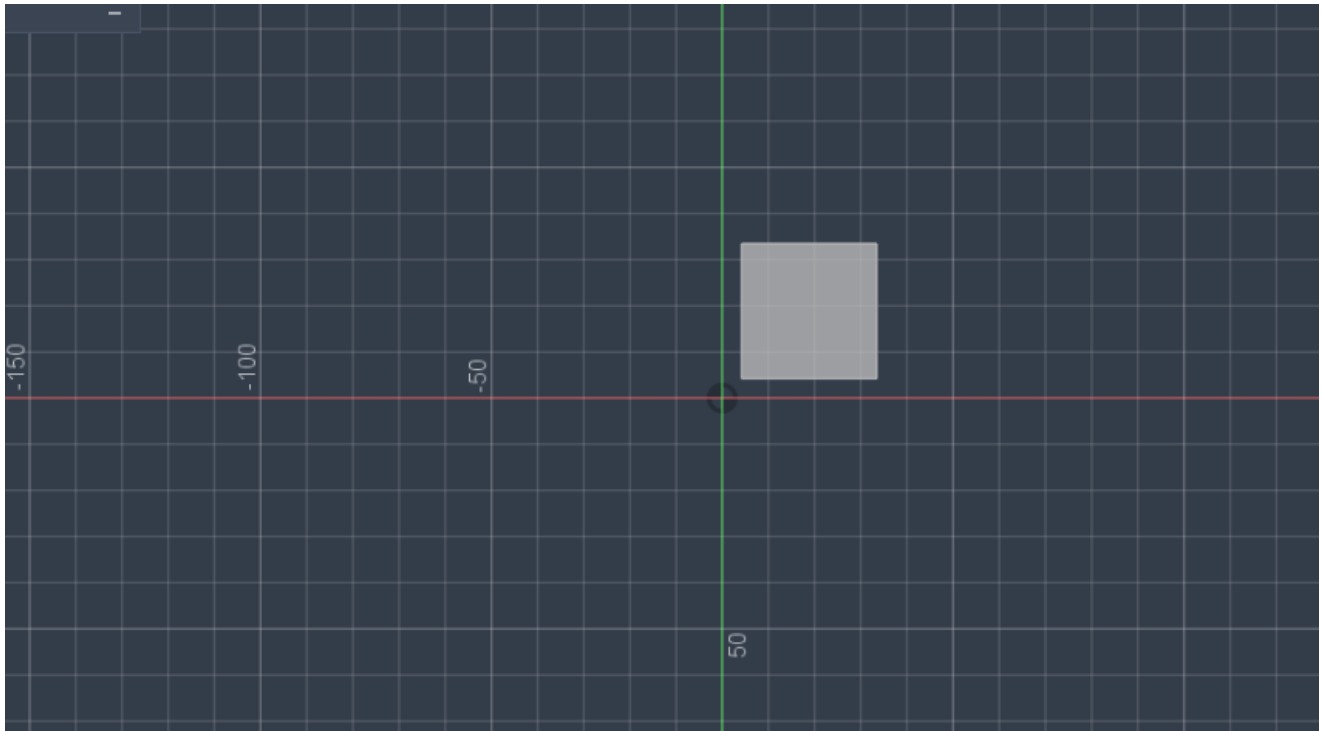
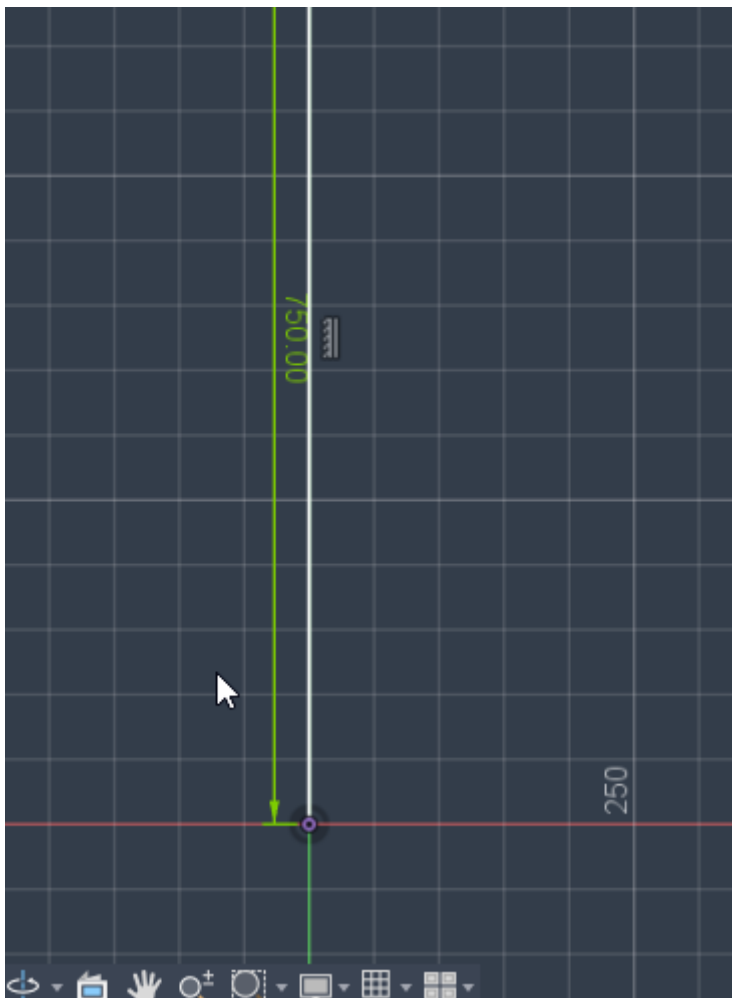


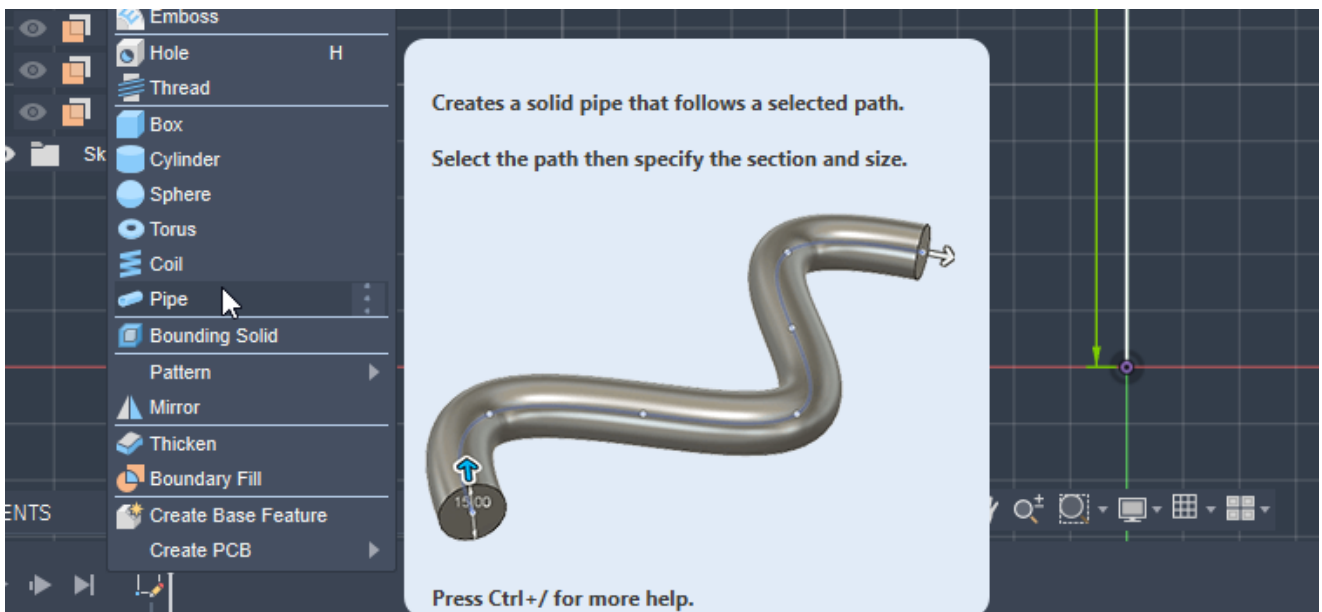
Auger



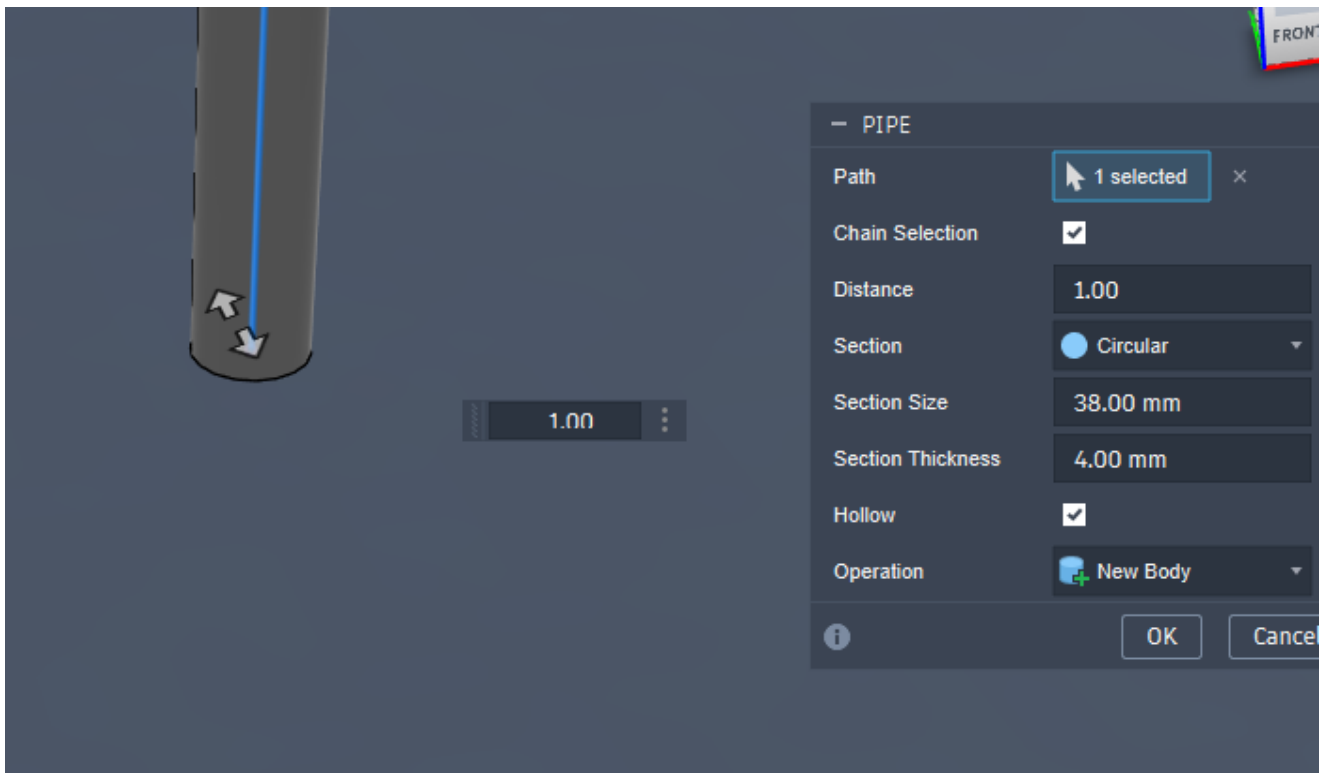
Start sketch on XZ plane.



Draw a vertical line of 750 mm.

