

Adobe Illustrator CS

Turn a simple path into a dynamic 3D illustration

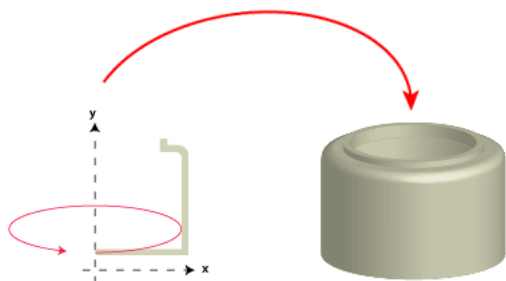
The 3D effects in Adobe® Illustrator® CS are an invaluable tool for illustrators who want their work to stand out. In this tutorial, you'll learn how to apply a label to a package mock-up and create realistic surface shading. Follow along and see how easy it is to create a dynamic 3D illustration.



1. Create and revolve a simple path.

Start by creating a simple path. With the path selected, choose Effect > 3D > Revolve, enter a value for the Angle option (we applied a 360° revolve), and click OK.

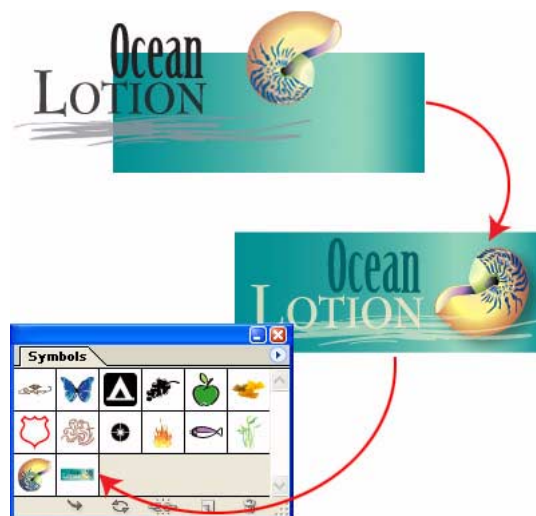
Revolving an object sweeps a path in a circular direction around the global y axis to create a 3D object. Because the revolve axis is vertically fixed, the open or closed path that you revolve typically needs to depict half of the desired 3D object's profile in a vertical and front-facing position. When working with complicated shapes, keep in mind that a closed path with a fill will render faster than a open path with a stroke.



2. Prepare artwork for surface mapping.

In order to map artwork onto a 3D object, the artwork must be a symbol. To create a new symbol, select the artwork and click the New Symbol button in the Symbols palette. (If this palette isn't showing, choose Window > Symbols.) If you don't want to create new artwork, you can use any of the preset symbols that ship with Illustrator.

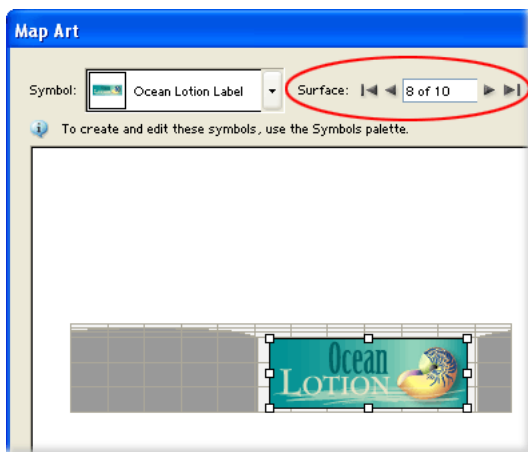
To create our label, we drew a simple rectangle, added text, and embellished it with the Dry Ink 2 Artistic brush and the Shell symbol from the Nature symbol library. One of the great things about using symbols is the ability to instantly replace one instance with another. All you have to do is Alt-drag (Windows) or Option-drag (Mac OS) the new image over the original symbol in the Symbols palette and release. This is handy when mapping artwork to a 3D object because you can experiment with different images without having to continually clear the original mapped art.



3. Map artwork to the 3D object.

Select the 3D object, and double-click the 3D Revolve effect in the Appearance palette (choose Window > Appearance if the Appearance palette isn't showing). Click Map Art, and use the Surface arrows to locate the surface you want to map. Choose your artwork from the Symbol pop-up menu, and then move the image into the light gray area of the surface grid. (Dark grey area indicates surfaces that are hidden by the object's current position.) Size the image by dragging the bounding box or clicking Scale to Fit. Click OK when you're satisfied with the results, and then click OK again to close the 3D Revolve Options dialog box.

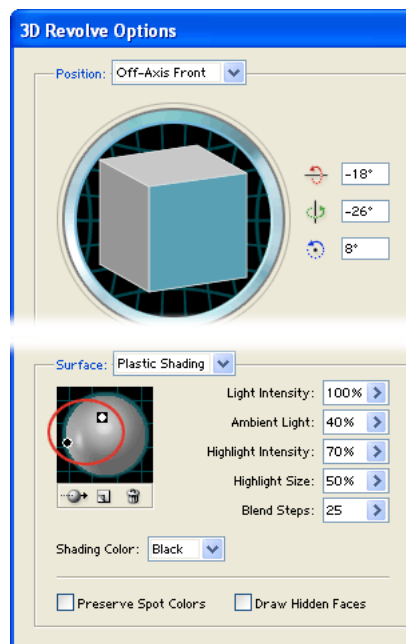
In the Map Art dialog box, there is a surface grid for each individual surface of your image. If you have difficulty telling which surface is selected, move the 3D dialog boxes so that you can see the 3D object on the artboard. The selected grid will be outlined, on your image, in red.



4. Adjust the lighting.

Select the 3D object, double-click the 3D Revolve (Mapped) effect in the Appearance palette, and click More Options to display the Surface options. To apply a surface property, choose an option from the Surface menu (we used Plastic Shading). To adjust the light source, drag the small light circle within the Lighting Sphere and then set the other lighting options as desired. To add a back light, click the New Light button below the Lighting Sphere, reposition the light source, and then click the Move Selected Light to Back of Object button.

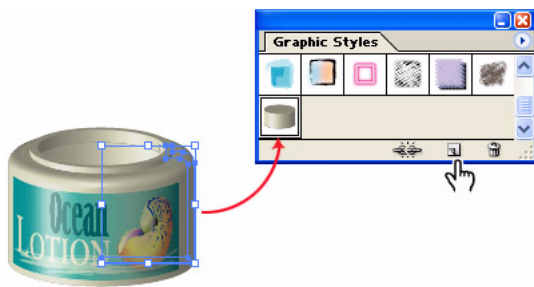
To create realism, you can set the same lighting properties used on the 3D image to your mapped art. Click Map Art in the 3D Revolve Options dialog box, and select the Shade Artwork option. When you select this option, the image may display anti-aliasing artifacts on-screen, but these artifacts disappear when the object is rasterized.



5. Create a graphic style.

Now that you have your 3D image exactly how you like it, take an extra few seconds to save it as a style. Select the object, and click the New Graphic Style button in the Graphic Styles palette. (If this palette isn't showing, choose Window > Graphic Styles.) Then double-click the new style to rename it appropriately.

Creating a new graphic style allows you to add the same effect to other objects with a single click. This is a great way to ensure that illustrations within a series retain the same perspective, lighting, and color shading.



6. Expand the appearance.

Select your 3D image and choose Object > Expand Appearance. This will divide the object into multiple objects that make up the original 3D image.

Once your image is expanded, you will be able to select individual elements to recolor. This can be very useful if you want to adjust a reflection to pick up the colors of an adjoining object or background. Expanding is particularly helpful if you are having difficulty printing your 3D image.