

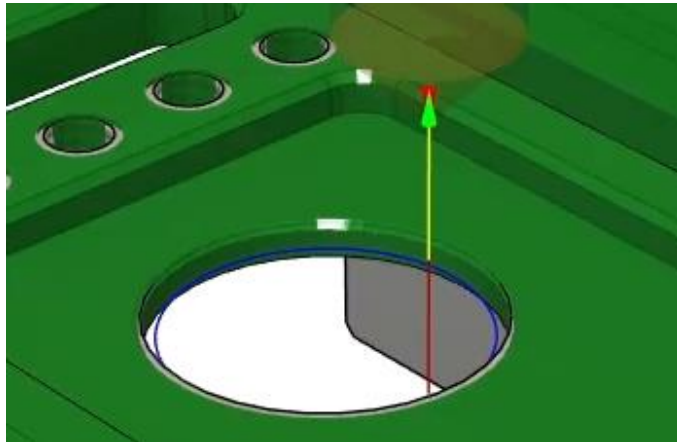
## Step-by-step guide

### Chamfer edges

Chamfer a part's edges, regardless of whether the chamfer was modeled or not.

#### Learning objectives:

- Create a Chamfer toolpath to deburr edges.



*The completed exercise*

1. Continue with your model from the previous video or upload the supplied *Cell Phone INCH – Chamfer.f3d* file. The supplied file does not have active links to the parent files, so use your file if possible.

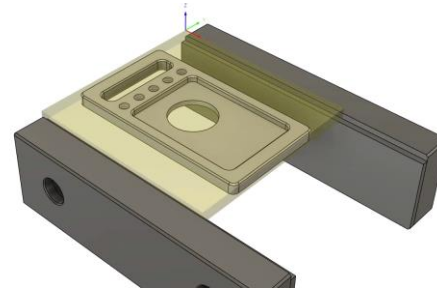


Figure 1. Open the file

2. This part's edges need to be deburred so that there aren't any dangerous sharp edges. Notice that only some of the model's edges are chamfered. For instance, the large hole does not have a chamfer feature.

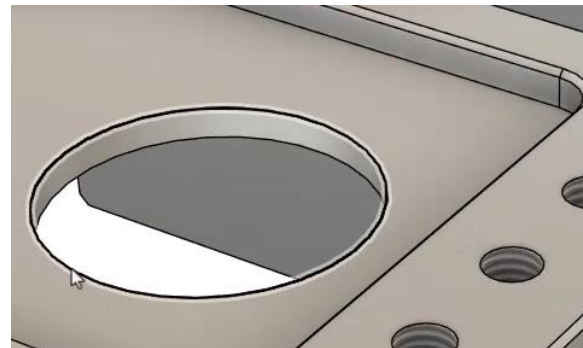


Figure 2. Notice the unchamfered edge

3. Create a Chamfer operation by clicking 2D> 2D Chamfer.

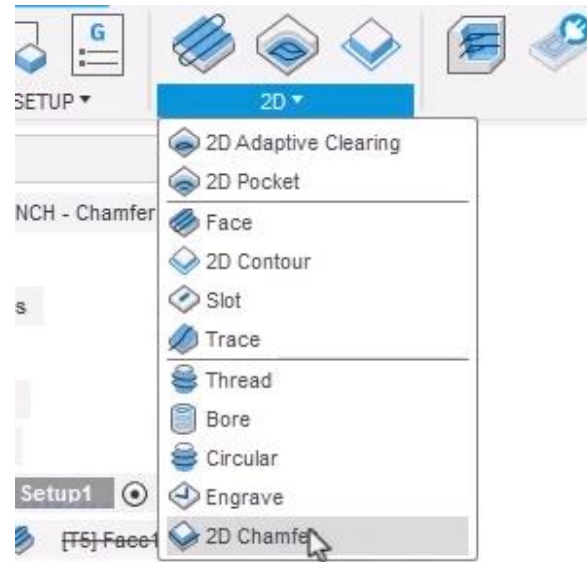


Figure 3. Create a Chamfer operation

4. Click the dialog's Select to choose an appropriate tool for the operation. Navigate to the Learn Cam 90 – INCH tool library and choose Tool 4.



Figure 4. Choose the operation's tool

5. Click the Select Tool dialog's Select.

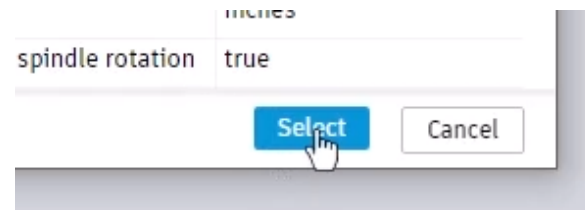


Figure 5. Click Select

6. Continue to the Geometry tab and select the top edge on each of the model's three chamfered edges. OK the dialog to generate the toolpath.