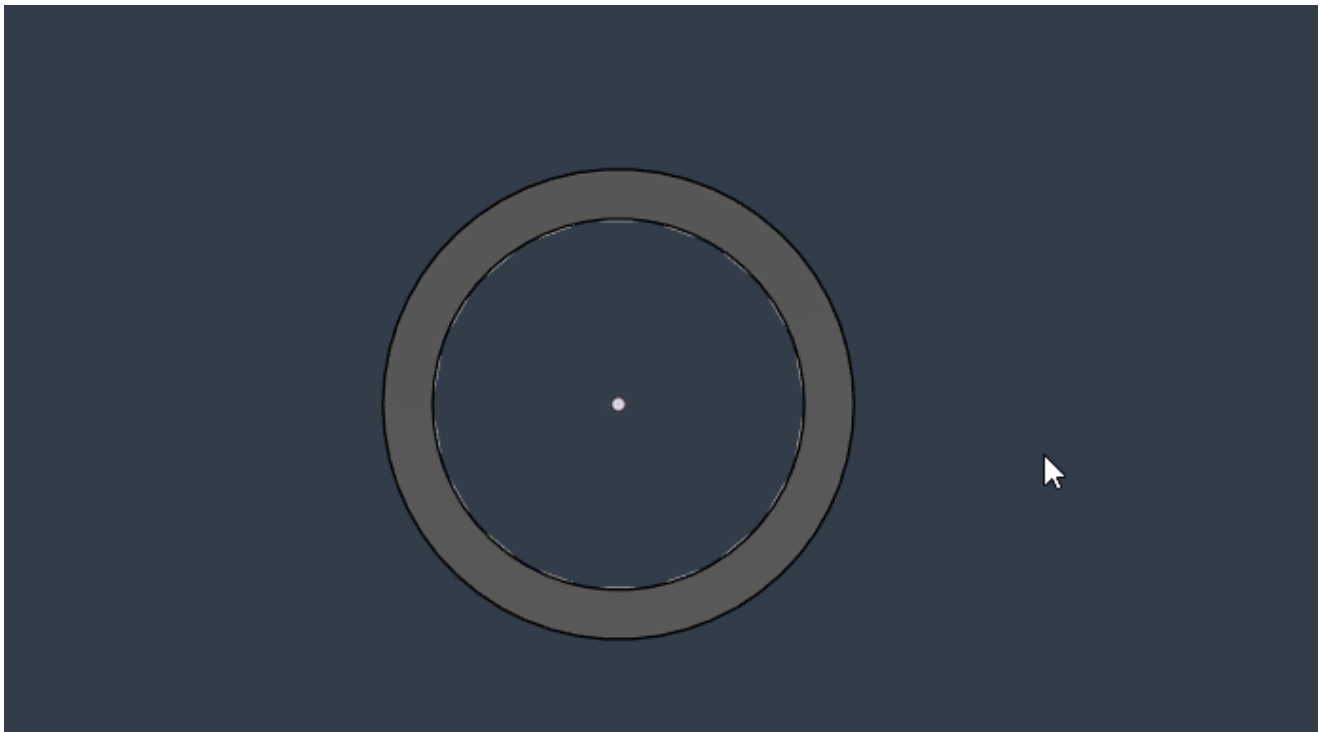


Go to Pipe tool.

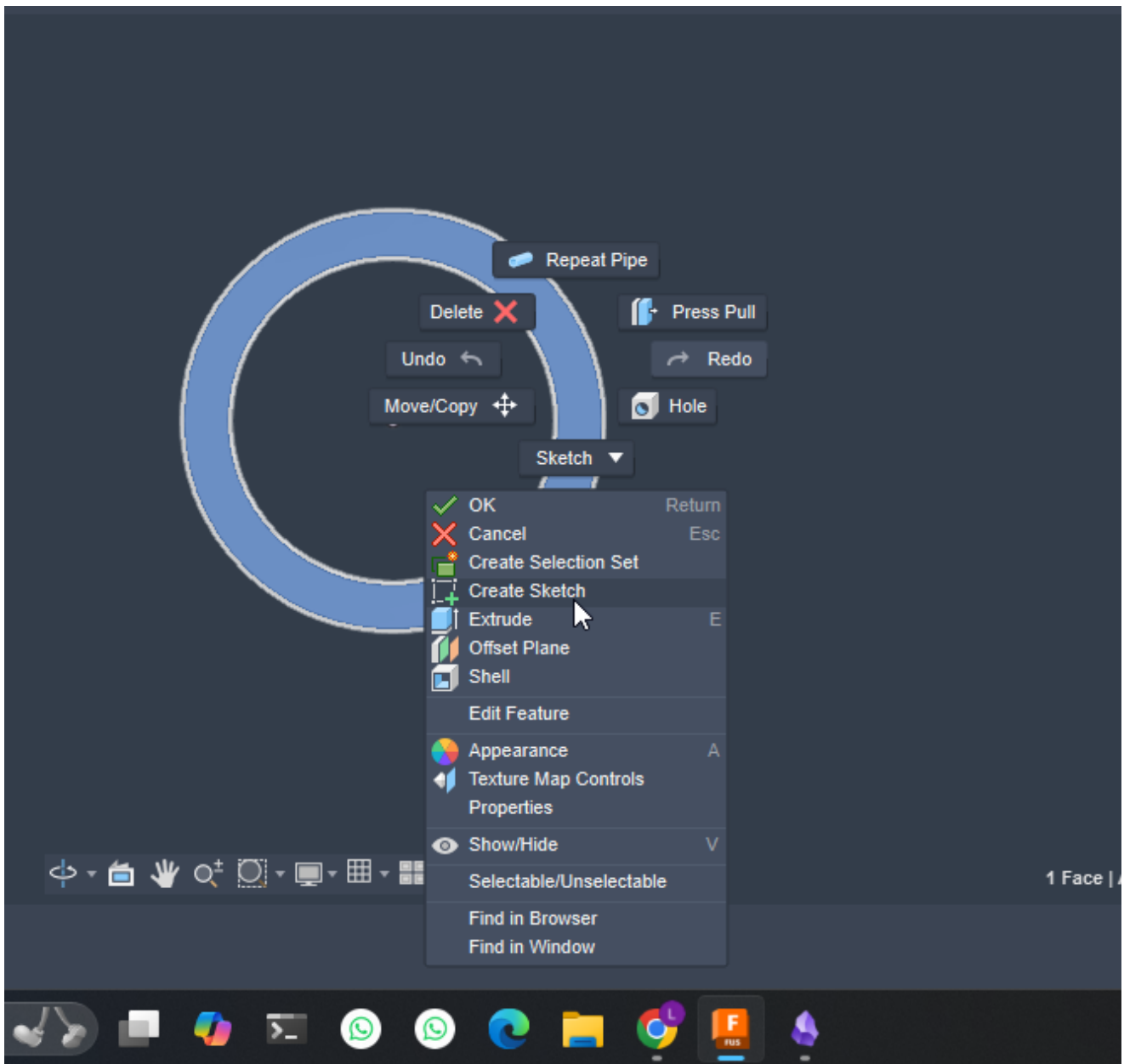


Set these Pipe parameters:

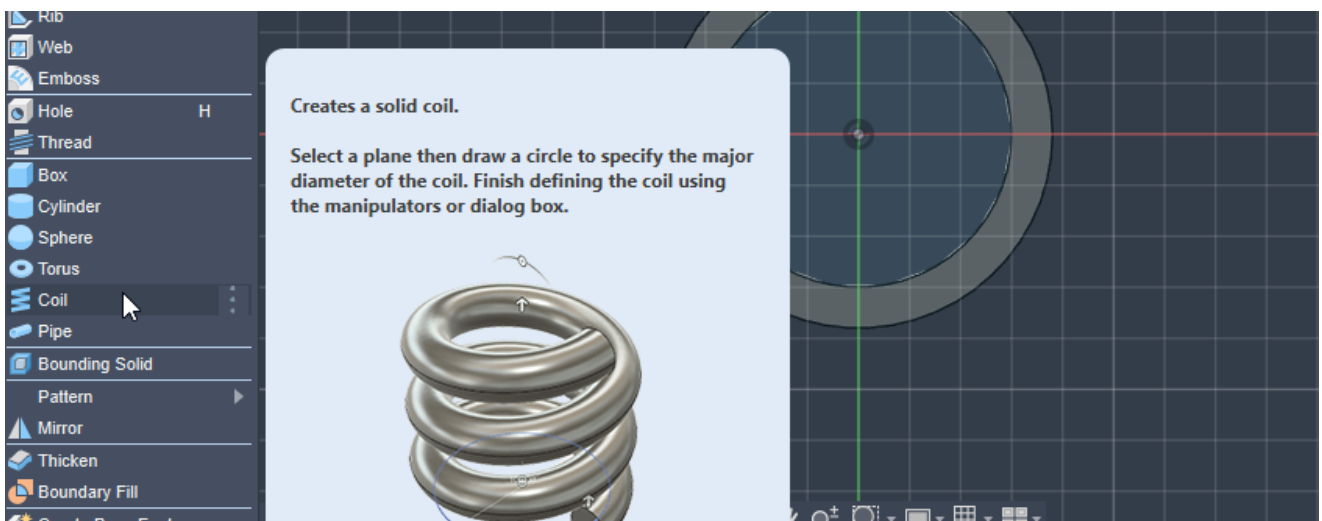
- Section: Circular
- Diameter: 38 mm
- Thickness: 4 mm
- Distance = **1.0** → **100% length**



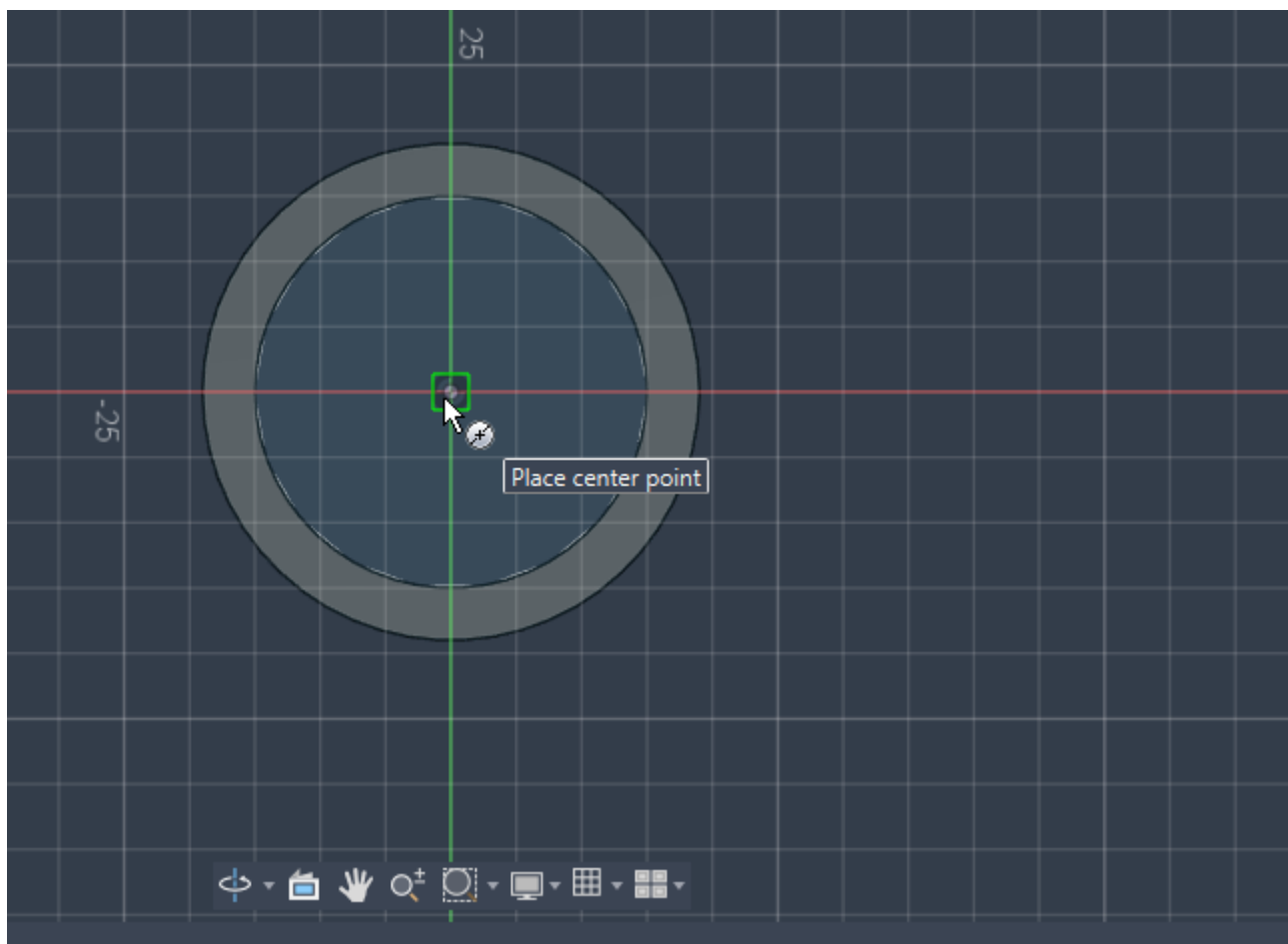
Go to bottom face of the pipe.



