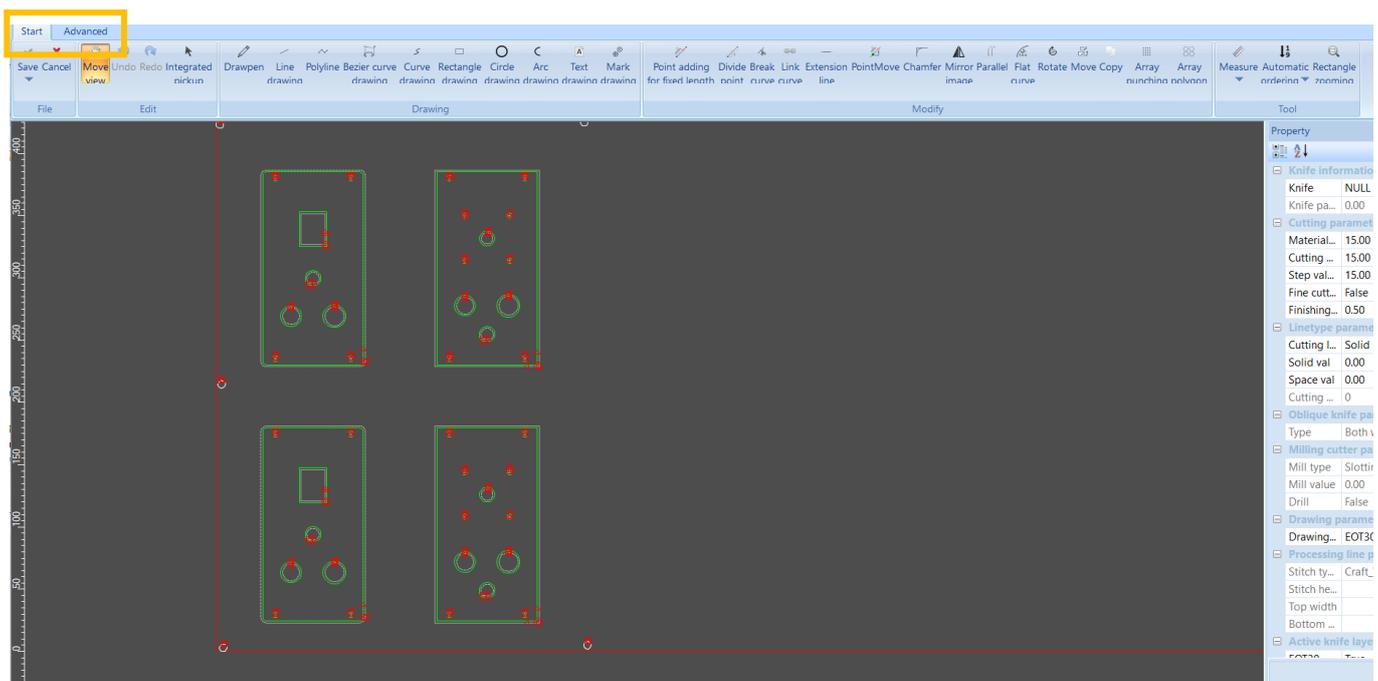


Figure 9.2

To highlight a line, ensure integrated pickup is selected, click the left mouse button in a space near the line and drag left [Figure 9.3].

