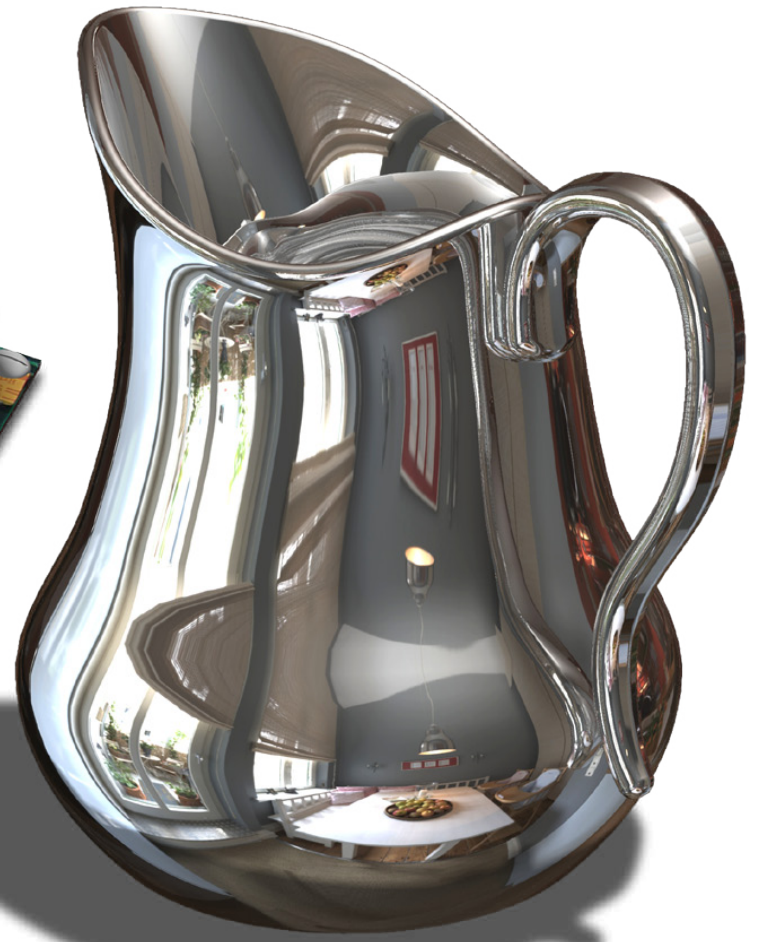
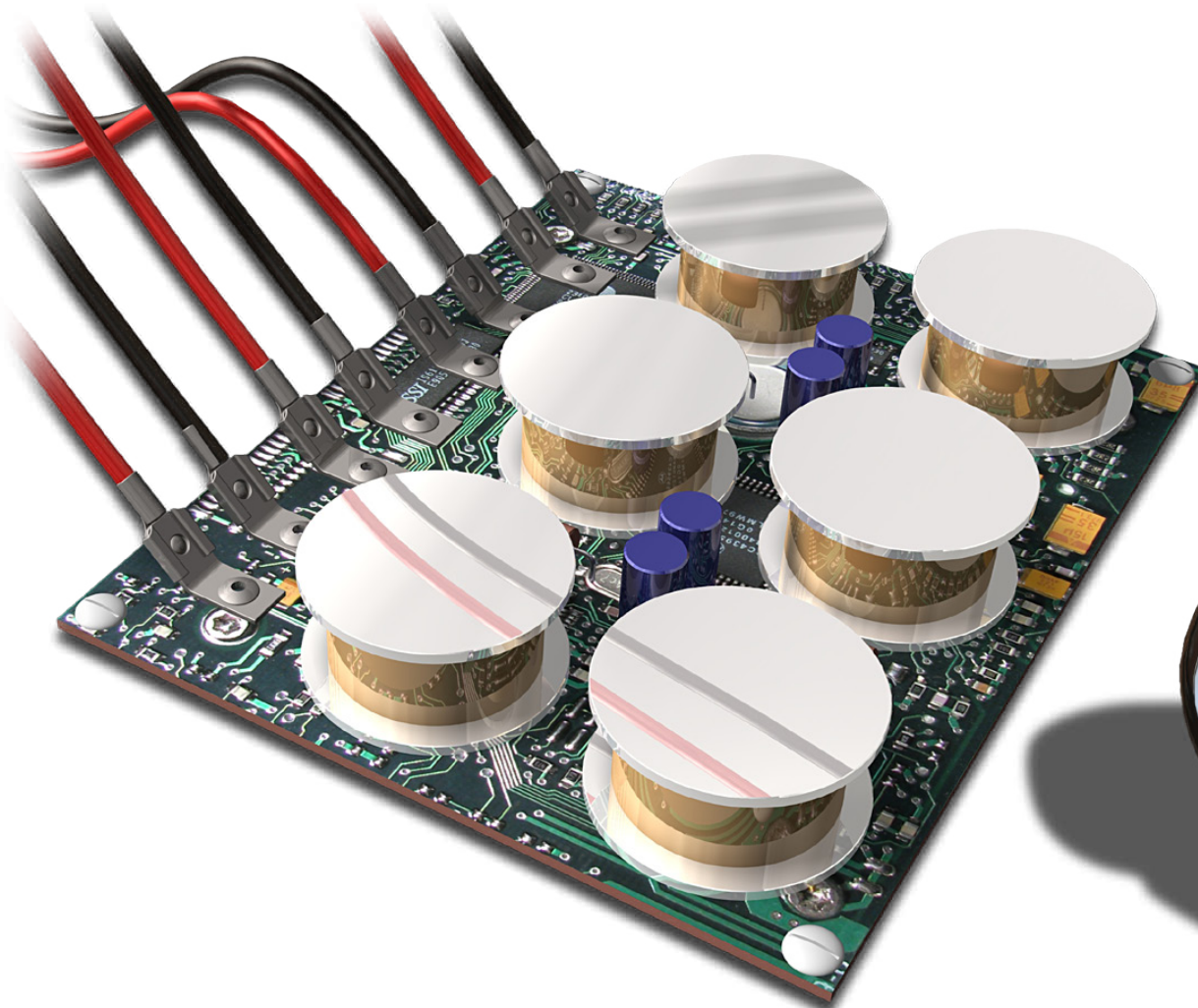
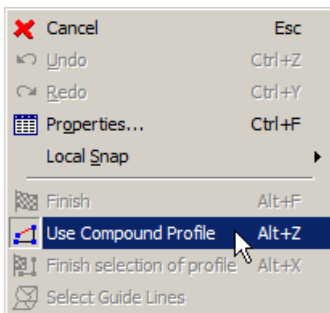
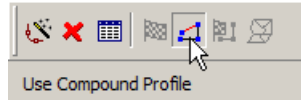


