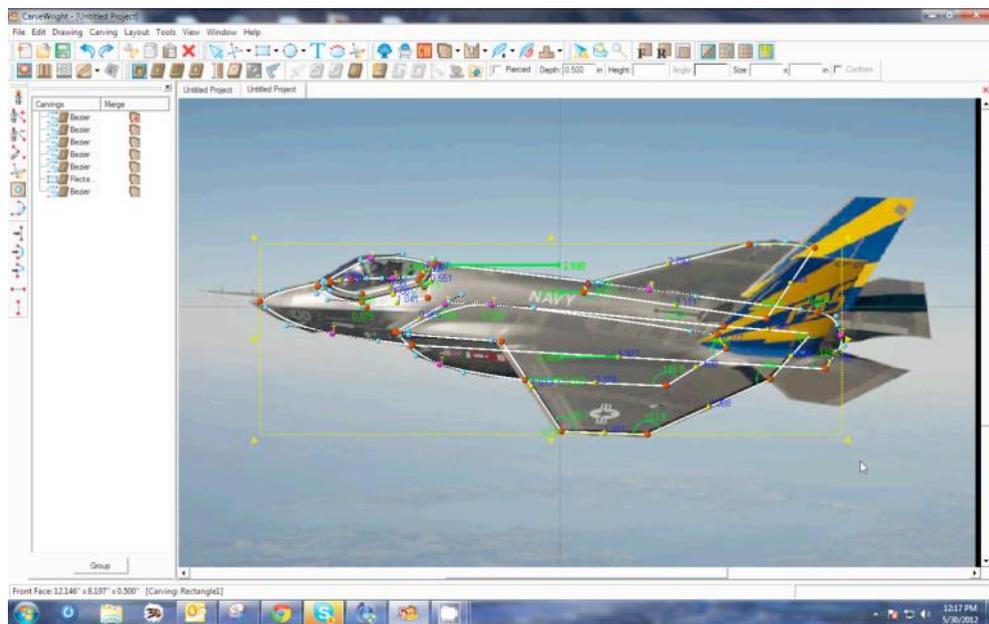


# CHAPTER 6 – THE SUITES

There are two additional tool bar suites for Project Designer sold separately as add-on modules. These are the Vector Drawing Suite, and the Pattern Modeling Suite. This section will cover the use of both of these.

## *VECTOR DRAWING SUITE*

The Vector Drawing Suite (2D Advanced) is a tool bar add-on for Project Designer that expands the drawing and vector manipulation capabilities of the software. Define vector paths quickly, trace images, trim and merge vectors together, and many other features that assist in creating your own drawings.



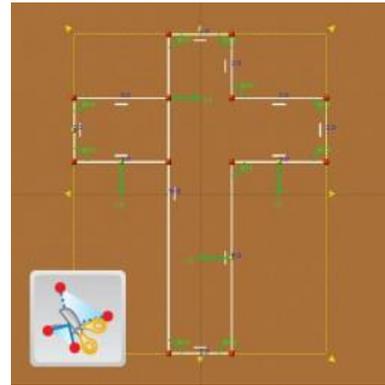
## **SMART SPLINE**



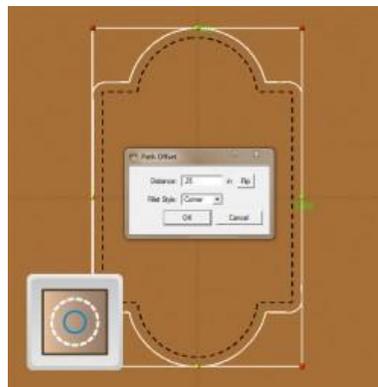
The Smart Spline tool is the most powerful drawing tool available to Project Designer. It allows you to quickly define a shape by placing points, or vertexes, along a path, while on-the-fly designating the segments between as either lines or curves.

## TRIM TOOL

The Trim Tool serves as a way to merge intersecting vectors by allowing you to delete overlapping segments and join closed vector shapes together. As an example, to make a cross, you could draw 2 rectangles overlapping, and then use the trim tool to remove the interior lines to create one continuous cross shape.



