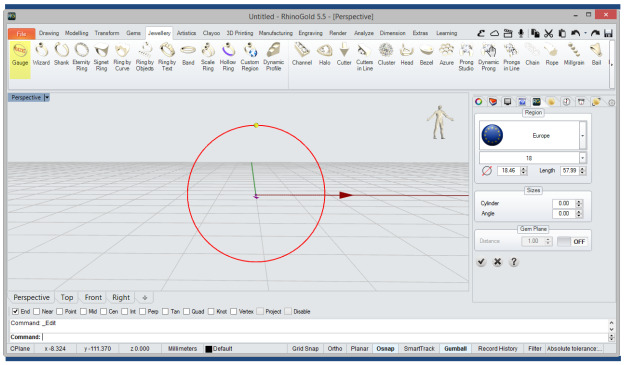
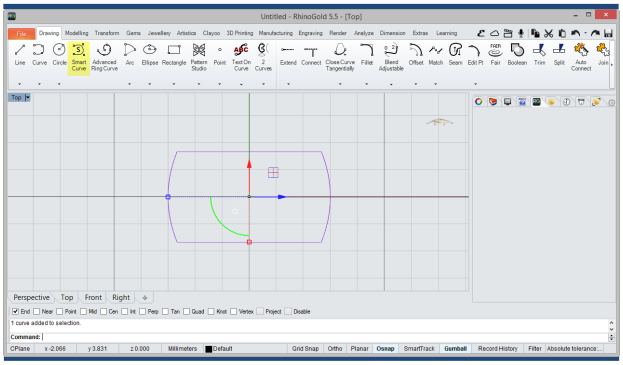
Chained Ring

In this tutorial we'll try some of the more useful commands in RhinoGold. Powerful tools such as Gauge, Curve Shell, Gem Studio, Dynamic Polar Array and Dynamic Profile.



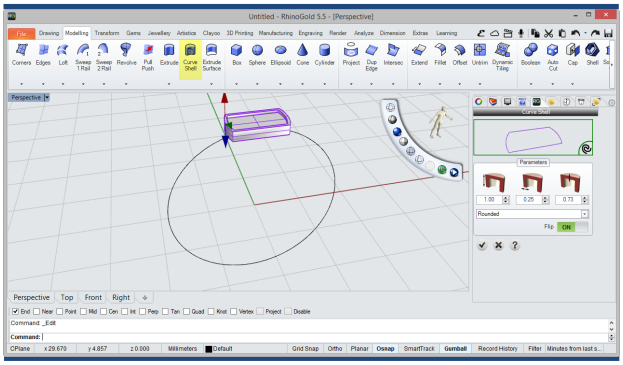
1 Gauge

First, we'll go to the Jewellery tab, select the Gauge tool and define a European ring type of 18 in size.



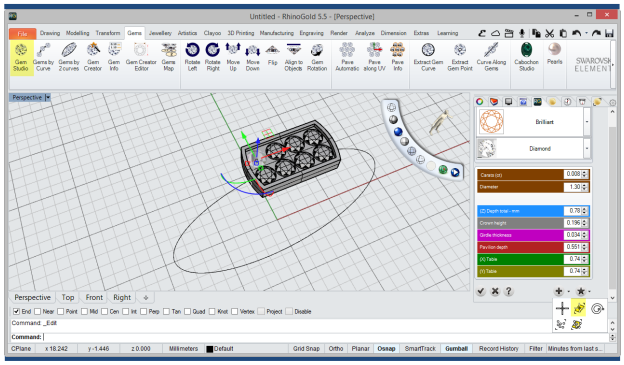
2 Smart Curve

Then, we'll select the Smart Curve tool and trace a curve of 5.5mm x 3mm similar to that shown in the image.



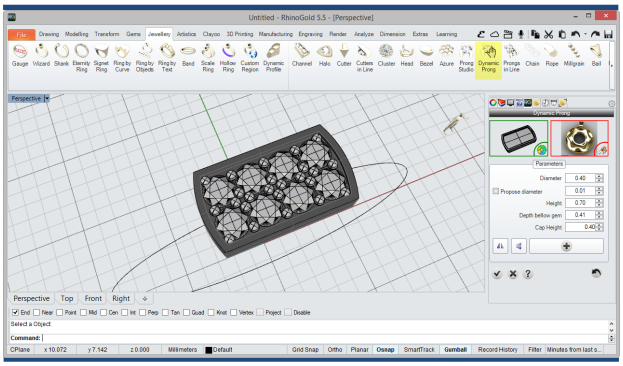
3 Curve Shell

Now, we'll apply the Shell Curve tool of Modeling tab in the curve traced in the previous step. We'll respect the parameters shown in the image.