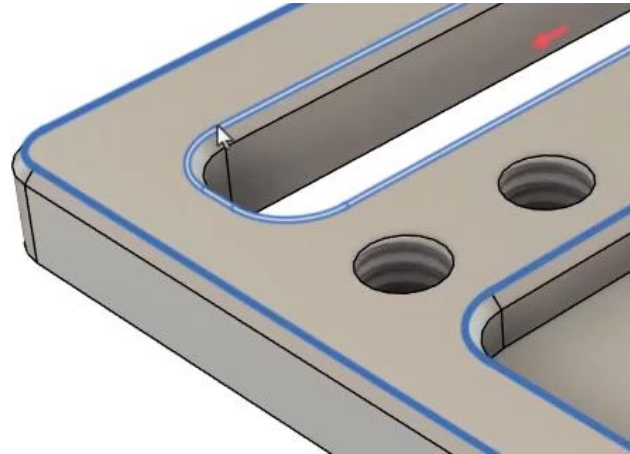


Figure 6. Select three edges

7. Inspect the result and notice that the chamfer is created correctly. The machined chamfer perfectly matches the modeled chamfer.

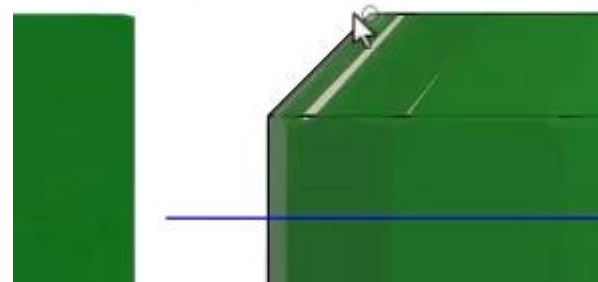


Figure 7. Inspect the toolpath

8. A chamfer can be added to model edges that are not chamfered. Create another Chamfer operation by clicking 2D> 2D Chamfer. Navigate to the Chamfer dialog's Geometry tab and select the large hole's top edge as the contour selection.

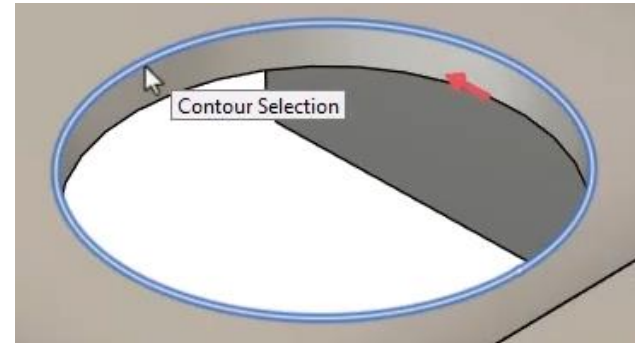


Figure 8. Select the edge

9. Continue to the Passes tab and enter **0.2 inches** into the Chamfer Width box. OK the dialog to generate the toolpath.

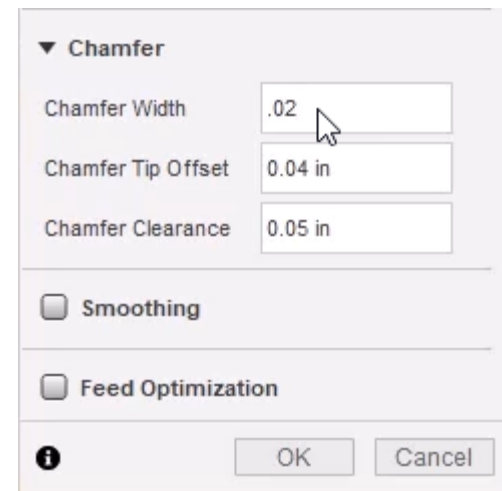
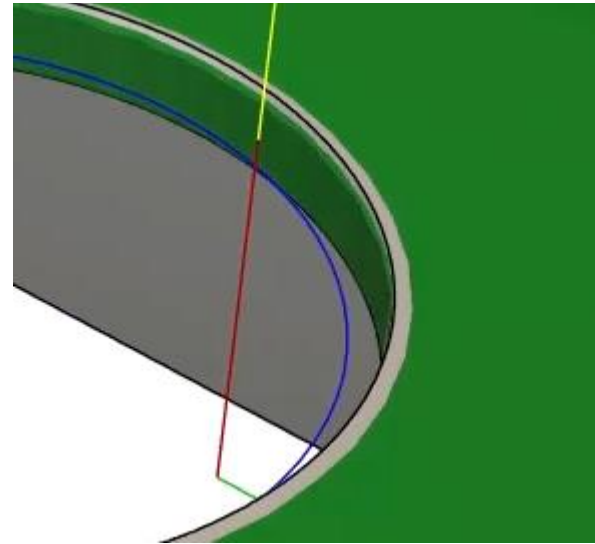


Figure 9. Adjust the chamfer's width

10. Inspect the toolpath and notice that the un-chamfered model's edge is sticking out of stock body. This is acceptable because a machined chamfer has been added to the un-chamfered model edge. Save the file.



*Figure 10. Inspect the toolpath*