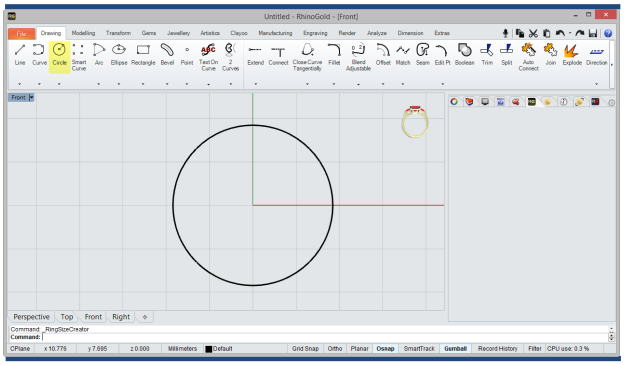
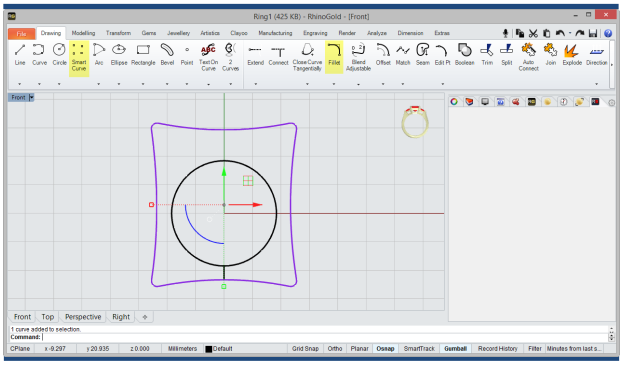
Wedged Gem Ring

In this tutorial we'll use RhinoGold tools such as Gem Studio, Taper, sweep 2 rail, Hollow Ring, Auto Cut and Head Studio.



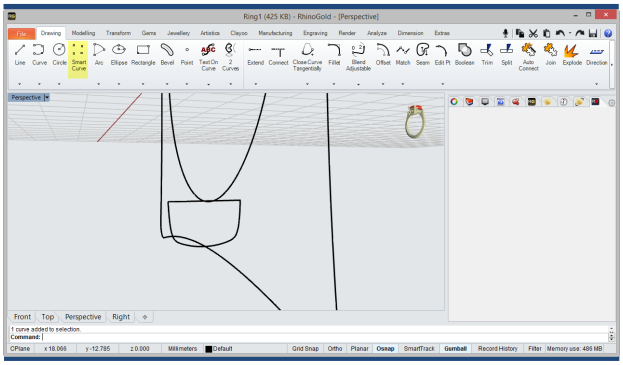
1 Circle

First, we'll select the Circle tool on the Drawing tab and define a curve of 18 mm in diameter.



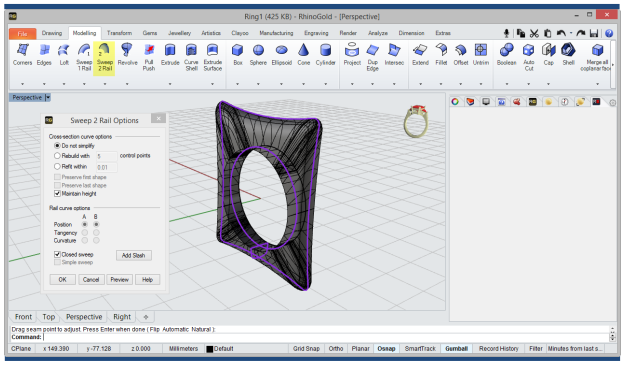
2 Smart Curve/Fillet

Now, following the Drawing tab select the Smart Curve tool and define a curve similar to as shown in the picture, we'll round the edge with the Fillet tool.



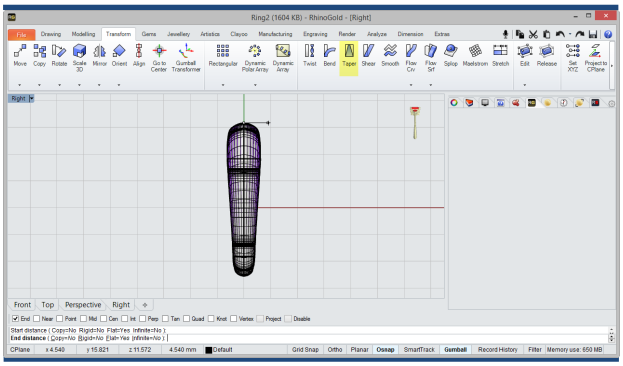
3 Smart Curve

Then, we'll trace a curve with the Smart Curve tool to create the profile of the ring, will try to keep in contact with the other two curves traced above.



