

Centerline Carving Using a Drawn Vector Group

CREATING A CENTERLINE CARVING USING SKETCHED PATHS

IN THIS EXERCISE WE WILL SHOW YOU HOW CREATE A CENTERLINE CARVING USING SIMPLE SKETCHED PATHS, THE VECTOR GROUP TOOL AND A V-BIT.

NOTE: THIS PROJECT REQUIRES AT LEAST VERSION 3 OF THE DESIGNER SOFTWARE.

This project covers the following design concepts:

- DRAWING A GROUP OF PATHS (VECTORS) IN THE DESIGNER SOFTWARE
- CREATING A VECTOR GROUP
- SELECTING THE AREAS TO BE CARVED FROM THE VECTOR GROUP



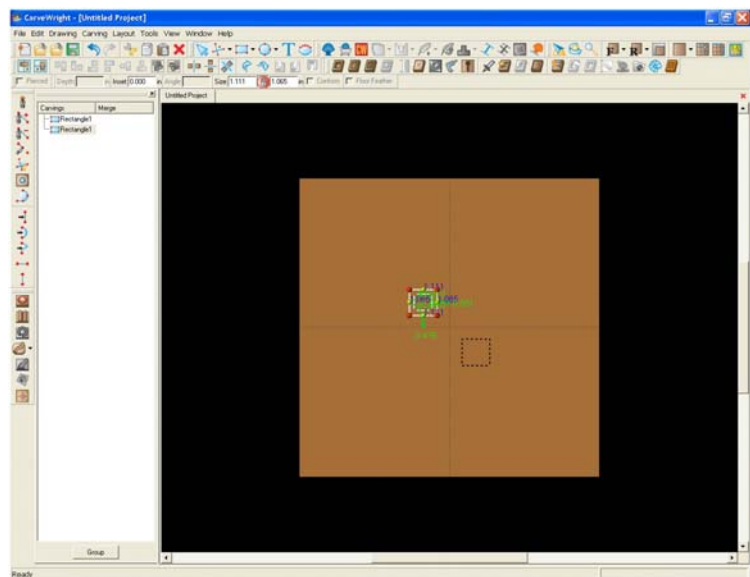
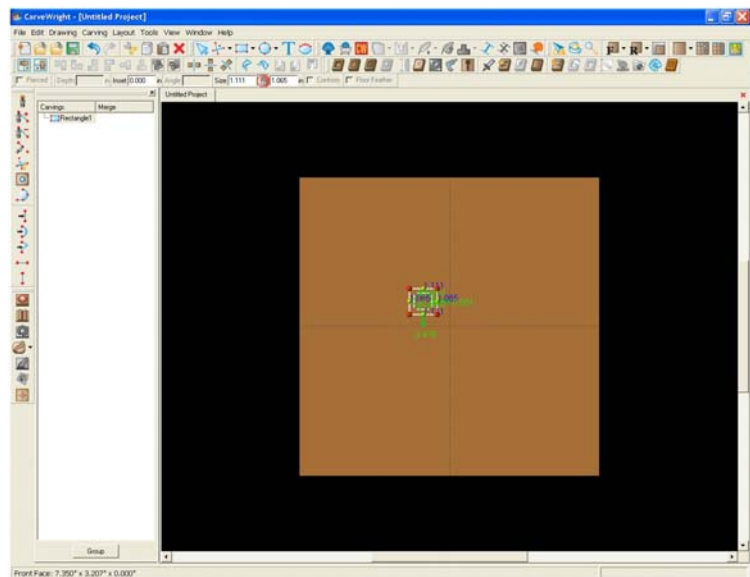
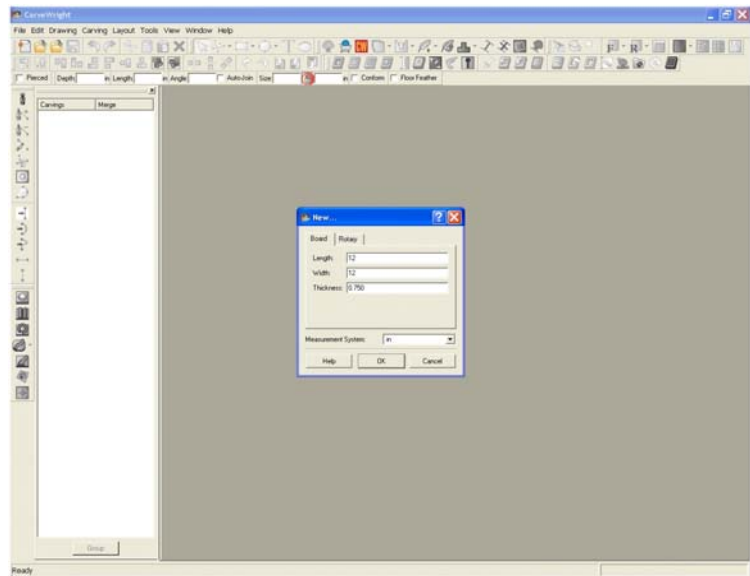
The Welcome Screen will appear upon starting of the Designer Software.

