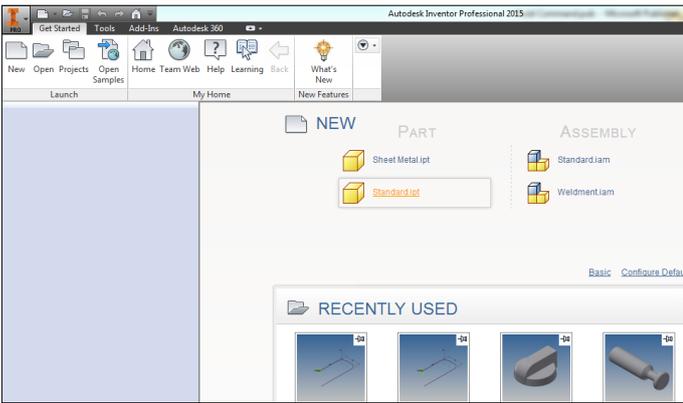


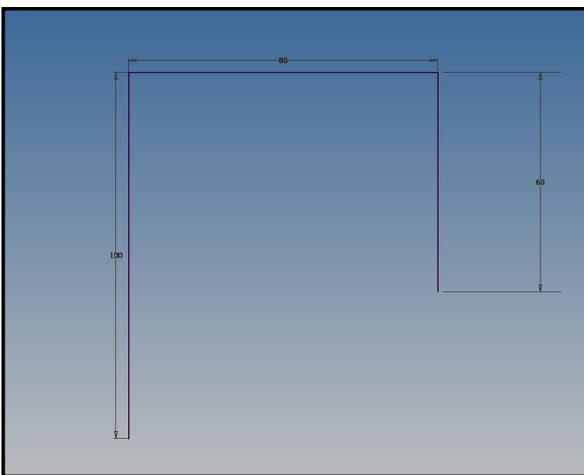
Sweep Exercise. Twist Option

Sweep 6 circular objects along a path with new twist option



Step # 1. From the New File dialog box , select the *Standard.ipt* template.

FIG 1.0



Step # 2. On the Sketch tab under the Draw panel select the *Line Command* and create the sketch shown.

Step # 3. Using the Fillet Command create 2 fillets as shown. (Radius 20.0)

Finish the sketch.

FIG 2.0

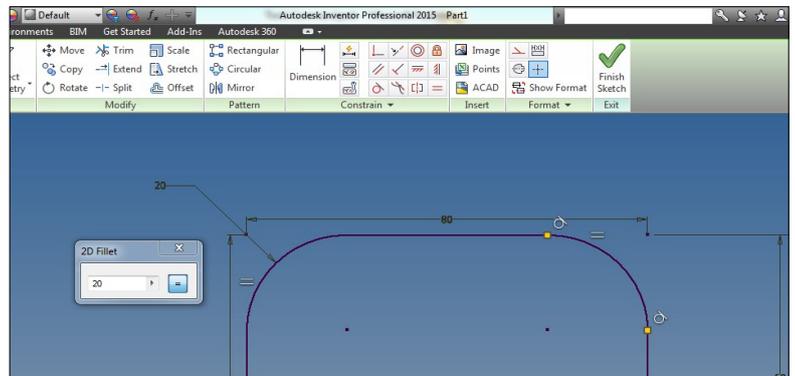


FIG 3.0

Step # 4. Create a *WorkPlane* on one end of the previously draw sketch.

Using the *Workplane Command* select the end point of the original sketch, and then the adjacent line on the sketch itself.

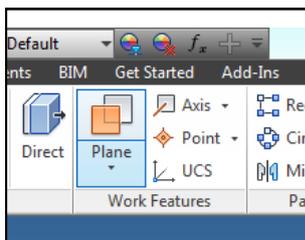


FIG 4.0

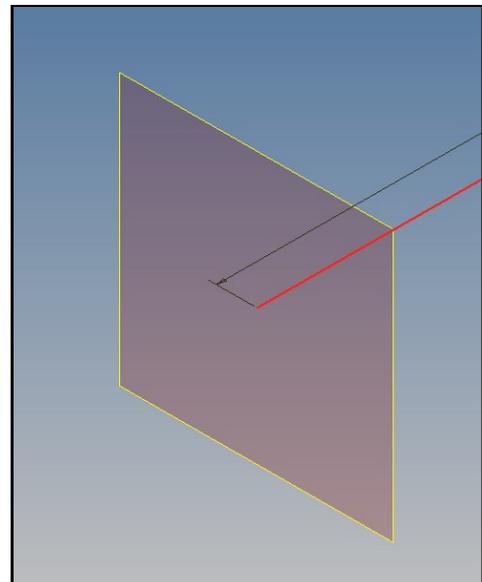


FIG 5.0

Step # 5. Create a new sketch on the workplane

Right click on the drawing area and select **New Sketch**.

