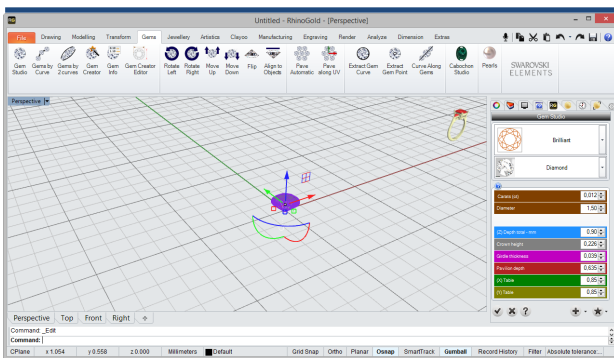


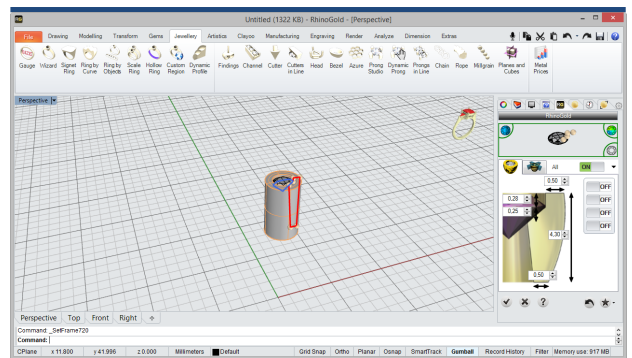
Butterfly Ring

In this tutorial we are going to try some of the more useful commands in RhinoGold. Tools such as Gem Studio, Bezels, Symmetry and Dynamic Polar Array.



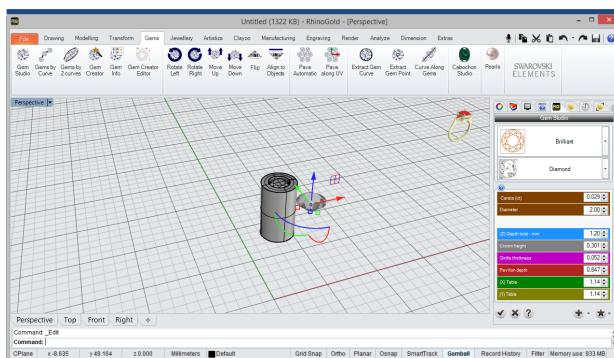
1 Gem Studio

First, we will define a gem 1.5 mm in diameter with Gem Studio tool.



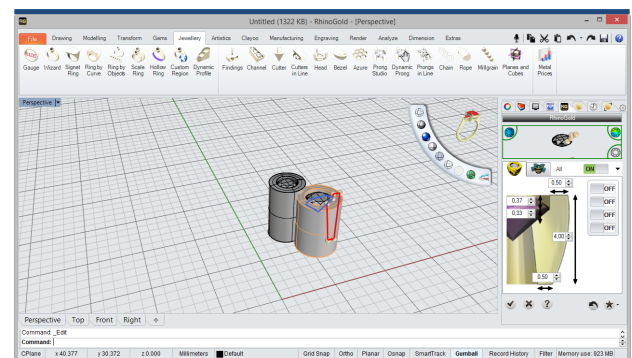
2 Bezel

Then, apply a bezel to the gem with Bezel tool within the Jewellery tab, we will respect the parameters shown in the image.



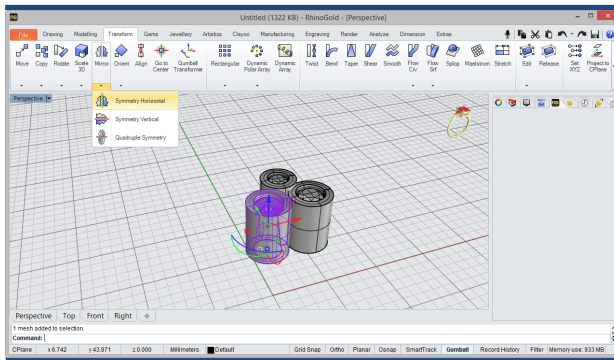
3 Gem Studio

Now, select the Gem Studio tool and define another gem of diameter 2 mm. Will position the gem as shown in the picture.