Select **New Project** and create a board that is 12" wide by 12" long by 3/4" thick.

➤ DRAWING A GROUP OF PATHS (VECTORS) IN THE DESIGNER SOFTWARE

Select the **Square Tool** and place a small square in the upper left quadrant of the board near the centerlines.

Highlight the sketched square and mirror it across the diagonal.



Highlight the sketched circle and mirror it across the diagonal.

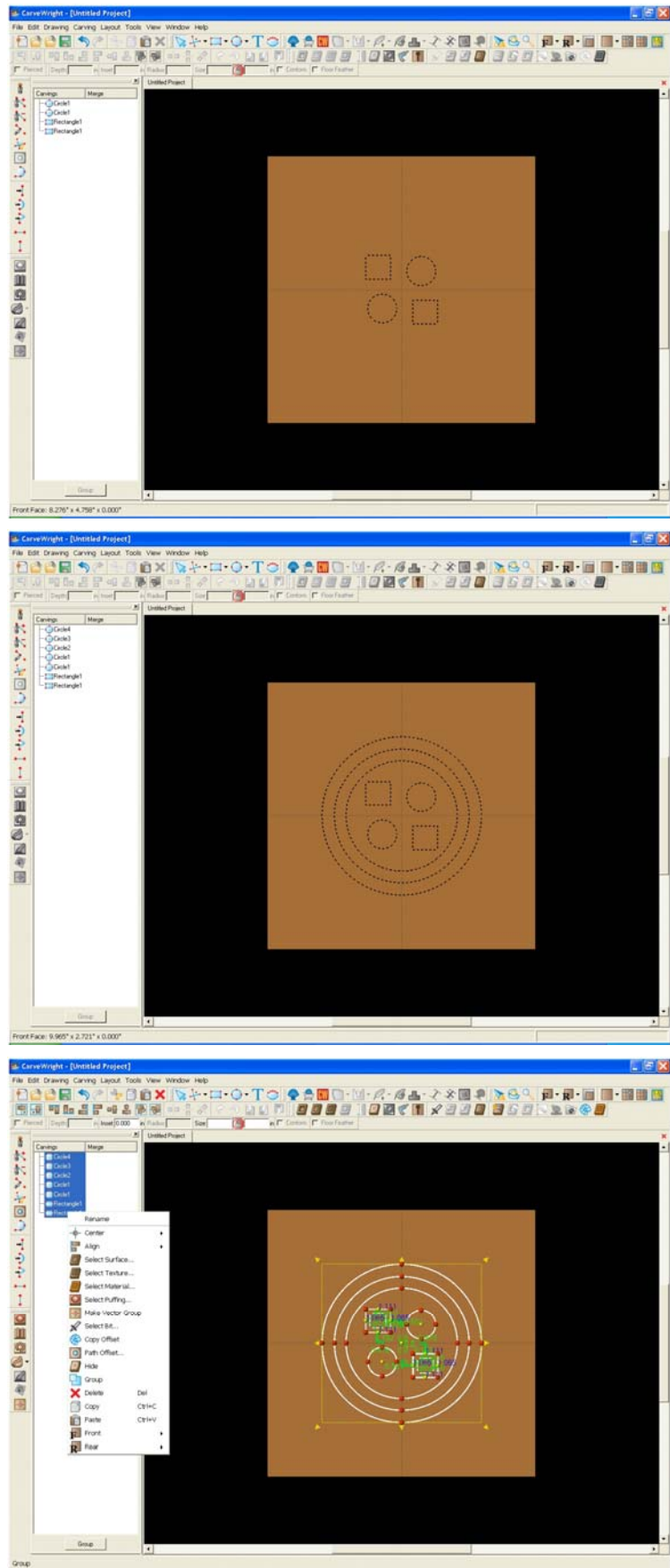
Using the **Circle Tool**, draw a series of three concentric circles centered on the board and just outside of the smaller squares and circles.