Left click on the border of the workplane to select it (See Fig 6.0)

Step # 7. Using the sketch plane just created, *draw the circle*

described in Fig 7.0

Circle diameter 6.0 mm , and 8.0 mm above sketch 1 end point.

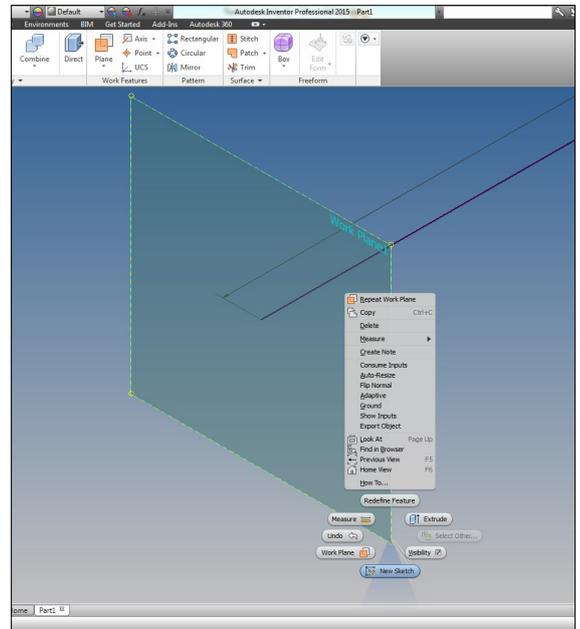


FIG 6.0

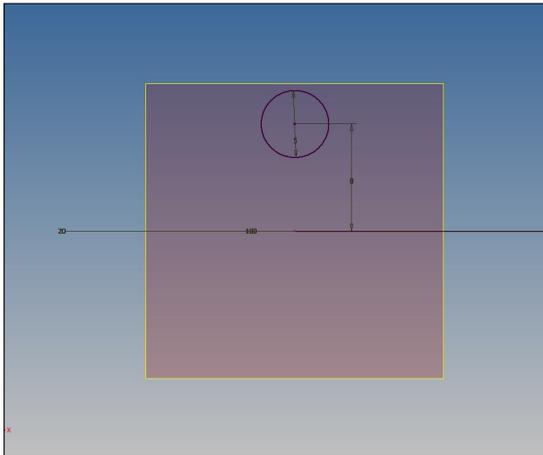


FIG 7.0

Step # 8. Create a circular pattern.

From the sketch tab select *Circular Pattern*.

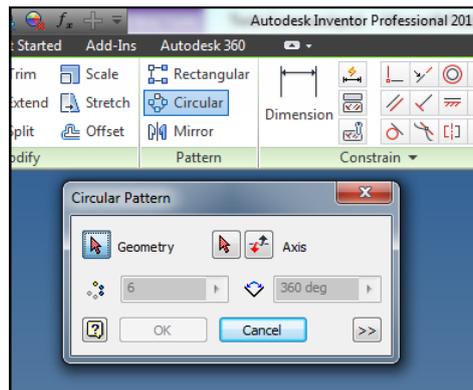


FIG 8.0

Select the circle as **Geometry** and the end point of the line from sketch 1 as the axis of rotation. (See Fig 9.0)

Create 6 objects on a 360 degree rotation.

Finish the sketch.

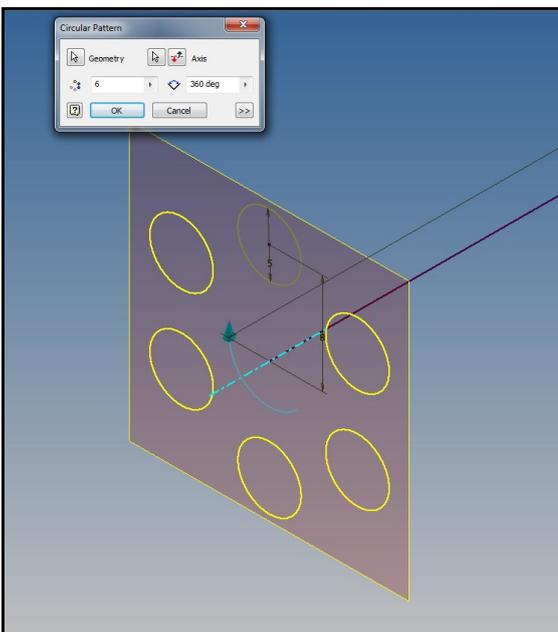


FIG 9.0

Step # 10. From the 3D Model Tab select the *Sweep command* as shown in Fig 10.0

Select the circles as profiles and the line of sketch1 as the Path.

OK the dialog box.

