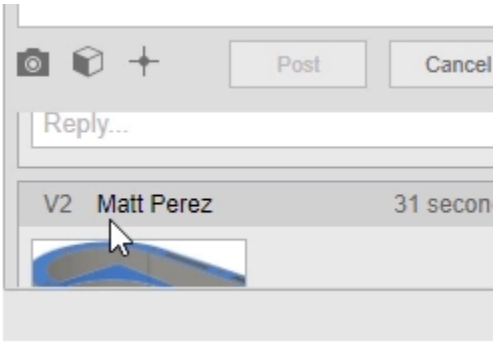
Process plan with imported CAD data

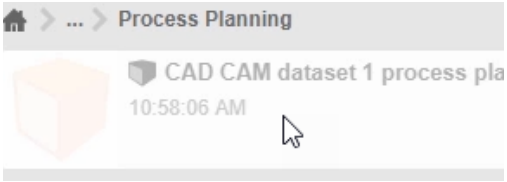
Learning Objectives

- Create comments.
- Navigate to the Manufacture Workspace.
- Identify toolpaths.

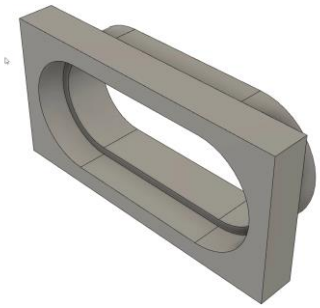


The completed exercise

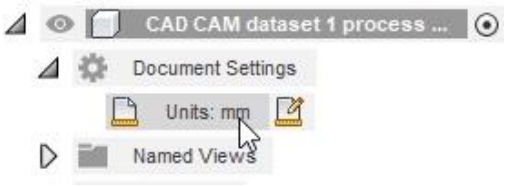
1. Create a new folder named Process Planning and upload the supplied *CAD CAM data set 1 process planning.iges* file. The iges file type is a neutral, intermediate CAD format. Double-click the file to open it in the Canvas area.



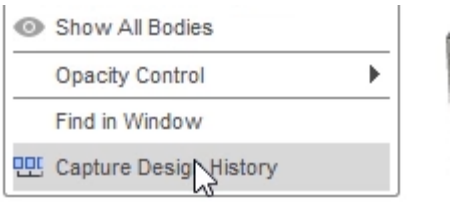
2. Since the file is not a native Fusion 360 file, some of the metadata will be lost. Information such as timeline history, tolerance values, and critical areas will not be imported with the file.



3. Expand the Browser's Document Settings and notice that the file's units are set to metric. The Measure tool can be used to determine that the part's holes are drilled to a metric dimension.

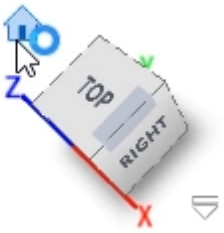


4. Select the Browser's top level, right-click it, then choose Capture Design History.

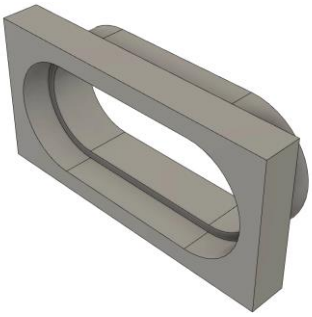


5. The timeline is added to the bottom of the Canvas area. Any adjustments or changes to the model will now be recorded in the timeline.

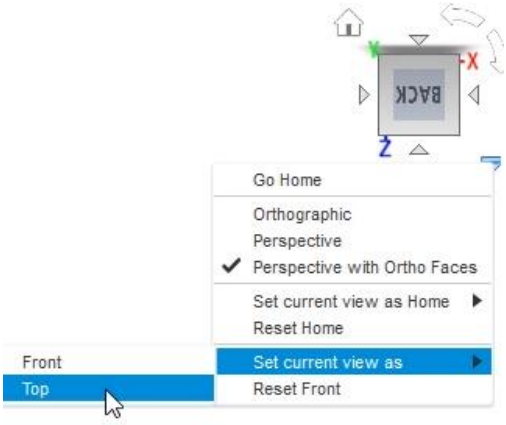
6. Click the home icon next to the View Cube.