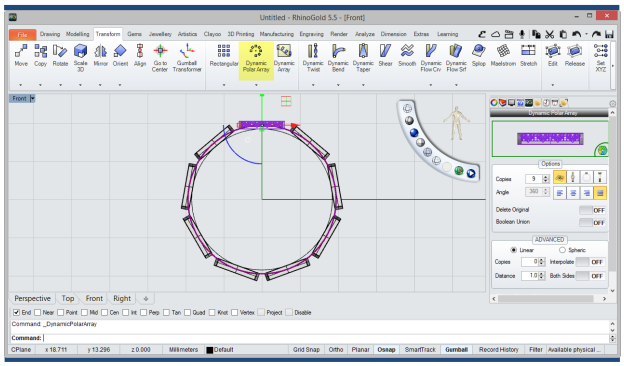
4 Gem Studio

Now, we'll select the Gem Studio tool and define 8 gems of 1.30mm, in the solid surface.



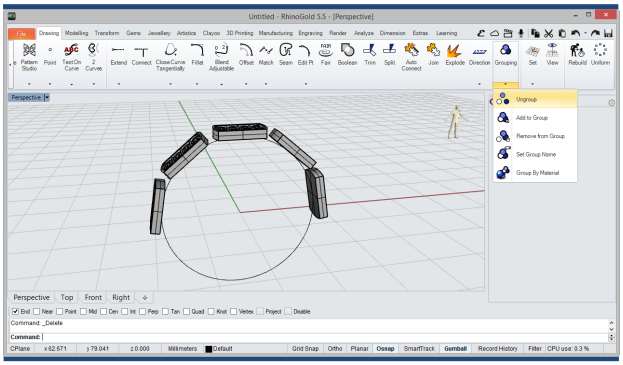
5 Dynamic Prongs

Then, we'll select the Dynamic Prong tool at the Jewellery tab and define the Gem prongs.



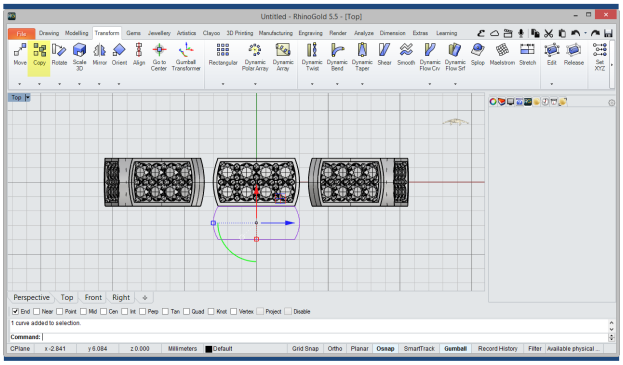
6 Dynamic Polar Array

Now, apply an array of 9 copies to the solid and gems with Dynamic Polar Array tool in the Transform tab.



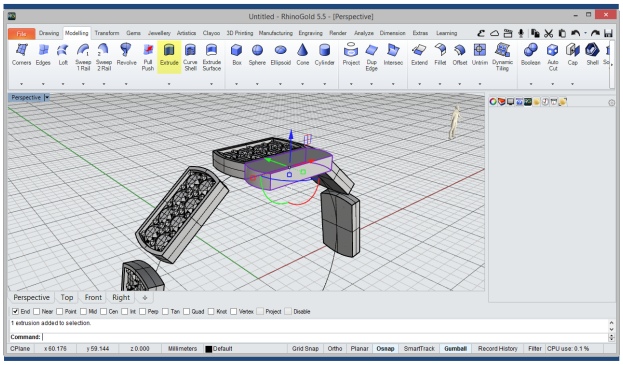
7 Ungroup

In this step, we'll ungroup the array objects with the Ungroup tool, in the Drawing tab and remove the 4 copies of the bottom.