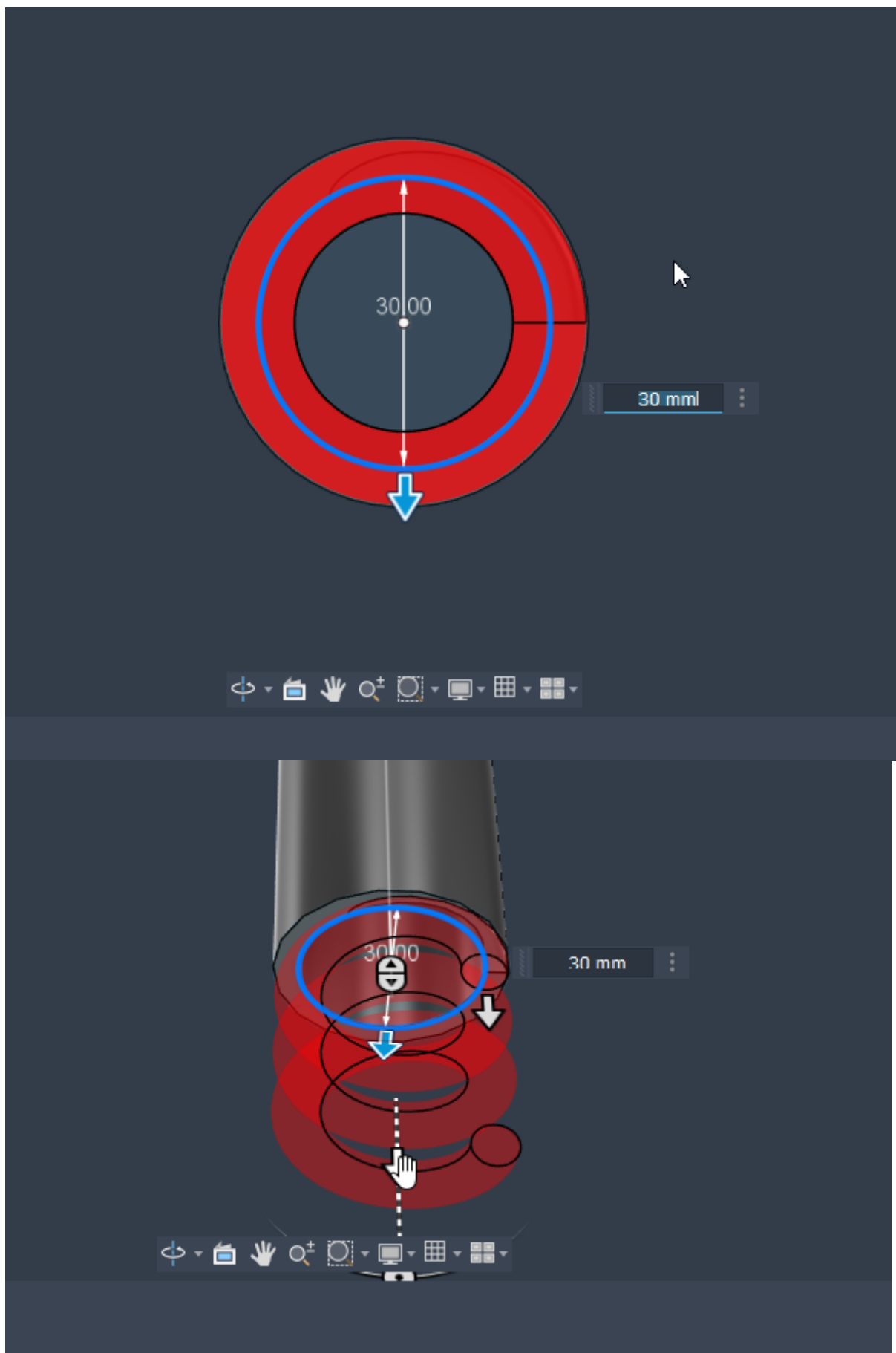
Right-click → Create Sketch.



Solid → Coil tool.



Start coil from center. Set diameter = 30 mm.

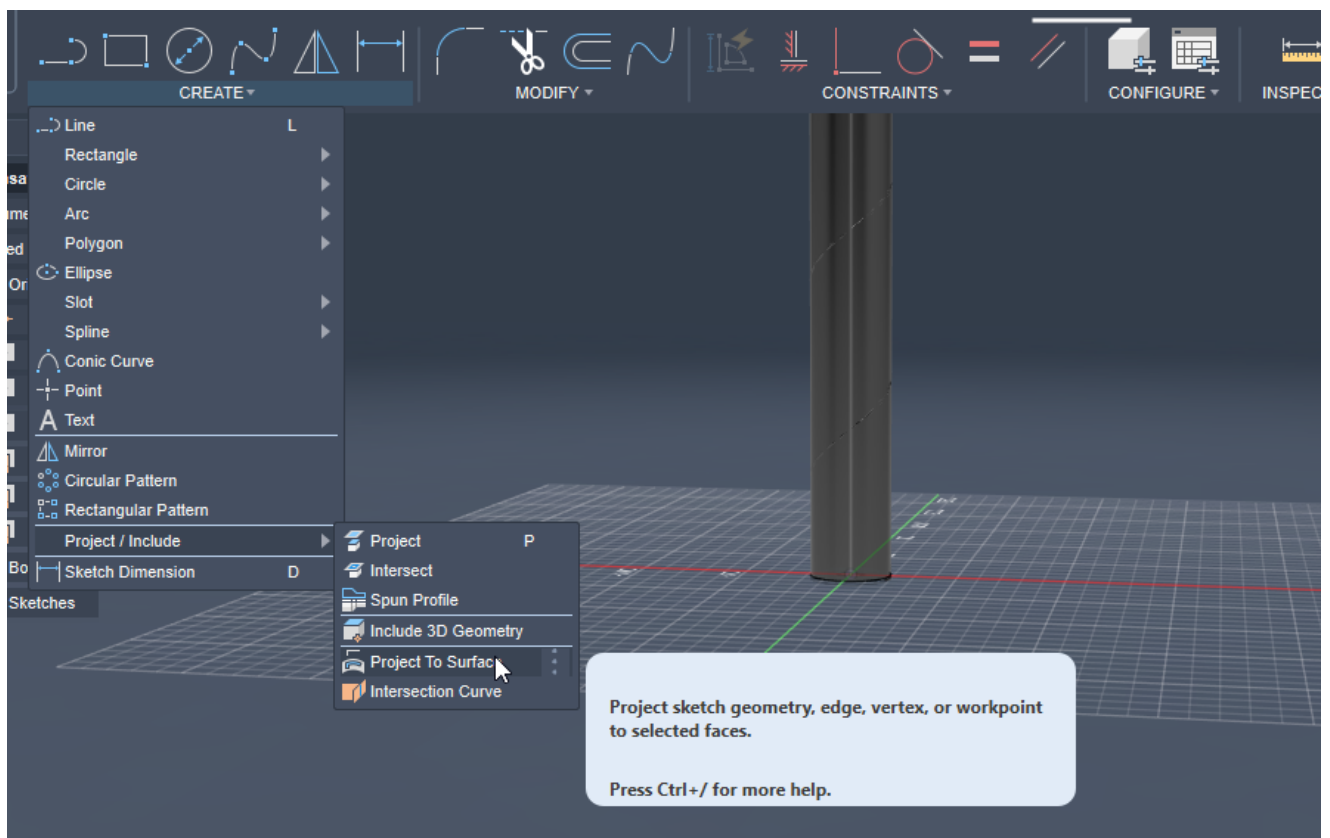


Move coil upward or type height = -450 mm.

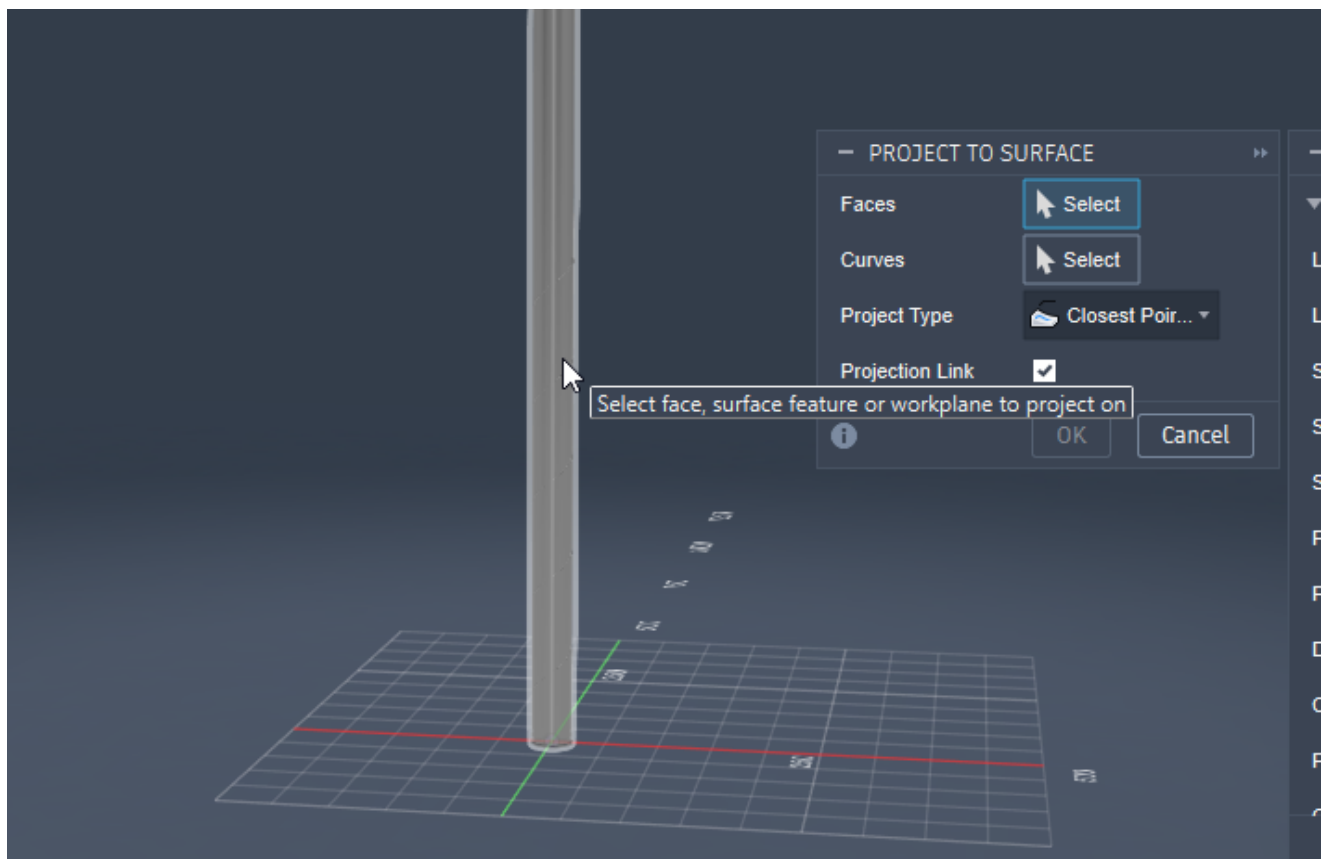


Set coil parameters:

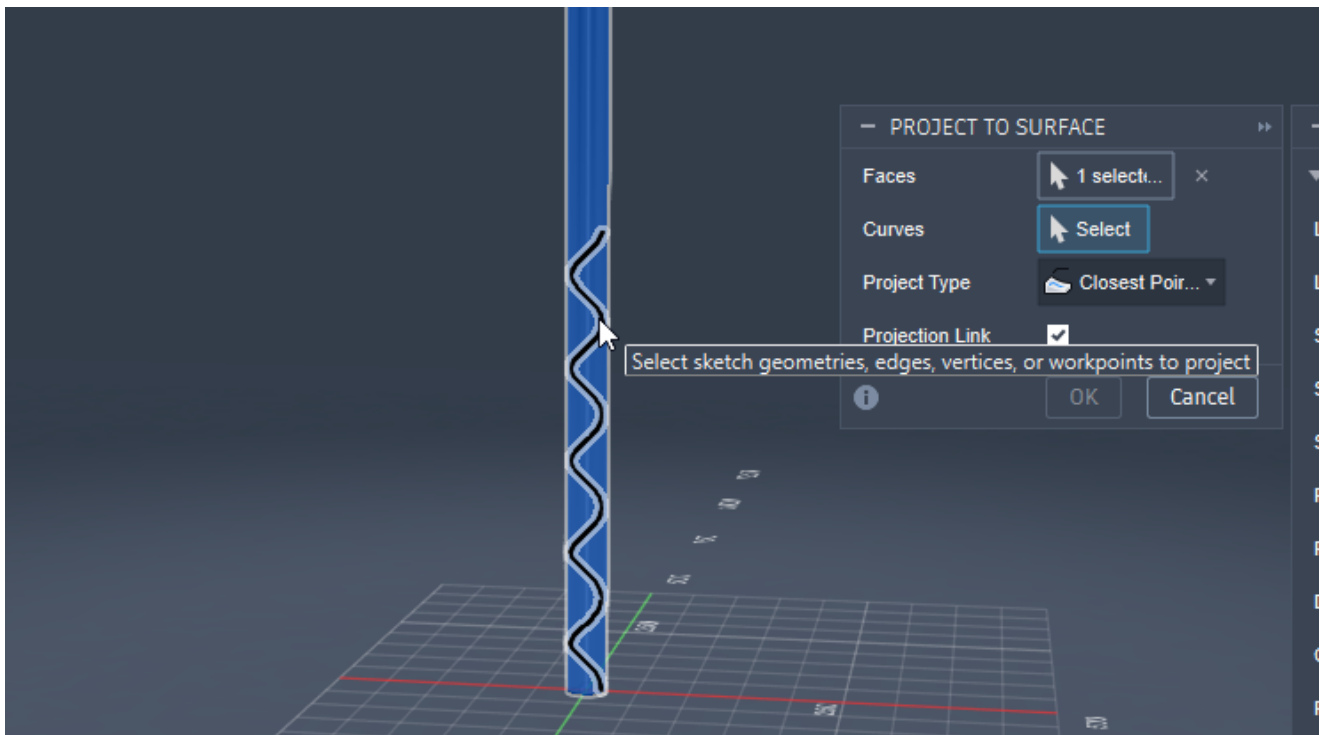
- Revolution + Height
 - Height: -450 mm
 - Revolutions: 5
 - Section Position: Outside
 - Section Size: 4 mm
 - Operation: New Body
-



