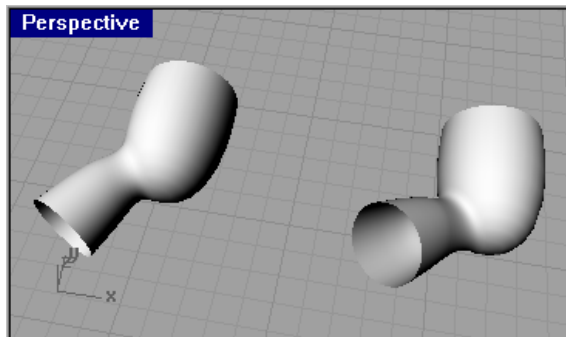




How to Bend a Blend Surface



This demonstration shows:

- ▶ How to modify a blend surface, keeping it connected and curvature continuous with the adjacent surfaces.

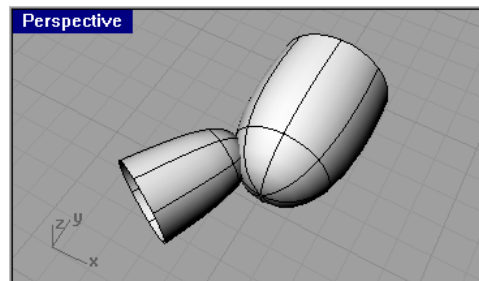
You will use these techniques:

- ▶ Curve drawing (**InterpCrv** or **Curve**)
- ▶ Revolved surfaces (**Revolve**)
- ▶ Trim surface with curve (**Trim**)
- ▶ Blend between surfaces (**BlendSrf**)
- ▶ Show control points on surfaces (**PointsOn**)
- ▶ Select control points (**Lasso**, **SeIU**, **SeIV**)
- ▶ Hide control points (**HidePt**)
- ▶ Move (**Move**), 2-D rotate (**Rotate**), and 3-D rotate (**Rotate3D**)

To bend a blend surface:

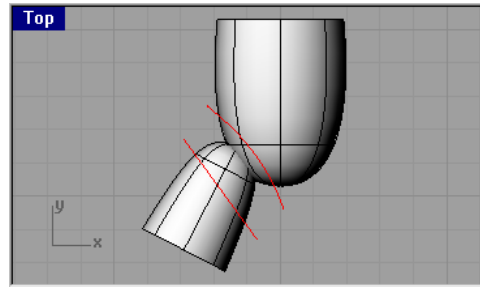
The completed model with steps is [blend01.3dm](#).

- 1 Create two revolved objects, a "body" and a "leg".

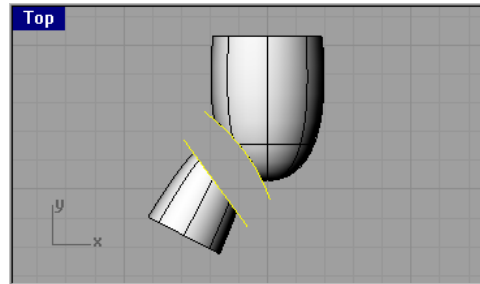




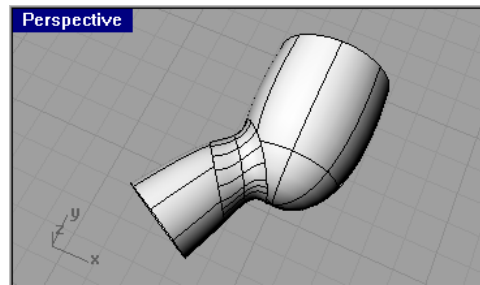
- 2 Draw two curves as shown.



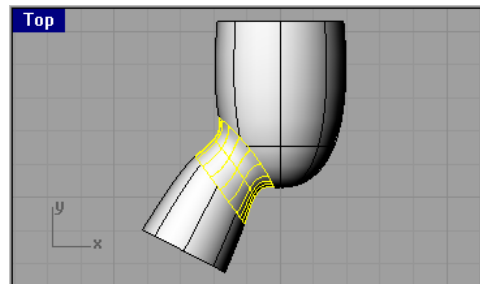
- 3 **Trim** the surfaces using the projected curves.



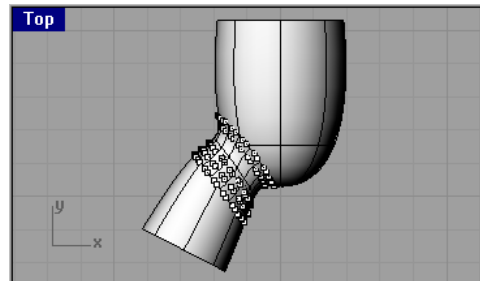
- 4 Use the **BlendSrf** command to create a blend surface between the openings.



- 5 Select the blend surface.



- 6 Use the **PointsOn** command (**F10**) turn on the control points on the surface.

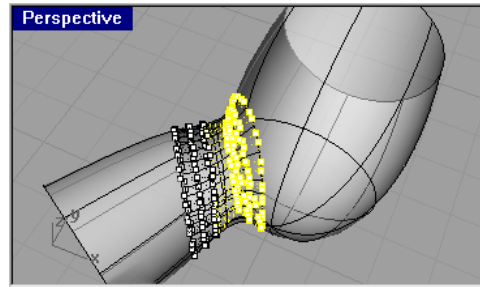




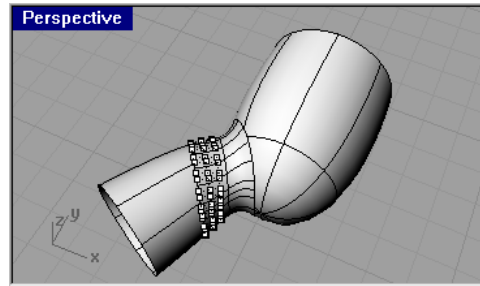
- 7 Select three rows of control points on the side you do NOT want to modify.

Use the **Lasso** command or select one control point from each row and use the **SeIU** command to select the row.

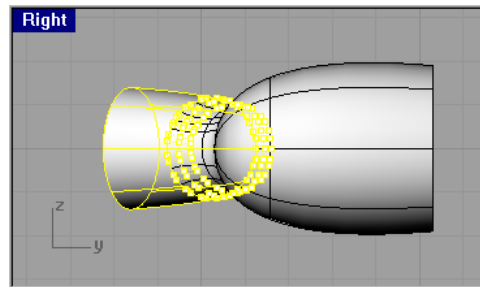
Note: In shaded mode, one row of control points does not show since it is inside the surface.



- 8 Use the **HidePt** command to hide the selected control points.



- 9 In the **Right** view, select the control points and the surface to modify.



- 10 Use **Rotate3D**, **Rotate** or **Move** to stretch and bend the selected objects.

This way the blend surface will stay connected to both mating surfaces and maintain curvature continuity.

