

Arc Bug Corrected (Between CamBam 0.9 and Mach3), version 1.0

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Background

Please refer to <http://rick.sparber.org/ARC.pdf> for an explanation of arcs defined in G-code. Pay special attention to page 10 where I deal with the conflict between G90 and G91.1 as processed by Mach3.

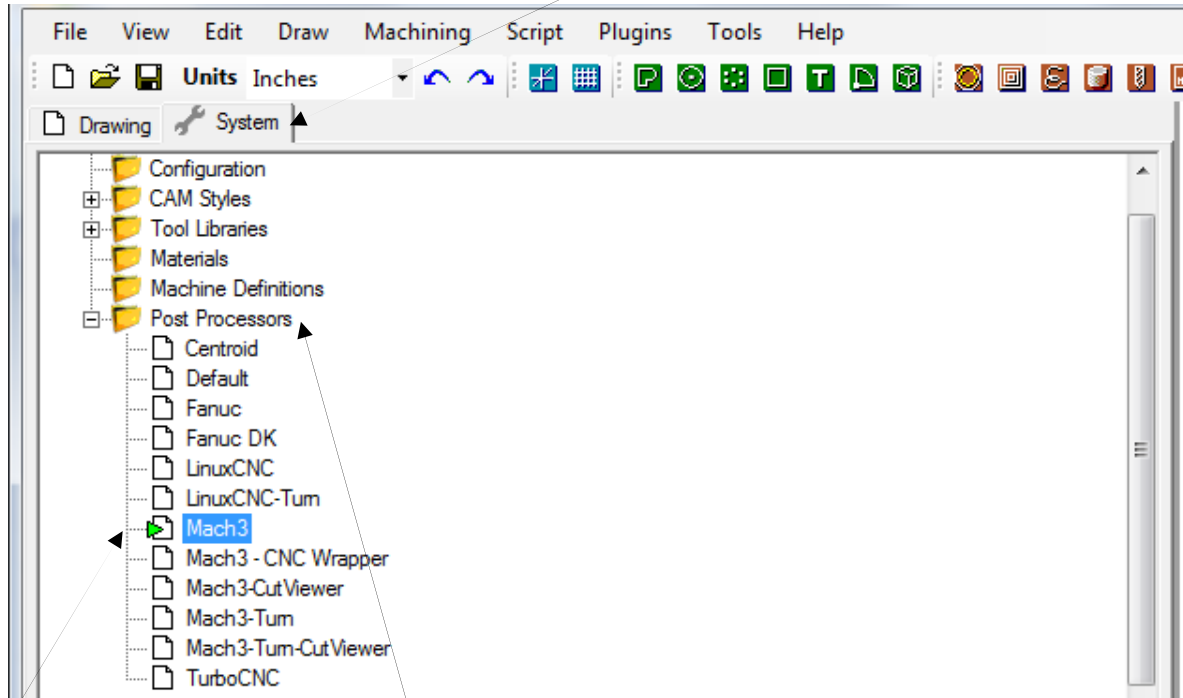
Conclusion

By making a small change to your CamBam post processors, G90 and G91.1 are placed on separate lines and no longer conflict. Failure to do this can cause the arc function to act in unwanted ways as it is interpreted by Mach3.

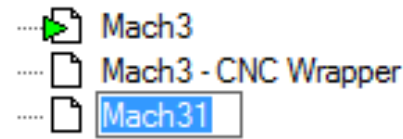
¹ You are free to distribute this article but not to change it.

The Procedure

Start CamBam 0.9. Then click on the System tab.

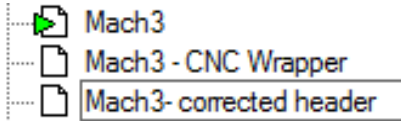


Find the Post Processors file. If there is a "+" in front, click it and you should see "-" and a list of possible post processors. The one with the green triangle is your default. Note that Mach3 is my default. If your default is not outlined in blue, click on it.

