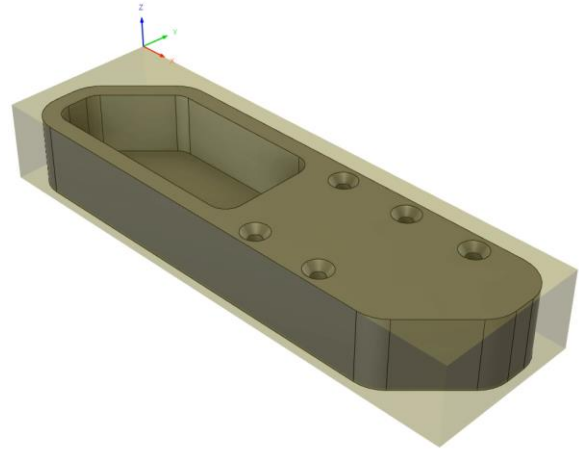


Lesson: Set up Stock

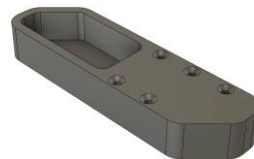
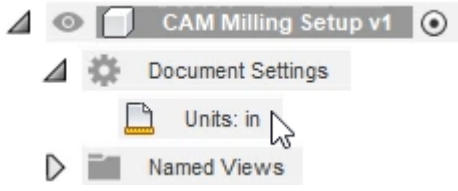
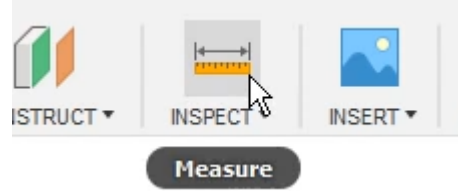
In this lesson, you'll prepare a model for machining by determining its measurements and creating a setup.

Learning Objectives

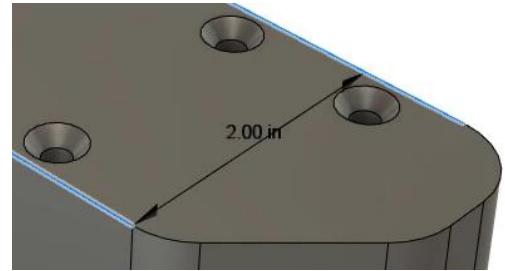
- Use Inspect to measure a part.
- Show how to set stock in a setup.



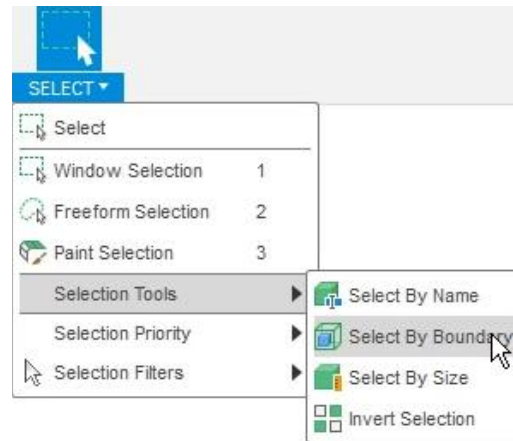
The completed exercise

<p>1. Upload and open the supplied <i>CAM Milling Setup.f3d</i> file.</p>	
<p>2. Note that the document's units are inches.</p>	
<p>3. This part needs to be measured to determine how large its stock needs to be. Click Inspect> Measure.</p>	

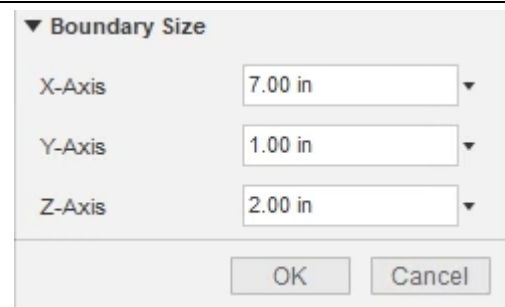
4. Select various faces and edges on the model to measure its length, width, and height. To clear the Measure tool's selections, click the Restart Selection option in the Measure dialogue. Click the dialog's close when you're finished finding the part's measurements.



5. To find the part's dimensions using a different method, click Select> Selection Tools> Select by Boundary.



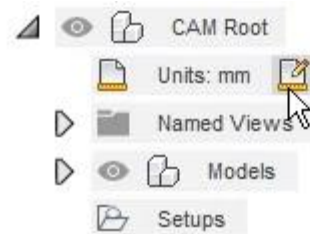
6. For the dialog's Centroid selection, choose the model in the Canvas. The model's length, width, and height are shown inside the dialog. This tool is especially useful when a body has complex geometry that is difficult to measure. Click the dialog's Cancel to close the dialog.