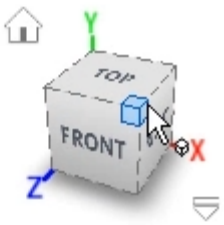
7. The model snaps to the home position but this is not an ideal position for machining the model's geometry.



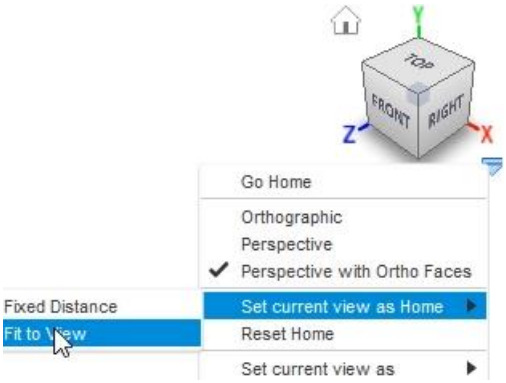
8. Click the View Cube's Back view, then expand the menu. Choose Set current view as> Top. The view that was previously the Back view is now the Top view. However, the home orientation is still not correct.



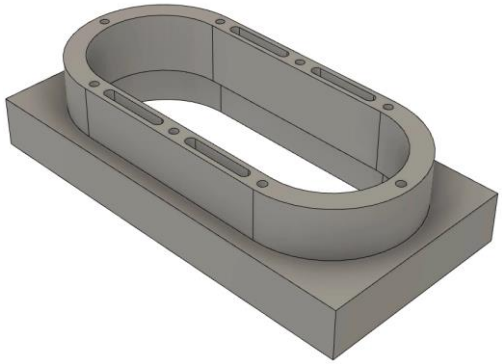
9. Snap to an isometric view by clicking the View Cube's corner shown in the image on the right.



10. Expand the View Cube's menu and choose Set current view as Home> Fit to View.

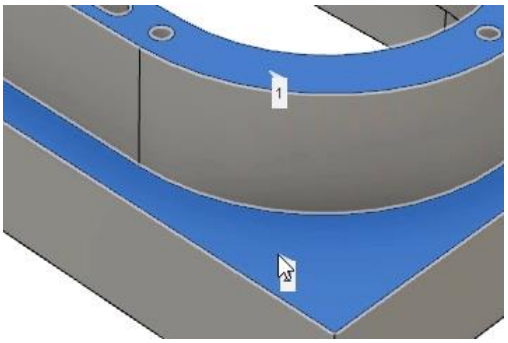


11. Clicking the View Cube's Home icon will return the model to the orientation shown in the image on the right.

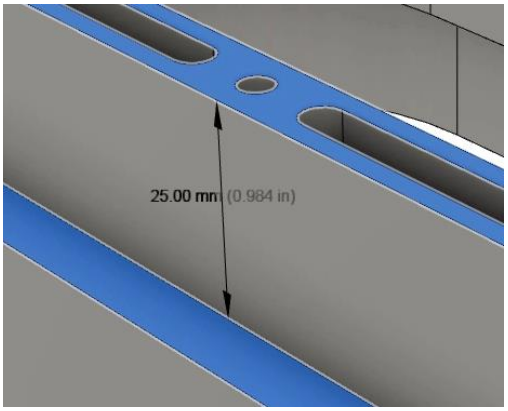


12. Expand the Comments dialog by clicking the plus icon in the screen's lower left corner.

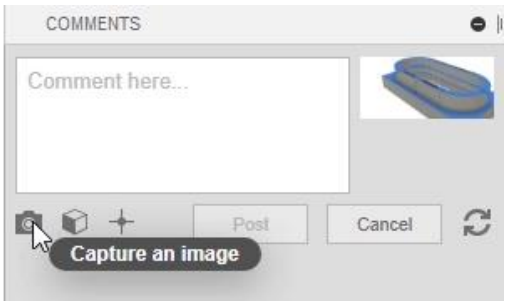
13. Open the Measure tool by clicking Inspect> Measure, then measure the distance between the two faces shown in the image on the right.



