

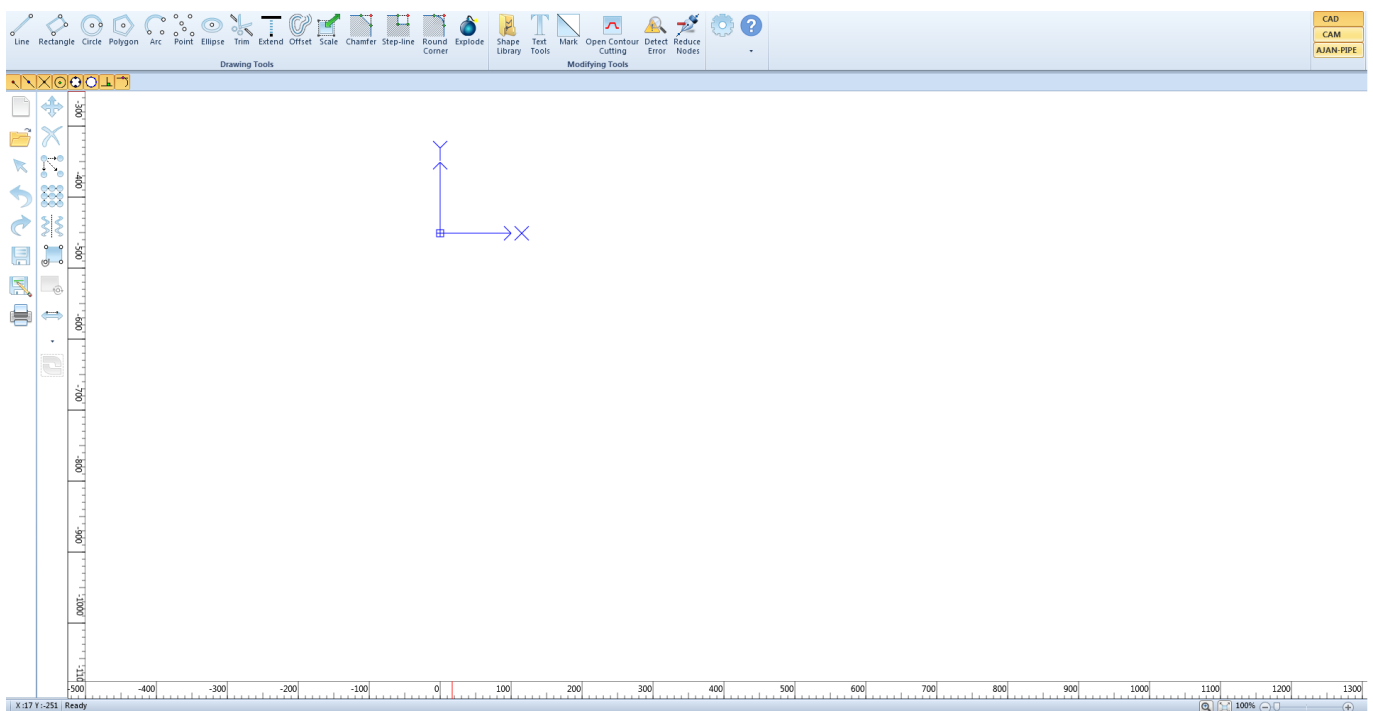
# Working with AJAN CAM software

## Creating the CAD/CAM file

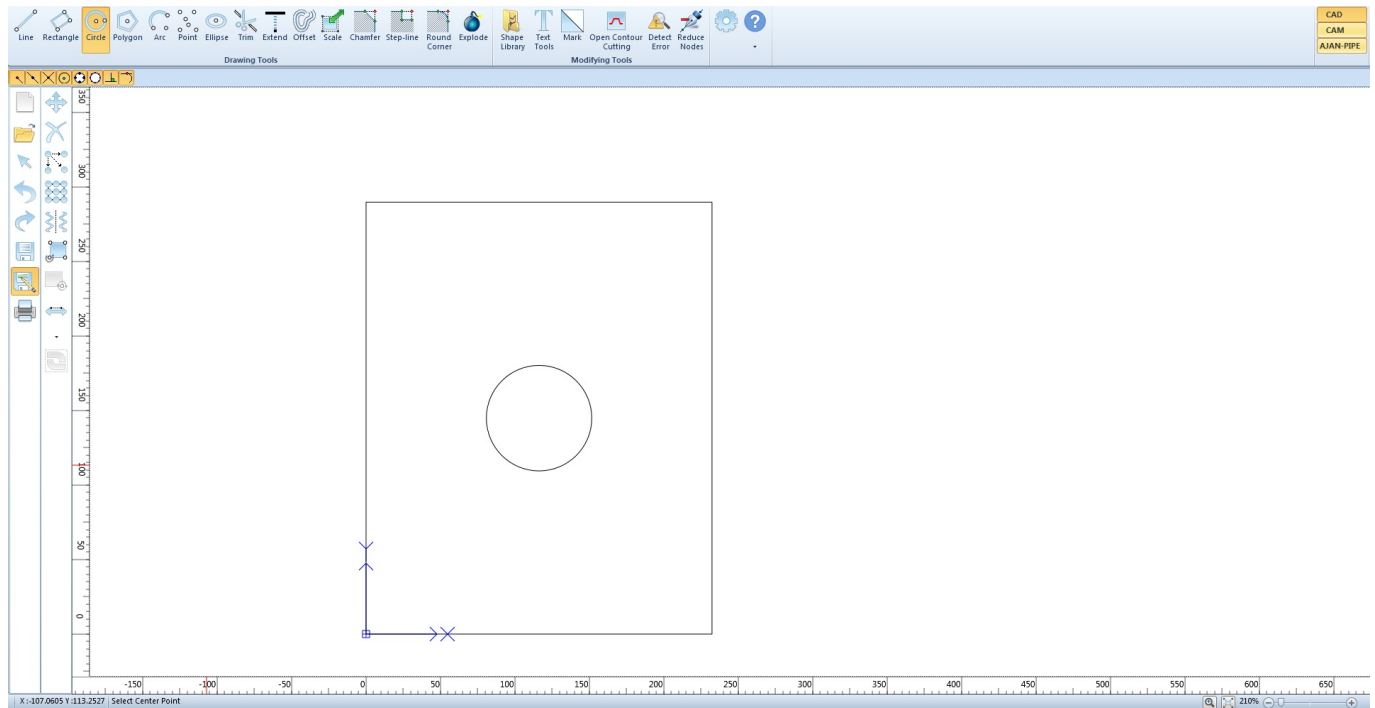
In order to import ESSI/MPG files into myCNC software, we can first use a CAM/CAD program like [AJAN CAM](#) to obtain the file itself. Programs like AJAN CAM are often used to create CAD drawings for plasma or laser cutting, which can later be converted and imported into myCNC.

