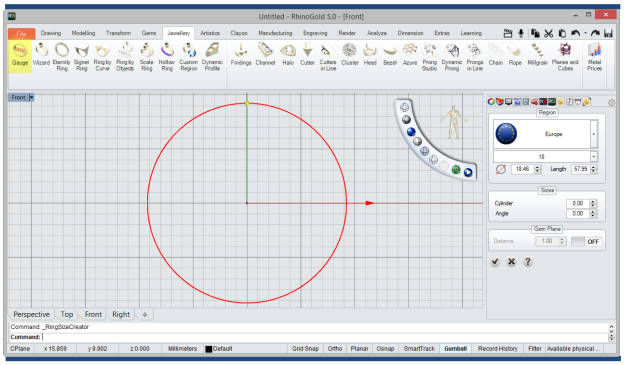
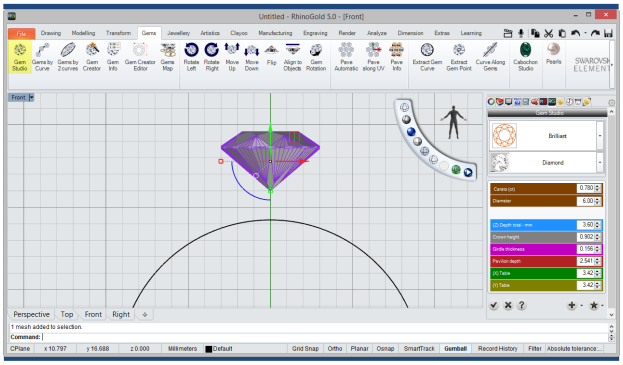
Floral Ring

In this tutorial we are going to try some of the most useful commands in RhinoGold. Powerful tools like Extrude, Gems by Curve, Pave Automatic, Dynamic Profile and Ring Wizard.



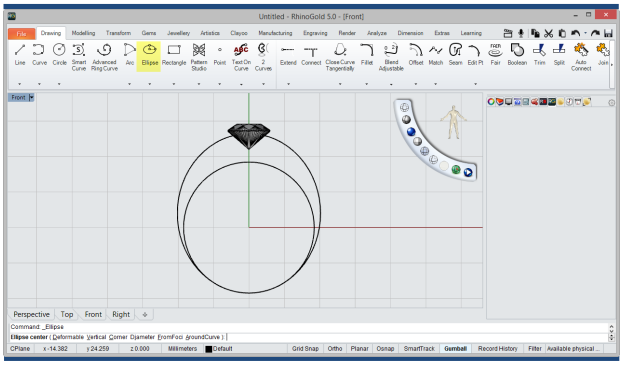
1 Gauge

In Jewellery tab, with the Gauge tool, we'll define a 18 ring size of European type, in the front view.



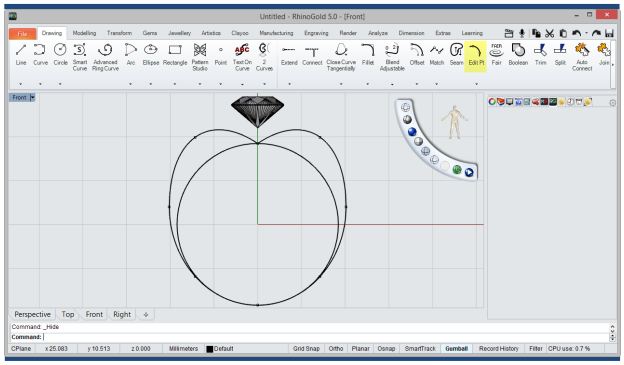
2 Gem Studio

Now, in the Gems tab, with the tool Gems Studio, we'll define a Stone of 6mm and we sitúate to 2mm of the Curve.