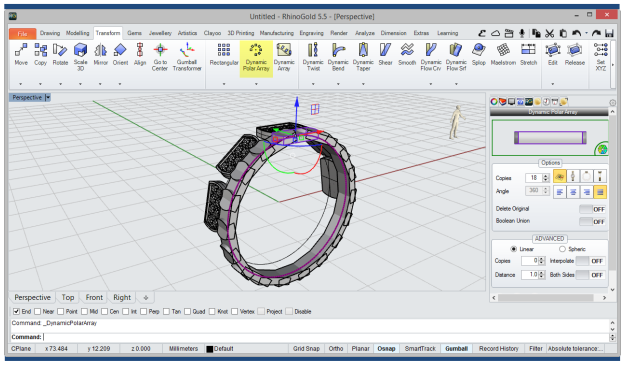
8 Copy

Now, we'll go to the Transform tab and select the Copy tool, will make a copy of the curve traced at the beginning and we'll place it of the same way as in the picture.



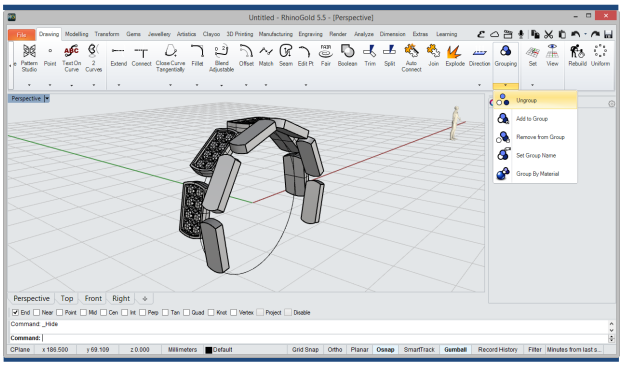
9 Extrude

Then, we'll apply a 1mm Extrusion to the traced curve with Extrusion tool at the Modelling tab.



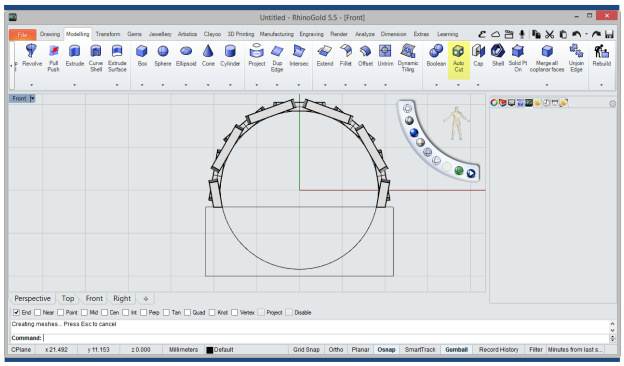
10 Dynamic Polar Array

Now, we'll repeat the operation with the Dynamic Polar Array tool, in this case applying it to the solid extruded in the previous step and and defining 18 copies.



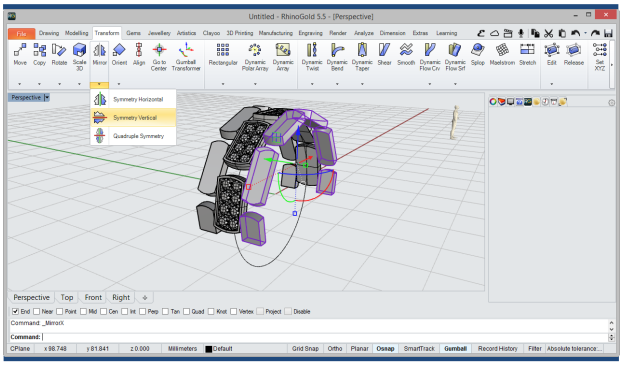
11 Ungroup

Then, we'll ungroup the copies group and remove the necessary solids to obtain the same result as in the image.



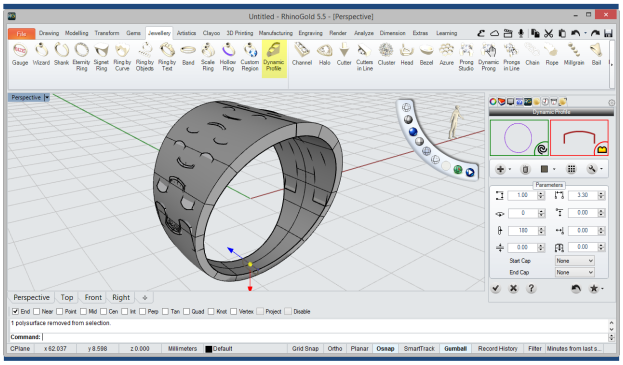
12 Rectangle / Auto Cut

Now, from the front view, we'll define a rectangular curve with the Rectangle tool in the drawing tab. Then apply the Auto Cut tool between the rectangular curve and the second matrix solids, as the picture shows.