See results in Fig 11.0

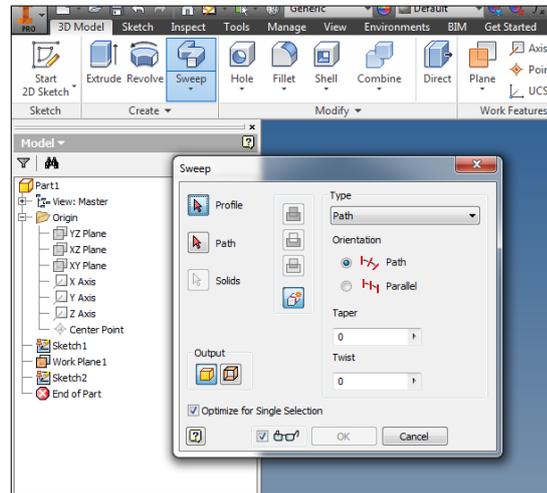


FIG 10.0

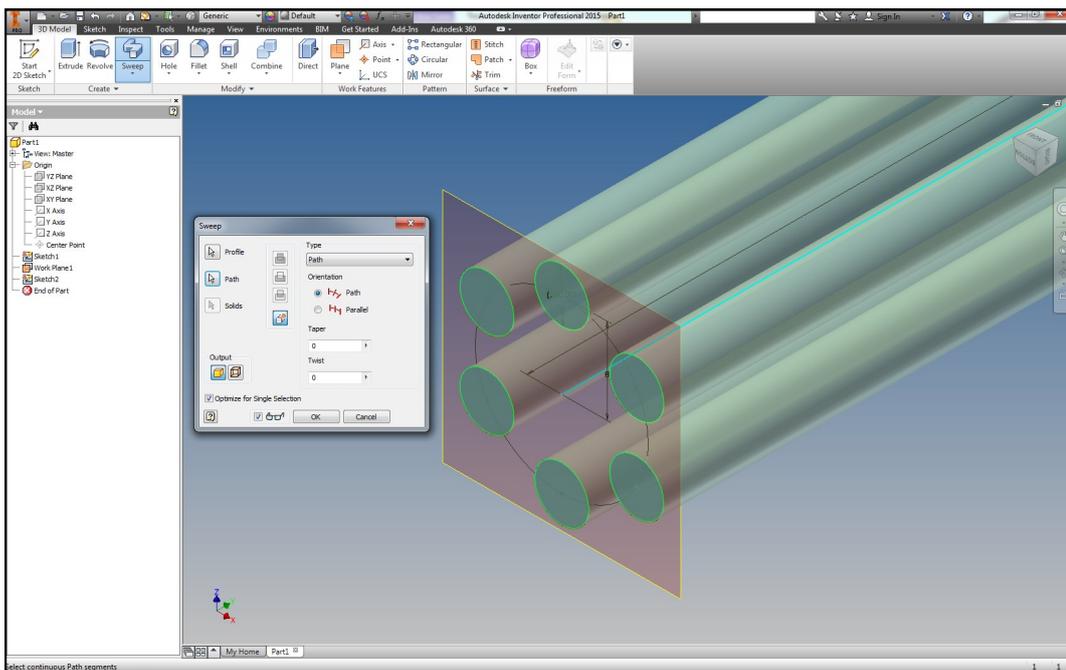


FIG 11.0

Note. New in Release 2015 is the “Twist” option. Edit the previously created sweep and change the twist value to 180 degrees.

The results are displayed in Fig 12.0

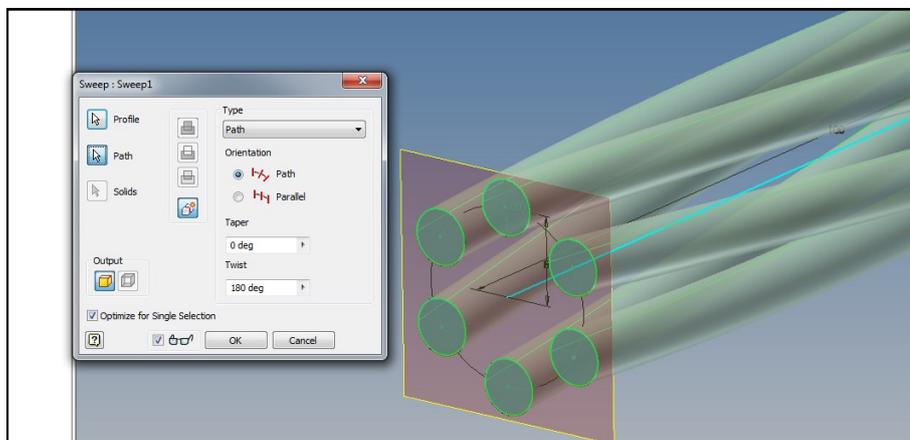


FIG 12.0