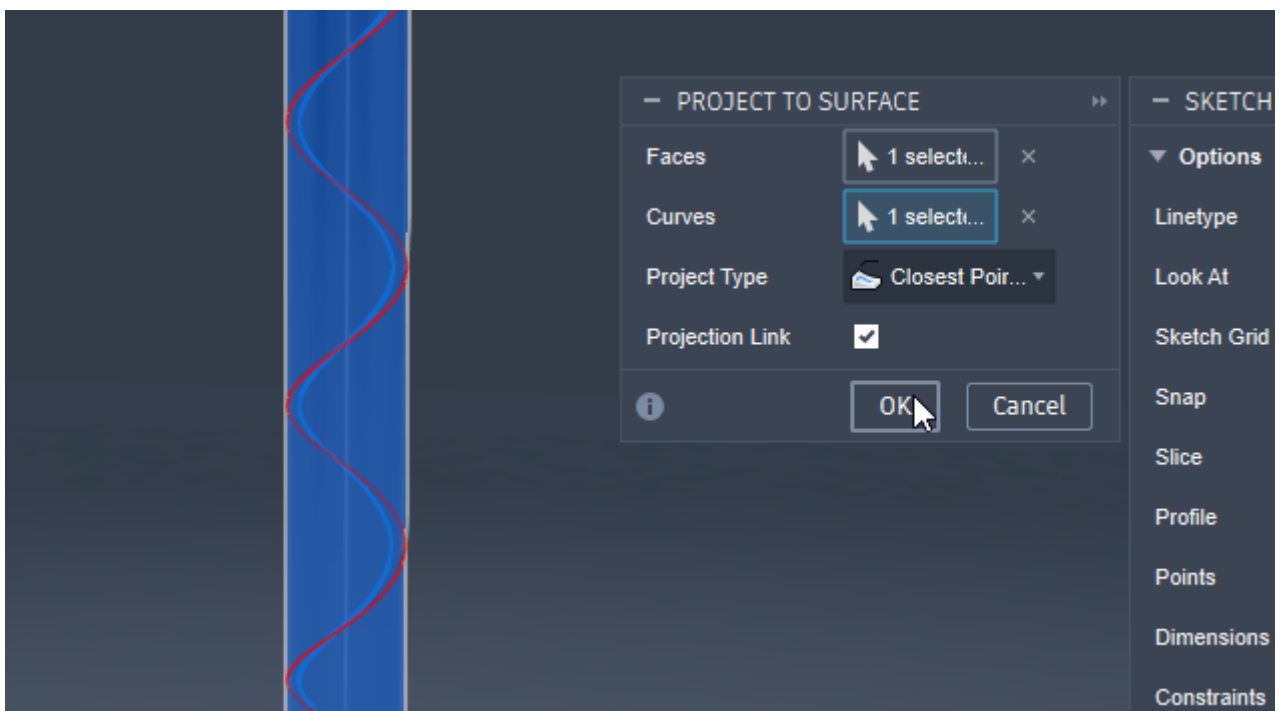
Sketch → Project to Surface.



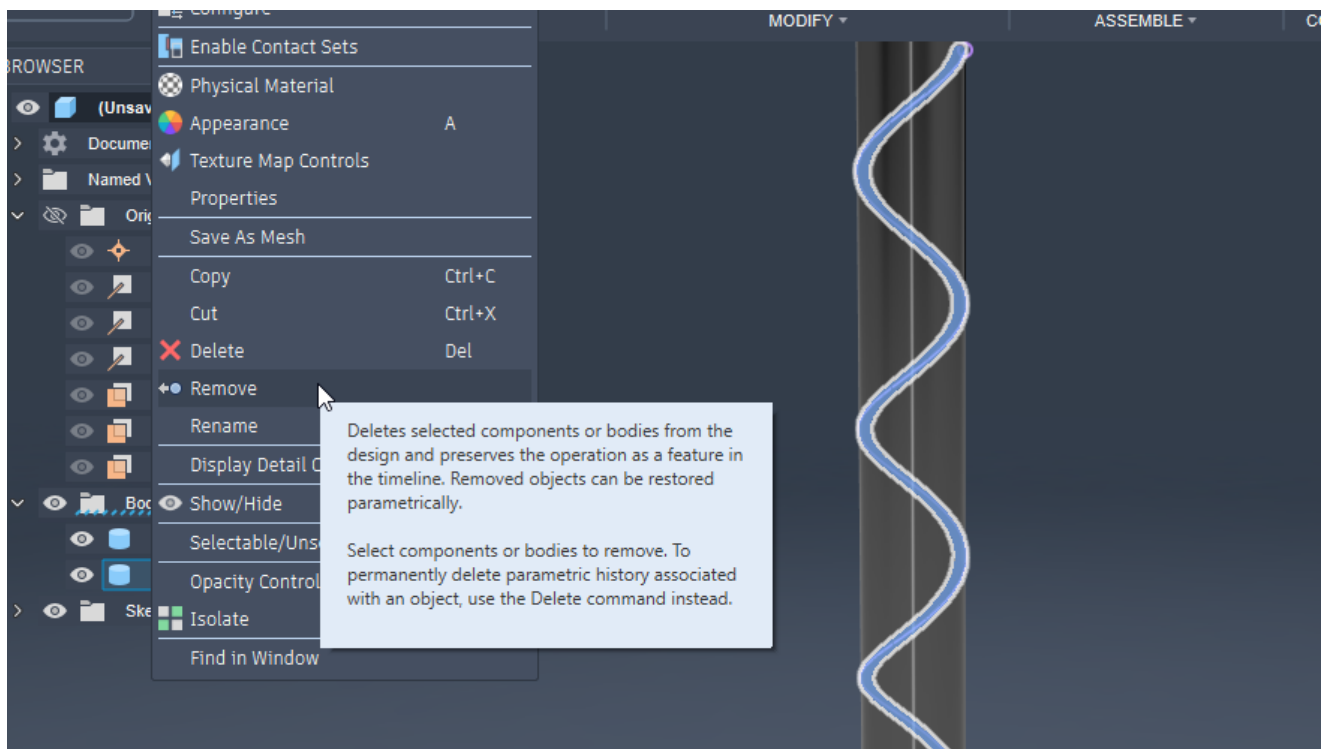
Select this cylindrical face.



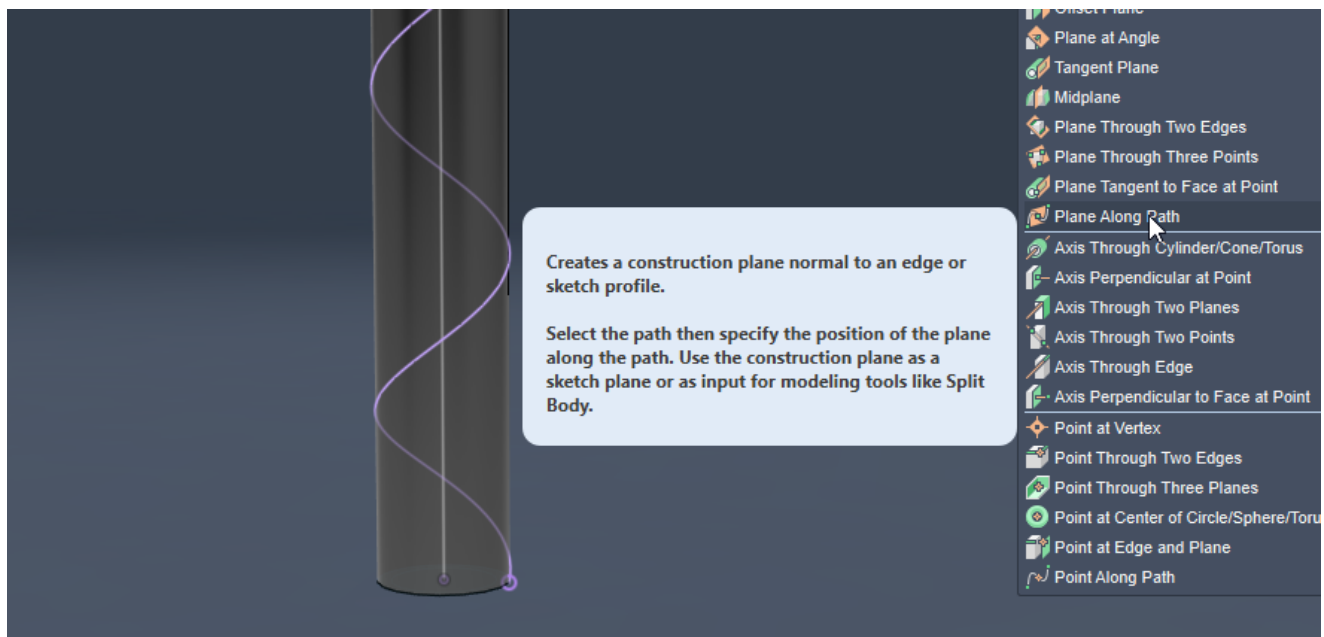
Select the coil line under “Curves”.



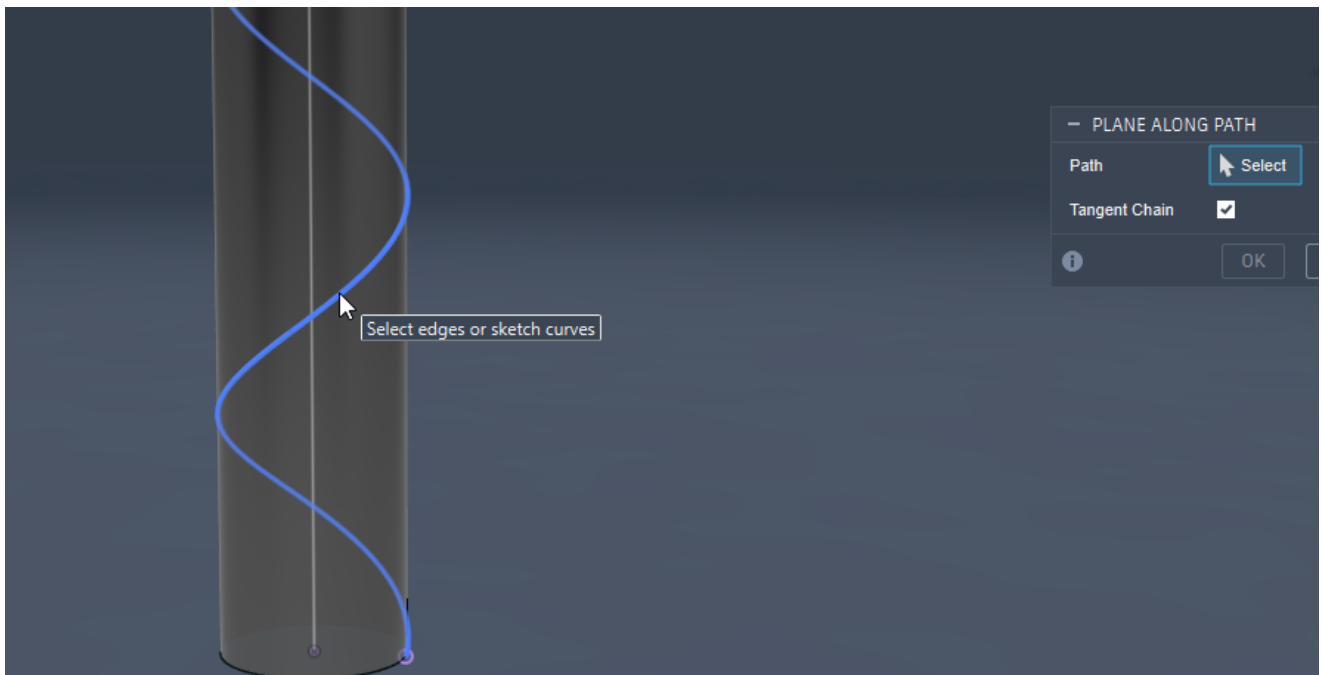
Click OK (helix projected as sketch).