Were you aware that TurboCAD offers a form of auto updating when it comes to some types of 3D components?



Use Compound Profile

On Inspector Bar or right mouse click local menu after tool is selected.



Auto updating means that when the 2D profiles of a 3D object created from those profiles are changed the 3D object changes automatically to reflect the changes that were made to the profiles.

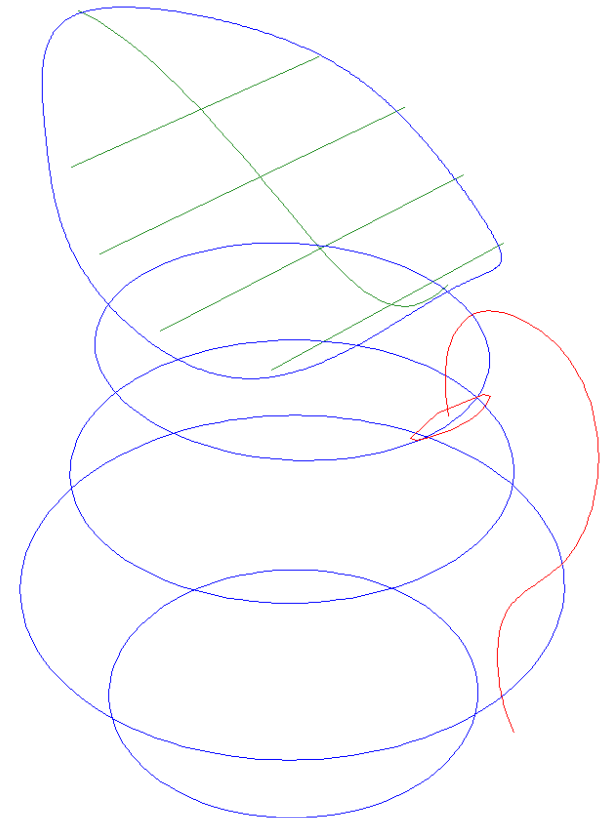
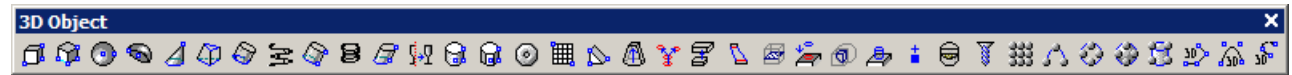
Auto updating can be very handy when designing complex objects that require tweaking along the way. This might include organic shapes such as the pitcher illustrated in this tip or more difficult shapes such as airplane fuselages or car bodies, which are notoriously hard to create in TurboCAD at the best of times.