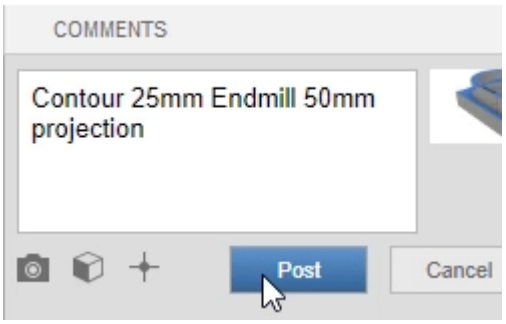
14. Zoom in to the model so that the measurement fills the Canvas area.



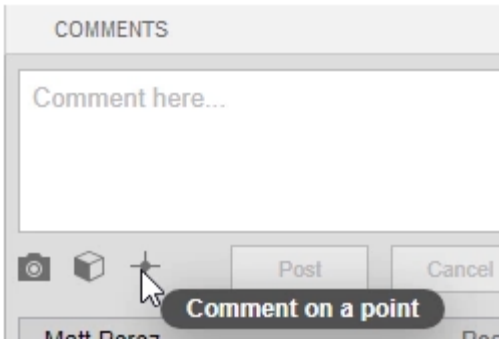
15. Click the dialog's Capture an image and notice that a screenshot is added to the Comments dialog.



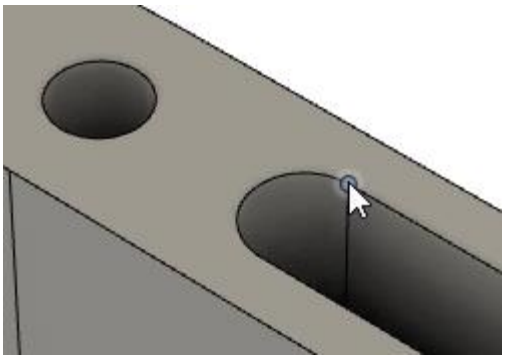
16. Type the note you want to add to the comment, then click Post. In the image on right, the tools needed to cut the model's geometry are documented.



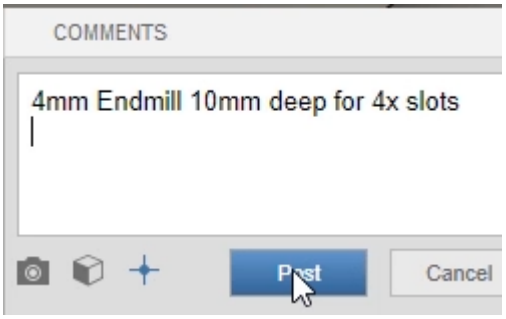
17. Click the dialog's Comment on a point.



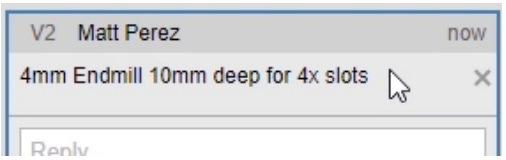
18. Select a point on the model.



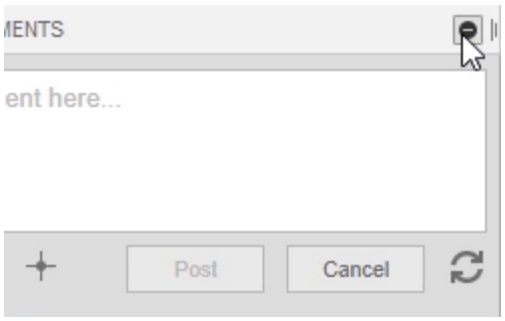
19. Document the information you want to apply to the selected point, then click Post.