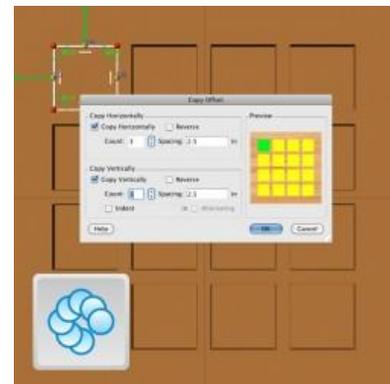
## OFFSET PATH



The Offset Path tool is used to generate a path either inside or outside of a closed vector path at a specified distance. So, for example, if you wish to create an outline around a shape you've drawn, but you want it a half an inch larger all the way around, this is the tool you would use.

## COPY OFFSET

The Copy Offset tool allows an object on the board to be copied either vertically or horizontally a given number of times with a given spacing. If you need to make multiple's of a pattern, or even a tiled repeating pattern, this tool makes it quick and easy.



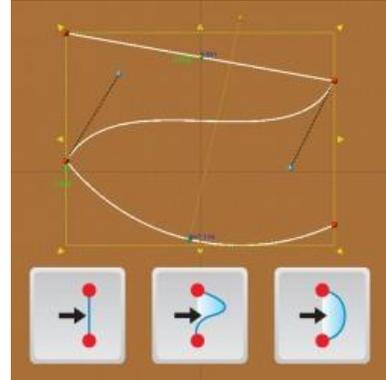
## IMPORT TRACING IMAGE



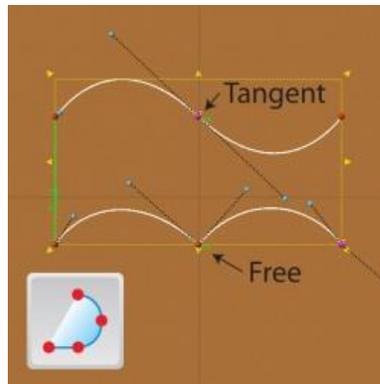
Import Tracing Image allows for an image file (jpg, png, gif, bmp) to be imported and placed on the design board to be used as a pattern for tracing with the drawing tools. The image can be cropped and scaled during the import process to suit your needs and can be toggled on and off to better view your drawing.

## CHANGE FORM SELECTORS

The drawing tools offer several types of segments, including; line, spline (curve), and arch. The Change Form selector tools allow you to quickly change segments to the selected form by simply clicking on them. Select the Change to Line Tool and click on any spline or arch and it will change to a line, or vice versa.



## CHANGE TANGENCY SELECTORS

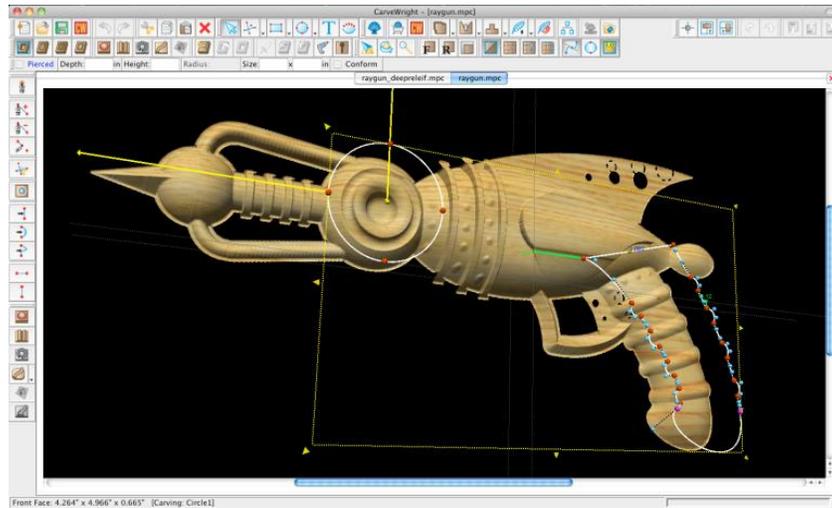


The points (vertexes) between the segments have two states, either tangent or free. Tangent means a curved segment on either side of a point will be locked into the angle of the segment on the other side. The “free” state means the segments are not locked into the previous segments influence. This tool allows for quickly changing those states for more control over defining your drawings.