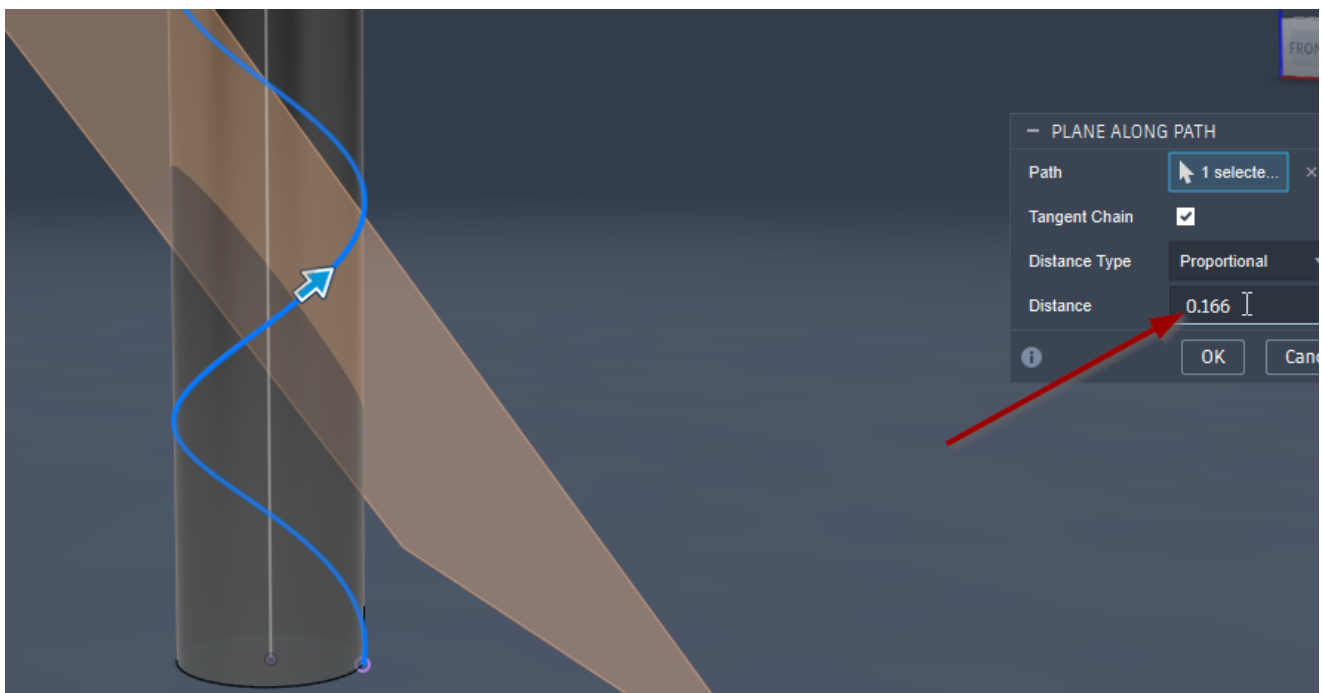
Finish sketch → Remove the coil body.



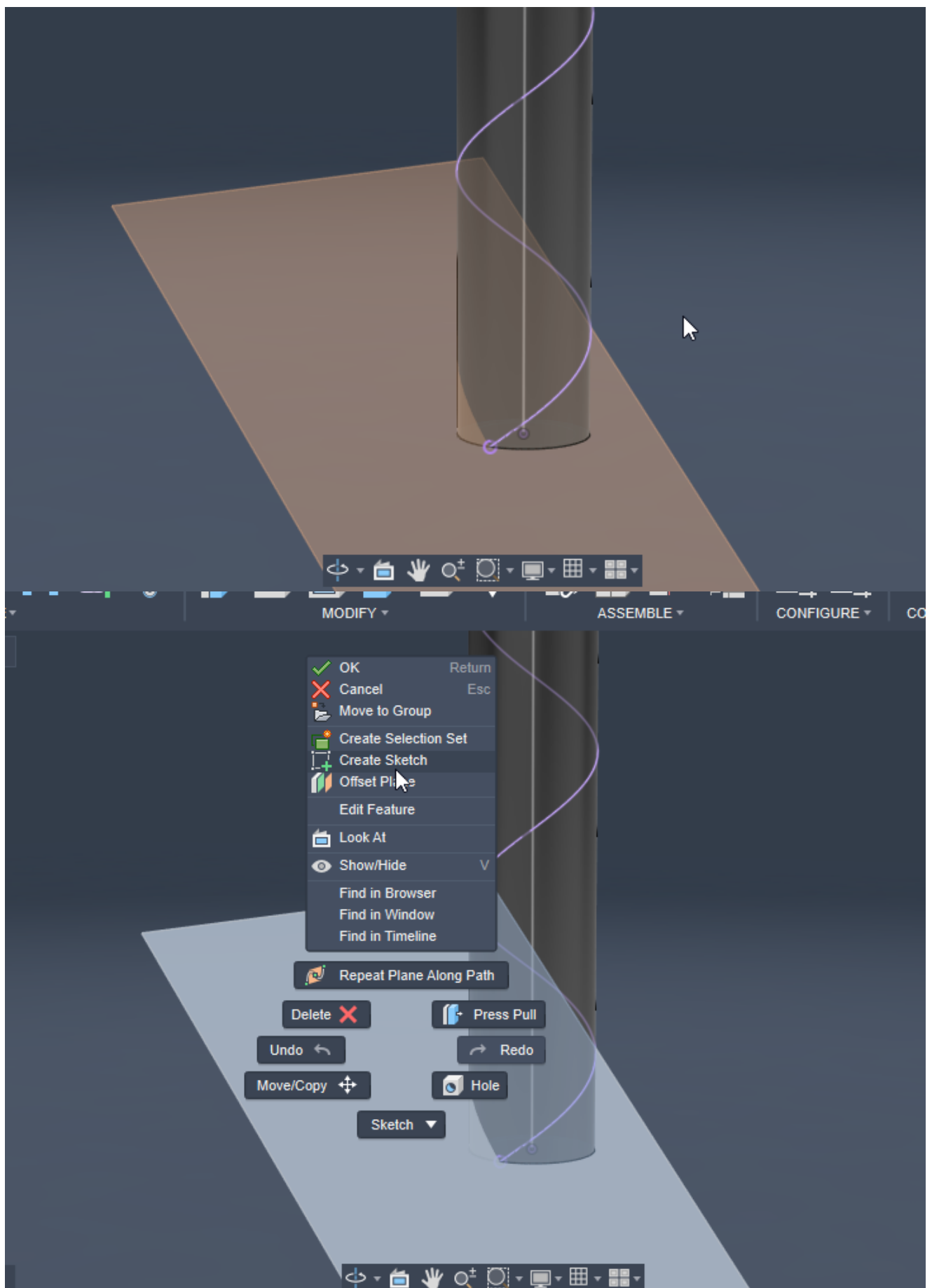
Construct → Plane Along Path.



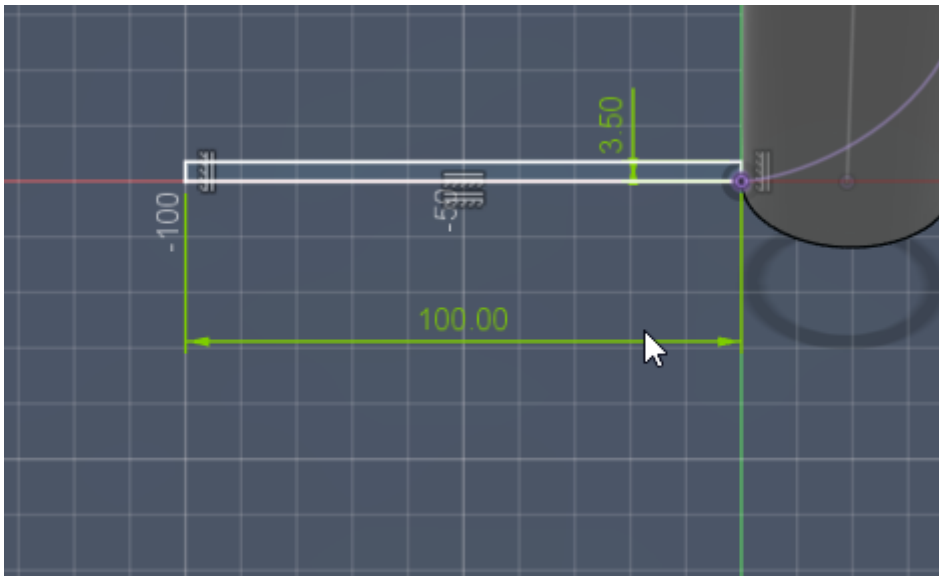
Select the helix path.



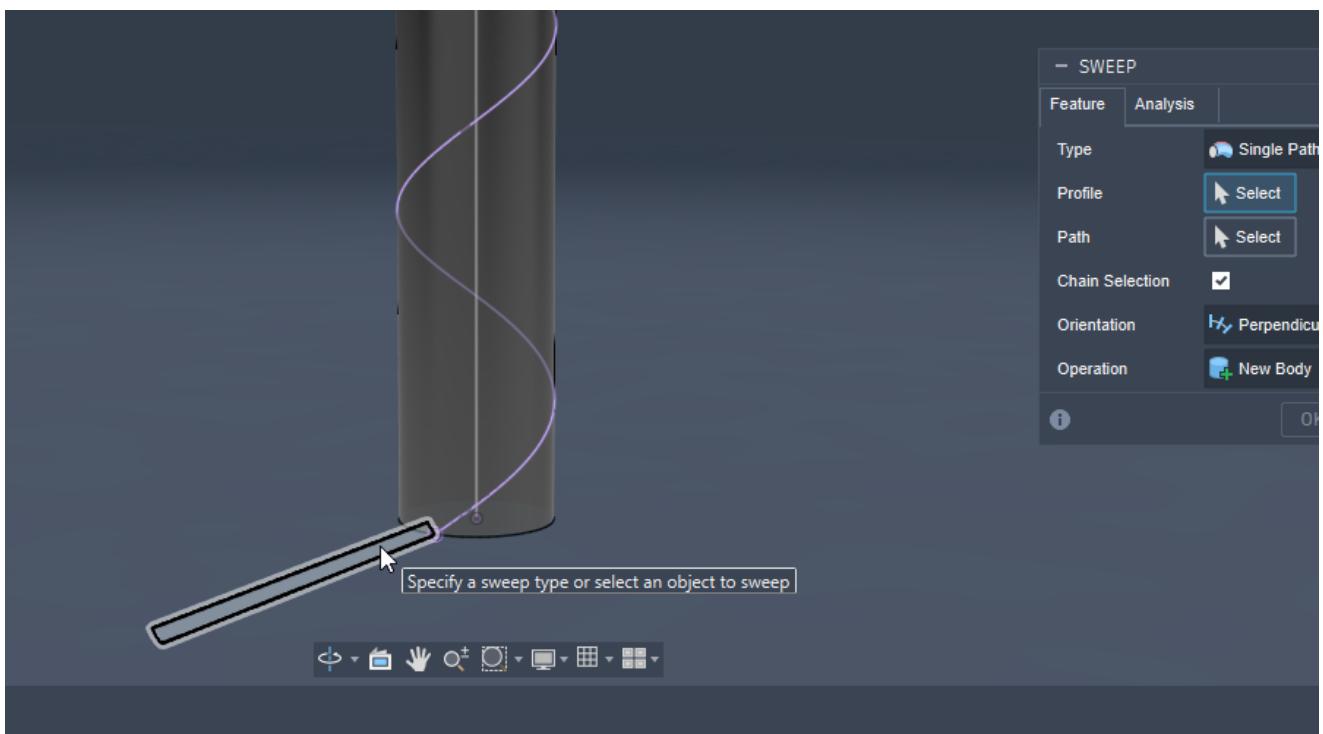
Set distance = 0 (start of helix).