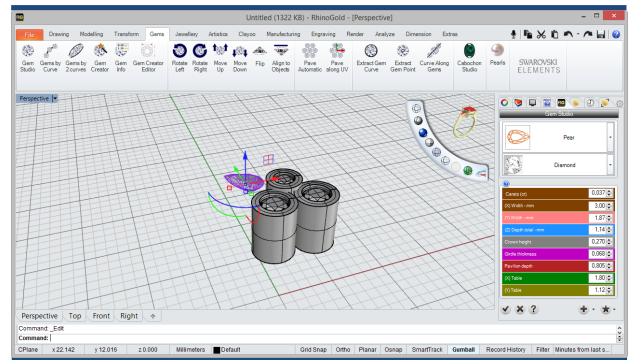
4 Bezel

Repeat the previous step and create a new Bezel, respecting the same parameters.



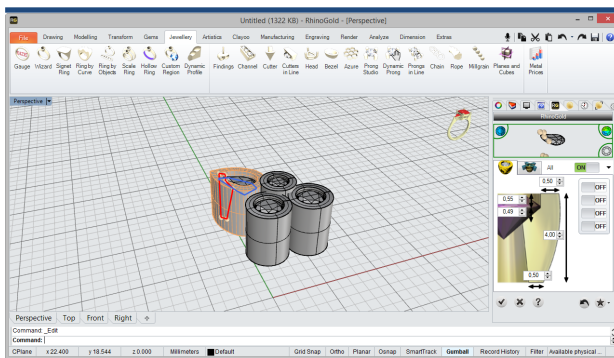
5 Symmetry Horizontal

Then, apply a Horizontal Symmetry in the Mirror sub-menu, in the Transform tab, on the gem and the bezel.



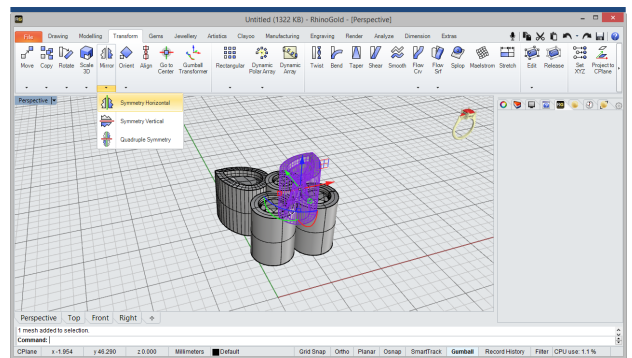
6 Gem Studio

Repeat the Gem Studio tool creating a new gem, with a pear shape and width of 3 mm.



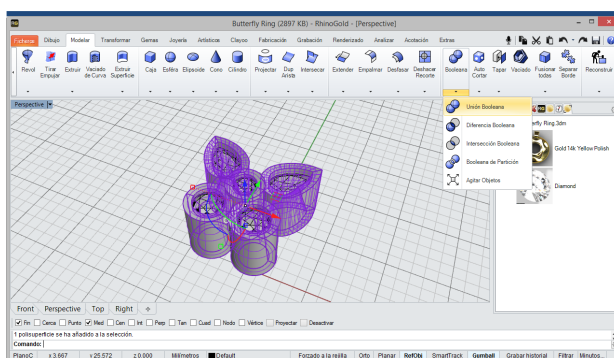
7 Bezel

Again, we will create a new bezel for the gem, respecting the parameters.



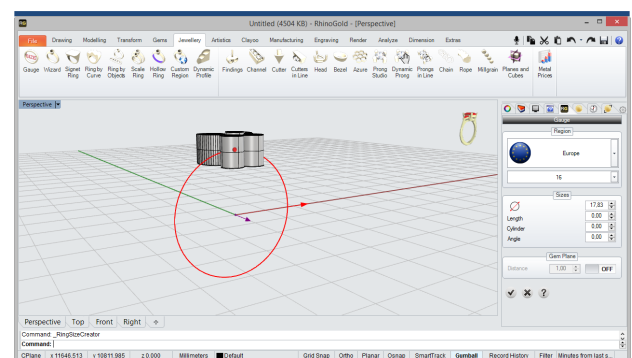
8 Symmetry Horizontal

Now, repeat a Symmetry Horizontal to the gem and the bezel created in the previous step.



