Spiral Curve Command Added to ST9

This Tech Tip looks at the new addition to Solid Edge ST9; the new ability to create spiral curves.

The command is found as an option within the Helical Curve command. It is available in both Synchronous and Ordered modelling. The command inputs are the axis of the spiral, which defines the plane it will be placed on, its start point, and the parameters of the curve, which are explained below.

This image shows the Spiral curve options within the Helical Curve dialog box. The spiral can be created using three methods: Radial pitch and Turns, End diameter and Turns, and End diameter and Radial pitch.

Options also exist for right or left handed rotation and outward or inward direction.

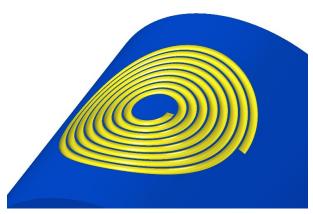
Depending on method chosen by the user, the appropriate inputs become available on the dialog box.

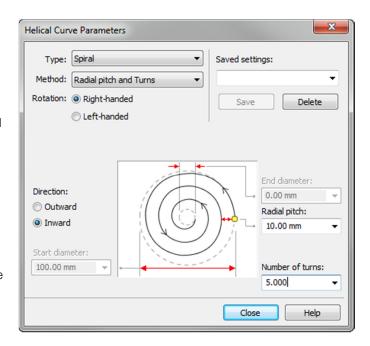
Common curve settings can be given a name and saved for later use.

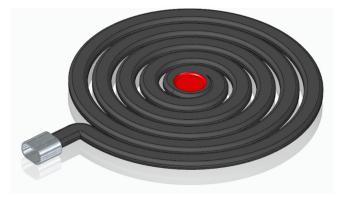
In Ordered modeling, spiral curves can be associative to the input geometry such as cylinders, cones or existing geometry keypoints.

The command supports live preview, so as you define the needed inputs, a preview of the curve will be displayed.

Once you have the curve you want, it can be used to create features such as the parts you see here.







TIP: If you intend to wrap a spiral curve to a non-planar face as in the image on the left, you will need first to include (*Project to Sketch*) it to a sketch so that the Wrap Sketch command will be able to select it.

It is easy to see Spiral curve is another great tool to help you design your parts better.