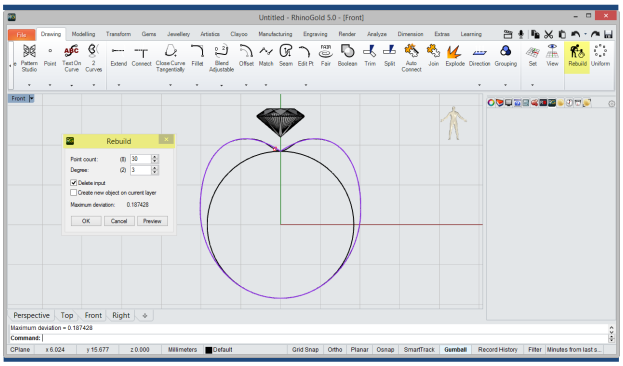
3 Ellipse

Then, we'll trace a curve with the Ellipse tool, on the Drawing tab. Define a tangent Ellipse to the Gauge curve, as shown in the picture.



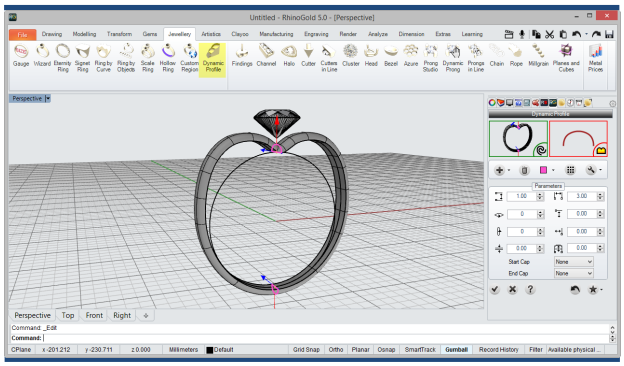
4 Edit Points

Now, following in the Drawing tab, we'll select the Edit Points tool, apply it to the superior control point of the Ellipse and will position it tapping to the Gauge Curve.



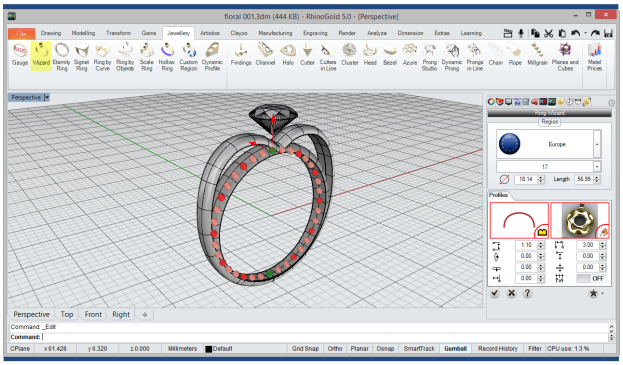
5 Rebuild

Then, we'll apply the Rebuild tool to the curve Ellipse, smoothing the vertex.



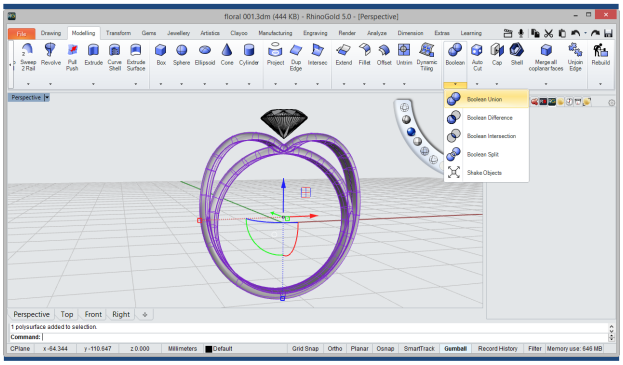
6 Dynamic Profile

Now, in the Jewellery tab, we'll select the Dynamic Profile tool and apply it to the ellipse curve defining a Dynamic Profile of 1mm in thick and 3 mm in wide at the top profile and 2 mm in the lower profile. Select a rounded profile as picture show.