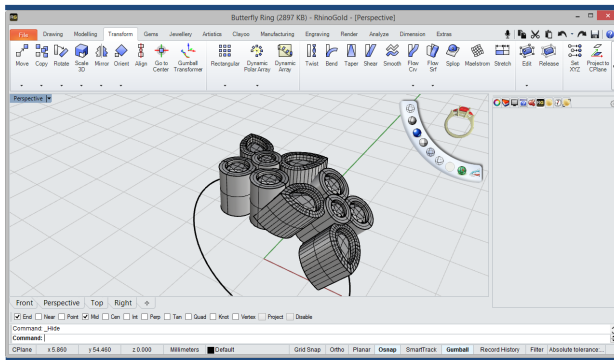
9 Boolean Union

Then, select the Boolean Union tool within the Boolean sub-menu, in Modeling tab, and apply a union between the all the bezels.



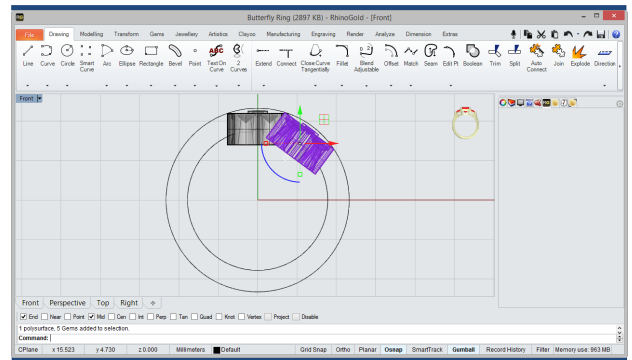
10 Gauge / Gumball

Now, define a European ring size 16, with Ring Gauge tool, in the jewellery tab and post the piece as shown in the picture. Situate bezels and gems to 10 mm from the point 0, we use the Gumball located in the bottom panel.



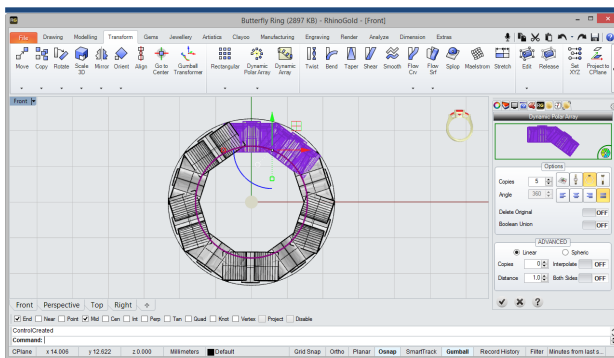
11 Copy

In this step, select the Copy tool and create a copy of the piece, positioning it in the same way as in the picture.



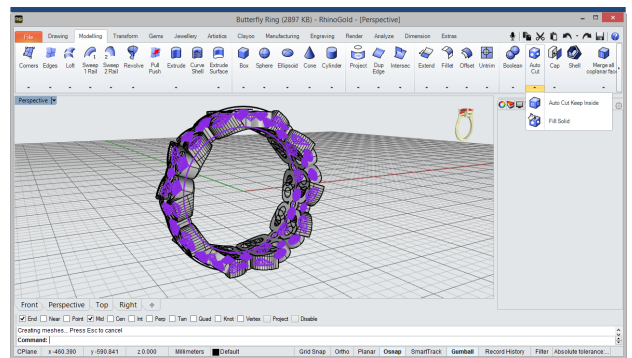
12 Circle / Gumball

Then, define a circle with the Circle tool, with a larger diameter than the ring size. We will use this circle as a reference for positioning the workpiece and using of the Gumball will move.



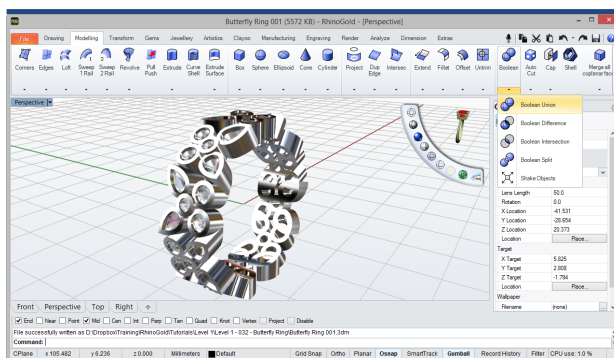
13 Dynamic Polar Array

Now, apply an array to the two pieces with Dynamic Polar Array tool in the Modeling tab. We will respect the parameters shown in the image. If we don't get satisfactory results with the results, we can play with bezels and gems in the Z axis.



14 Auto Cut

Then, we will select all the bezels and the Gauge curve and apply the Auto Cut tool to subtract the excess of the bezels.



15 Boolean Union

Finally we will unite all solids with a Boolean Union tool, unifying the ring.