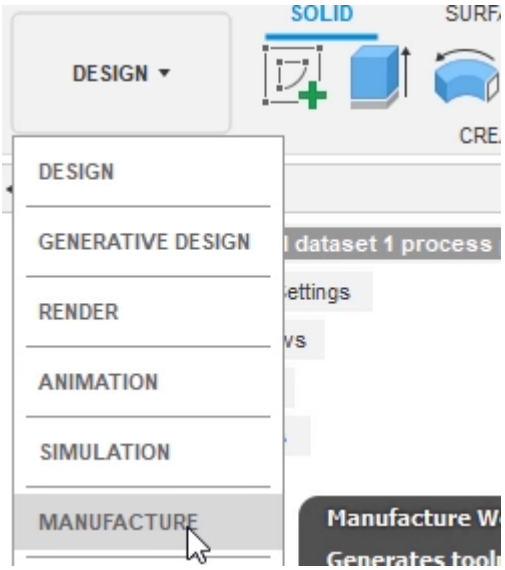
20. Click the captured comment and notice the Canvas area zooms to the point you selected on the model.



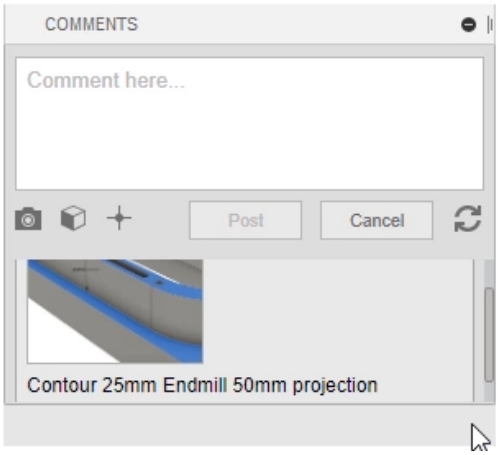
21. Minimize the Comments dialog by clicking the minus icon.



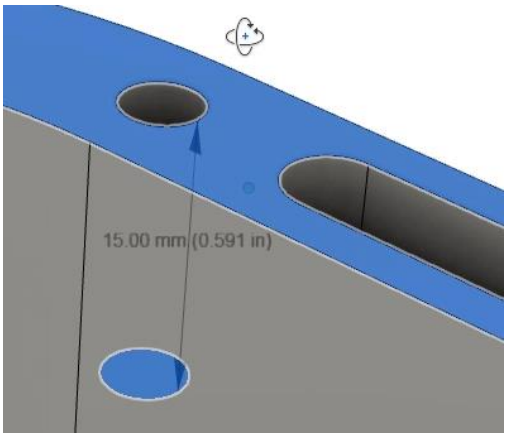
22. Click the Toolbar's Change Workspace and navigate to the Manufacture workspace.



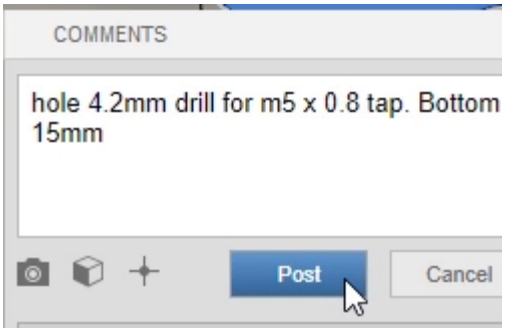
23. Expand the Comments dialog and notice that the comments you created are available in the Manufacture Workspace.



24. Open the Measure tool and choose the two faces shown in the image on the right. Note the hole's depth displayed in the Measure dialog.



25. Document the hole's parameters and the tools needed to cut the geometry inside a comment. Click Post. Close the Measure dialog.



26. Notice the file's version number is increased when you add comments. The design was automatically saved when you placed the comments. Continue to the next module.