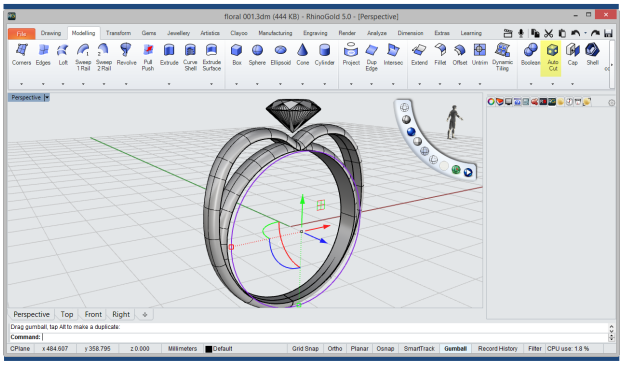
7 Ring Wizard

Then, we'll select the Ring Wizard tool, in the Jewellery tab and define a 17 European ring with a round profile similar to the Dynamic Profile. Edit the top profile with 3 mm wide and 1.10 mm thick, the bottom profile with 1.10 mm thick and 2 mm wide.



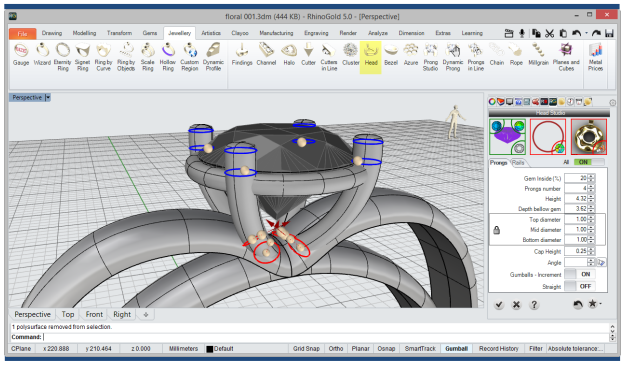
8 Boolean Union

Now, we'll apply a Boolean Union between the Dynamic Profile and Shank.



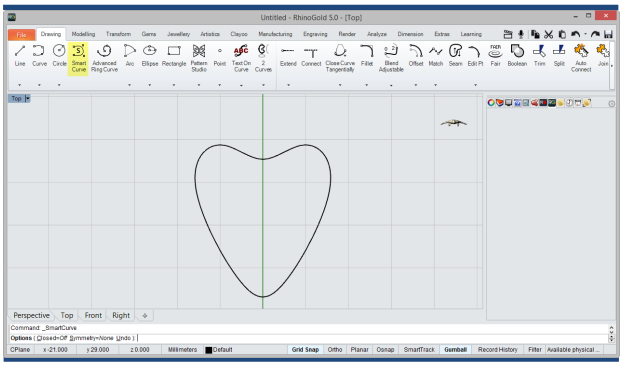
9 Auto Cut

Then, we'll select the first Gauge curve and Shank and will apply the Auto Cut tool, in the Modelling tab.



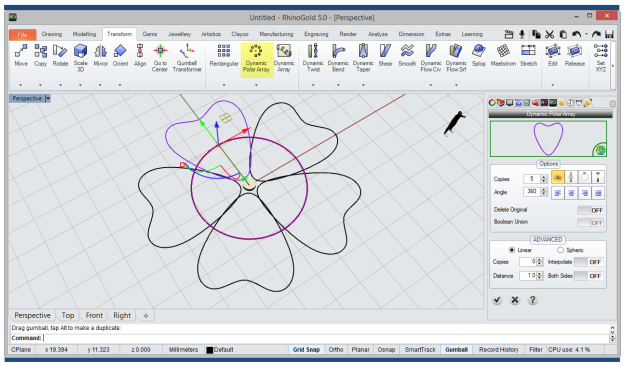
10 Head

Then, we'll select the Head tool, in the Jewellery tab and define a Head for the Gem, as shown in the picture.