In order to do so, follow the instructions below:

1. Download and install AJAN CAM (Version 6 has been used in this tutorial, however Version 7 can also be used if the user so desires) from the [official site](#).
2. Open AJAN CAM. You will be presented with the following screen:

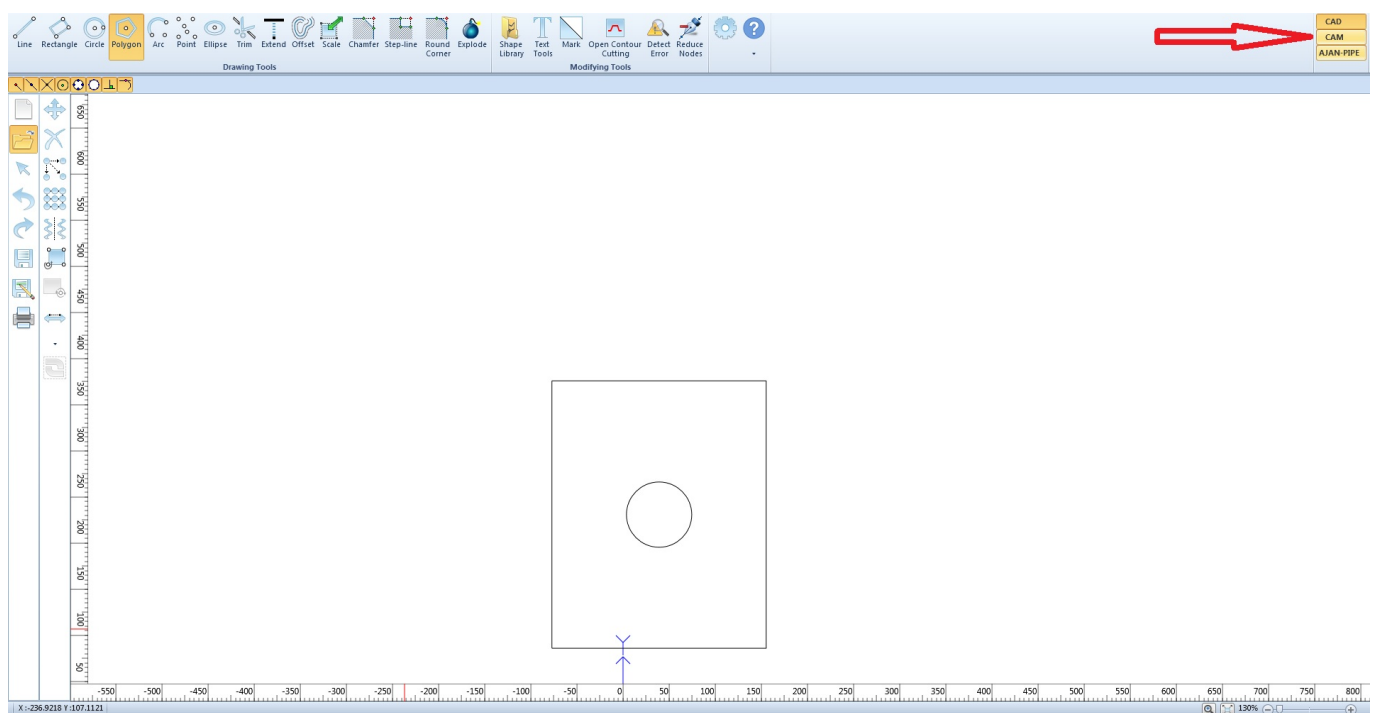


3. Draw your part or parts. A full manual on using the AJAN CAD module for drawing parts can be found on the official site [here](#).