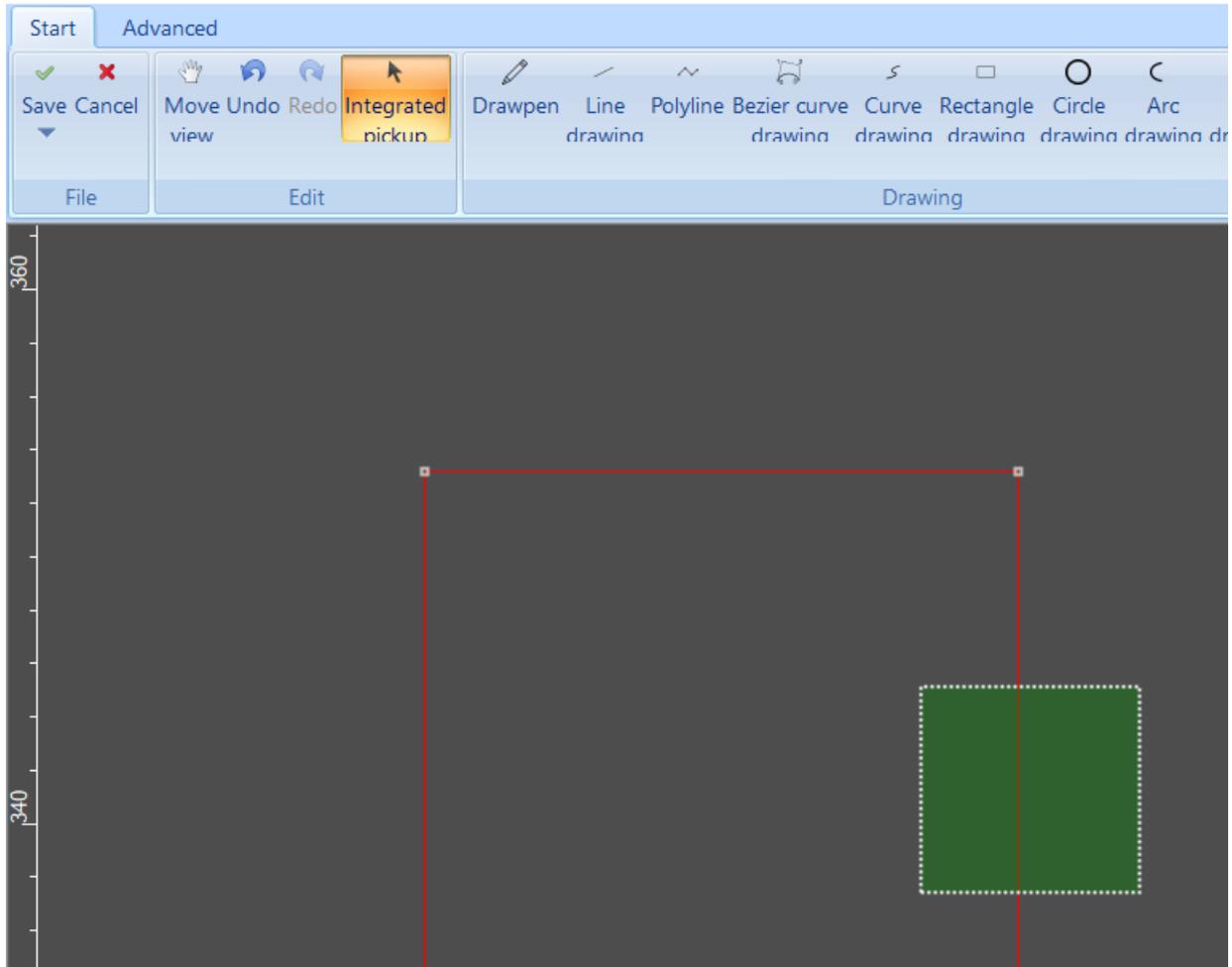


Figure 9.3

Once highlighted you can change various settings - deleting, cutting knife, stepping, dash line [Figure 9.4] and milling values [Figure 9.5].