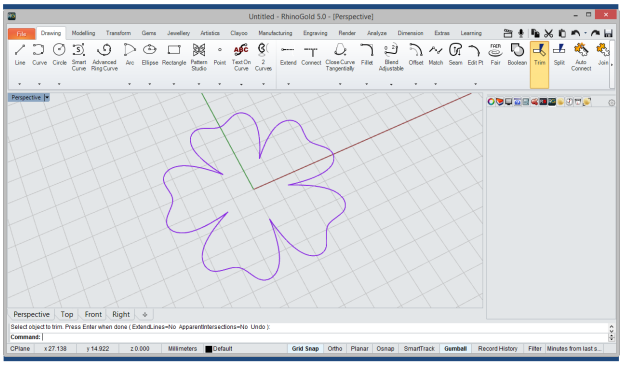
11 Smart Curve

Then, we'll select the Smart Curve tool, in the Drawing tab and will trace a similar curve to that shown in the image.



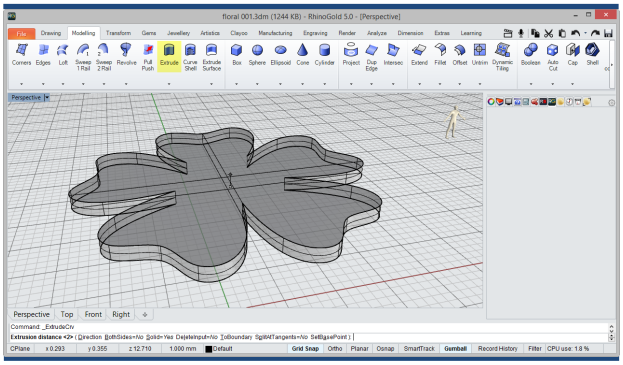
12 Dynamic Polar Array

Now, we'll define an Array of 5 copies to the curve traced in the previous step, with the Dynamic Polar Array tool, in the Transform tab.



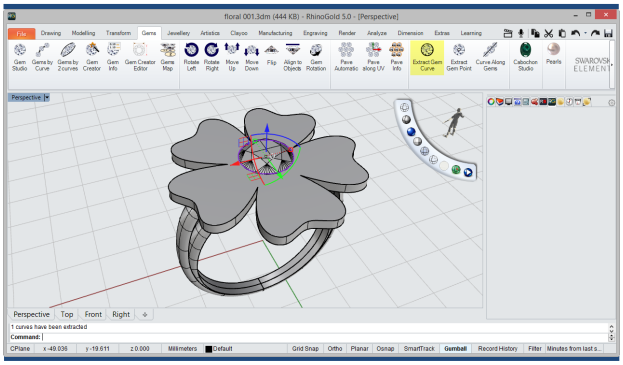
13 Trim/Join

Then, we'll apply the Trim tool, in the Drawing tab to remove intersecting curves of the Array. Then apply the Join tool to the curves.



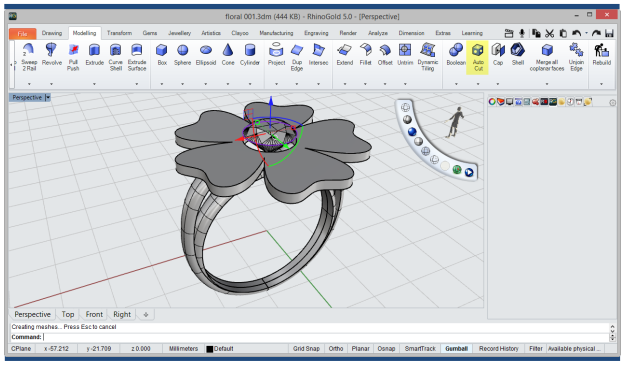
14 Extrude

In this step, we'll apply the Extrude tool to the curve, in the Modelling tab. We'll define a Extrusion of 2mm.