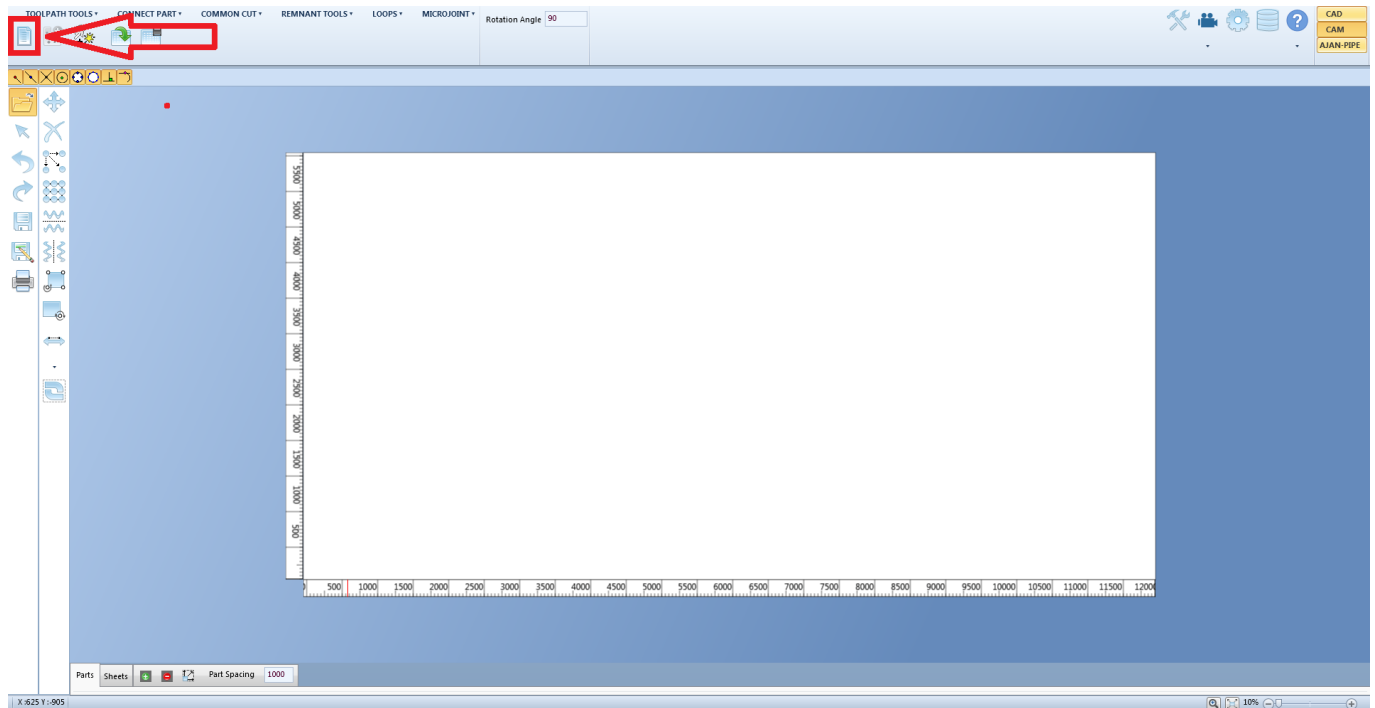


4. Save the part(s) that you have created to your Desktop.

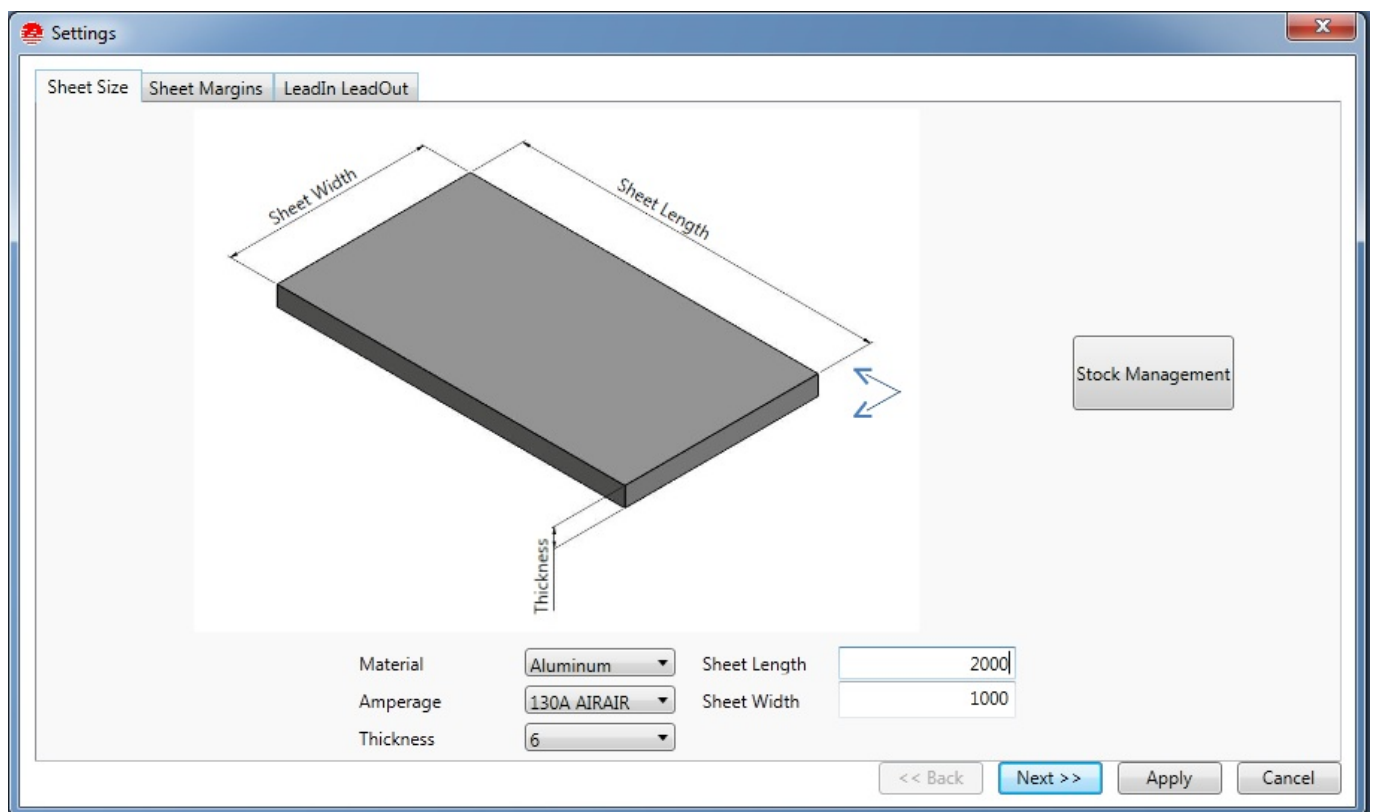
5. Open the CAM module, located in the top-right corner of the screen.



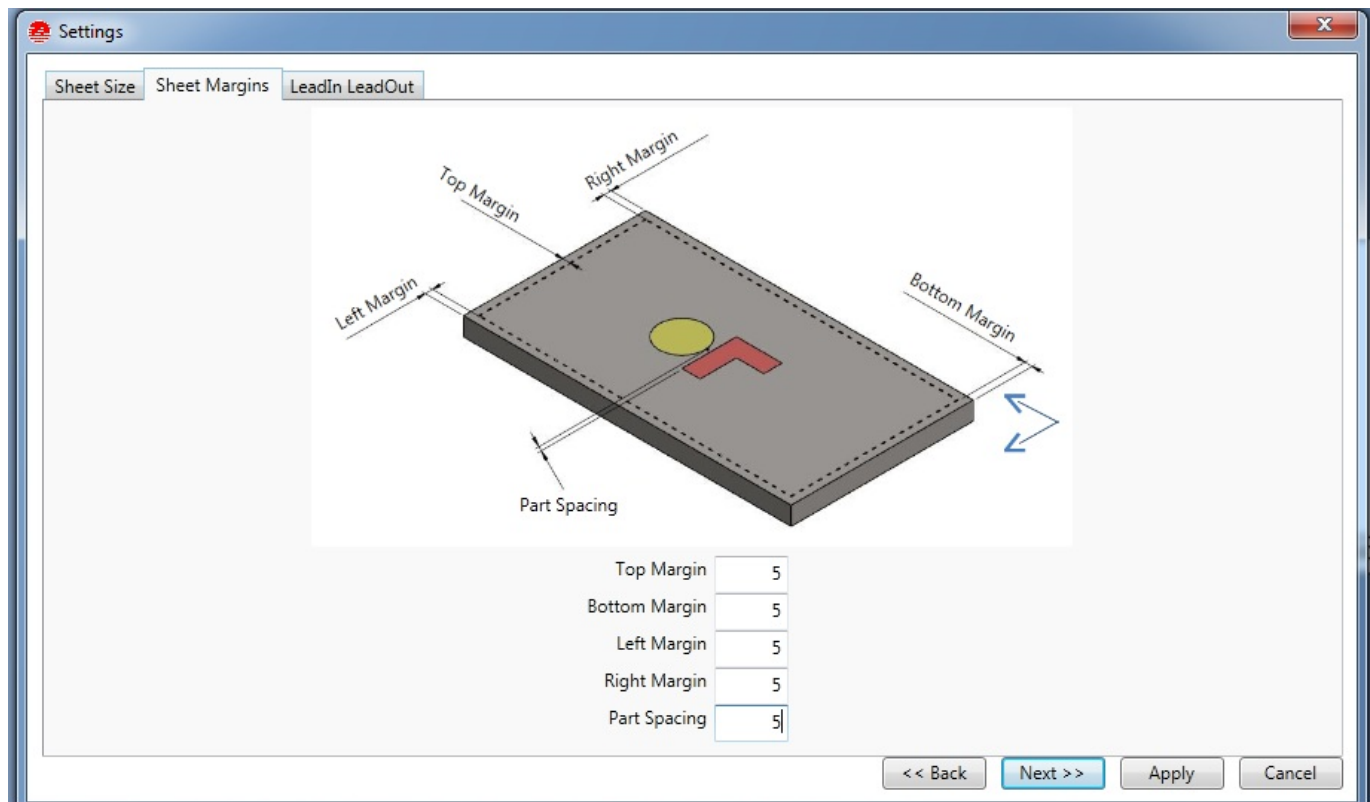
6. On the screen that appears, click the **New Job** button, located in the top left corner:



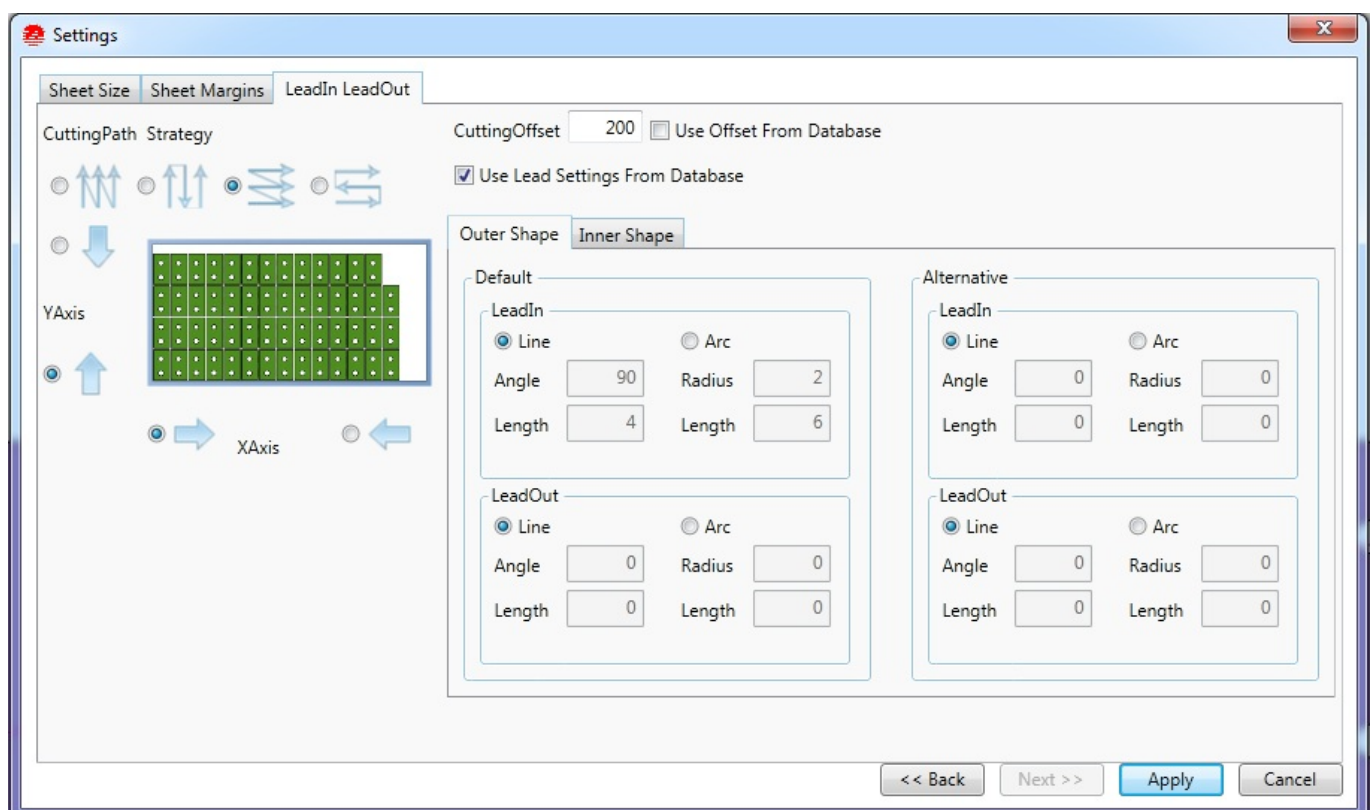
7. Specify the sheet size that you will be working with, then click Next:



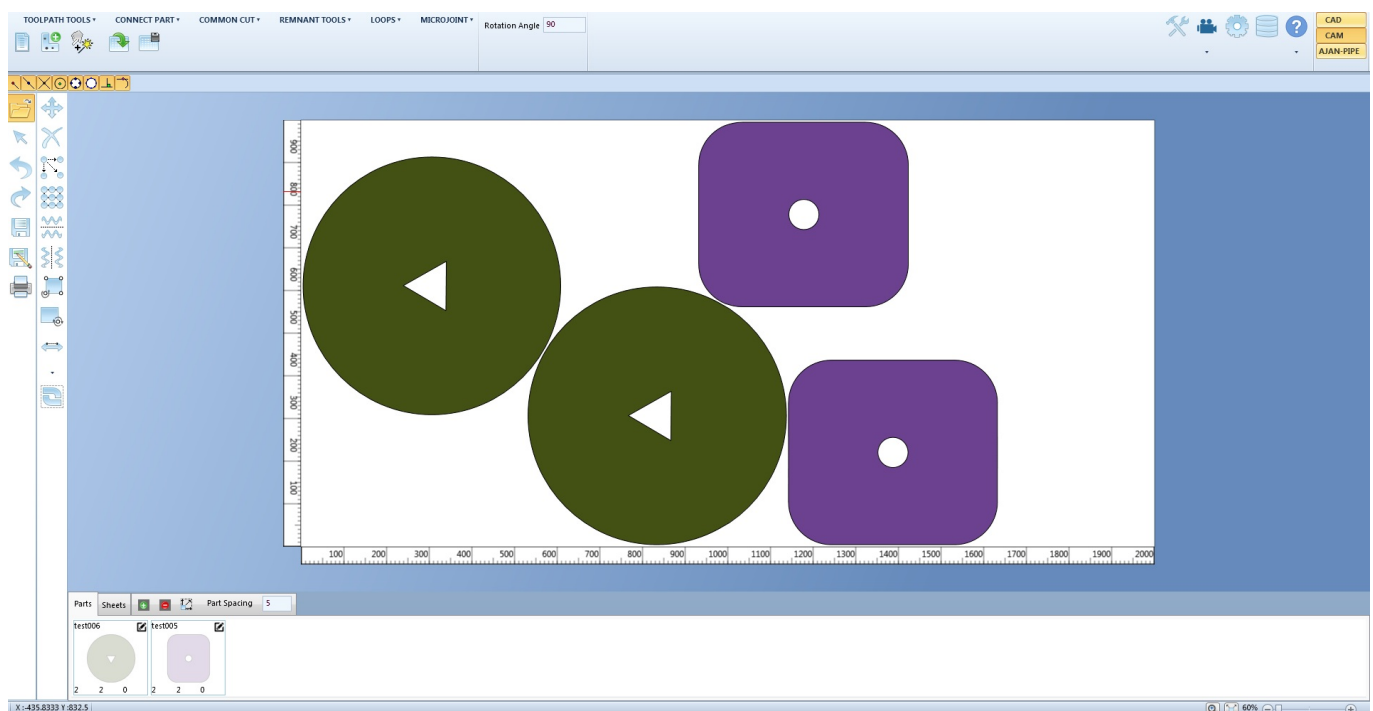
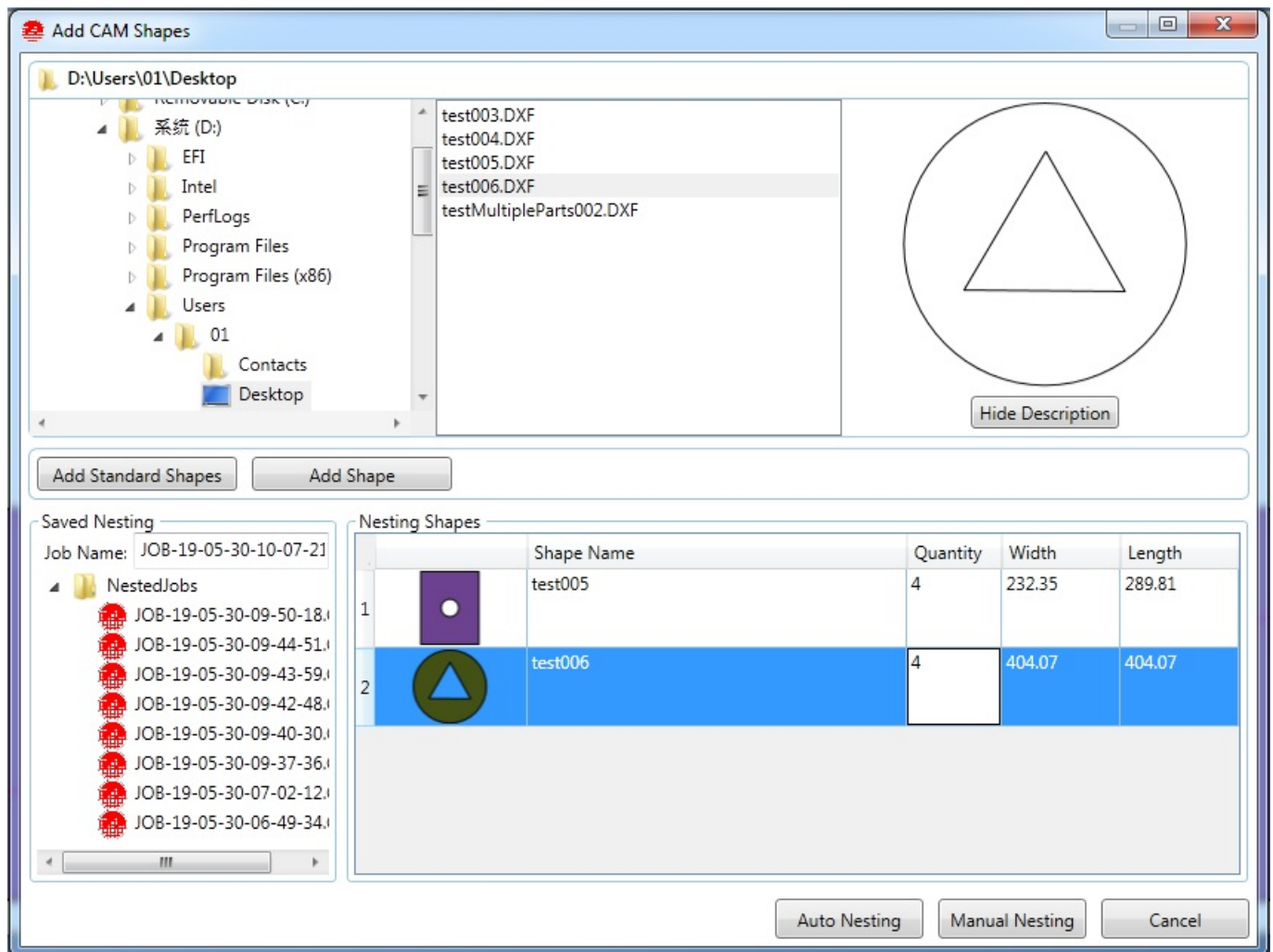
8. Specify the margin values that you want by default, then click Next.