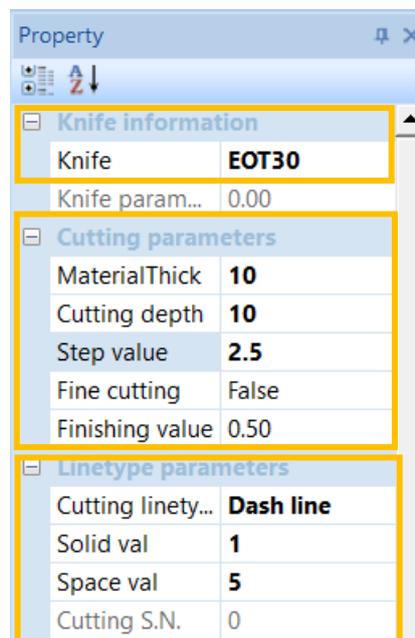


Figure 9.4

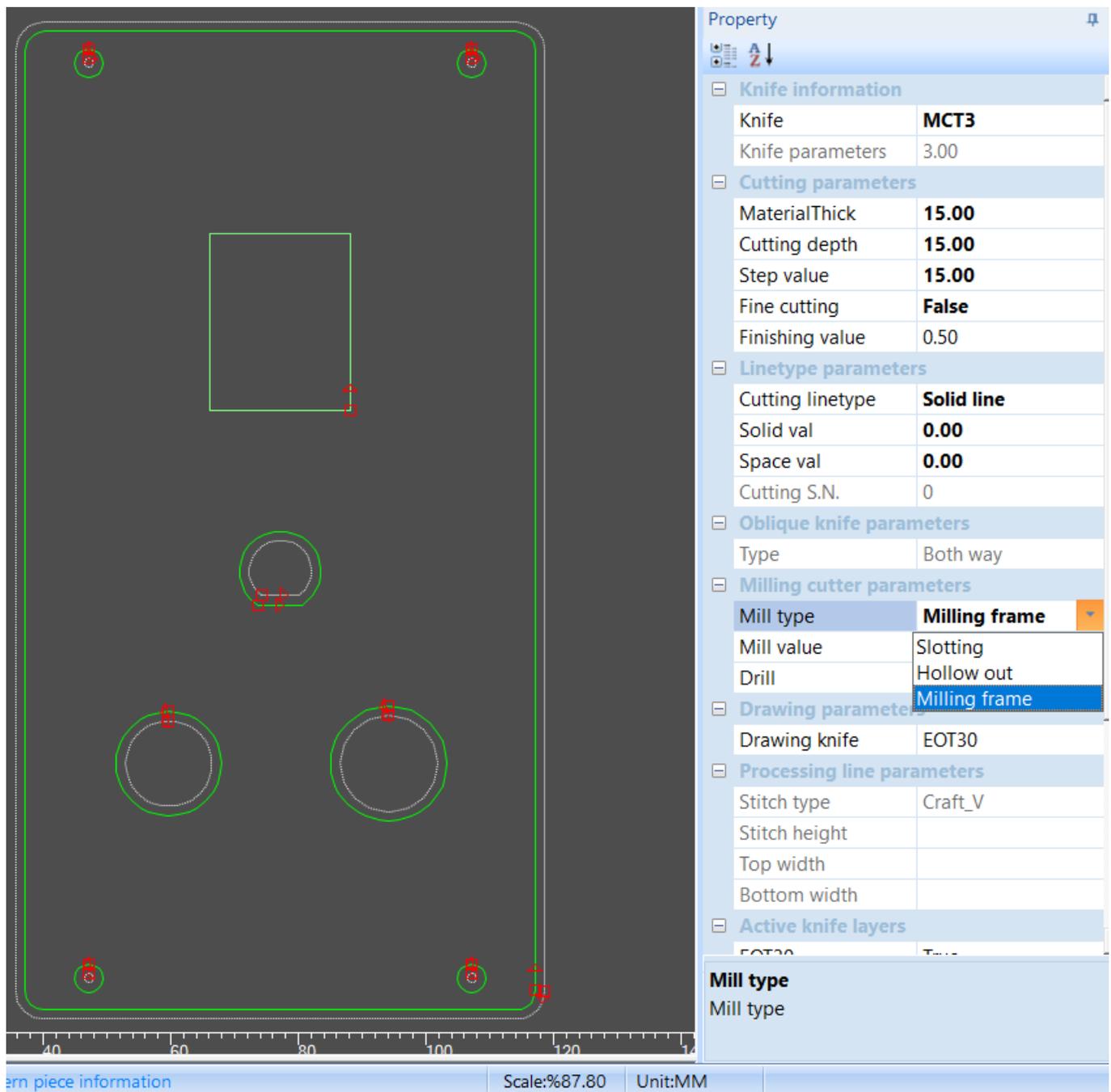


Figure 9.5

Milling Frame = Cutting the outside of the line

Hollow Out = Cutting the Inside of the line

Slotting = Cutting on the line

To save the changes to Figures 9.5/9.6 you must left click the mouse in the editing window.

When a cut line/Artwork is highted it will need to be put in the bottom left corner, this can be done by right clicking on the mouse and selecting back to the origin [Figure 9.6].