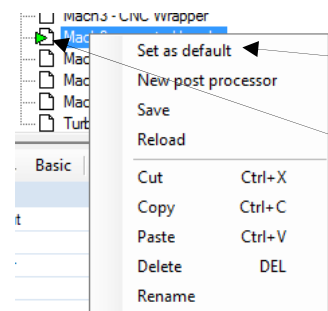


Then hold down the Ctrl button and press "C". Let go. Next hold down the Ctrl button and press "V" and let go. You should then see a copy of your default post processor with a "1" on the end. Type the name of

your new post processor and then press Enter.



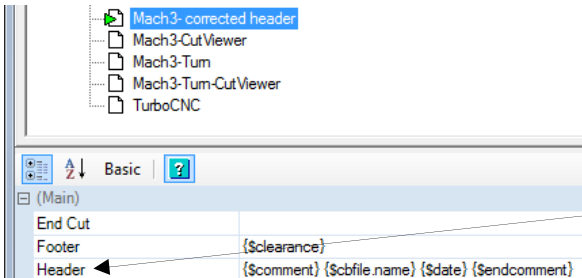
I called mine "Mach3- corrected header"



Right click on the new post processor and click on "Set as default".

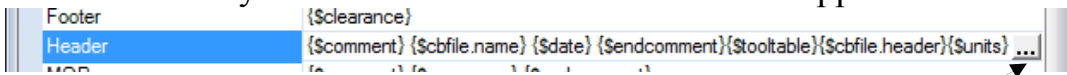
The green triangle should then show to the left of the name.

Now we can safely modify our copy without risking damage to the original post processor.

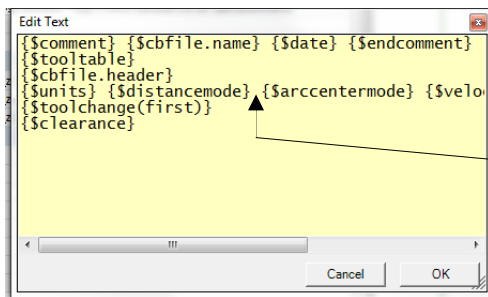


With the new post processor selected, look in the window below it and find the "Header" entry.

Click anywhere on the Header line to see this appear.

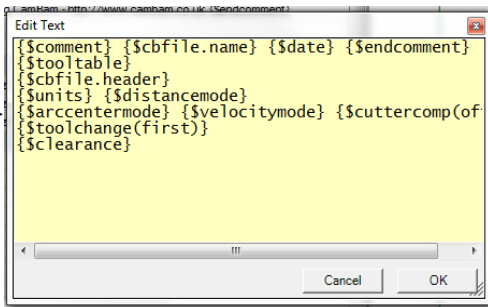


Then click on the ellipsis.



Up pops a window that lets us modify the header.

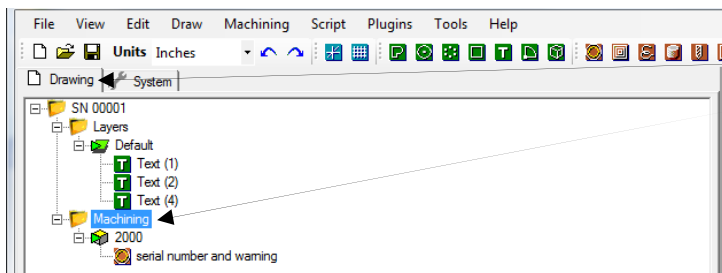
Locate the space between { \$distance mode } and { \$arccenter mode }. Click in this space and then press Enter.