Auto updating can also be handy for tweaking placement of wiring or piping created by sweeping profiles along paths, such as was done when placing wires on the crossover illustrated in this tip.

Auto updating is achievable by employing tools that offer the Use Compound Profile option. This includes the Simple Extrude, Twisted Extrude, Sweep, Rail Sweep, Revolve, Loft and Branch Lofting tools that are located on the 3D Object toolbar.

Associations will be maintained until other operations, such as Boolean operations, have been performed. As such, any changes must be made early in the construction phase before the association is broken.

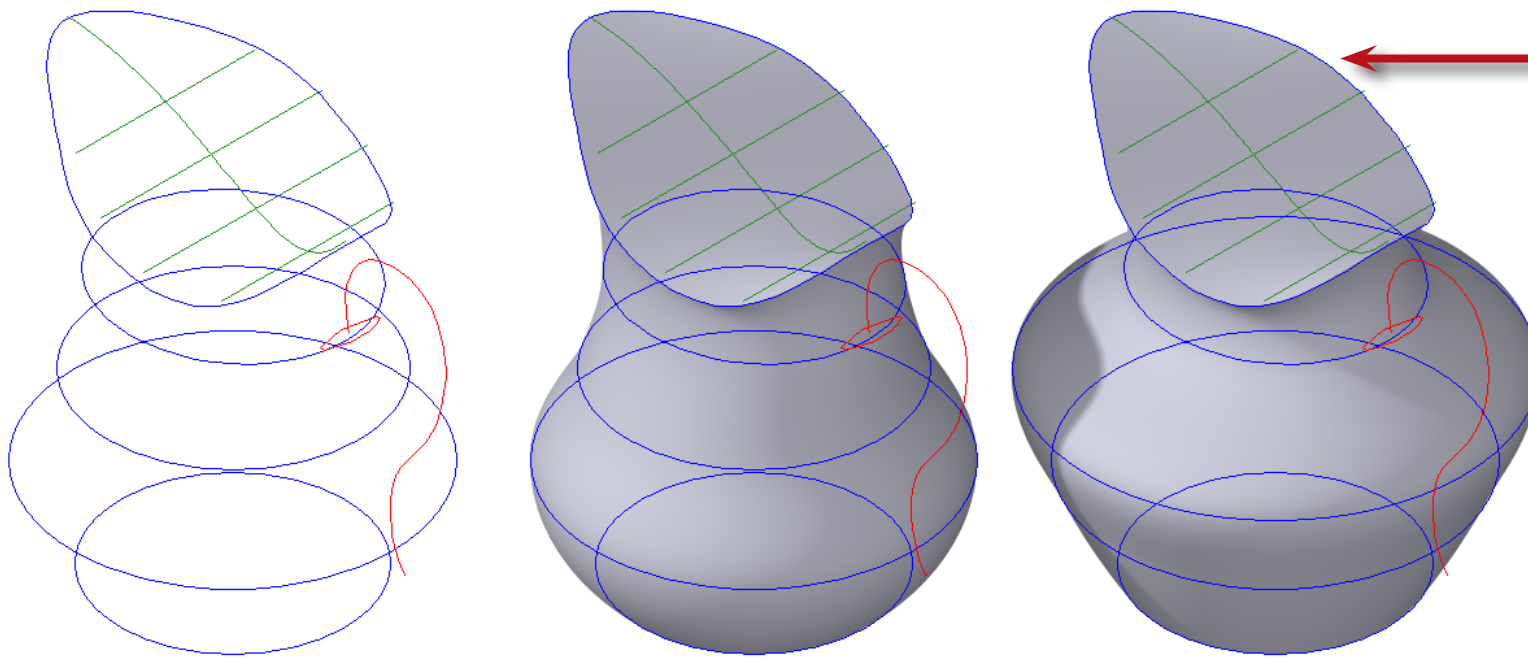
The following pages will look at a some examples.



