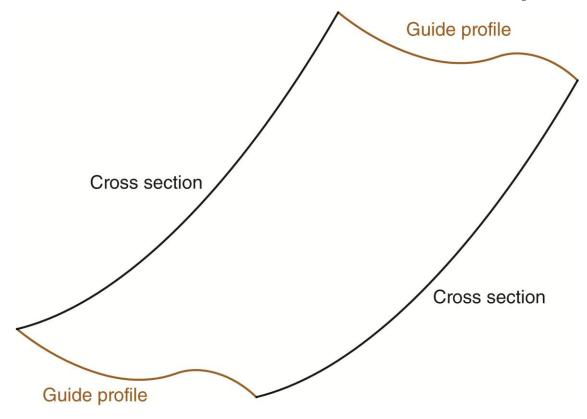
AutoCAD and Its Applications ADVANCED

Exercise 8-9

In this exercise, you will use a lofted surface to slice a solid to create a contoured solid object.

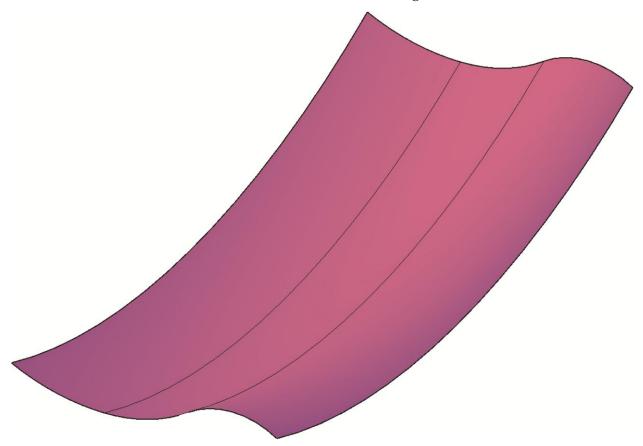
You will also use a revolved surface to slice a solid to create a taper on a spline shaft.

- 1. Open the drawing Lofted_slice.dwg available on the companion website.
- 2. Set the Surface layer current.
- 3. Set the **DELOBJ** system variable to zero (0).
- 4. Enter the **LOFT** command. Select the cross sections shown in the following illustration.



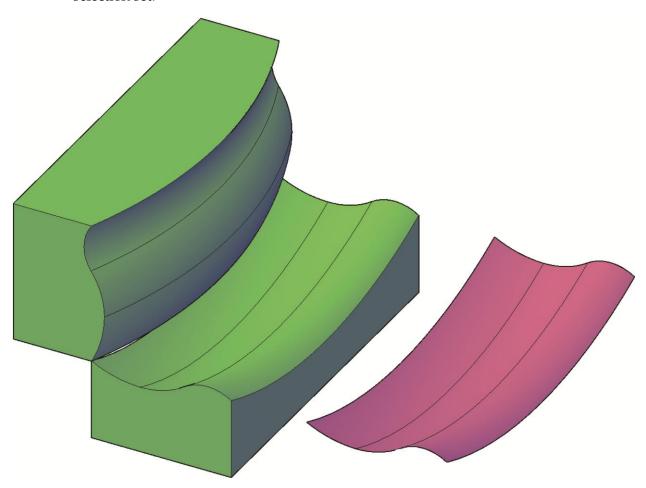
5. Select the **Guides** option and pick the guide profiles shown in the illustration above.

6. Notice the lofted surface, as shown in the following illustration.



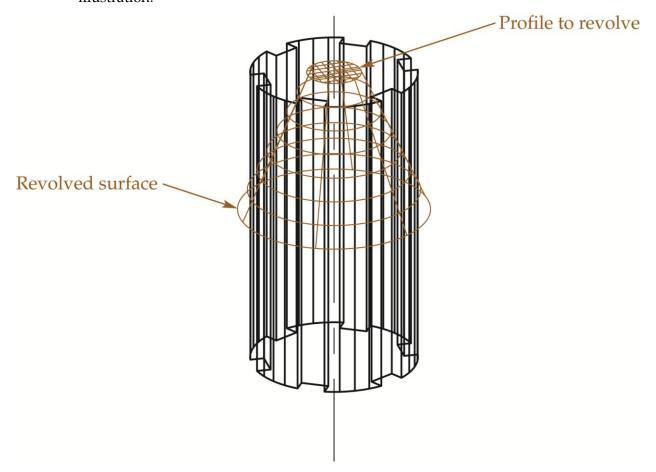
- 7. Thaw the Box layer and set it current.
- 8. Freeze the Guides and Rails layers.
- 9. Enter the **SLICE** command and select the box.
- 10. Enter the **Surface** option and select the lofted surface as the slicing plane.
- 11. Keep both sides of the object.
- 12. Thaw the Guides and Rails layers.

13. Move the top solid and the lofted surface as shown in the following illustration. When moving the lofted surface, include the defining cross sections and guide curves in the selection set.



- 14. Save the drawing as EX8-9A.
- 15. Open the drawing Spline_shaft.dwg available on the companion website.
- 16. Set the **DELOBJ** system variable to zero (0).

- 17. Enter the **REVOLVE** command.
- 18. Select the red polyline and revolve it 360° about the centerline. See the following illustration.



19. Enter the **SLICE** command and select the spline shaft.

- 20. Enter the **Surface** option and select the revolved surface as the slicing plane.
- 21. Select the bottom of the shaft as the part to keep. See the illustration below.
- 22. Save the drawing as EX8-9B.