These paths will make up the design to be carved. All paths must be closed and cannot intersect.

➤ CREATING A VECTOR GROUP

Select all of the created paths and select the **Make Vector Group** icon on the 3D Toolbar (to turn the toolbar on, select the **Toolbars** item under the **View** menu).

To select all objects on the board, simply press the **CTRL** and **A** keys at the same time. The carving list can also be used to select paths.



➤ SELECTING THE AREAS TO BE CARVED FROM THE VECTOR GROUP

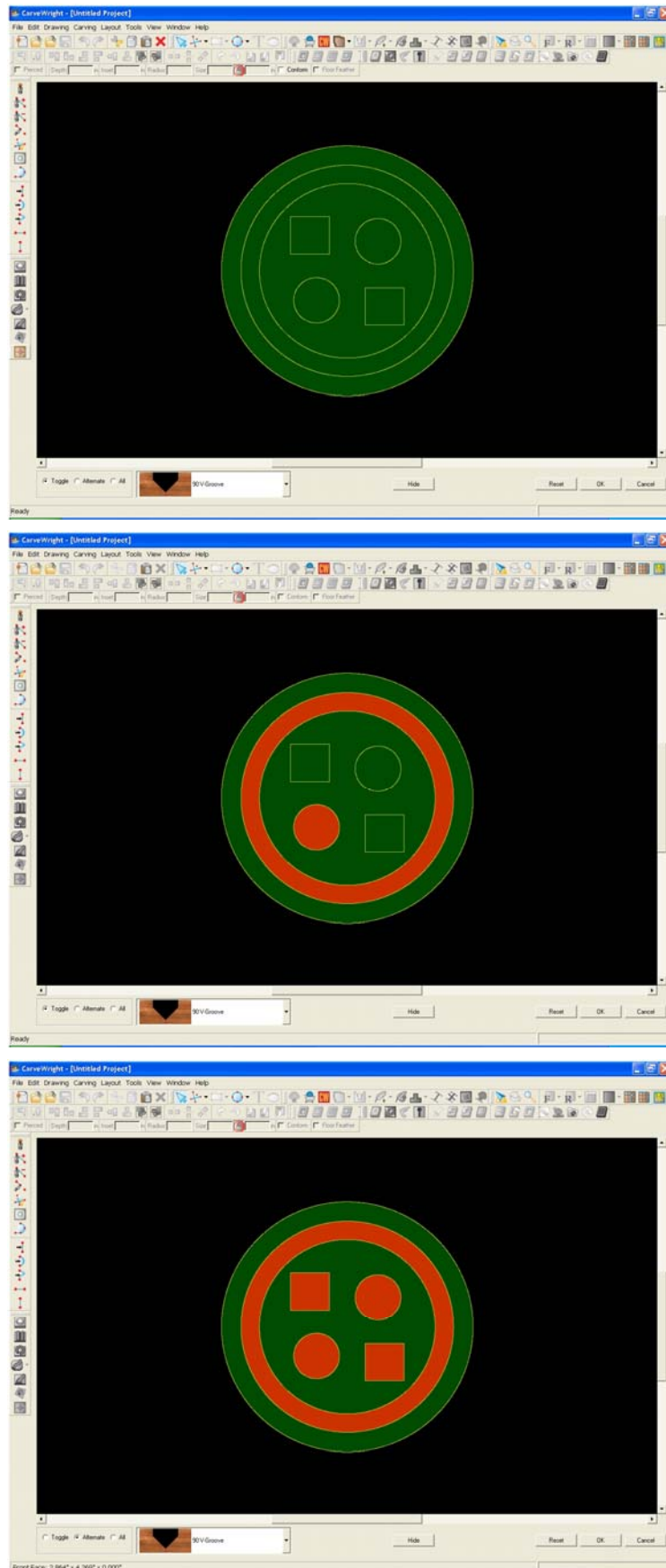
Once the vector group is created successfully, the 2D vector group window appears. This is where we can specify what areas will be removed during carving. Carved areas are shown in red.

Start off by selecting between the 60 and 90 degree V-bits. In our case we desire the wide 90 degree V-bit.