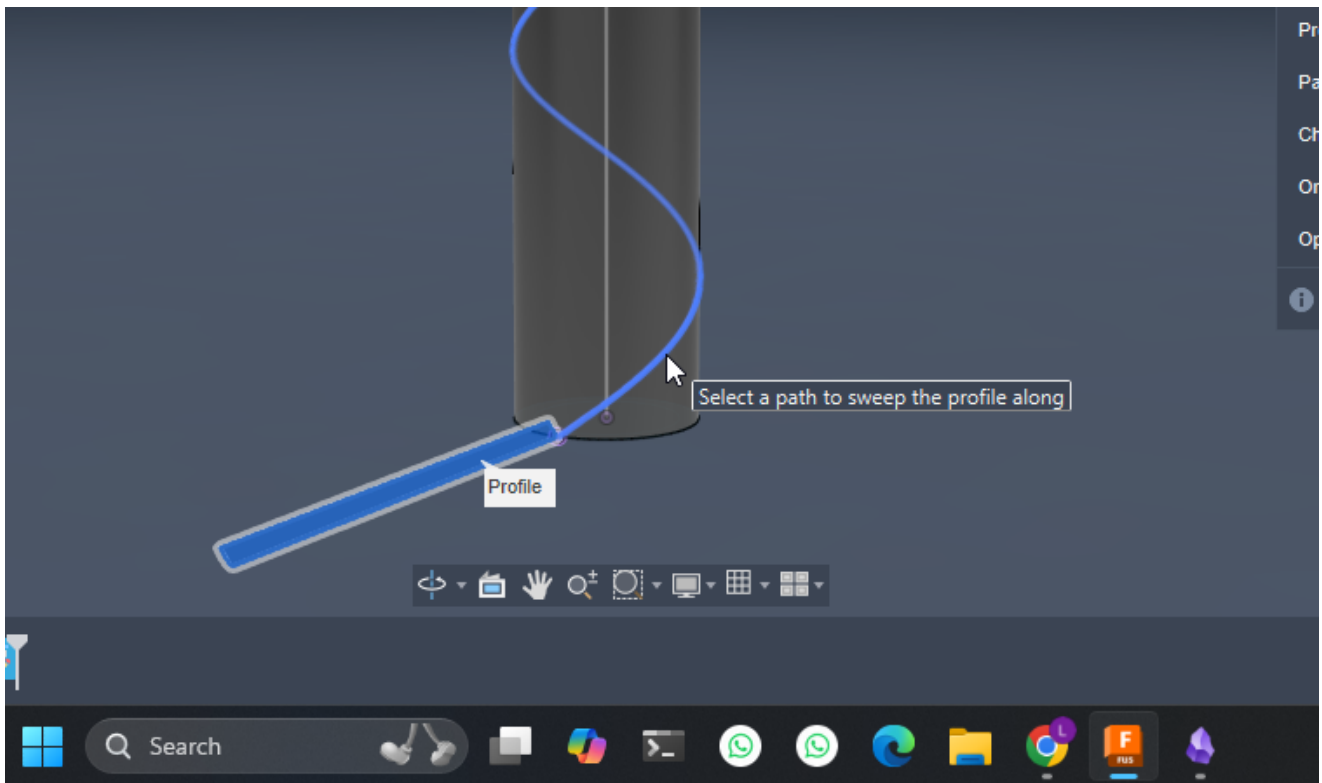
Plane created → Create Sketch on this plane.



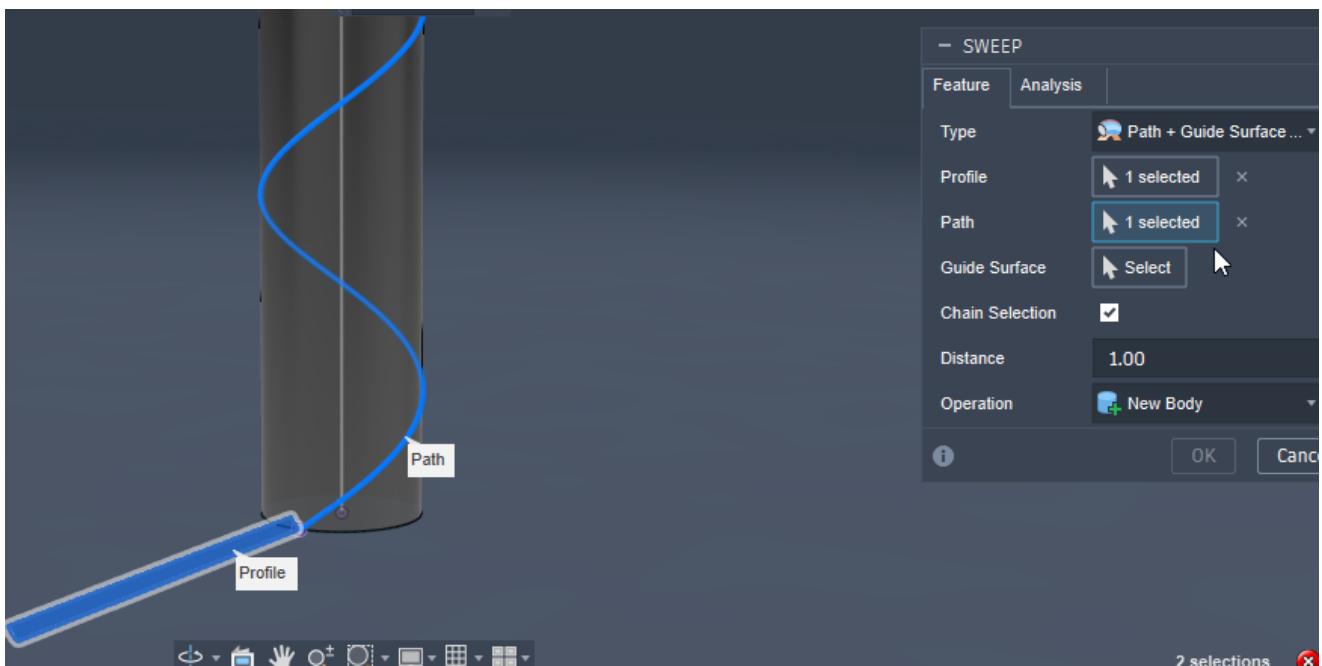
Draw a rectangle at the helix start.



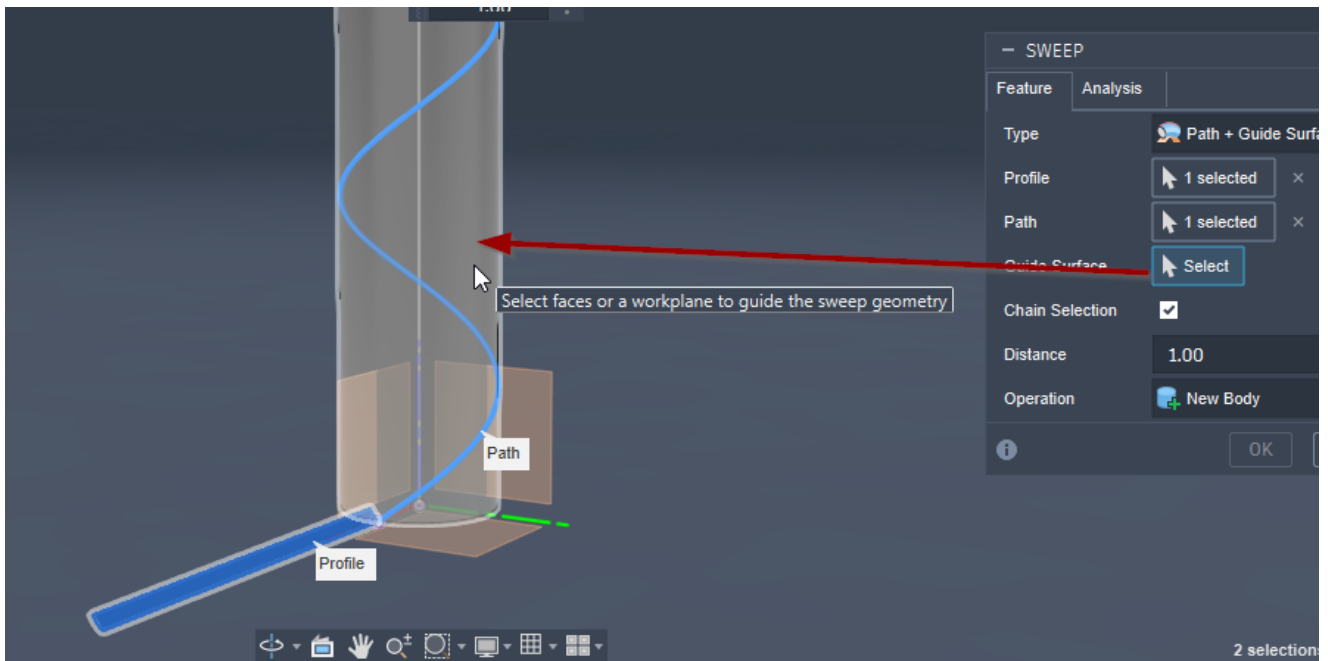
Solid → Sweep. Select the profile.



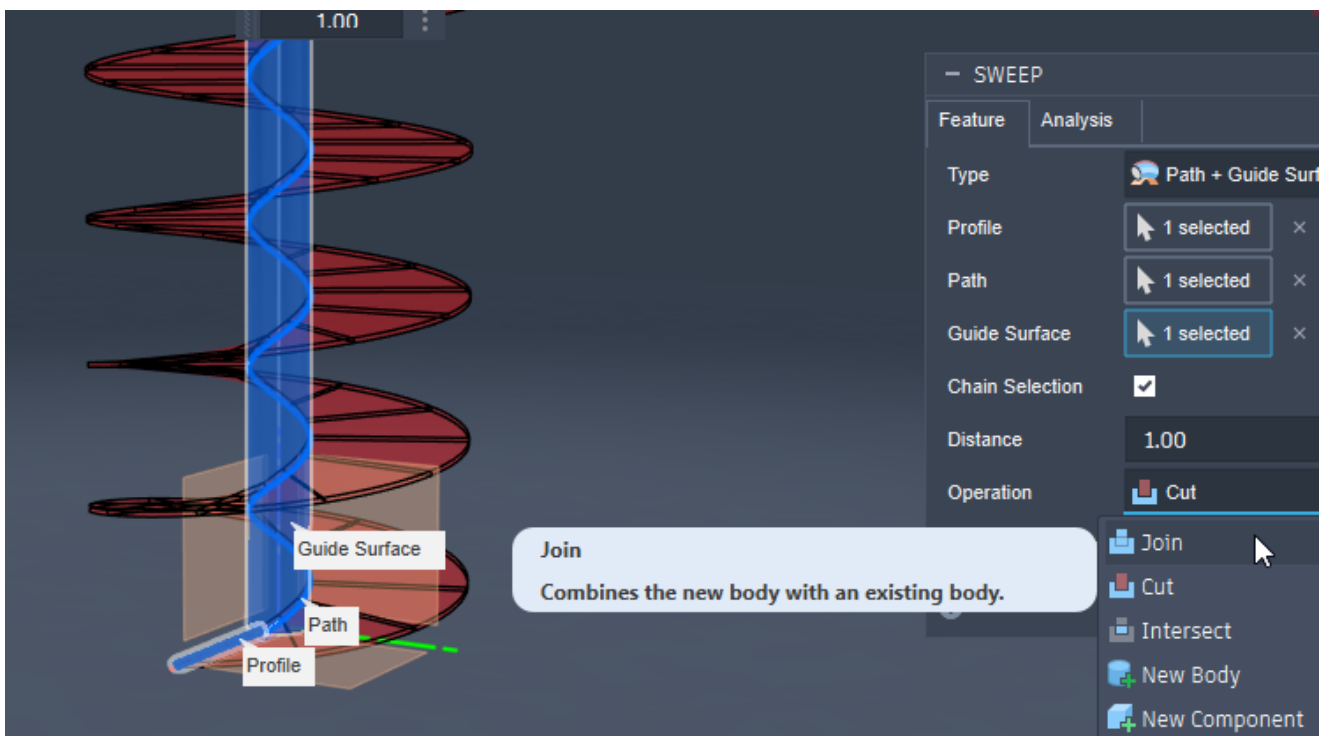
Select the helix as the Path.



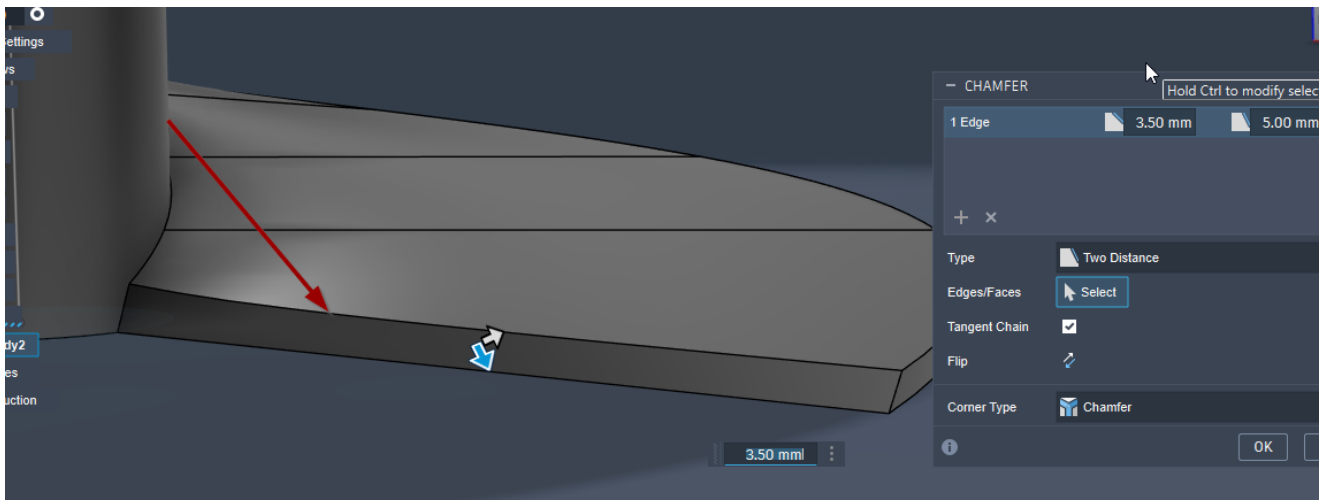
Sweep gives error → change Sweep Type.



