

Wood 482 - Lab # 2

Mastercam – Tool path

Assignment

Each student has to draw the object, create toolpath and generate the G-code as displayed below and save it, and paste the files (both MasterCAM and G-code) in the folder of your name into “Undergraduate Drop Box”. Submit a printout (hard copy) of the drawing in MasterCAM.

Please note:

1. Using SCM 5 Axis machine
2. The work piece reference point is at 0,0,0 (Top Surface, & left lower corner of the component)
3. Z=0 is on top of the work piece (program zero point)
4. Using “stock setup” and “bounding box” to create the stock (material)
5. The panel is 300 by 400 by 19mm
6. The tool path direction for the contour and the pocket is counter clockwise
7. The tool has to turn clockwise
8. Contour Depth = full material depth cut
9. Depth of Vertical holes = 5mm
10. Depth of the pocket in the middle of the panel = 6mm
11. Tooling Information: (all tools are external tools)
Use an 8 mm drill to drill (use tool #12) the holes
Use a ¼ inch router bit (use tool #6) to cut the outside of the contour
Use a ½ inch router bit (use tool # 13) to cut the pocket.
12. The lead in/out for the pocket is perpendicular from the top and for the contour use a circular approach.
13. Create a custom plane as the picture below and add a horizontal drilling toolpath with 8mm drill at 10mm deep.