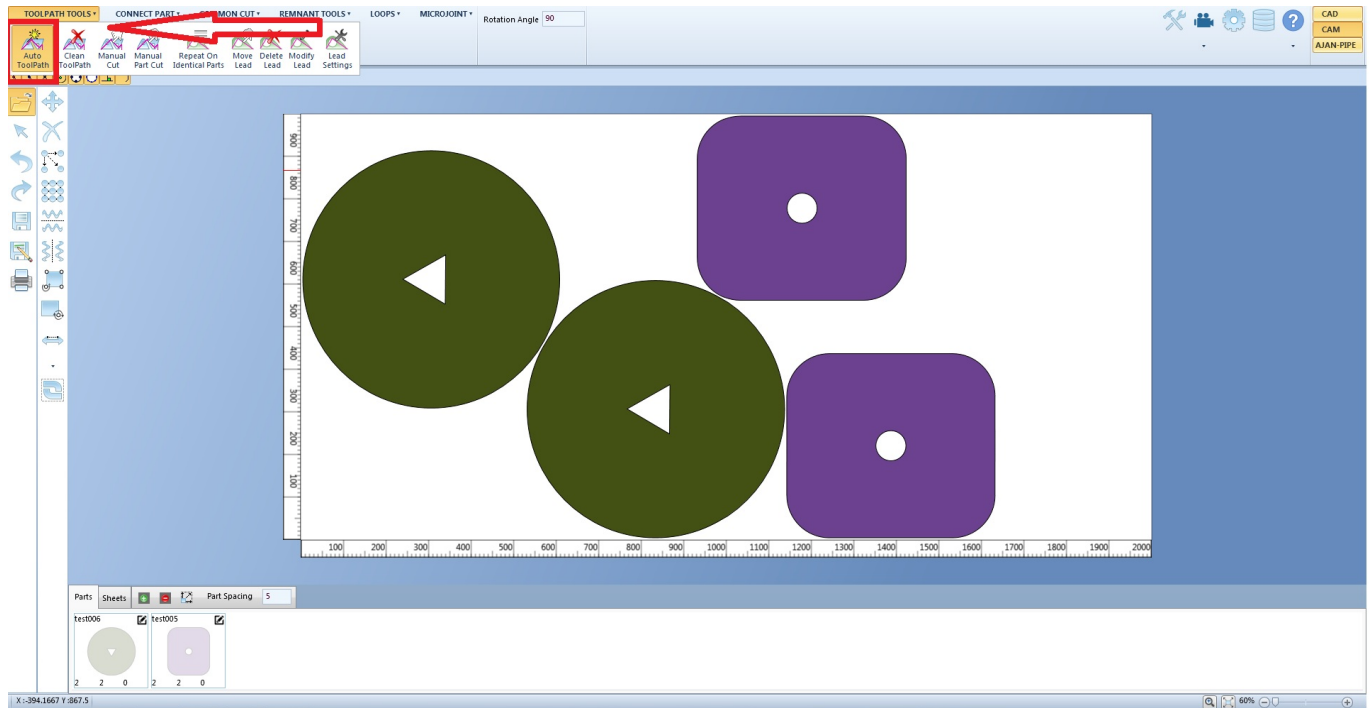
9. Specify your Lead In and Lead Out values, making sure they are viable for your particular setup. These can also be changed later. Click Apply.