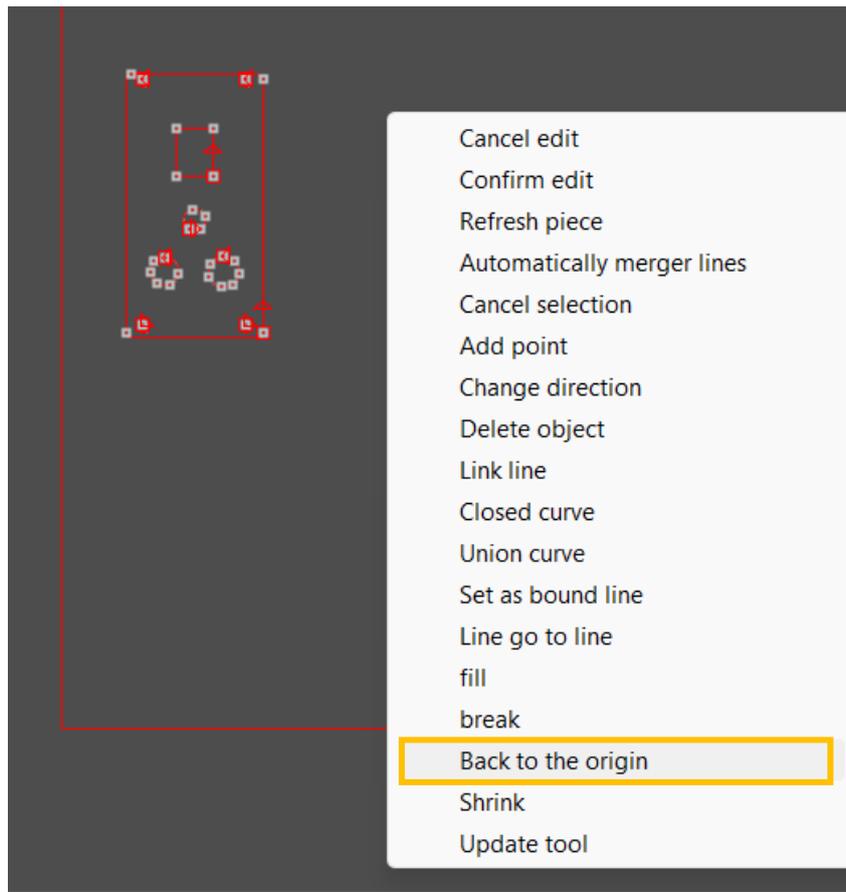


Figure 9.6

Once all changes are done the changes will need to be changed. There are 2 ways to do this, right click on the display and select Confirm edit [Figure 9.6 or by clicking the green tick above save as shown in Figure 9.7.

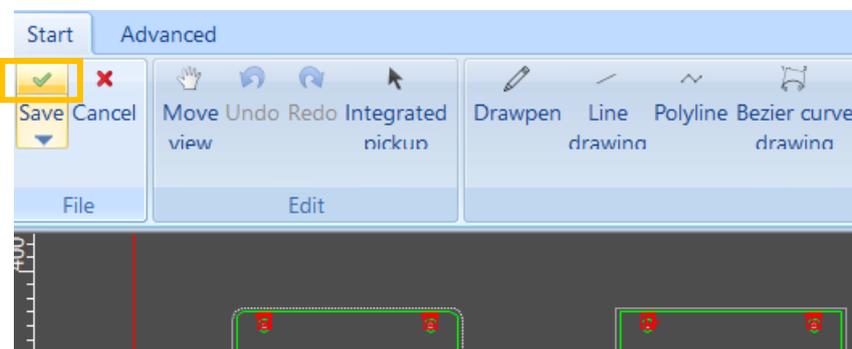
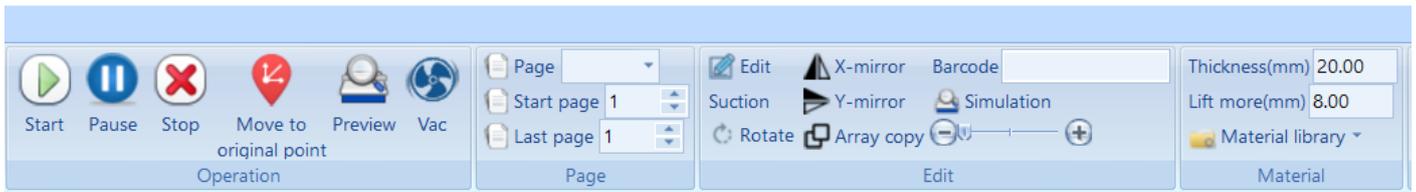


