
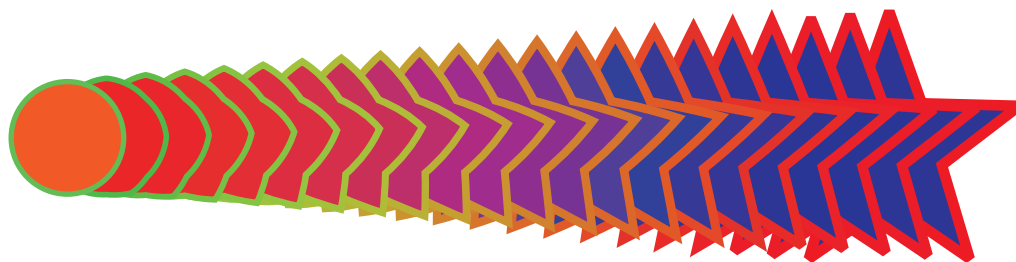


Blend effects create a series of intermediate step objects, with the properties of each step influenced by both original objects. The Blend Tool offers many different effects for the laser owner. With wood, acrylic and other softer materials, blends allow the laser to cut down into the material creating a 3D effect. While the laser cannot cut deep into glass as you do with softer materials, the Blend Tool can create an illusion of depth.

Creating a blend is very easy. First create a circle with a .60 diameter. Fill it with orange, and change the fill to green and the Outline Width to 2 pt (.028 in.). Then with the Polygon Tool create a star about 1.50 inches tall and 5 inches away from the small circle. For my star example below, I used a fill color of blue and an Outline Width of 4 pt (.056 in.).

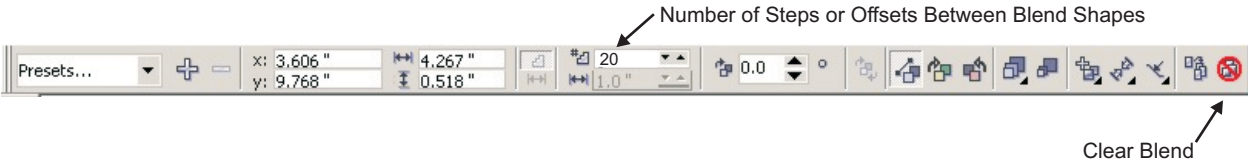


Select the Blend tool and notice the cursor. Until the cursor moves over the small circle, it will have a  symbol. Just Click-Drag from the small circle to the star. If you have not changed the default value of 20 of the Number of Steps or Offsets Between Blend Shapes on the Blend Property Bar, you will get an additional 20 objects between your circle and the star.

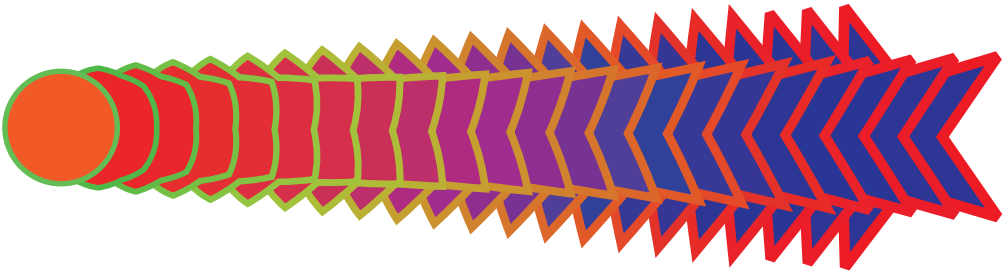


Notice that the circle starts transforming its shape, color, and line width to those of the star. When working with Blends I have found the Status Bar as the best source of information of what's selected. Click on the circle and you will see Control Ellipse on Layer 1 on the Status Bar. And Control Polygon with five lines on layer one will be the information on the Status Bar after you click on the star. Click on one of the blend objects and you should see Blend Group on Layer 1.

Here's a great tip! To change on any of the blend properties, click on one of the new objects created by the Blend tool, and you will have the Blend Property bar reappear.

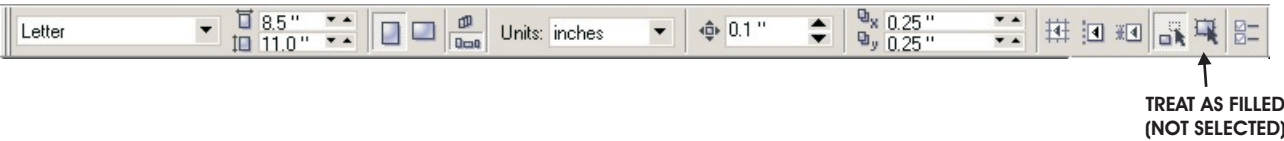


Next, click twice (two slow clicks) on the star, and play with the rotation angle handles. As you change the star's rotation angle, the blends also change. The example below has the star rotated 18 degrees.