2D profiles used to create the pitcher



Below, the blue profiles have been lofted using the Lofting tool with the Use Compound Profile option engaged. The profiles have been selected in order from the bottom to top. Finish was selected to complete the loft.



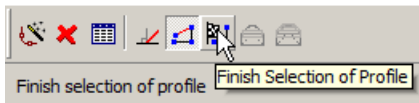
It is interesting to note with this pitcher that 2D profiles are not limited to flat two dimensional shapes. The upper profile of this pitcher was created with the 3D Spline tool. It was snapped to the forest green aids and node edited to suit.

In the image on the right the third circular profile was changed via Inspector Bar entry from 3.35 inches to 5 inches. The 3D shape automatically updated when Enter was pressed. Profiles can be enlarged or moved as needs dictate, although moves should be made in small increments or they will fail if moved too far or moved out of an acceptable range to maintain a calculable shape.

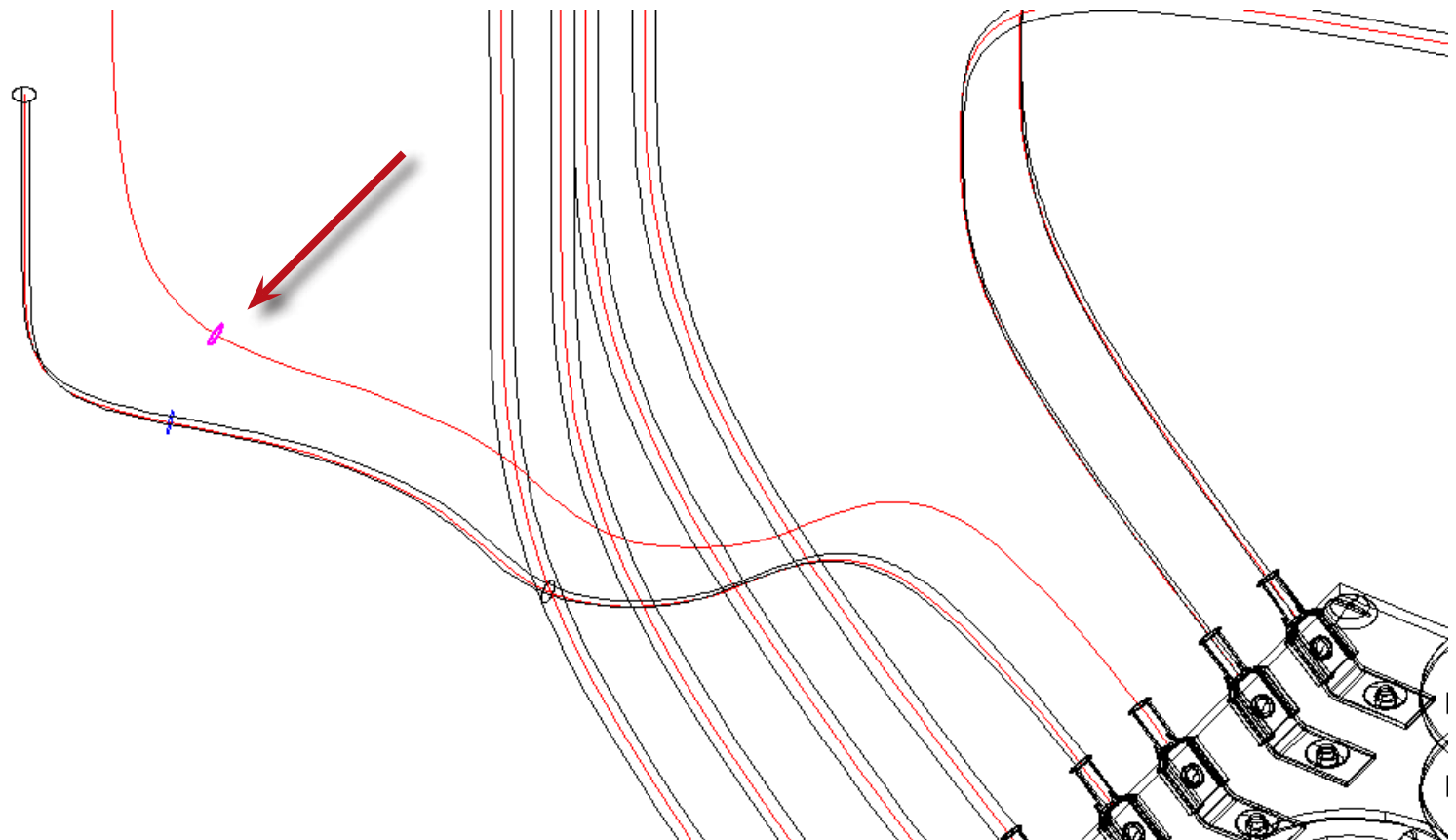
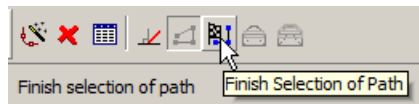