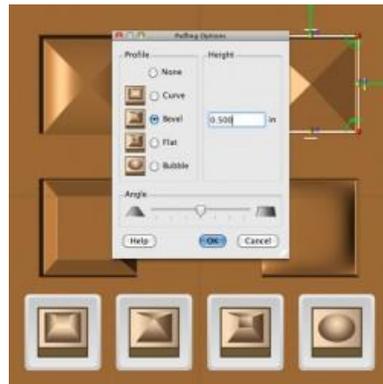
To see how to use all of the tools from the Vector Drawing Suite, watch the videos available online here: <http://www.carvewright.com/add-on-modules/vector-drawing/>

## PATTERN MODELING SUITE

The Pattern Modeling Suite (3D Advanced) is a tool bar add-on for Project Designer that enables modeling of 3D relief patterns. Extrude, sweep, and puff shapes into dimensional creations. These tools are easy-to-use and they make your own custom pattern designs fun and simple.



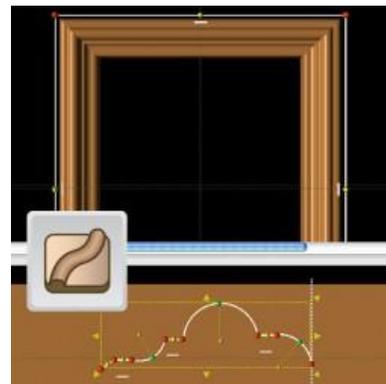
### PUFFING TOOL



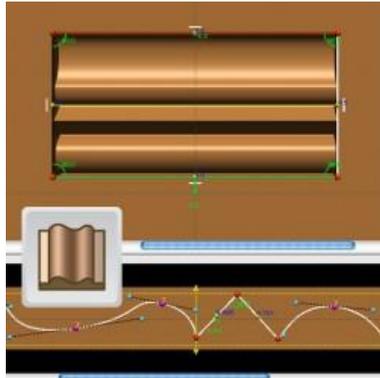
The puffing tools allow closed vector shapes to be raised up or puffed in four different styles; Curve, bevel, flat and bubble. The steepness of the sides and depth of puffs can be adjusted to suit.

### SWEEPS

The Sweep tools will allow a drawn profile to be swept along a single vector path. This means the profile will follow the line along it's entire length. There are two types of sweeps, rounded, which will round corners, and corner, which leaves sharp corners.



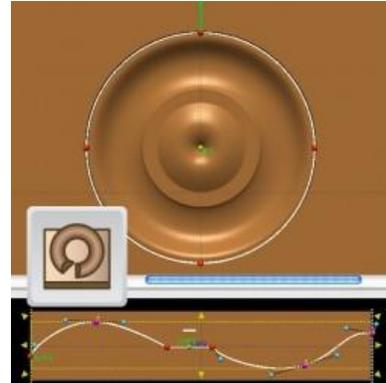
## EXTRUDE



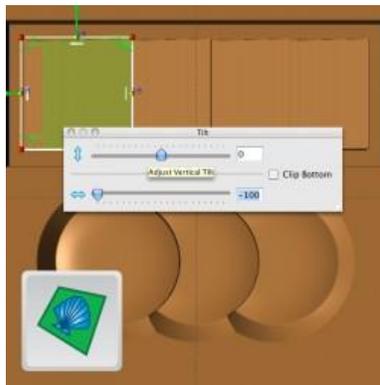
The Extrude tool allows a profile to be extruded along the inside of a closed vector shape. The angle of the extrusion can be adjusted by setting horizontal, vertical, or setting a custom angle.

## REVOLVE

The Revolve tool will rotate a profile around the center-point of a circle. The revolve tool only works with circles.



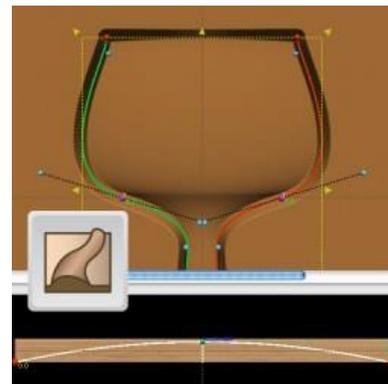
## TILT TOOL



The Tilt tool allows a pattern to be tilted vertically, horizontally, or a combination of both can be used to achieve different angles.

## SWEEP WITH RAILS

The Sweep with Rails tool is a more dynamic sweep in that it uses two curves (rails). These two curves define the two edges of the surface. Then a profile is defined for the surface's cross sections.



To see how to use all of the tools from the Pattern Modeling Suite, watch the videos available online here: <http://www.carviewright.com/add-on-modules/pattern-modeling/>