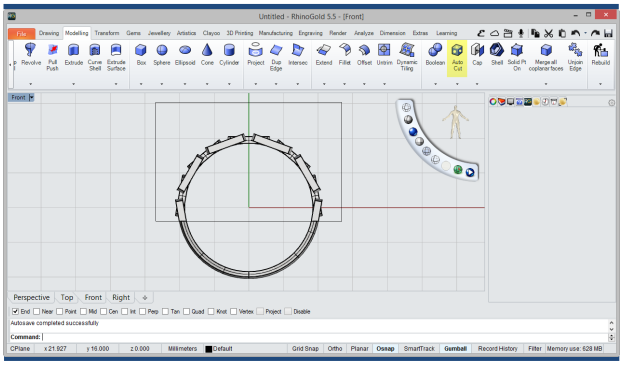
13 Symmetry Vertical

In this step, we'll apply a symmetry to the objects of the second array with Symmetry Vertical tool.



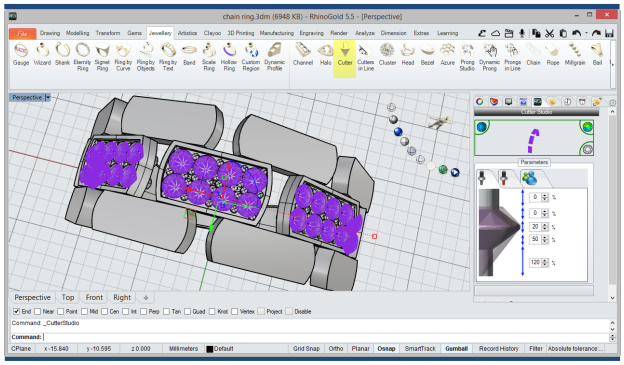
14 Dynamic Profile

Now, we'll select the Dynamic Profile tool, in the Jewellery tab and define a profile of 1mm x 3.30mm on bottom.



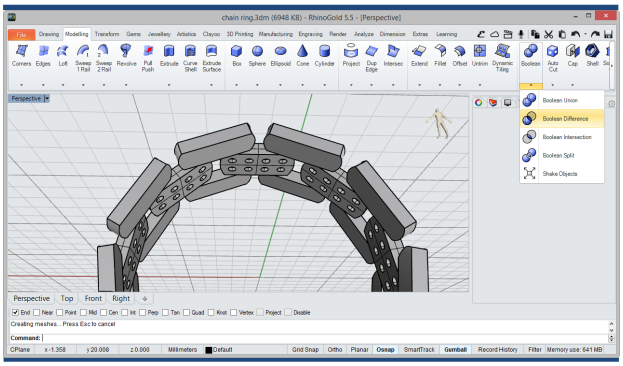
15 Rectangle / Auto Cut

Then, we'll repeat the operation with Auto Cut tool. First we define a rectangle and we'll position it at the top of the ring, then apply the Auto Cut tool between the curve and the dynamic profile.



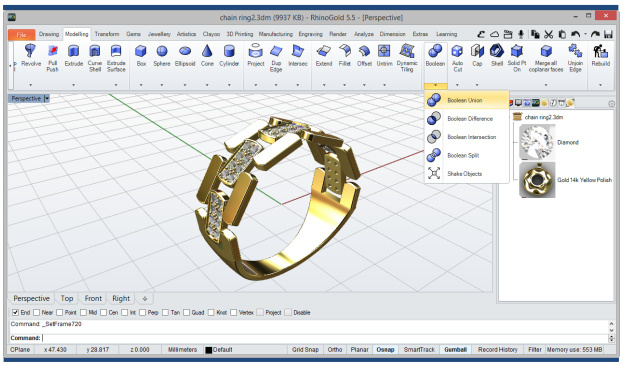
16 Cutter

Now, we'll define the gem cutters with Cutter tool, in the Jewellery tab.



17 Booleana Difference

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



18 Boolean Union

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