Below, the circle has been placed on the 3D Spline path with the aid of the Profile Along Path tool. The Sweep tool has been selected and then the circular profile selected.

After selecting the circle as the object to sweep the Finish Selection of Profile tool is selected.



This is followed by selecting the 3D spline that travels through the circle as the sweep path. Finish Selection of Profile tool is selected.



At this point the path is associated with the 3D wire.

In the left image it can be seen that the wire does not quite meet the wire spade as one would hope.

To remedy this, the Edit Tool is engaged and the path selected.



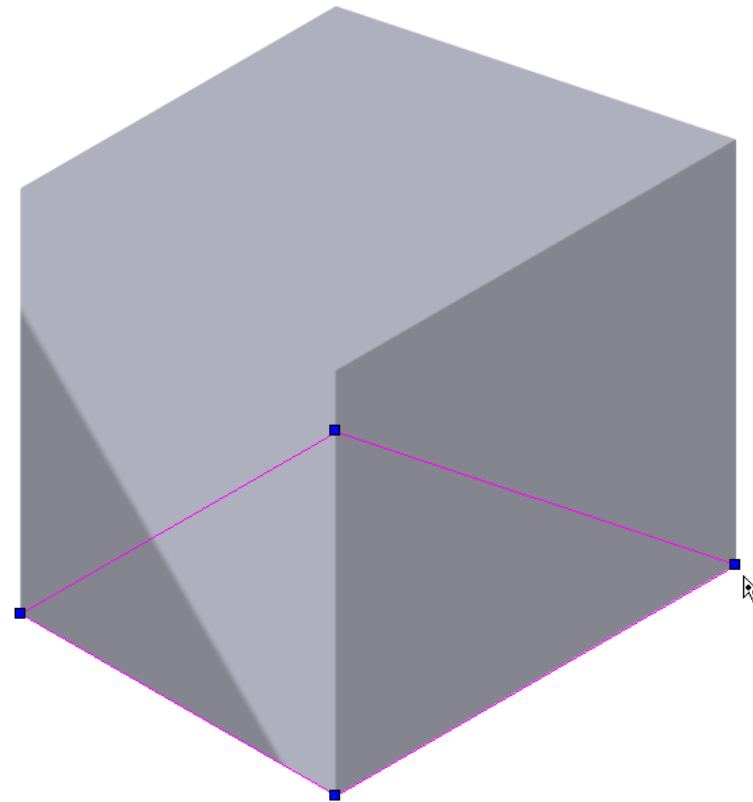
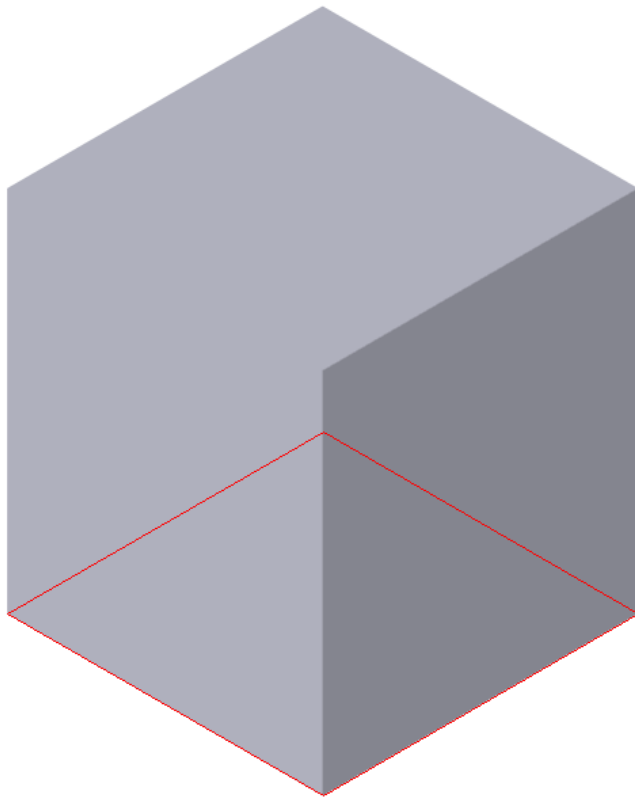
Nodes appear and the user can move them by left mouse clicking them to pick them up and snapping them in place or moving the selected node(s) via Inspector Bar entry. Nodes further up the line may require movement as well. The first node can't be moved to update.



