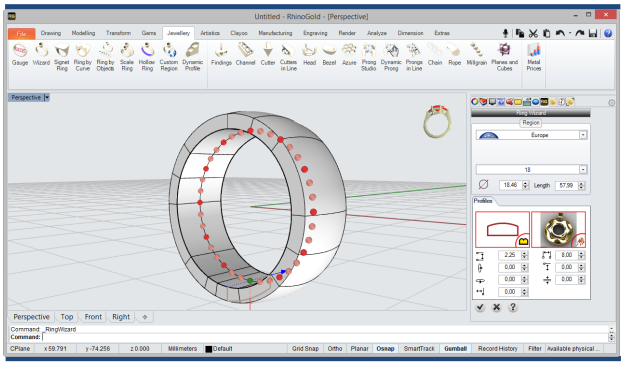
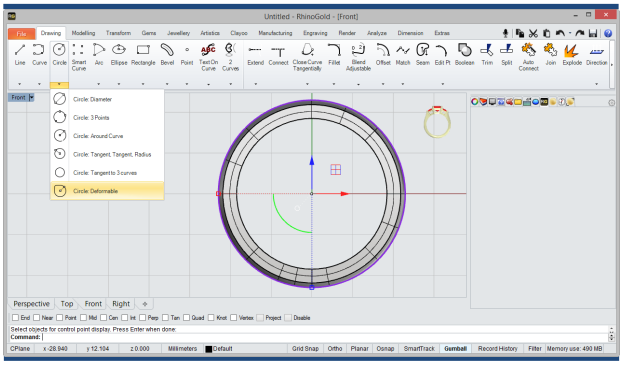
Wavy Band

In this tutorial we will use RhinoGold tools such as Ring Wizard, Gems by 2 Curves , Offset, Duplicate Edge and Boolean Intersection.



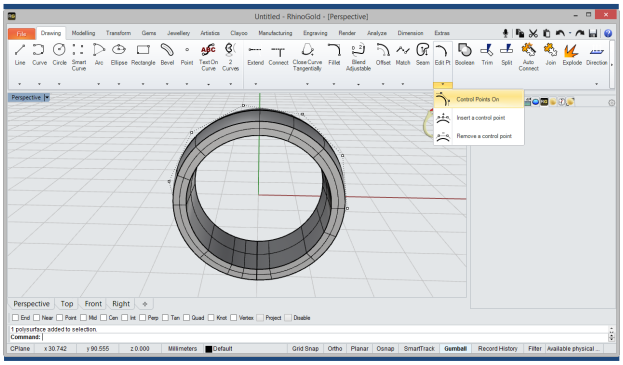
1 Ring Wizard

First, We'll select the Ring Wizard tool, in the Jewellery tab and define a European ring size 18, will edit the ring with 2.25 mm thick and 8 mm wide.



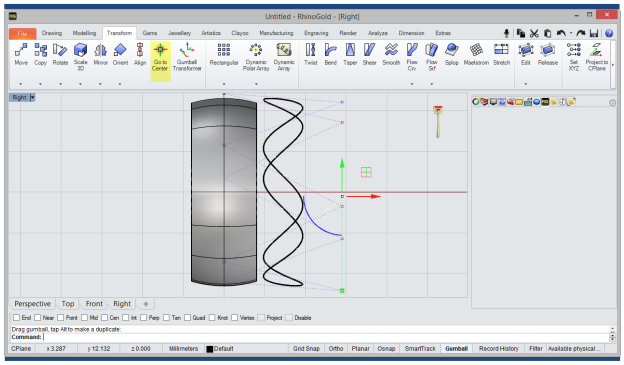
2 Circle: Deformable

Now, we'll select the Circle Deformable tool, in the Circle submenu within the Draw tab. Define a curve fitted to the surface of the ring.



