

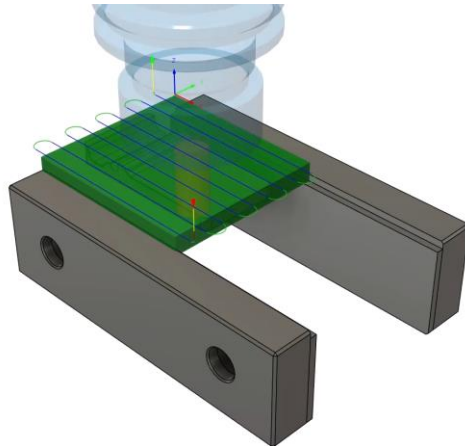
## Step-by-step guide

### Stock facing the base

Create a Facing operation to remove a stock body's extra top material.

#### Learning objectives:

- Create a Facing toolpath with an end mill.



*The completed exercise*

1. Upload and open the supplied *Cell Phone Stand INCH – Face.f3d* file.

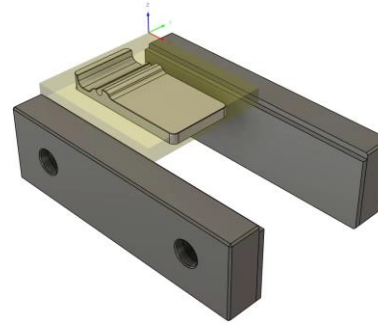


Figure 1. Open the file

2. Instead of opening the supplied file, you could use this as an opportunity to practice creating a setup by creating your own file. If you want to do this, open the supplied *Cell Phone Stand – INCH Assembly.f3d* file, derive the Stand Body into its own file, then create a setup.

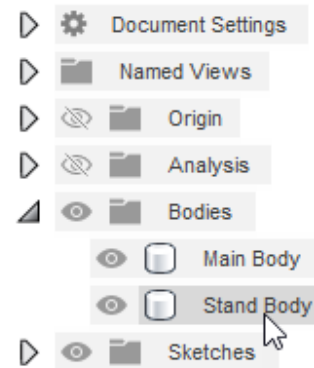


Figure 2. Note how to create your own file

3. A Facing operation is typically a program's first operation. This operation removes the stock's extra top material and ensures a high-quality finish.

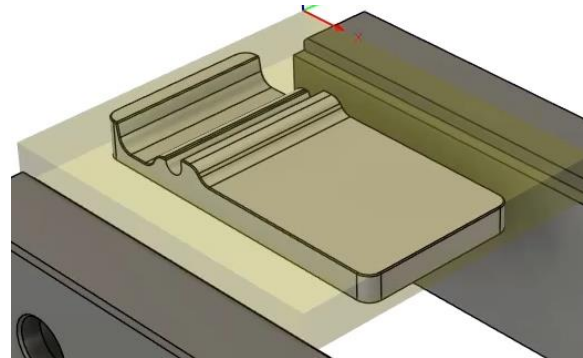


Figure 3. Notice the stock needs to be faced

4. Create a Facing operation by clicking 2D> Face.



Figure 4. Create a Facing operation

5. Click the Face dialog's Select to choose an appropriate tool for the operation.

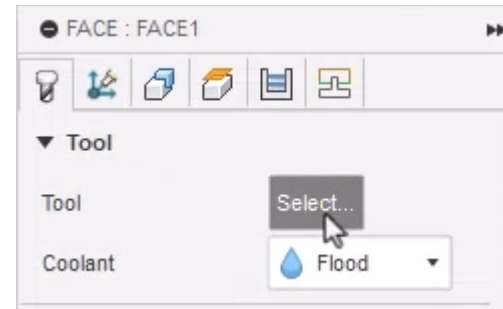


Figure 5. Click Select

6. Inside the Select Tool dialog, navigate to the Learn Cam 90 – INCH tool library.

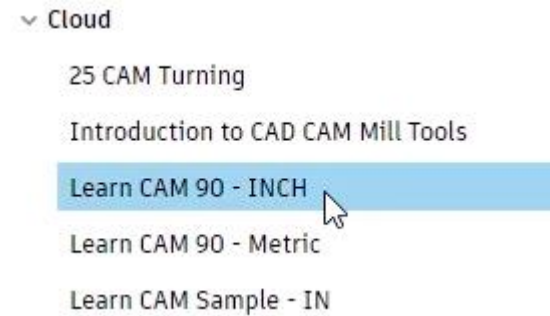


Figure 6. Open the tool library

7. Some machines cannot support a large diameter tool like this library's 2 inch face mill. Select Tool 7 which is a 1/2 inch flat endmill.



Figure 7. Select the tool

8. Click the Select Tool dialog's Select.

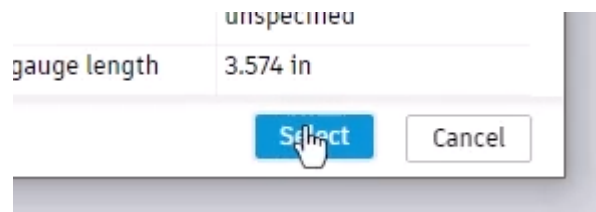


Figure 8. Click Select

9. OK the Face dialog to accept all the default settings and generate the toolpath.



Figure 9. OK the dialog

10. Inspect the toolpath and notice that the operation faces the entire stock body using 9 passes. Save the file.

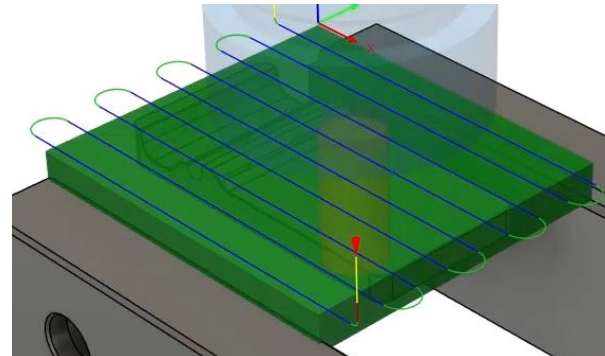


Figure 10. Inspect the toolpath