Figure 9.7

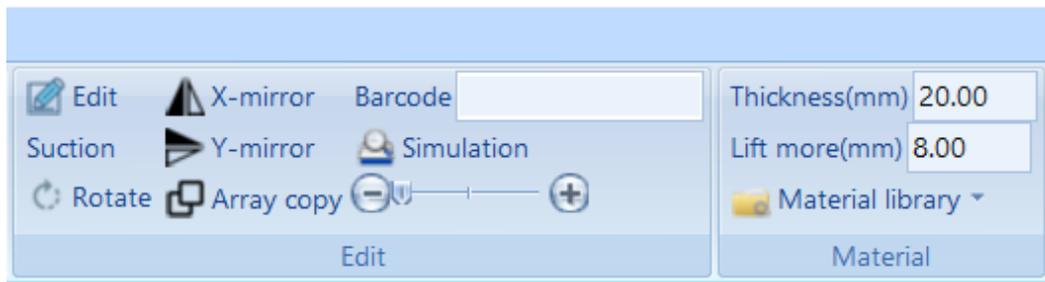
Chapter 10: Additional Icons



Pause - this is linked to the green buttons on each corner of the machine and the computer table. When these buttons are pressed it will pause the task and raise the cutting tool.

Move to original point - this will send the head to his home position at the furthest point towards the front of the machine and to the right. Usually this is selected before during the machine off.

Preview – when a task is selected in the task list this will move the head over where the cutting area will be.



Suction - The Cutting bed has 6 vacuum areas; these can be turned off when not using to improve suction. Once you have selected which areas you want off, right click on the screen, and click save.

Simulation - shows which direction the cutter will take, please note this option only works in Direct Cut mode.

Rotate & array copy – when selecting these in a Direct cut mode the screen will not change until you have gone into Edit and saved the file.

Thickness/Lift more – you can set Tool position 1 and 3 lift height to save time. Please note this will not change Tool position 2.

Material Library – this is a library of all blades, speeds and stepping. You can apply these settings to your tools in the library.

Chapter 11: Begin a cutting mode

Direct Cut – Select Direct cut mode and click apply, after importing the file it will appear in the Task list on the left of the screen. Click on the Task/File.

As the machine is not using camera registration, it will need to be shown where the media is placed on the cutting bed. Move the head and guide the red laser to 10mm inside the media on the bed as shown in Figure 11.1 and then click the Temporary Origin Button in the Debug View [Figure 11.2].



Figure 11.1

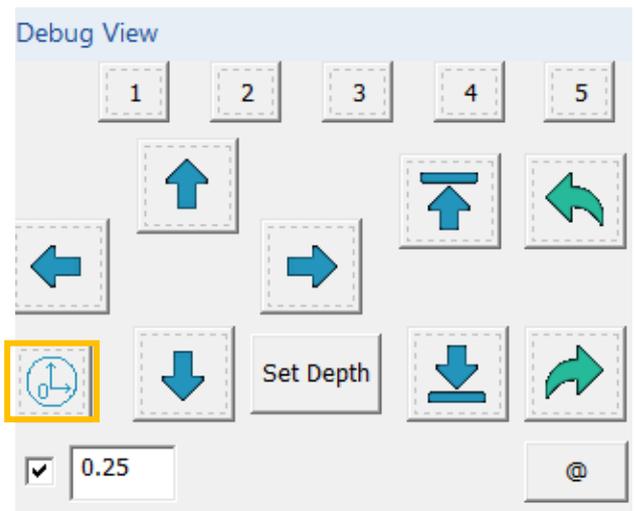


Figure 11.2

The file will move on the display to where you have set the origin point.

Once in position click Start twice [Figure 11.3].