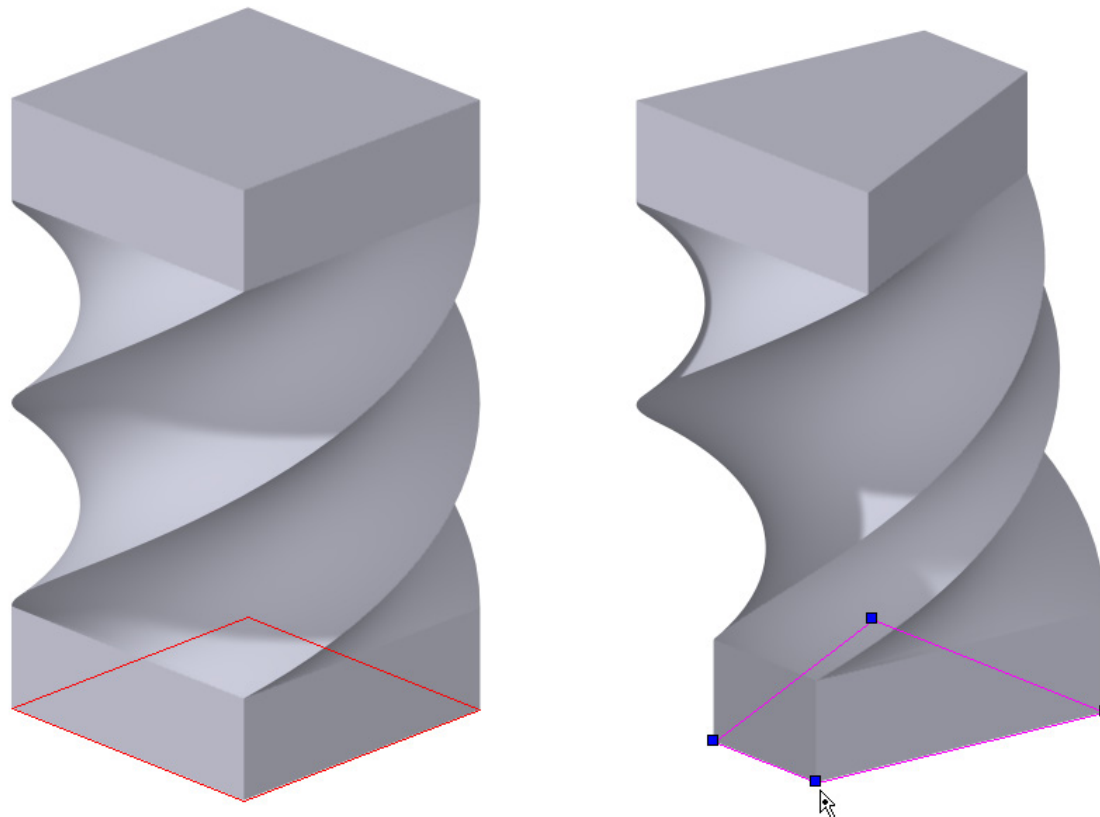
To see wireframe during a render, be sure that non-renderable objects is checked under the Camera Properties dialogue.

Note that it is not necessary for the scene to be rendered during node editing, but it can be easier to see immediate results more clearly.

