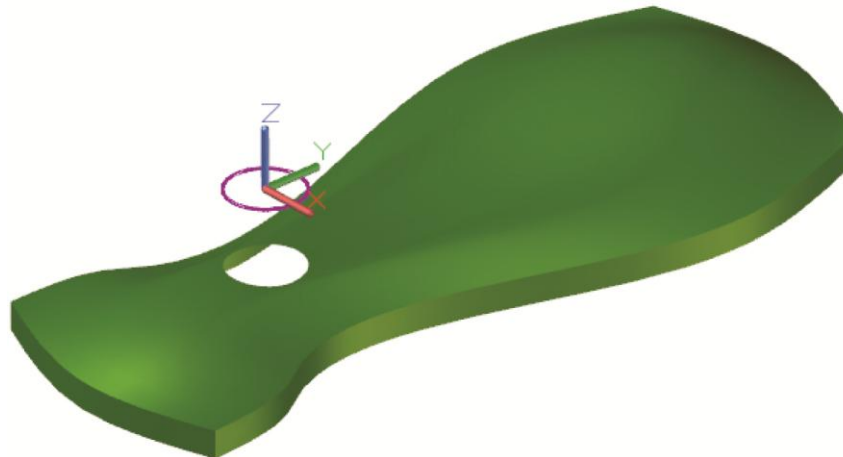
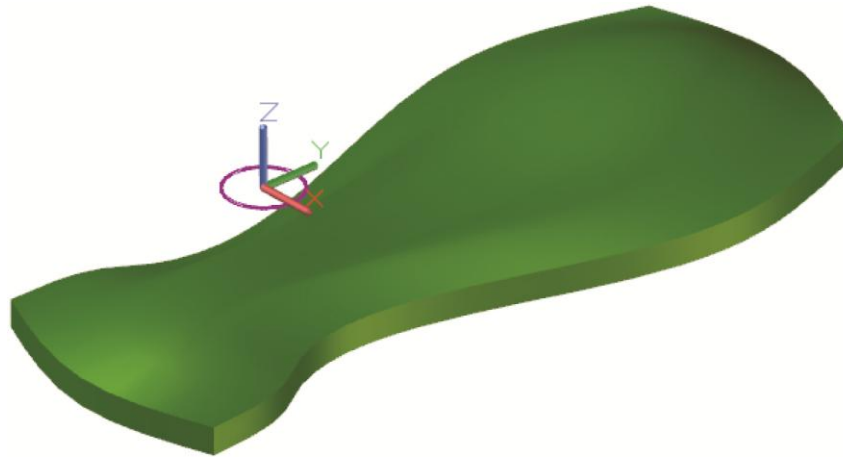


## Exercise 10-9

In this exercise, you will work with a conceptual design of a new 3D CAD mouse. You will create a rotation knob using surface modeling commands and editing methods. You will trim a surface using projected geometry, modify the defining curve, and create a blend surface.

1. Open the drawing EX10\_09.dwg available on the companion website.
2. Make sure the **SURFACEMODELINGMODE** system variable is set to 0 (the default setting).
3. Make sure the **SURFACEASSOCIATIVITY** system variable is set to 1 (the default setting).
4. The base of the mouse requires a hole for the rotation knob. Using the **SURFTRIM** command, project the circle onto the surface of the base and trim the circular area. See the illustration below.



5. Using the **Properties** palette, change the diameter of the circle to 2.000. See the illustration below. Notice that the diameter of the trimmed hole also changes because of the associative relationship between the trimmed surface and the defining curve.
6. Using the **PLANESURF** command, create a planar surface based on the circle object.
7. Using the **SURFBLEND** command, create a blend surface between the edge of the planar surface and the edge of the hole in the base. Set the continuity to G2 and the bulge magnitude to 1.
8. Save the drawing as EX10-9.