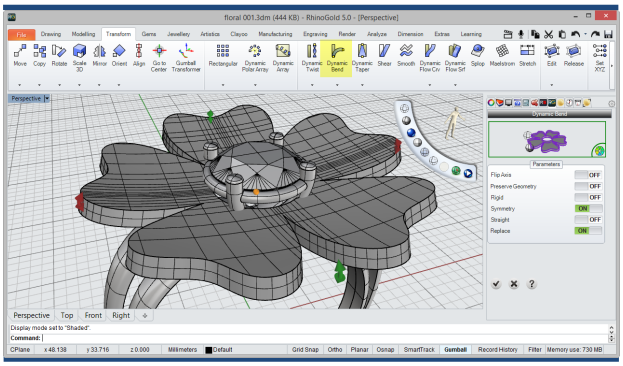
15 Extract Gem Curve

Then, we'll extract the diameter curve of the gem with the Extract Gem Curve tool, in the Gems tab.



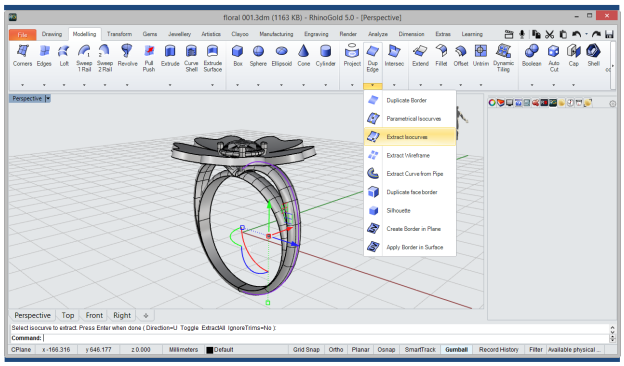
16 Auto Cut

Now, we'll select the Auto Cut tool, in the Modelling tab and apply it between the gem curve and the extruded surface.



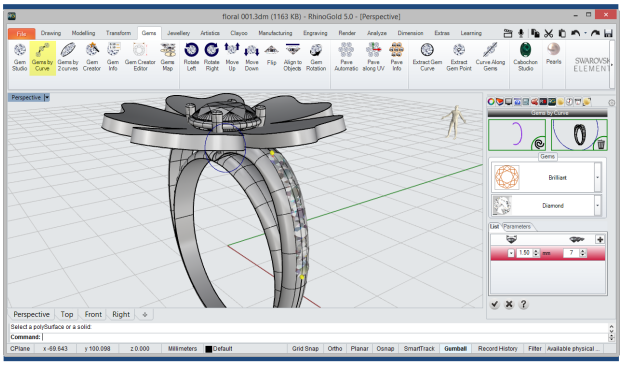
17 Dynamic Bend

Then, we'll edit the extruded surface, as shown in the picture with the Dynamic Bend tool, in the Modelling tab.



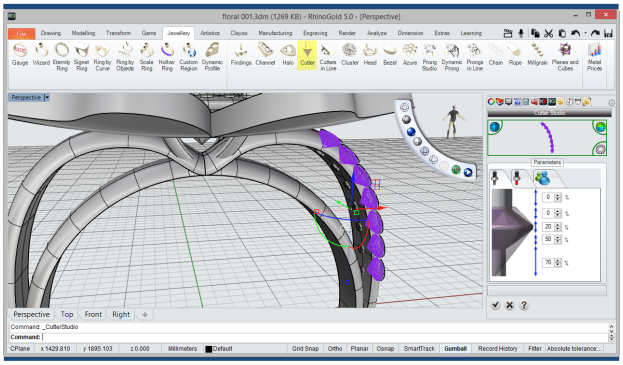
18 Extract Isocurves

Now, we'll extract the center curve of the arm shank with Extract Isocurves tool, in the Duplicate Edge submenu, in the Modelling tab.



