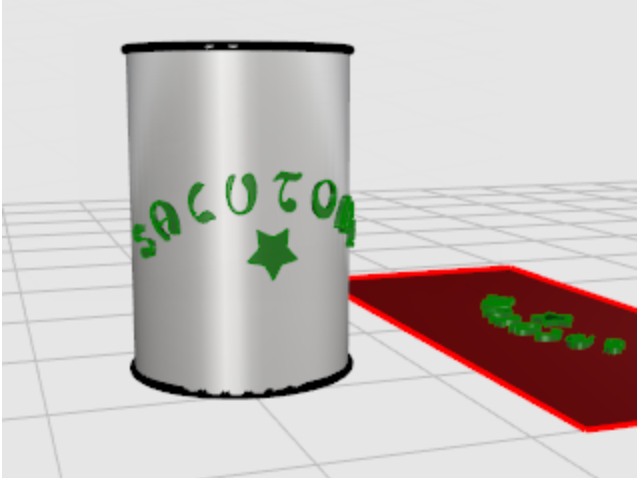


Chapter 18: Wrap Text - Flow along surface

This tutorial demonstrates wrapping text solids and other objects on a cylinder. These objects could be used to trim holes in the cylinder.

You will learn how to:

- Create text as solid objects.
- Wrap the objects to a surface.



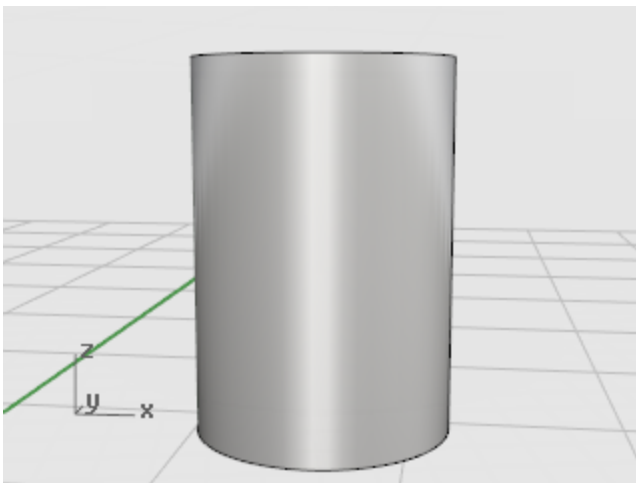
Make a surface

For this example, create a simple cylinder. Once you have learned the basic technique, you will be able to use other types of surfaces. Remember that trimmed surfaces maintain their basic rectangular shape. This underlying shape will affect the placement of the text.



Create a cylinder

- ▶ In the **Perspective** viewport, use the **Cylinder** command with the **Vertical** option to create a solid cylinder.



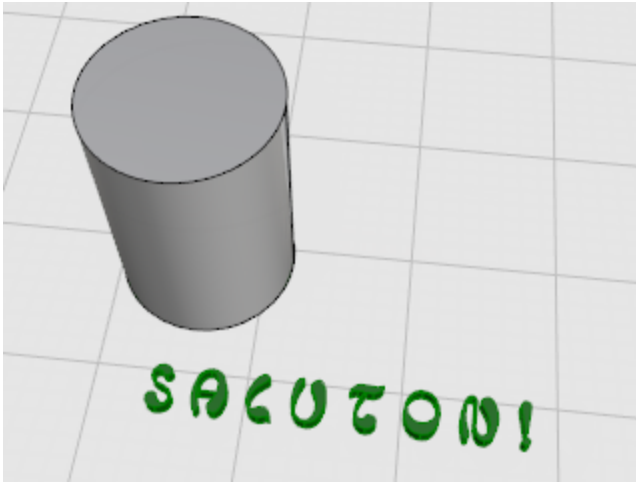
Create the objects to wrap

These solid objects will be wrapped on the cylinder surface.



Create the text

1. Use the **TextObject** command to create your text using **Solids**.
Choose a font that is fairly large and blocky rather than one with many holes and details.
Set the **Height** at about **1.5** units.
Set the **Solid thickness** to **.1** units.
2. Place the text on the construction plane near the cylinder. The location is not important.