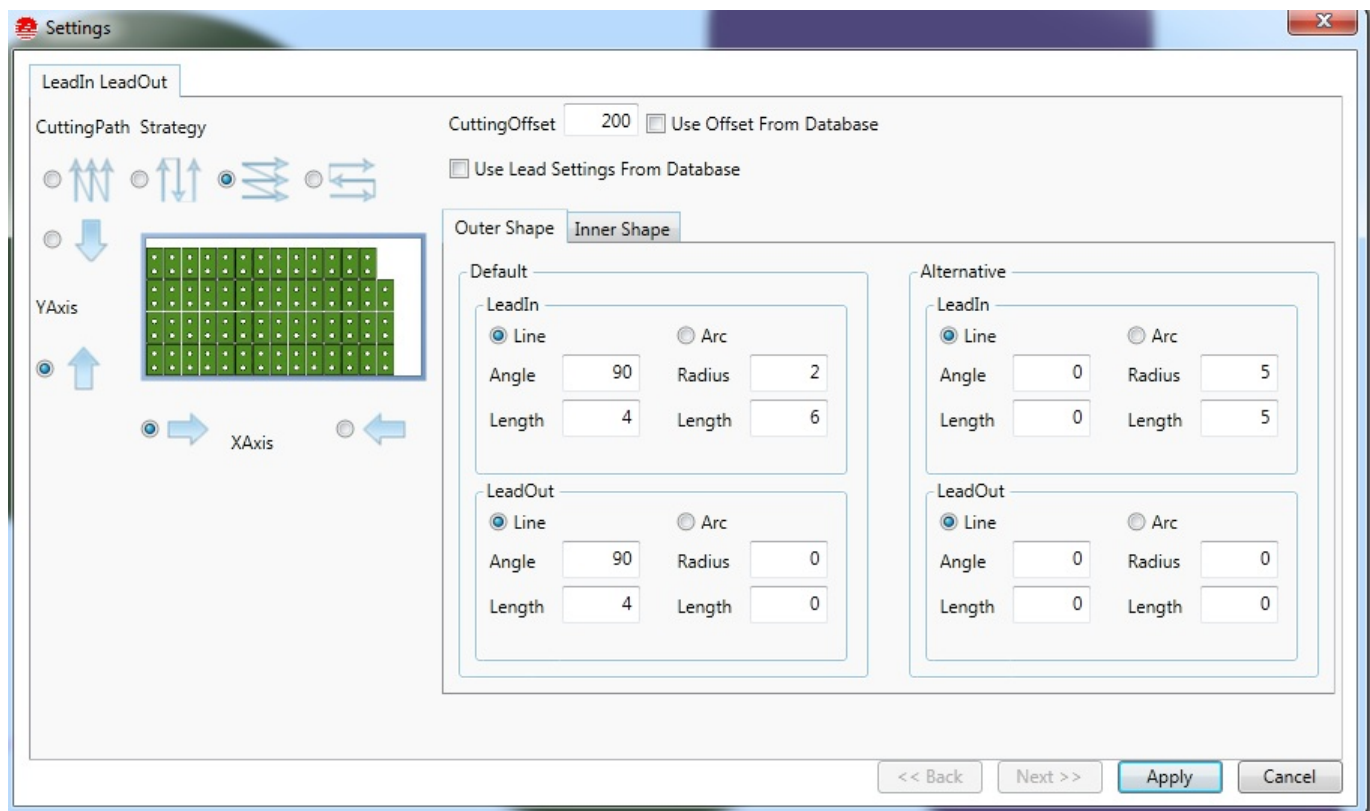
10. Import your part(s) into the CAM module. You can set your desired number of parts and select Auto Nesting for the default nesting configuration.



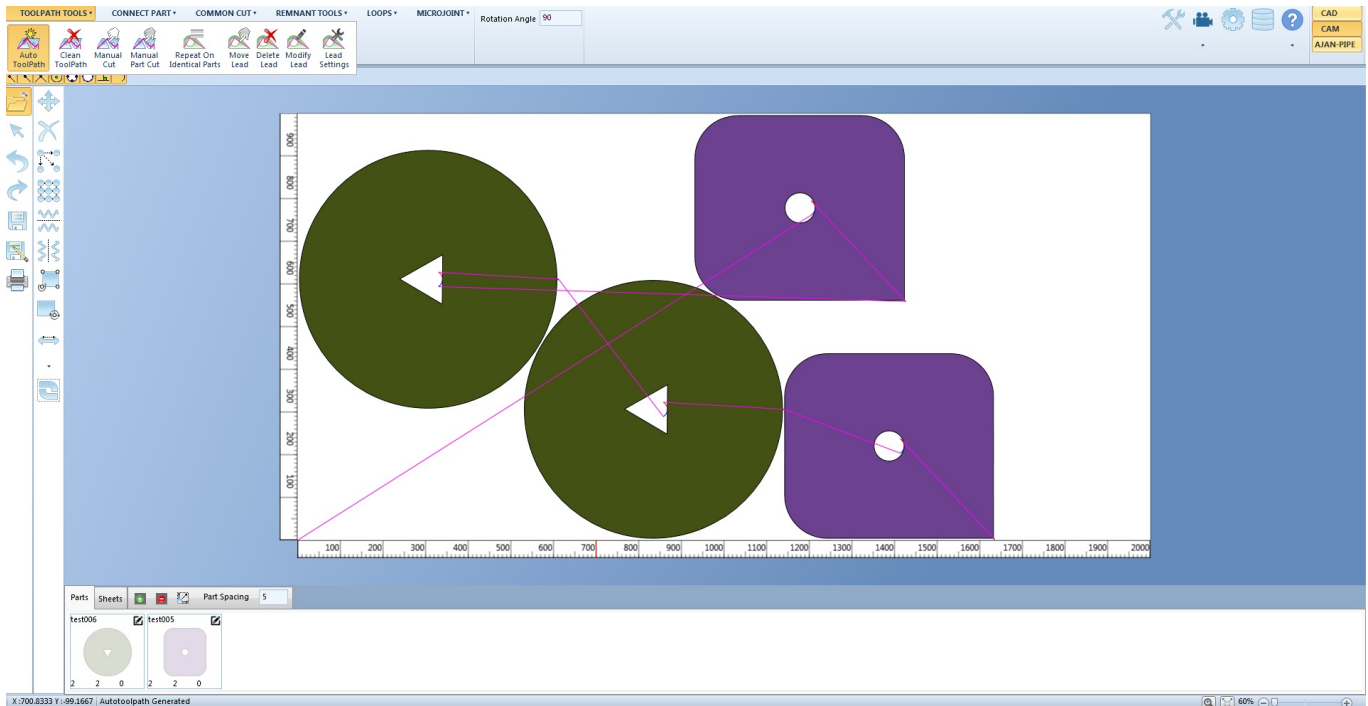
11. Click the Toolpath Tools button located in the top left corner, and then select Auto ToolPath.



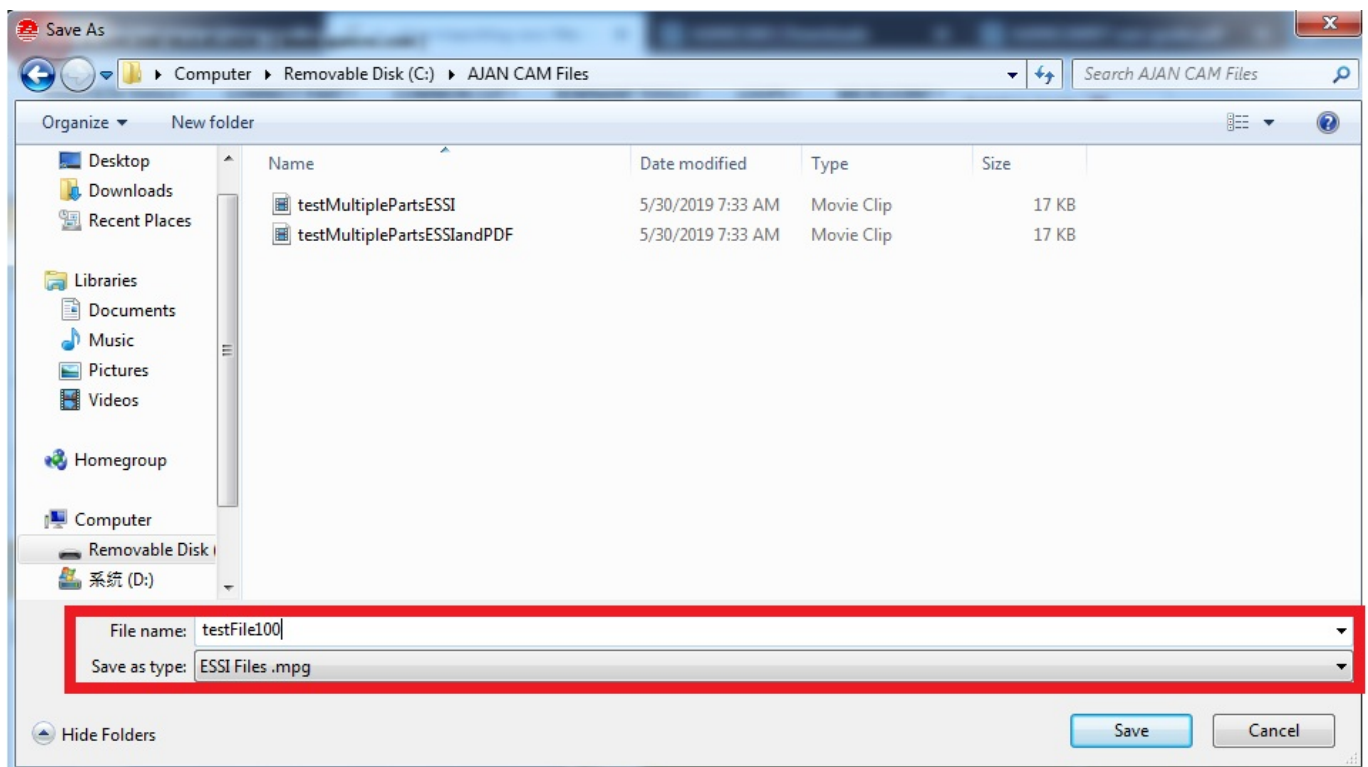
12. You can modify the Lead Settings in order to achieve the optimal cut:







13. Once you are satisfied with how the parts and the toolpaths are set up, you can save your file as an ESSI file (.mpg).



## Importing the file into myCNC

The mpg import support is not included natively with myCNC. However, the import can be performed upon request. In order to do so, please do the following:

1. Go to **CNC Settings > Support** and copy your Controller UID:

The screenshot shows the myCNC software interface with the 'Support' tab selected. The 'Profile Save' section contains a red box around the 'Controller UID' field, which is labeled 'CONTROLLER UID HERE'. Other fields include 'Tech Support Server' (mycnc.noip.me), 'Date', 'Screen', 'Macros', 'PLC', and 'Variables'. The 'Firmware Update' section includes 'Select Board' (myCNC-ET7), 'Firmware Version' (Release), 'UART port' (/dev/ttyS2()), and 'Baud rate' (115200). The 'Software Update' section has a 'Check Updates' button and a 'Download and Update Software' button.

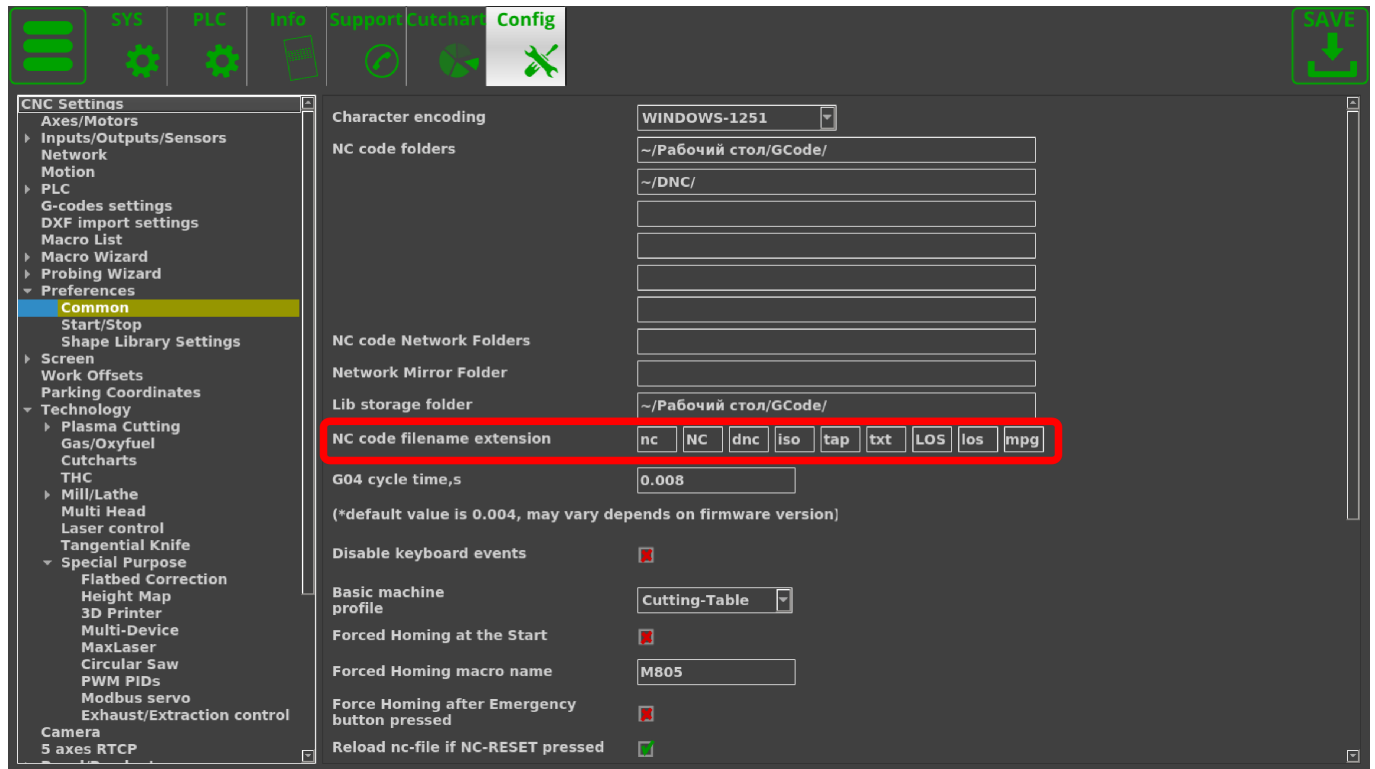
2. Send an email to **sale@pv-automation.com** which includes your Controller UID and your request for a CAM code.

3. After you have received your CAM code, go to **CNC Settings > Config > G-Codes Settings** and paste it into the **CAM Code** field.