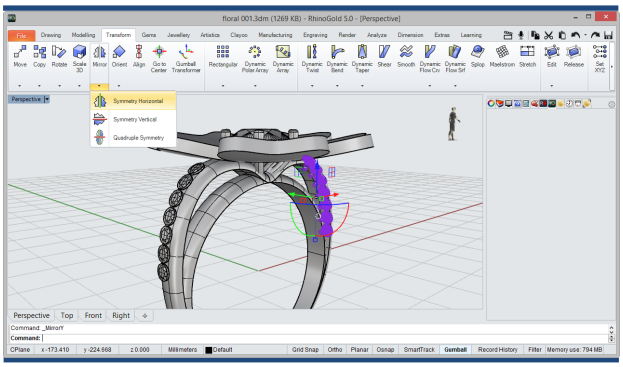
19 Gems by Curve

Then, with Gems by Curve tool, in the Gems tab, we'll define a stones along the extracted curve.



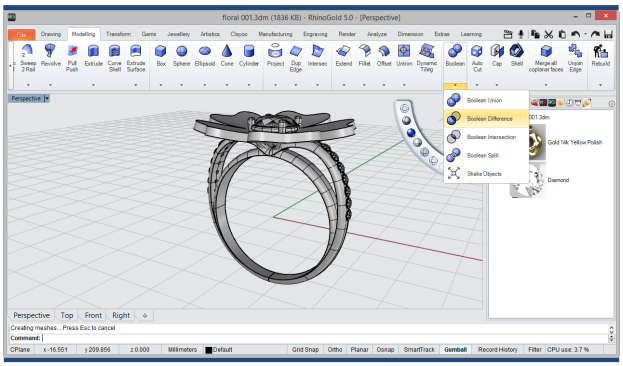
20 Cutter

In this step, we'll define the cutters to the gems with Cutter tool, in the Jewellery tab.



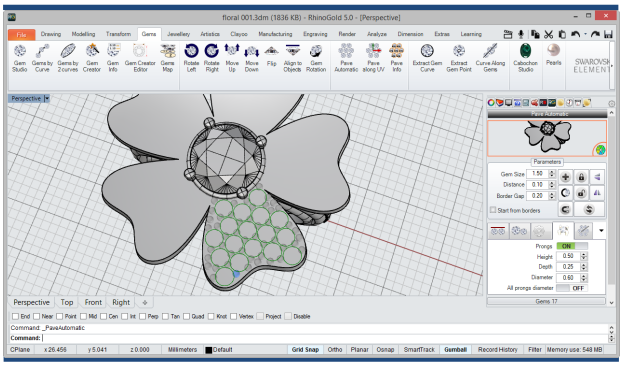
21 Symmetry Horizontal

Then, we'll apply a symmetry to gems and Cutters with Symmetry Horizontal tool.



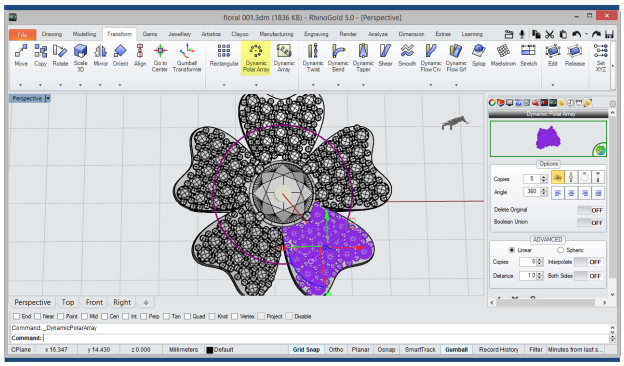
22 Boolean Difference

Now, we'll apply a Boolean Difference to the cutters to subtract from the arm surface.