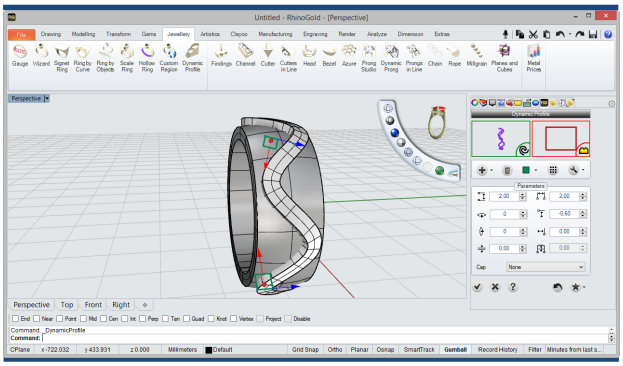
3 Control Points On

Then, select the Control Points On tool from the Edit Points submenu and we'll select the points alternately.



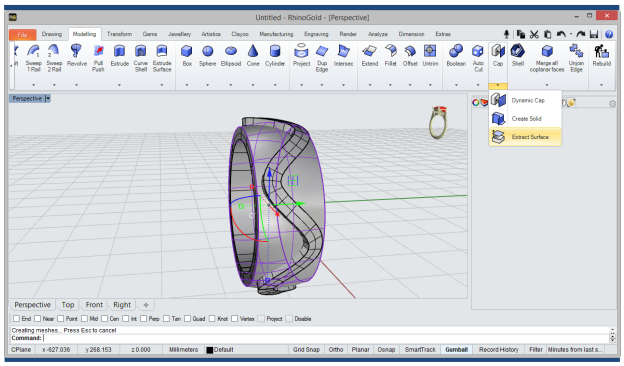
4 Move Points/Go to Center

In this step we'll edit points previously selected and will move outwards obtaining a curve as shown in the picture and then select the curve and will focus it with the Go to Center tool, in the Transform tab.



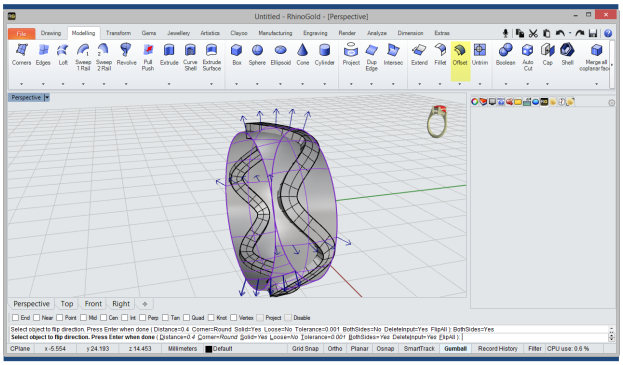
5 Dynamic Profile

Now, we go to the Jewellery tab and select the Dynamic Profile tool and apply it to the curve created above. We will respect the parameters of the image.



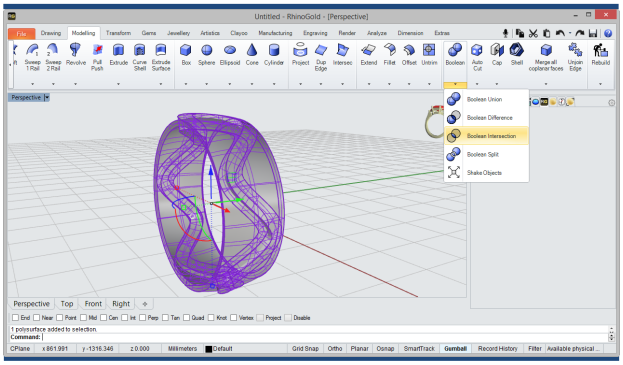
6 Extract Surface

Then, we'll extract the surface of the ring with the Extract Surface tool within the Cap submenu in Modelling tab.



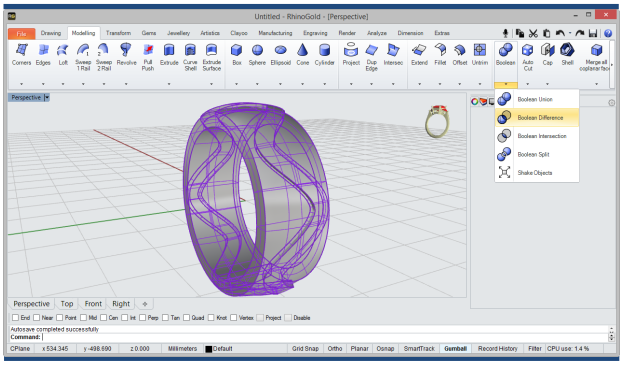
7 Offset

In this step, we'll select the Offset tool, in the Modeling tab and we will apply a 0.4 mm offset with BothSides option activated on Command Line.