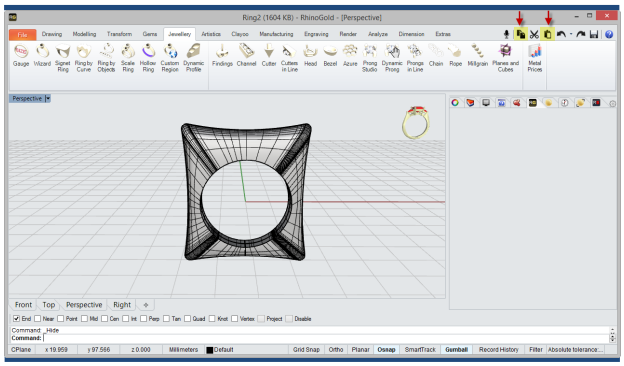
4 Sweep 2 Rail

Then, we'll go to the Modelling tab, select the Sweep 2 Rails tool and we'll apply it between the three curves, activate Maintain Height in the options window.



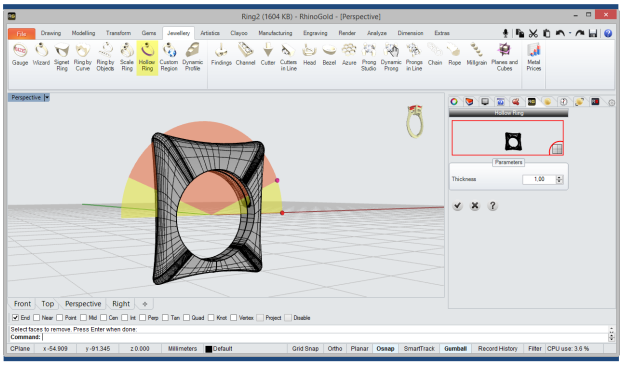
5 Taper

Now, in the Transform tab, select the Taper tool and we' ll widen the top of the ring.



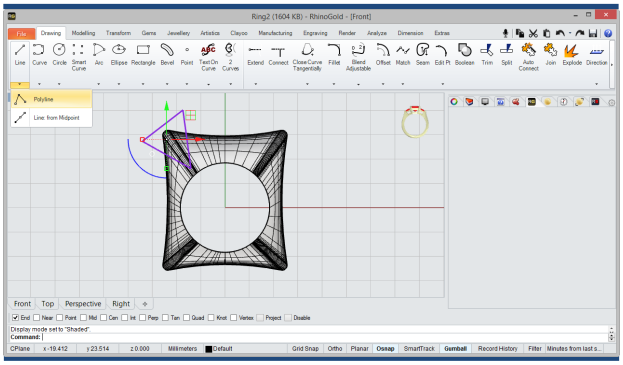
6 Copy/Paste

Then, we'll copy the ring and will paste the copy in the same position as the original.



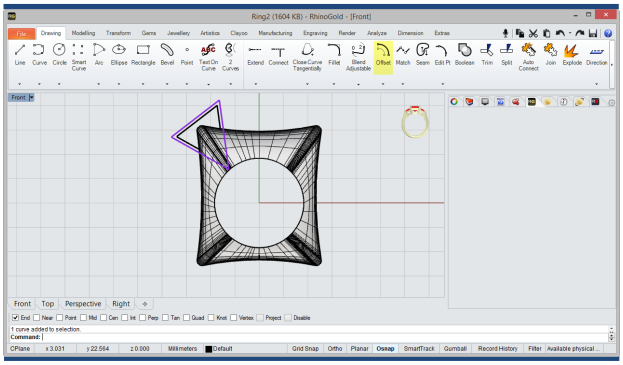
7 Hollow Ring

Then, we'll go to the Jewellery tab and apply the Hollow Ring tool.



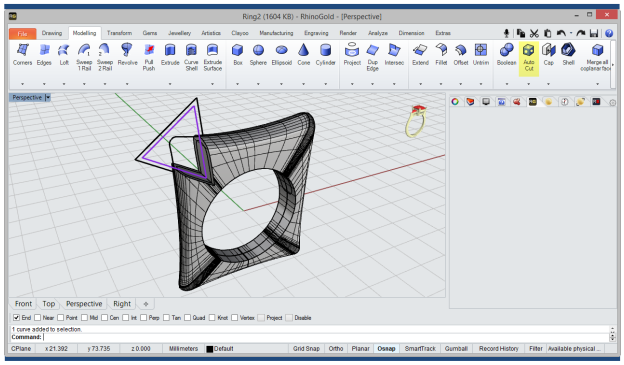
8 Polyline

Now, we'll return to the Drawing tab and will trace a curve as shown in the image, with the Polyline tool.