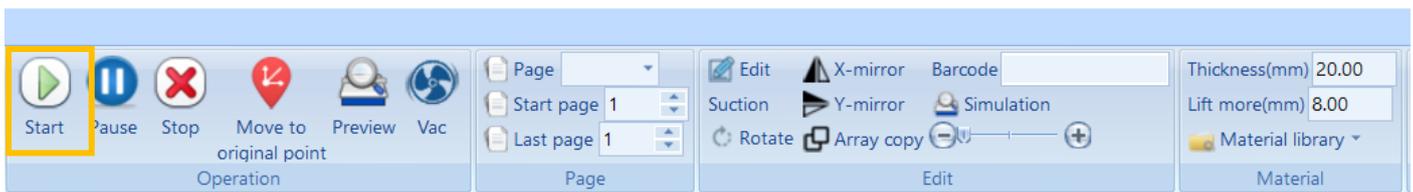


Figure 11.3

CCD Modes – Select the mode required and click apply, import the required artwork and rotate [Figure 11.4] the artwork to match how it is placed on the cutting bed.



Figure 11.4

Move the head to find registration mark 1 [Figure 11.5] in the camera view in the CCD Window, this will be the mark that's furthest forward and closest to the home position on the right-hand side.

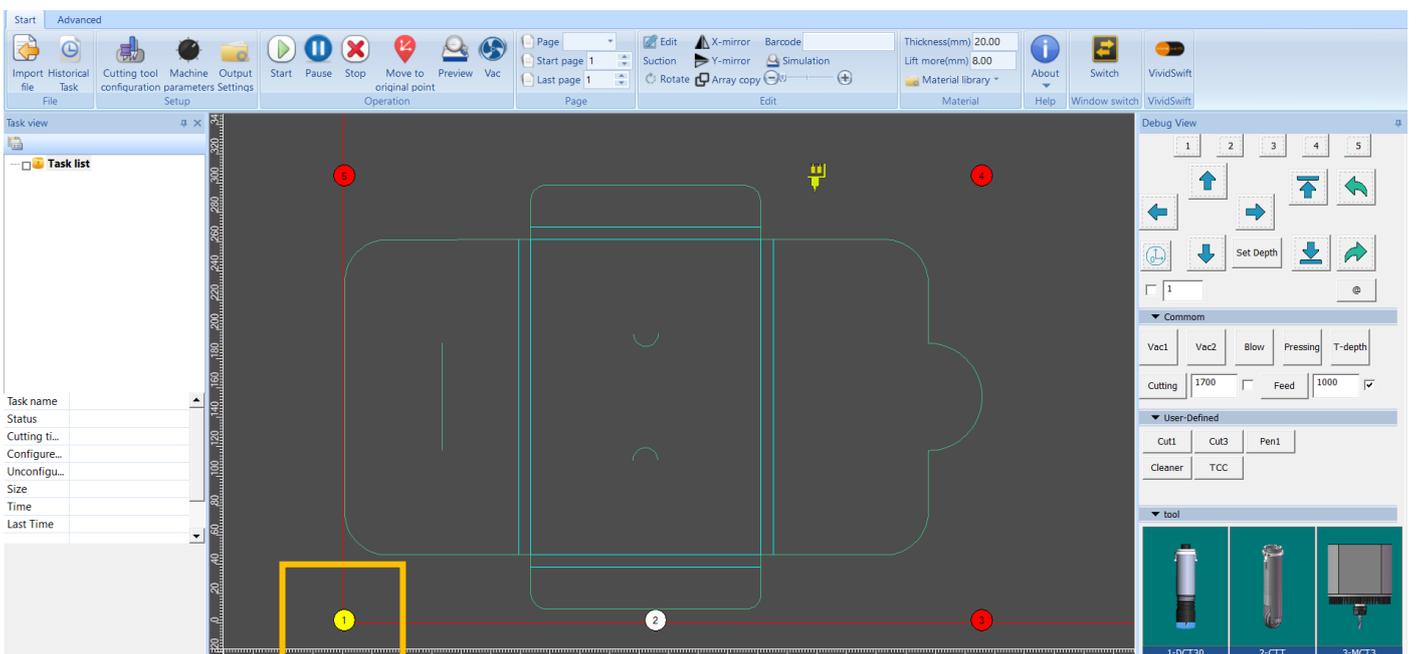


Figure 11.5

Once ready Click start in the CCD Window [Figure 11.6].