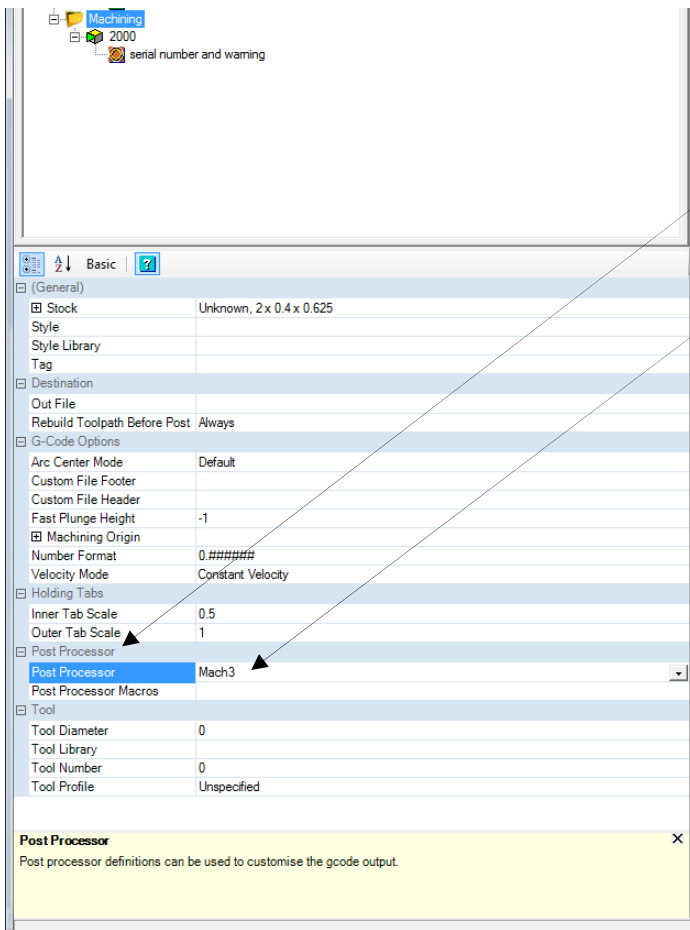
{ \$arccenter mode } should now start a new line. You may need to press Backspace to remove any blanks.

Press OK.

All that is left is to use the new post processor. New work will pick up the corrected post processor because it is now the default. But current files will need to have their post processor changed:



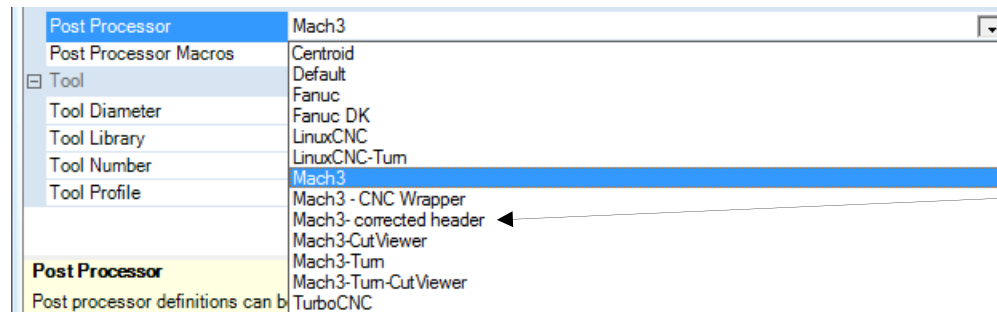
Click on Drawing and then click on Machining.



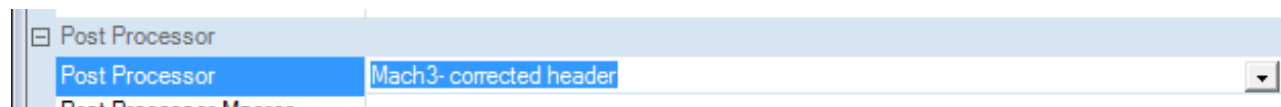
Look in the window below and find Post Processor. If there is a "+" next to it, click on it and you should see "-".

Below it find "Post Processor". Click on it and the text should become outlined in blue.

Click on the small triangle in the box at the right.



A menu of possible post processors should come up. Click on the one you just created.



In my case, I selected "Mach3- corrected header".

I tested this change by generating some G-code:

```
( T0 : 0.0 )
G20 G90
G91.1 G64 G40
```

Now G90 and G91.1 are on separate lines!

Acknowledgments

Thanks to kvon and EddyCurrent of the CamBam Forum for showing me how this is done.

I welcome your comments and questions.

If you wish to be contacted each time I publish an article, email me with just "Article Alias" in the subject line.

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