7. Click Change Workspace and choose the Manufacture workspace.



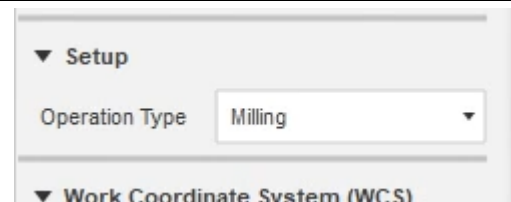
8. Use the Browser's Change Active Units to change the units to Inch.



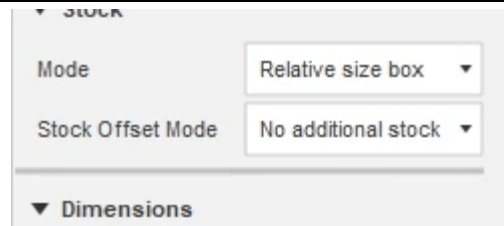
9. Before any operations can be created, a setup needs to be made. Click Setup> Setup.



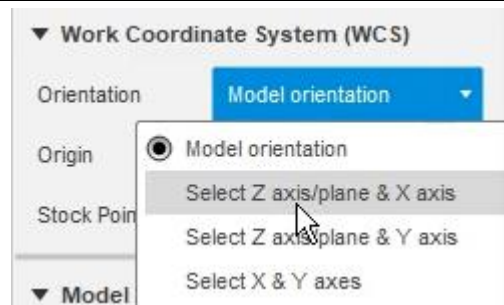
10. Since this geometry will need to be milled in a traditional milling machine, make sure the Milling option is selected in the dialog.



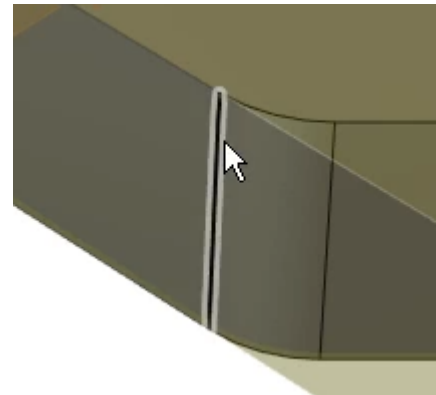
11. Continue to the dialog's Stock tab. Choose the No additional stock option in the dialog's Stock Offset Mode to specify that the stock will be cut to the exact dimensions needed for the model. Notice that the dimensions listed in the dialog's Dimensions section perfectly describe the model's length, width, and height. If the stock's dimensions need to be modified in any way, the options in the Mode and Stock Offset Mode menus can be used.



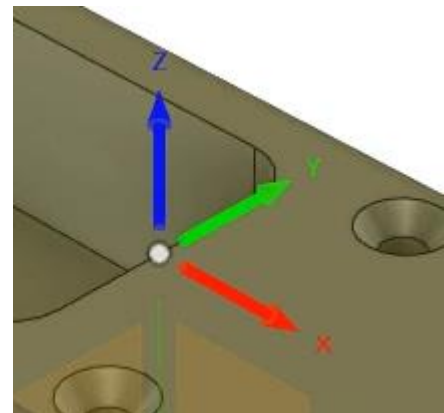
12. Return to the dialog's Setup tab and choose the Select Z Axis/plane & X axis option from the Orientation menu.




13. Select a vertical edge on the model as the dialog's Z Axis selection.



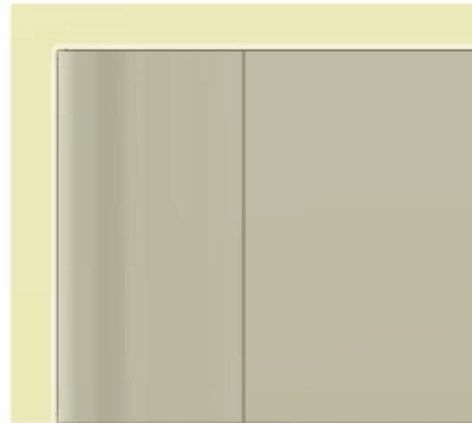
14. Activate the dialog's Flip Z Axis option so that the WCS matches the image on the right.



15. Continue to the dialog's Stock tab. The stock needs to be slightly larger than the model. Use the value fields to add 0.25 inches to the stock's width and depth, then add 0.125 inches to the stock's height. Choose the Offset from bottom option from the Model Position menu, then enter 0 into the Offset field so that all of the extra stock material is on top of the part.

Mode	Fixed size box ▾
Ground Stock at Moc...	<input type="checkbox"/>
Width (X)	7.25 in ▴ ▾
Model Position	Center ▾
Depth (Y)	2.25 in ▴ ▾
Model Position	Center ▾
Height (Z)	1.125 in ▴ ▾
Model Position	Offset from bott... ▾
Offset 	0 in ▴ ▾
Round Up to Nearest	0.5 in ▴ ▾

16. Navigate to the side view and notice that all of the extra stock material is on the sides and top.



- 17.** Return to the dialog's Setup tab to set the WCS for the setup. Choose the Stock box point option from the dialog's Origin menu, then choose to place the WCS at the model's back left corner. OK the dialog to create the setup. Save the file and continue to the next module.