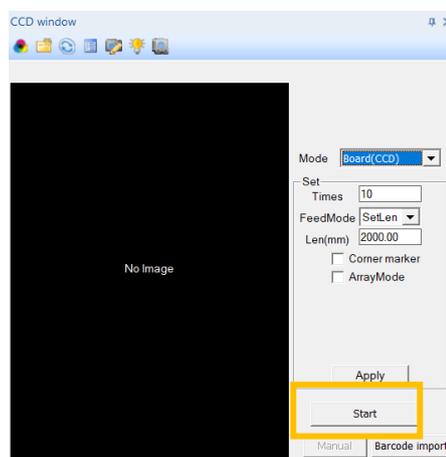


Figure 11.6

Travel Switch – If the travel switch is activated, the machine will stop cutting and turn the vacuum off. For the media already on the cutting area we can restore the task and finish the cutting. Right click the task in the task list [Figure 11.7], click Restore [Figure 11.8] and then press start on the screen [Figure 11.9].

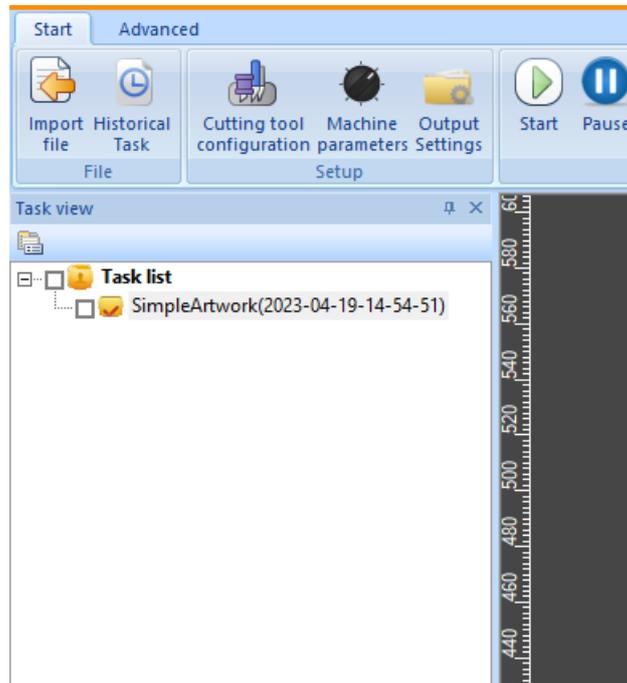


Figure 11.7

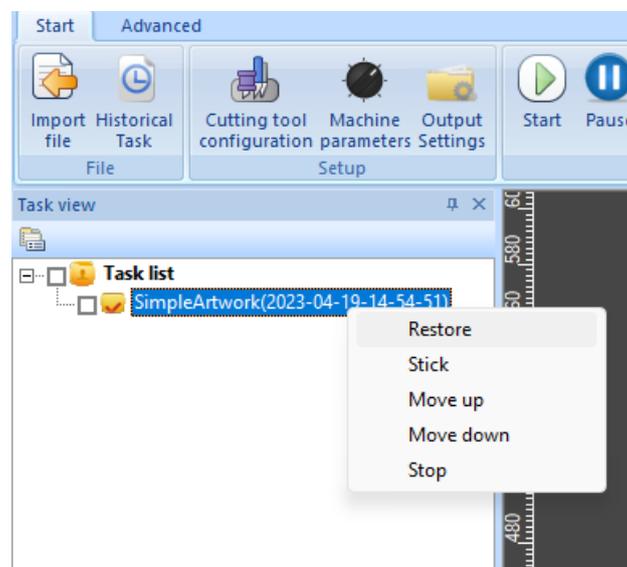


Figure 11.8

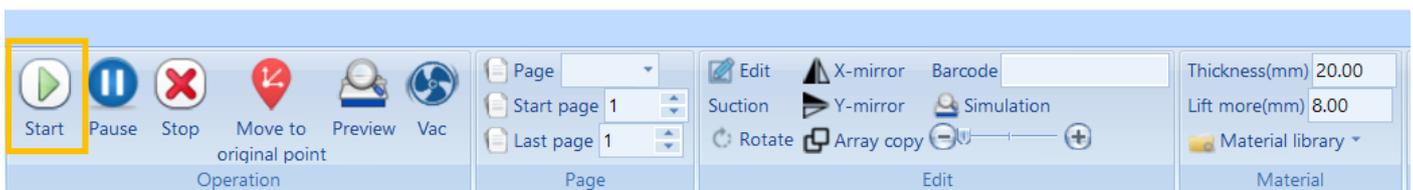


Figure 11.9

Chapter 12: Maintenance

Maintenance must be carried out weekly this includes:

- Water Cooler – check the water cooler level ensure it is topped up [Figure 12.1].
- Compressor – Drain the moisture out of the tank, disconnect the compressor from the power supply, pull the release valve [Figure 12.2] and unscrew the drain valve [Figure 12.3].



Figure 12.1



Figure 12.2

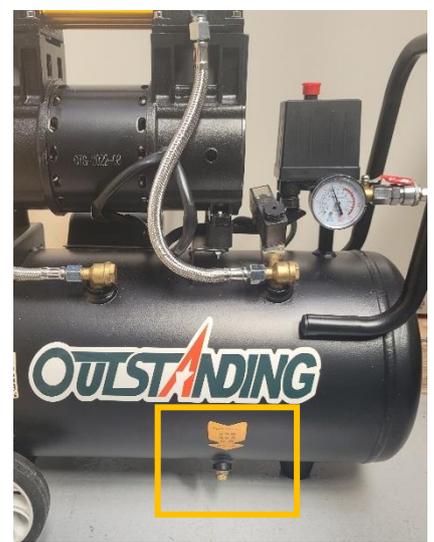


Figure 12.3

- Cutting bed – keep the cutting bed free from debris.
- Y Axis Rails – Clean the 2 Y axis rails and lubricate [Figure 12.4].



Figure 12.4

- Vacuum [Cleaner] – empty the bin by removing the pipe, unlock the 2 clips that hold the motor to the bin and lift the motor of the bin [Figure 12.5].

Cleaning the Filter – Remove the filter and clean with water or compressed air [Figure 12.6]

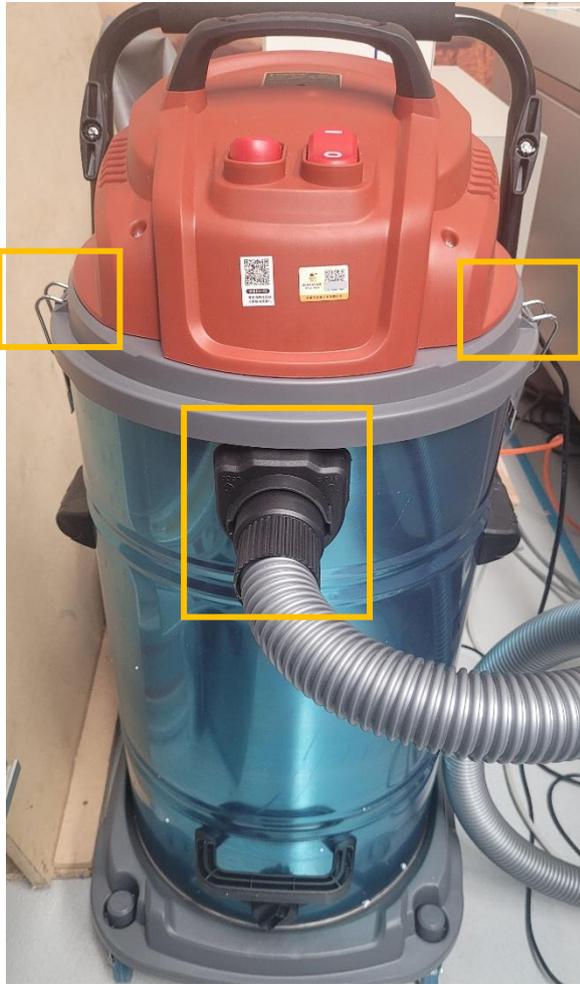


Figure 12.5



Figure 12.6

If heavily using the machine, please do the maintenance more frequently.

The Maintenance will be shown to the operator upon installation.