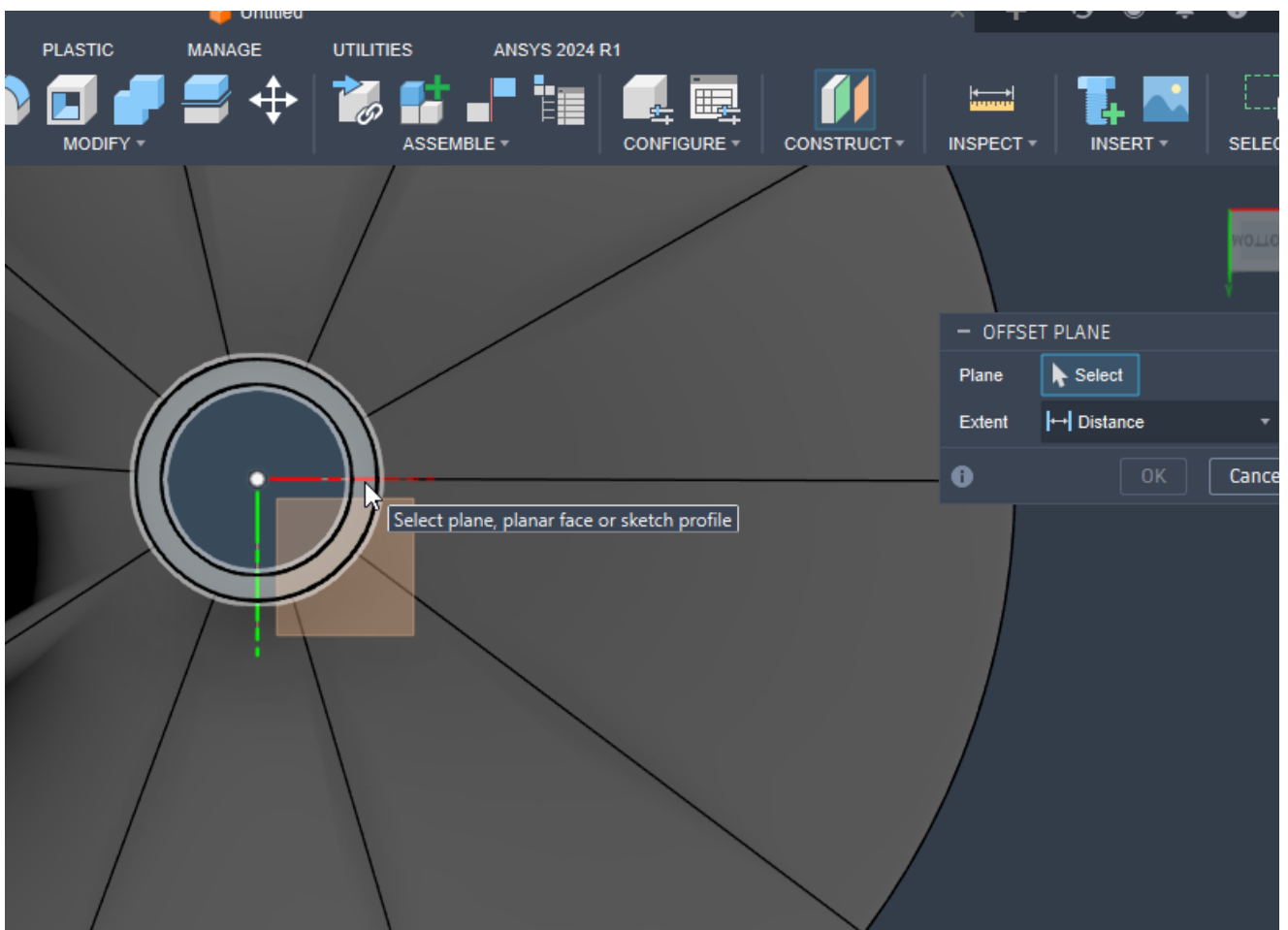
Choose “Path + Guide Surface” → select pipe outer surface.



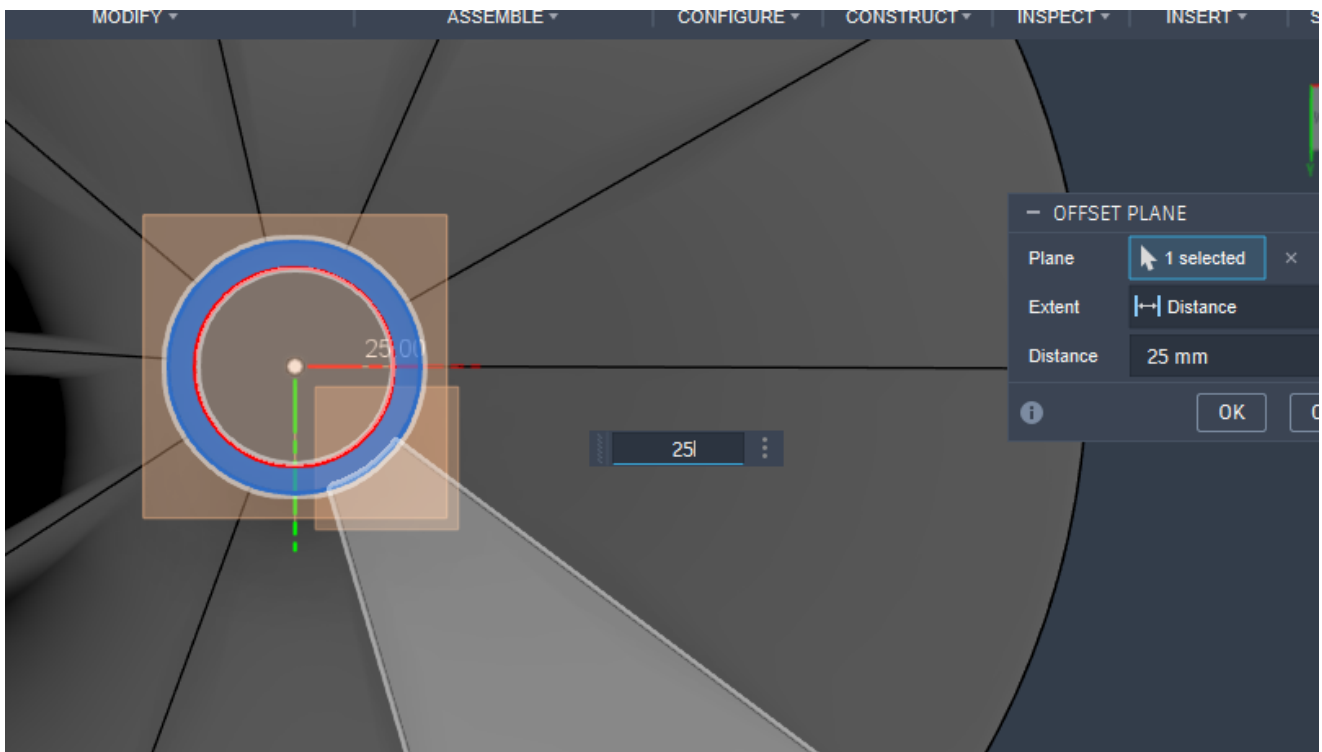
Set Operation = Join. Sweep completes.



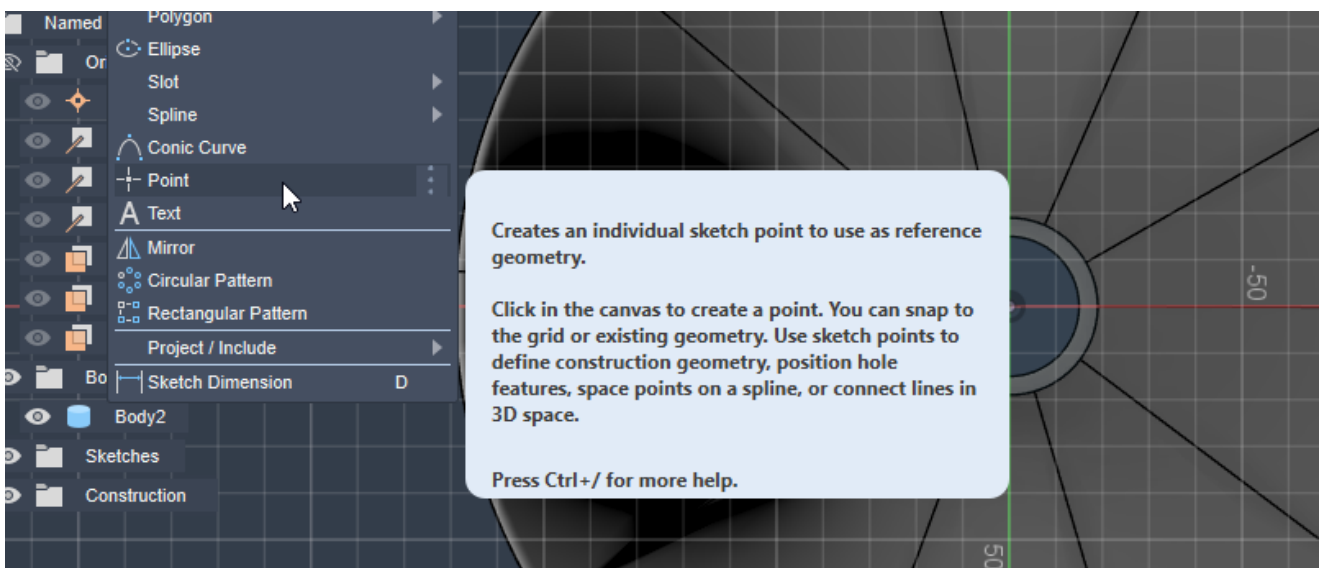
Apply Chamfer to the blade start (as shown).



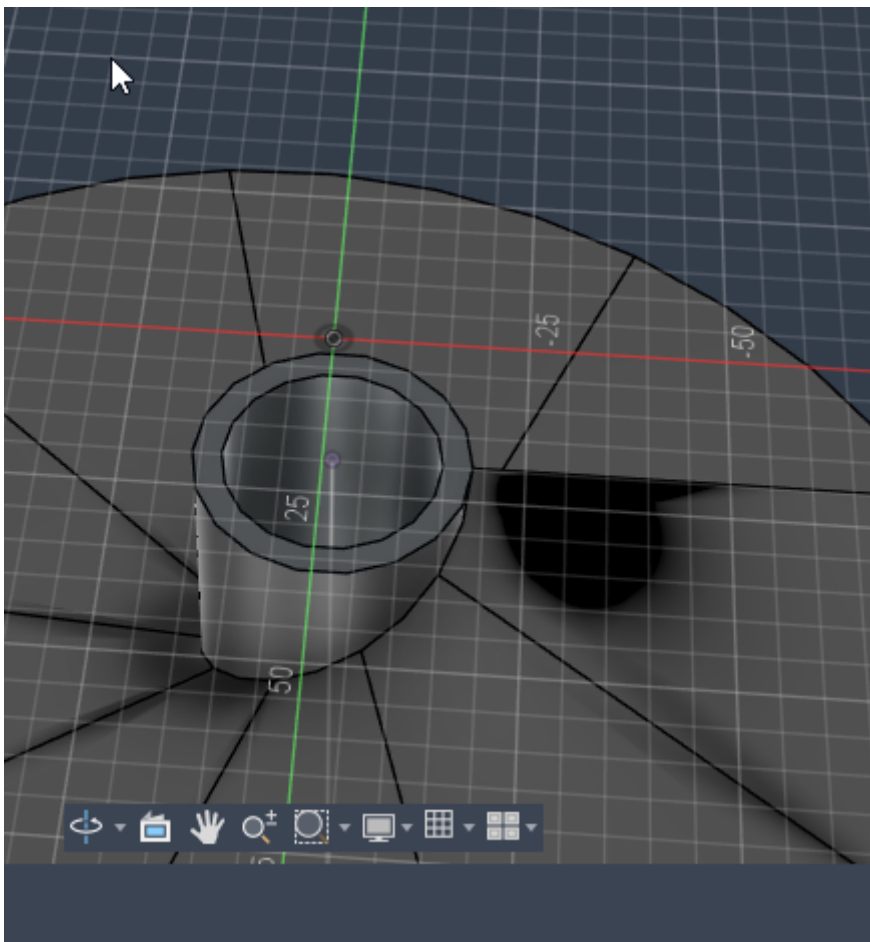
Offset Plane → select bottom face.