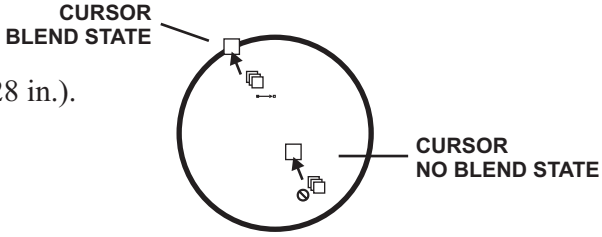


To remove the Blend effect, click the Blend Group portion of your effect and click the Clear Blend button on the Property Bar.

Let's learn one more basic principles of blends. With no objects selects (click in a blank area of your Drawing page), find the Treat As Filled option on the No Objects Selected Property Bar (shown below). The default value is selected; click on it to make it 'NOT SELECTED', as shown in the example below.



Create a 1" circle with no fill and an Outline Width of 2 pts. (.028 in.).



Select the Blend Tool. Watch your blend cursor as you move it over the various parts of if you see the NO symbol, it means the cursor has not detected an object that can be blended. The NO symbol appears when you select the inside of a an object that has no fill color, and the Treat as Fill option is turned off.

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Now that we know the basics, lets create something we can use.

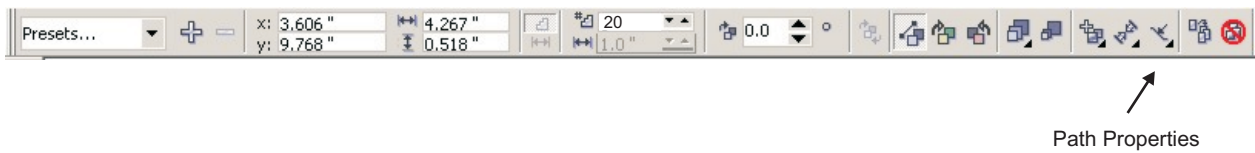
Create a .50 star that is filled with your choice of colors. Duplicate the star about 1" from the first star, and give it a different fill color.



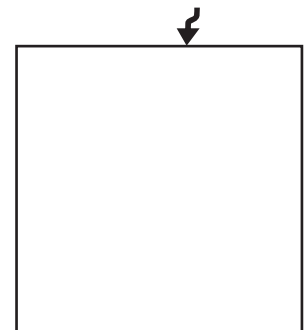
Draw a rectangle about 3" tall.

With your Pick Tool click on any of the stars that were created with the blend. Note: if you select the either of the two original stars, the Blend Property Bar will not appear.

On the Blend Property Bar, click on the Path Properties and select New Path.

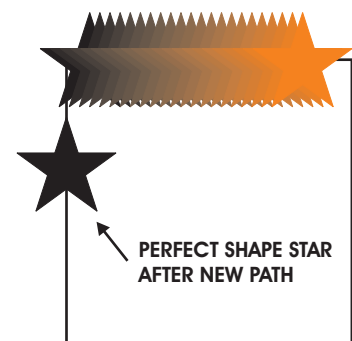


With the cursor changed to the New Path symbol, click on the rectangle.



The Blended stars will align to the rectangle.

**Special Note:** In my example you see the Blend of Stars and a single star. This for example only. I found one of those 'anomalies'. When I created my stars with Perfect Shapes, blended them and gave it a new path, I got the stars stacked on top of each other. Remember, to select a blend you must be able to select the newly created objects within the two control objects. Since the top object is one of the control objects, I could not select the blend. It works sometime, but!



To solve the problem, I converted the Perfect Shape stars to curves before I blended them.

After you change the path of the stars, click on the Miscellaneous Blend Options icon and choose the Blend along full path option.



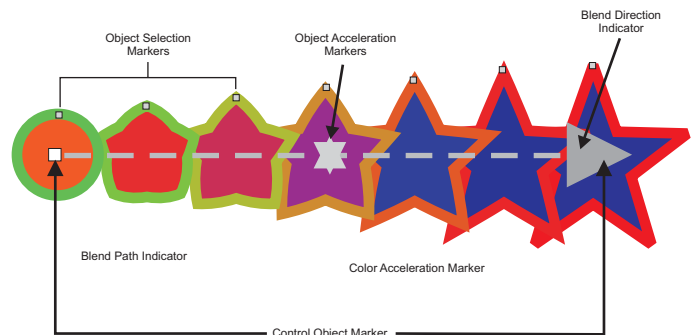
This is the results. You can change the number of stars by changing the Number of Steps on the Properties Bar. There's a lot different options you can now change. You can use different symbols from the Wingding font or virtually any other shape.

Remember that your original stars, or Control Objects, can be rotated and resized. When you change one of the Control objects, the blend instantly reflects the changes.

This is the concept for making rope and chain borders.



Rope Border



Components of a Blend