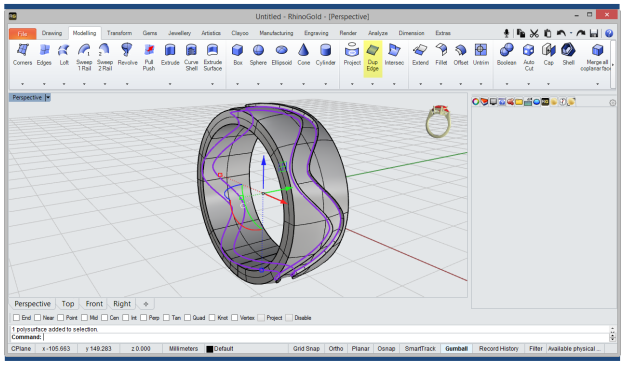
8 Boolean Intersection

Then, we'll apply a Boolean Intersection between the offset surface and the dynamic profile.



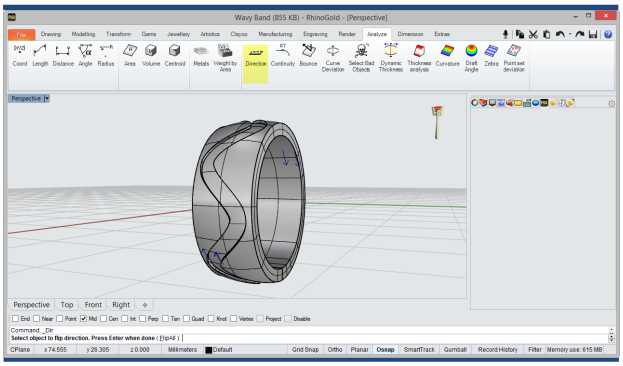
9 Boolean Difference

Then, we'll apply a Boolean Difference between the solid obtained in the previous step and the ring.



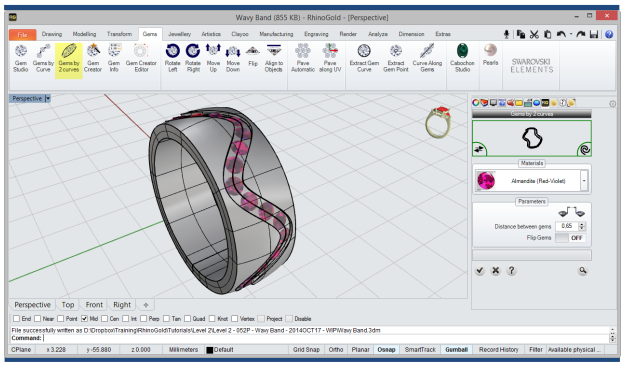
10 Duplicar Edge

Now, duplicate the inner edges of the band with the Duplicate Edge tool, in the Modeling tab.



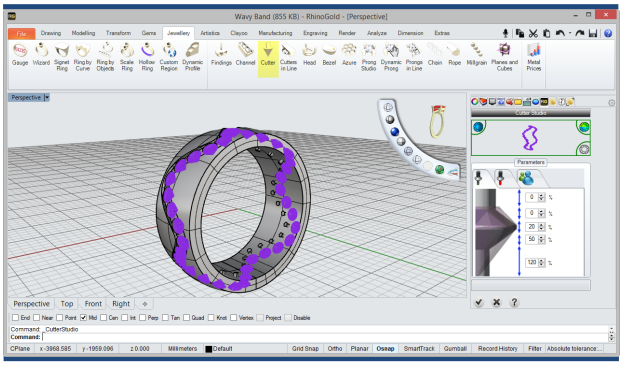
11 Direction

Then, we'll select the two curves created in the previous step and verify their directions with the Direction tool in the Analyze tab, if they are different directions, we will make an equalization making a Click on the direction arrow we want to change.