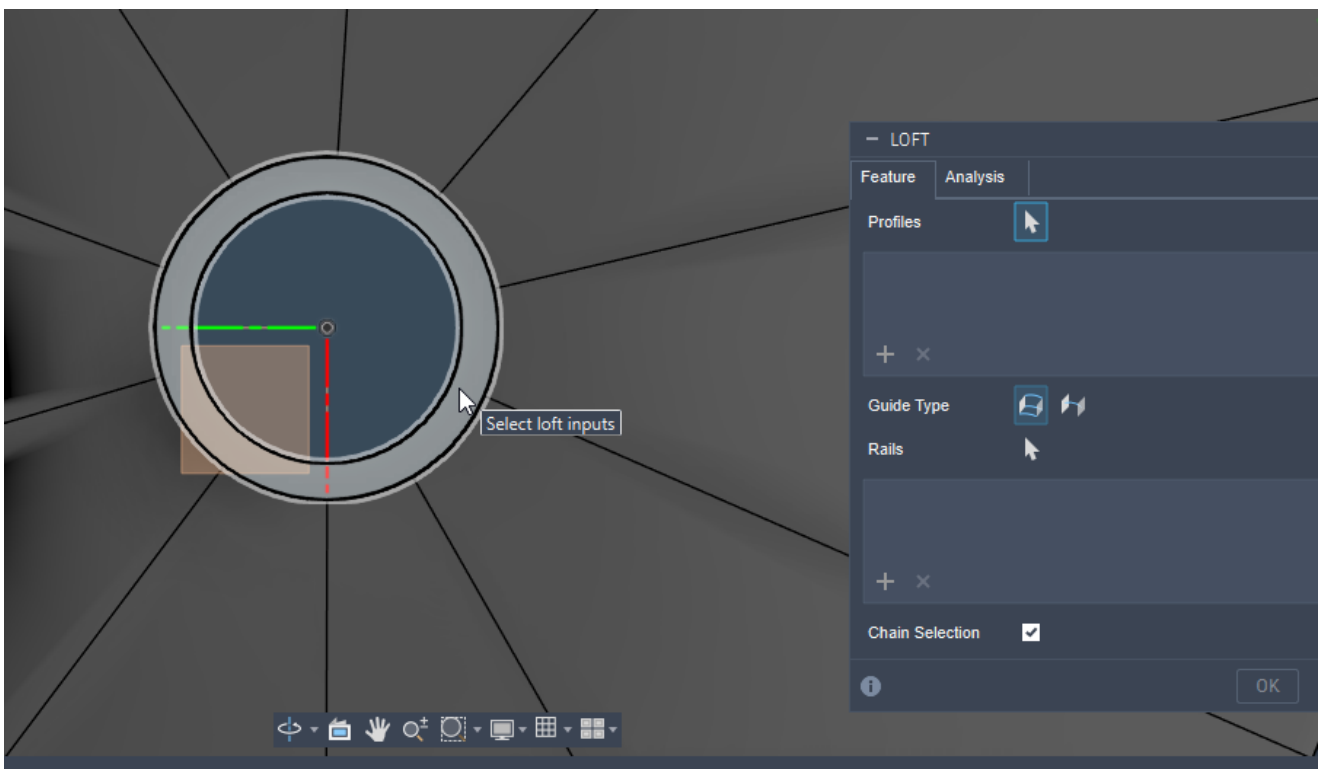
Set Offset = 25 mm.



Select Point tool.

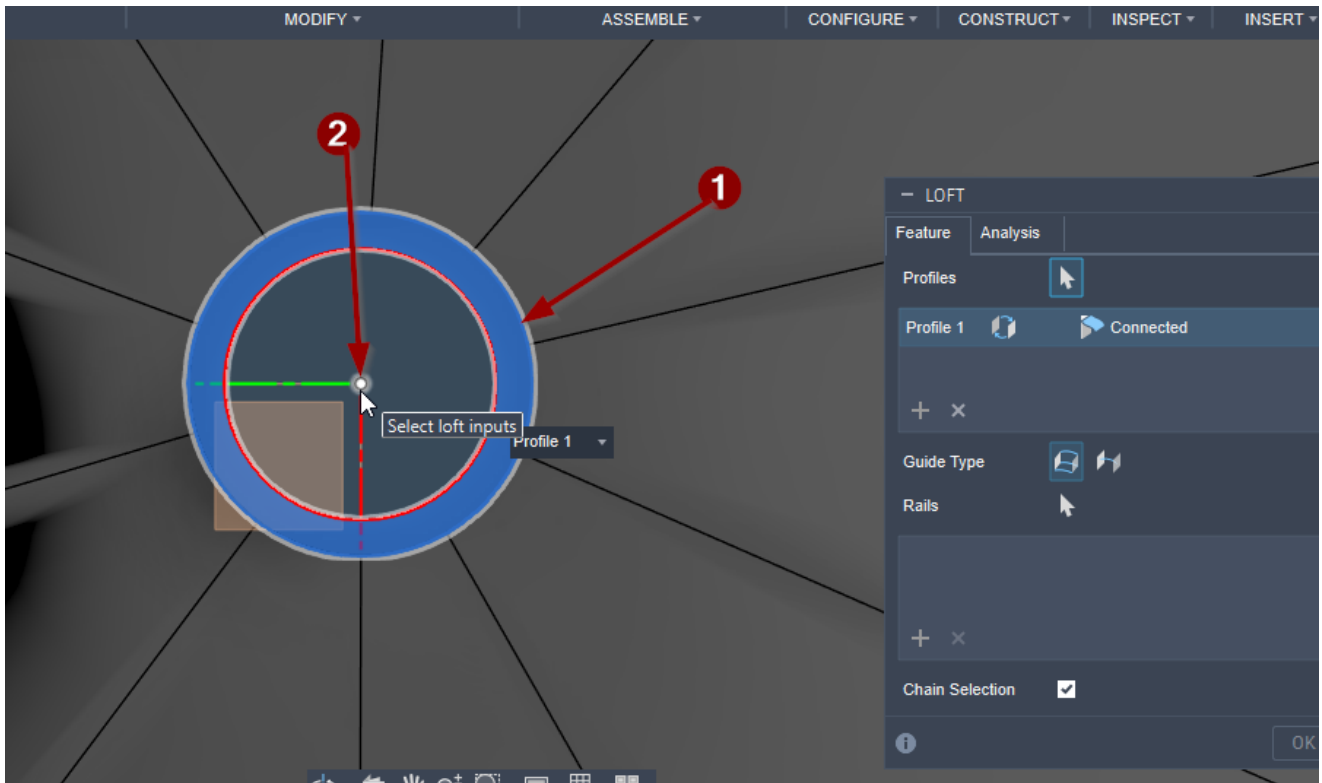


Place a point at the center.



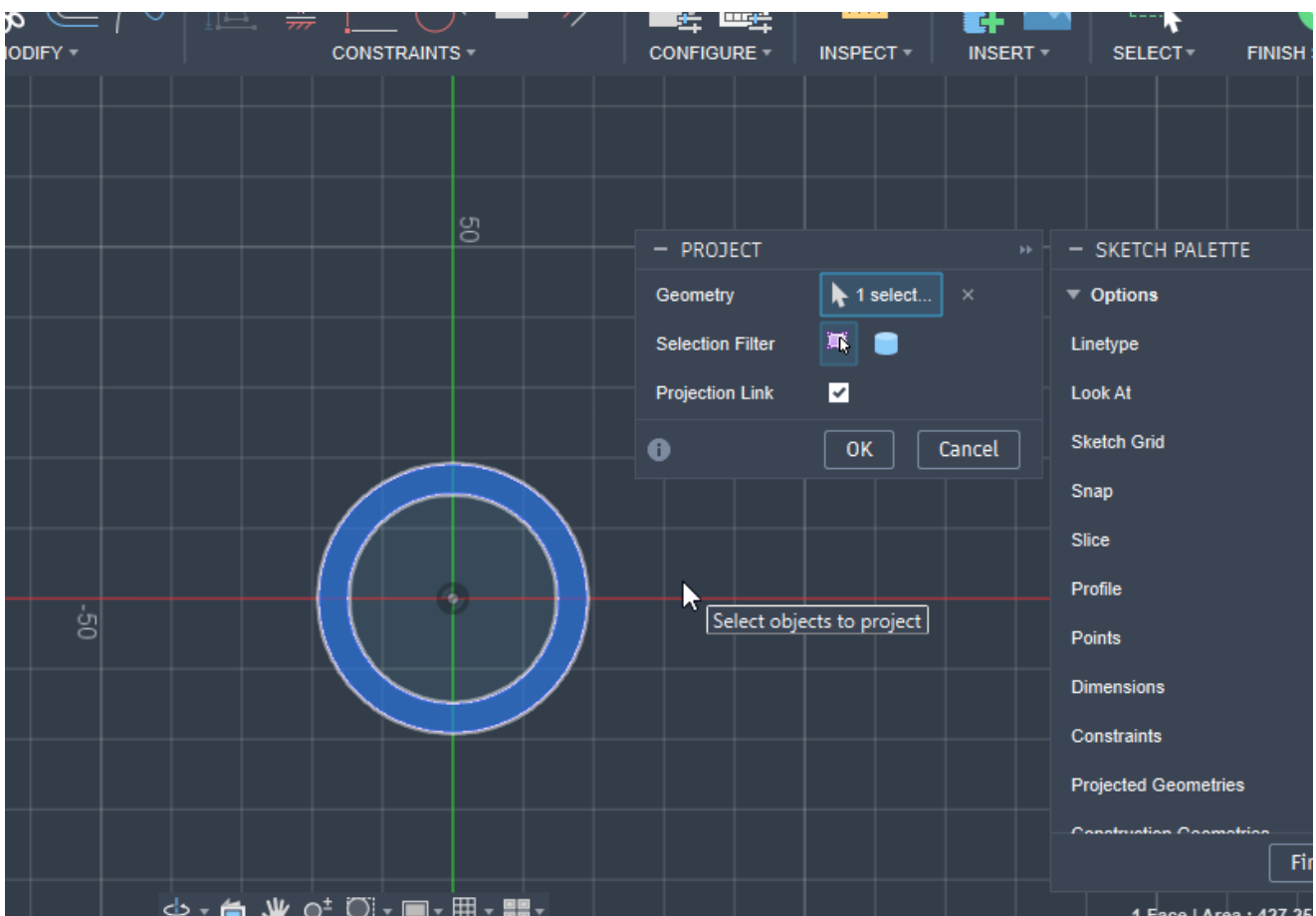
Solid → Loft.

1. Select pipe bottom circle
2. Select the single sketch point → error because geometry is interfering.

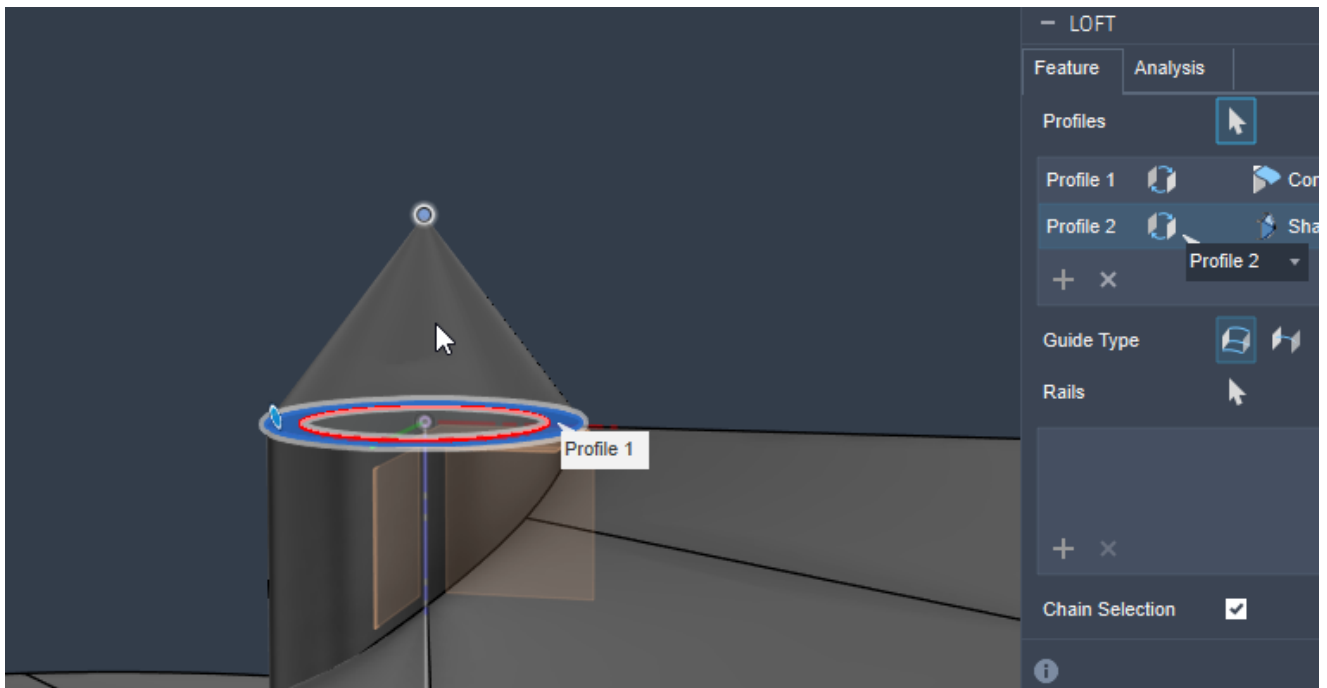


Fix the error:

Project pipe circles into sketch → click OK → retry Loft.



Use Project in sketch to include circle edges.



Loft works → final auger tip created.