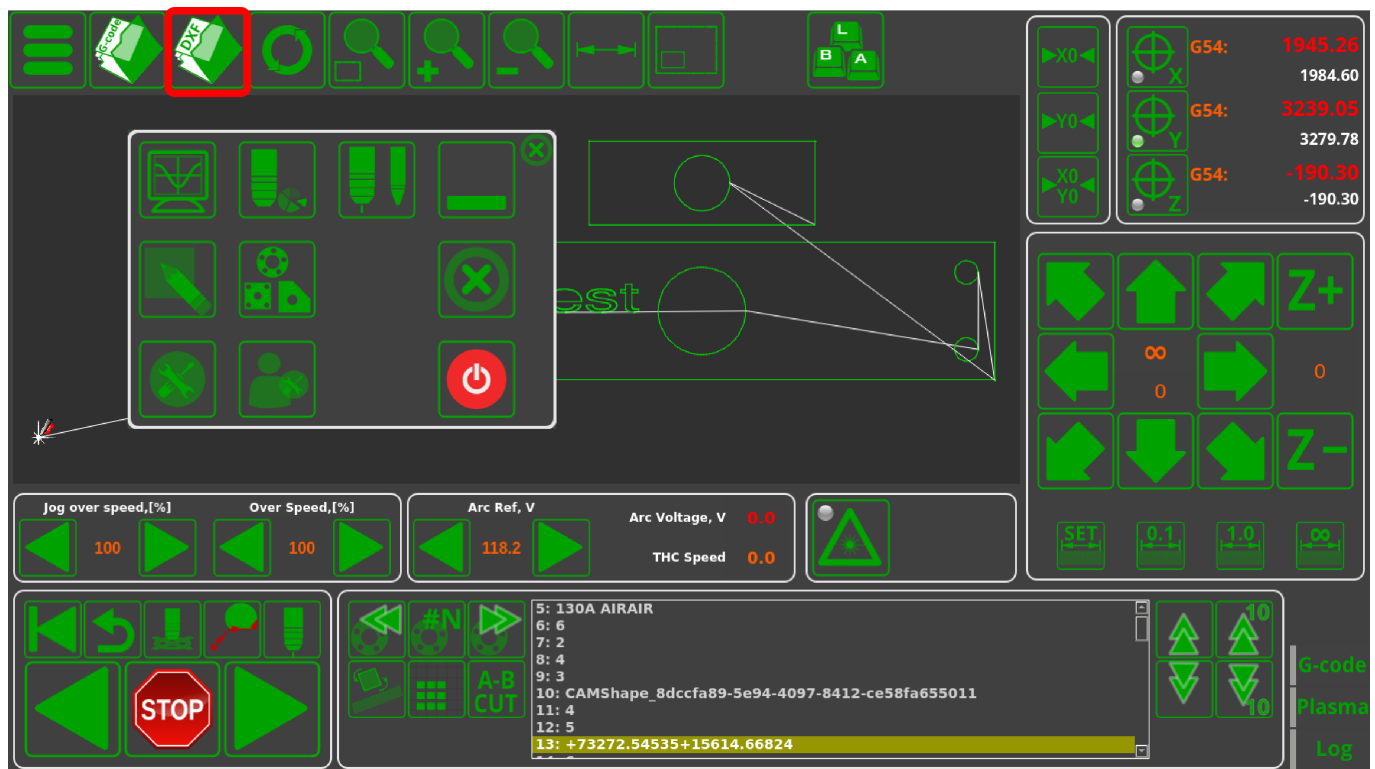
The screenshot shows the 'CNC Settings' window with the 'Config' tab selected. The 'G-codes settings' section is highlighted in the left sidebar. The 'CAM code' field is highlighted with a red box. Other settings include 'Default distance mode' (G91/Incremental), 'Default Arc Center Programming' (G91.1/Incremental Ce), 'Feed Rate (F) unit' (unit per minute), 'Rotate Rate (F) unit' (degree/s), 'Linear Unit' (mm), 'Angular Unit' (degree), 'G4 P value given in' (seconds), 'G18/G19 ignore' (checked), 'Command G59' (empty), 'Command M50' (THC disable), 'Tool Change M6Txx' (Enabled), 'Accept single S-code' (checked), 'G18 Switch G2/G3 (CW/CCW meaning)' (checked), 'G19 Switch G2/G3 (CW/CCW meaning)' (checked), 'G76 Thread Pitch (F) set in' (units), 'G96 CS speed (S) set in' (meters/min), 'G2/G3 is a circle if start-end distance less than' (1.e-9), 'Vision system licence', 'FlyCut licence', and 'Conveyor licence'.

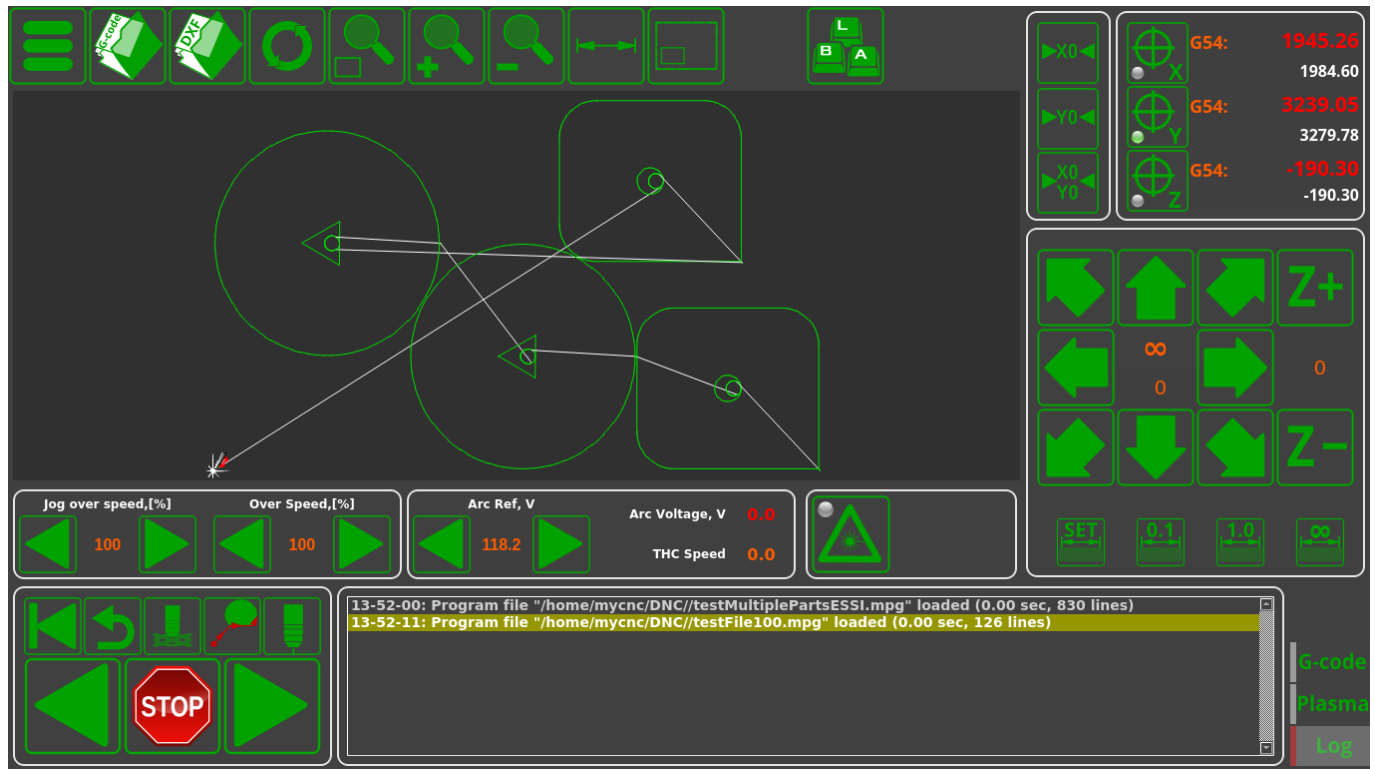
4. Go to **CNC Settings > Config > Preferences > Common** and check that the **mpg** extension is listed in the NC code filename extensions field. If it is not included, type it in.





5. Open your .mpg file by clicking the DXF button on the main software screen and then selecting your chosen file.





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<http://cnc42.com/> - myCNC Online Documentation

Permanent link:

<http://cnc42.com/other/importing-essi-files?rev=1559239274>

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