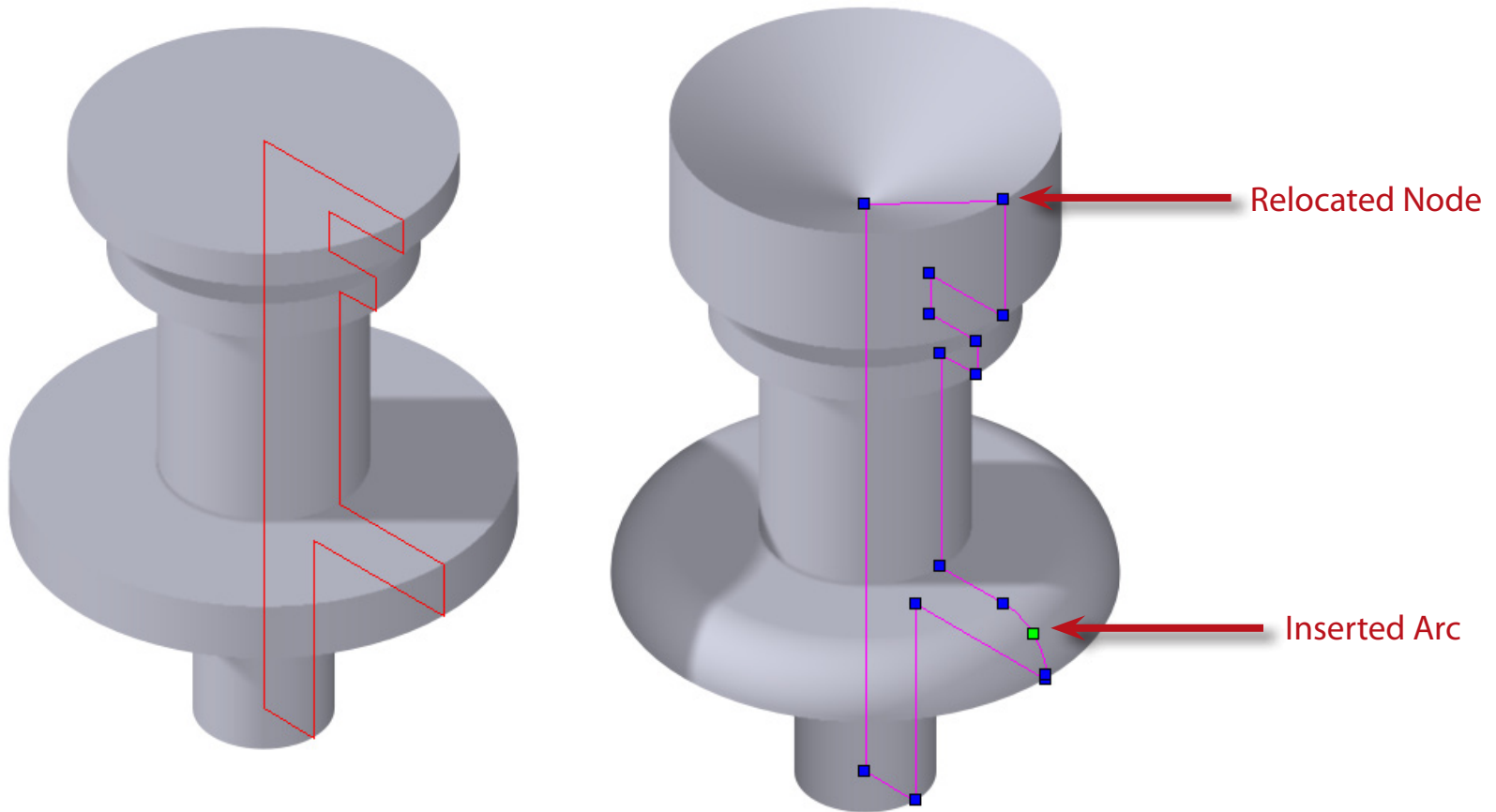
Additional example.
Node editing the profile of an extruded rectangle.



Additional example.
Node editing the profile of an twisted extrude.



Additional example.
Node editing the profile of a revolved object.



If you found this TurboCAD tip helpful, please consider purchasing a full Textual Creations TurboCAD project tutorial that will lead you through an entire project, keystroke by keystroke. You won't be disappointed! Visit the [Textual Creations Shopping Page](#)