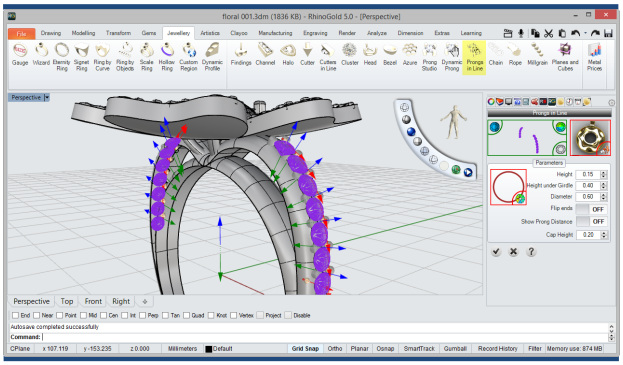
23 Pave Automatic

Then, we'll apply a Pave in the extruded surface with Pave Automatic tool, also define the gem prongs.



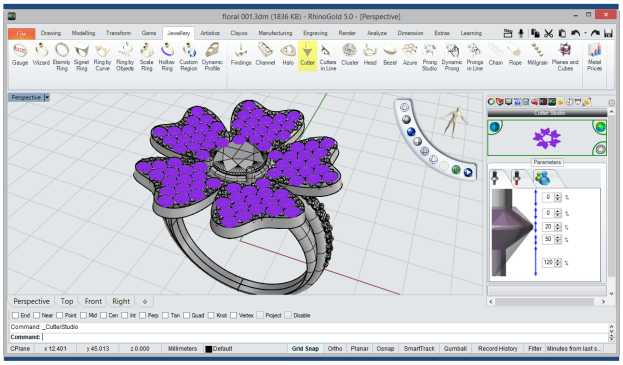
24 Dynamic Polar Array

Now, we'll apply an Array of 5 copies to the gems and Pave prongs with Dynamic Polar Array tool.



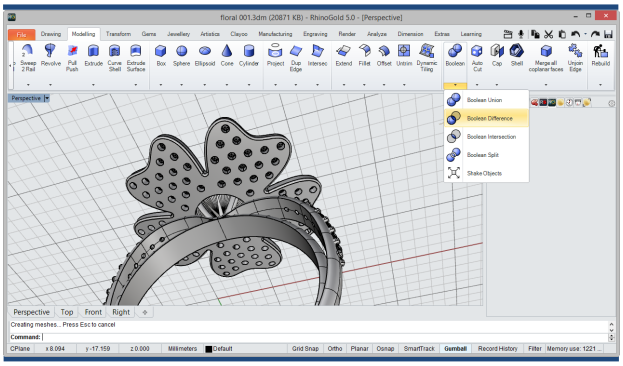
25 Prongs in Line

Then, we'll define the prongs to the arm gems with Prongs in Line tool, if is required we'll edit the prongs with the Edit option.



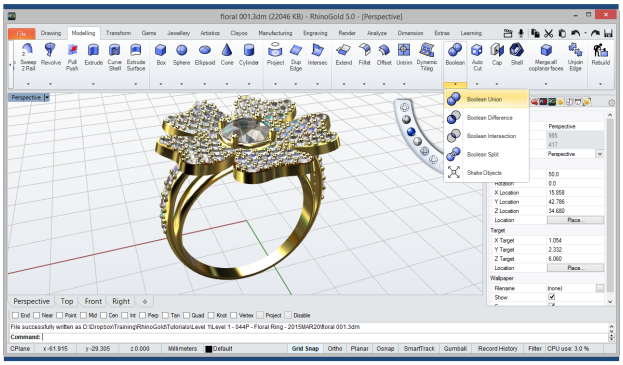
26 Cutter

In this step, we'll define the cutters to gems with Cutter tool, in the Jewellery tab.



27 Boolean Difference

Then, we'll apply a Boolean Difference to subtract the cutters from the surface.



28 Boolean Union

Finally, we'll apply a Boolean Union between solids to unify the piece.