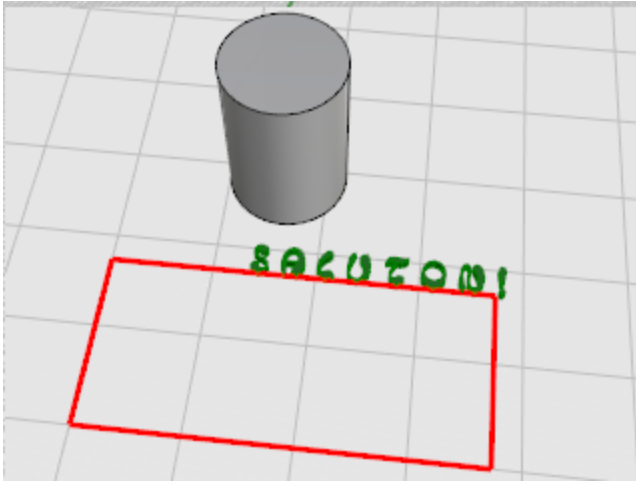
Control the object placement

The **CreateUVCrv** command generates the planar border curves of a surface that can be used as a guide to orient your text. Use the border rectangle to lay your text out before re-applying it to the cylinder. The rectangle then is used as a reference to guide the placement of the other objects.



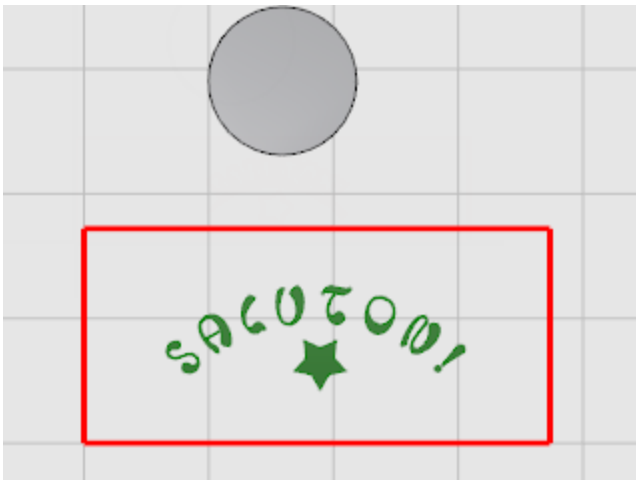
Create the UV curve

1. Use the **CreateUVCrv** command on the cylinder side to create curves that represent the border of the surface on the construction plane.
2. Select the side of the cylinder.
A rectangle is created starting at 0,0 on the **Top** construction plane.



Position the text objects

- ▶ Use **Move**, **Rotate**, and **Scale** or other transforms to arrange the text objects inside the rectangle just the way you want them to appear on the cylinder.
Add any other decoration curves you want to use.



Create a reference surface

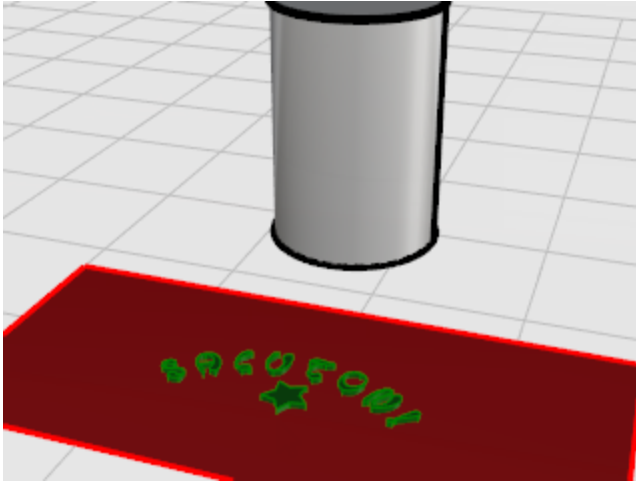
- ▶ Use the **PlanarSrf** command to make the rectangle into a surface.
You will use this surface later as a reference object for the **FlowAlongSrf** command.