Next, use the selection mode radio buttons to select the areas to be carved.

The **Toggle** mode allows you to select any and all regions manually by clicking on them.

The **Alternate** mode allows you to quickly select alternating regions, starting with the initial area selected. The software will automatically select alternating regions. In this case, one of the circles was selected. See how the alternating regions are colored red.

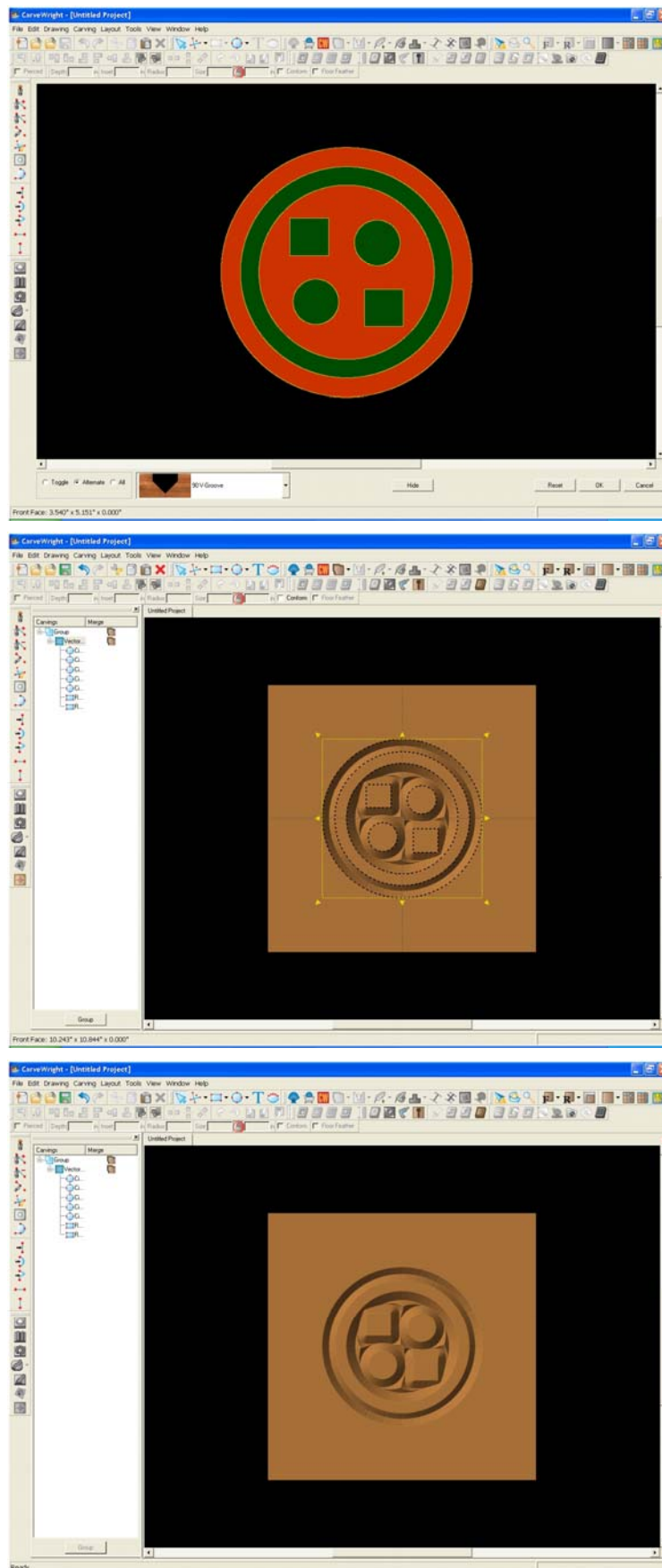


Select the **Reset** button to clear all of the region selections (turn all regions green).

Using **Alternate** mode again, we selected the large area surrounding the circles and squares to get this configuration.

Hit **OK** to proceed. The project board will now be displayed with the carved pattern.

Turn off the construction lines by selecting **Toggle Construction Lines** in the main **View** menu.



The **All** mode allows you to quickly select all regions to carve. You can use this in conjunction with **Toggle** mode to then de-select regions that you desire.

The result of each resulting carving can be quite interesting. Experiment with different designs and region selection patterns.



Select “File”, “Save”

*****IMPORTANT*****
Name file and click “Save”
to hard drive.



Select “File”, “Upload”
Save to memory card.