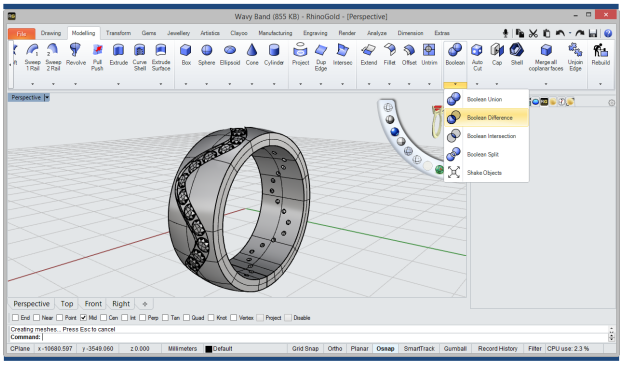
12 Gems by 2 Curves

In this step, we will define Gems of the band with Gems by 2 Curves tool, in the Gems tab. We will select the two curves created above for applying the tool.



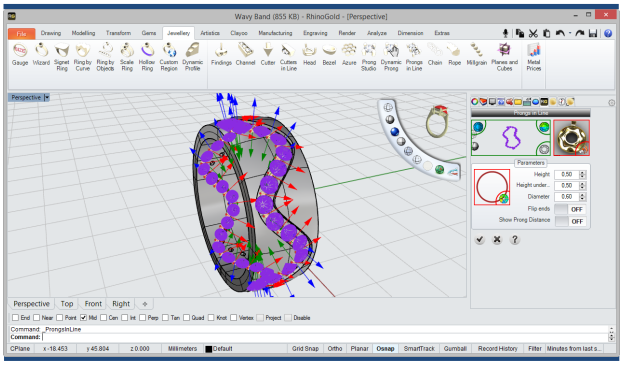
13 Cutter

Now, define the gems Cutters with the Cutter tool, within the Jewellery tab.



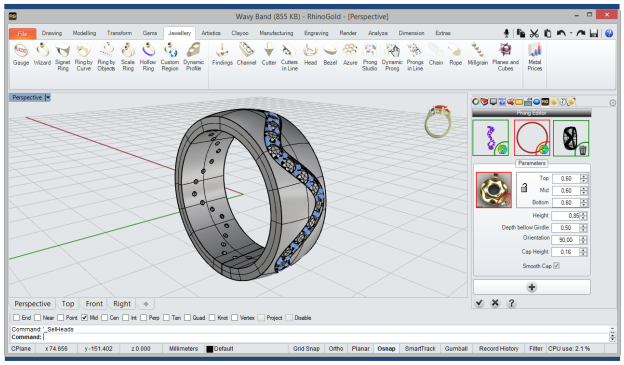
14 Boolean Difference

Then, we'll apply a Boolean Difference at the cutters to subtract of the ring surface.



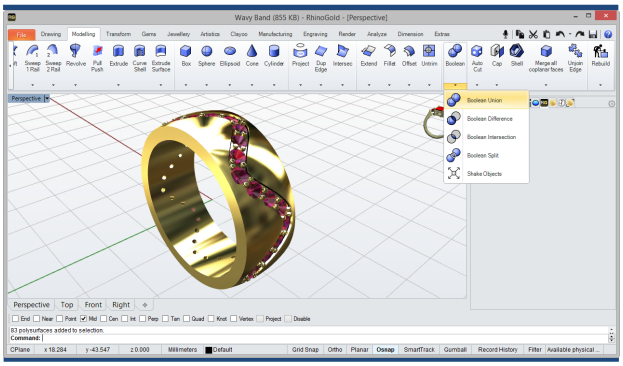
15 Prongs in Line

Next, we'll define the Prongs on the gems with the Prongs in Line tool, in the Jewellery tab.



16 Prong Editor

Now, we'll select and edit the prongs with the Prong Editor option, this tool is pressing the middle mouse button or the F2 key.



17 Boolean Union

Finally, we'll join all solids with a Boolean Union, unifying the ring.