Extrude the decoration curves

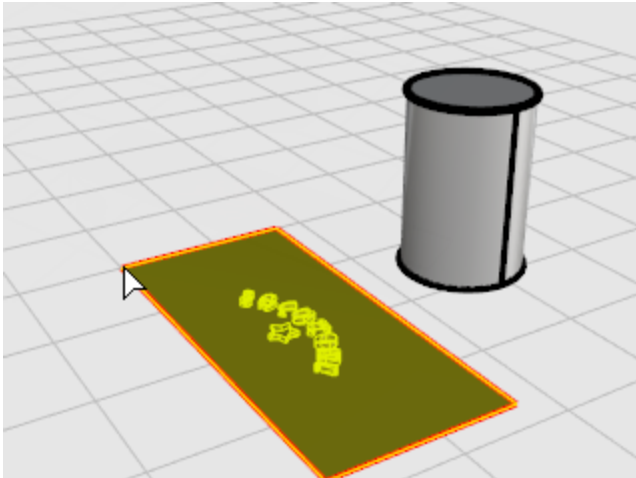
1. If you have created other curves, select these.
2. Use the **ExtrudeCrv** command to thicken the decorations to match the letters.

3. At the **Extrusion Distance...** prompt, set **Solid=Yes**.
4. At the **Extrusion distance...** prompt, type **.1**.

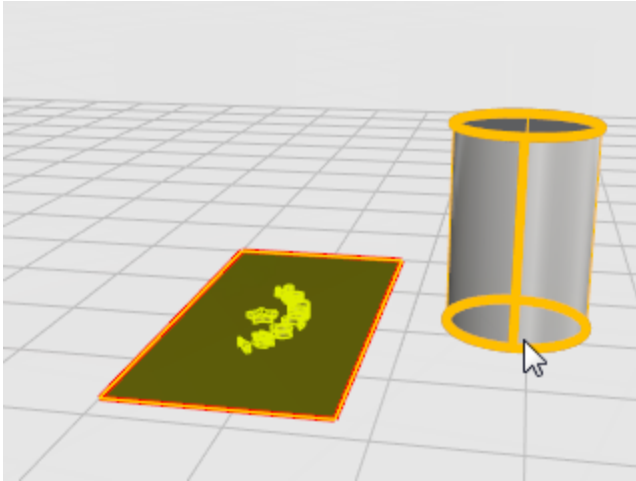


Wrap the lettering on the cylinder

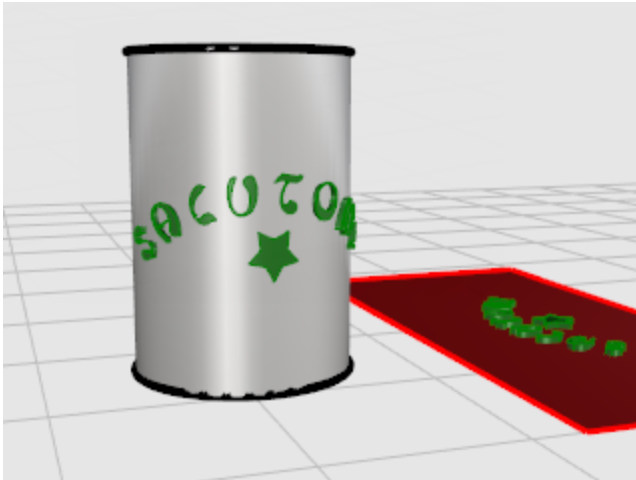
1. Select the lettering and the decoration.
2. Start the **FlowAlongSrf** command.
3. At the **Base surface...** prompt, set **Rigid=No**.
4. Click the **rectangular plane** near the "lower-left" corner as illustrated.



5. At the **Target surface...** prompt, click the cylinder near the lower edge of the seam as illustrated.



The text and decoration solids wrap around the cylinder.



Now you can use the letters to cut the cylinder or Boolean the objects together.