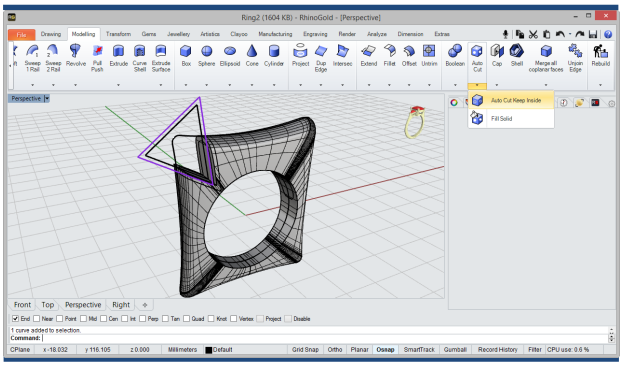
9 Offset

Next, we'll apply a 0.8mm Offset to the curve traced in the previous step, with the Offset tool.



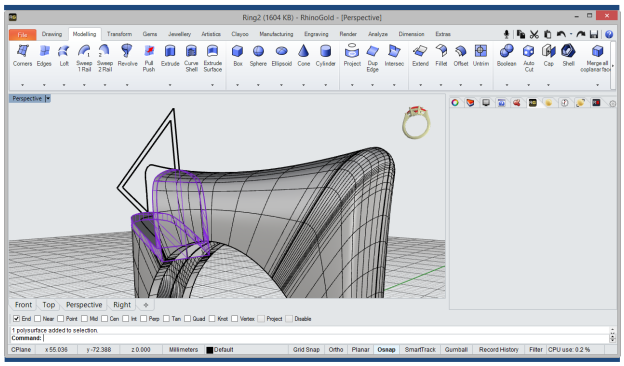
10 Auto Cut

Now, we'll go to the Modelling tab and select the Auto Cut tool, apply it between the small curve and the two rings.



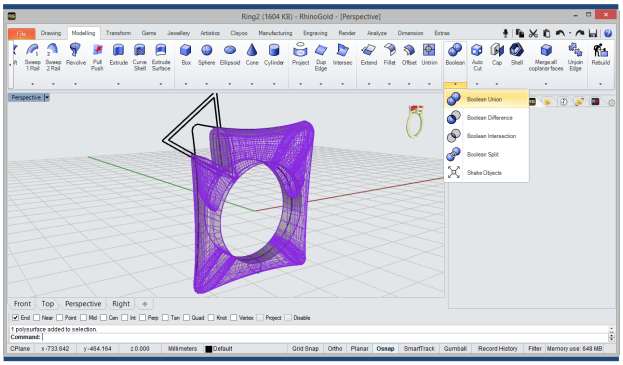
11 Auto Cut Keep Inside

Repeat, the operation but selecting the Auto Cutting Keep Inside tool and applying it between the large curve and the solid ring, without hollowing.



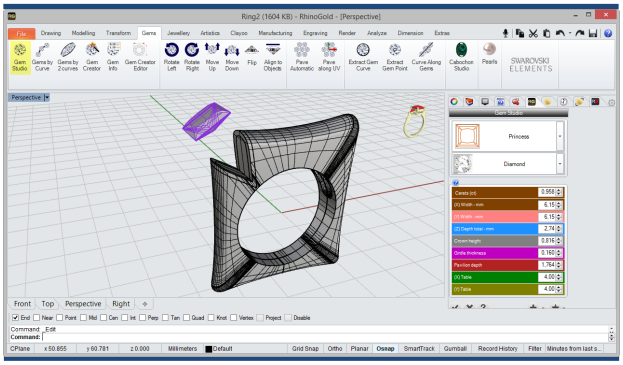
12 Remove

Then, we'll remove the solid ring and obtain a result similar to the image, a hollow ring with the closed edge surface.



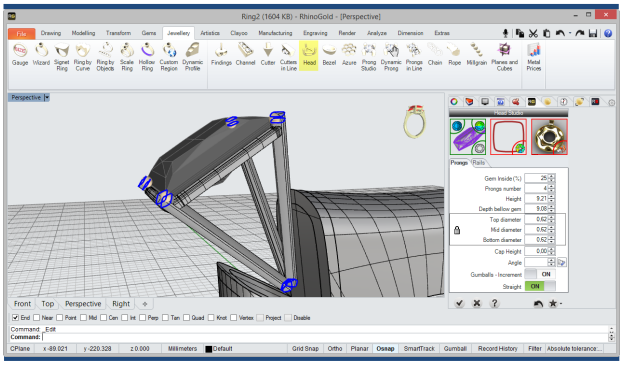
13 Boolean Union

Then, we'll apply a Boolean Union between the Surface created and the ring.



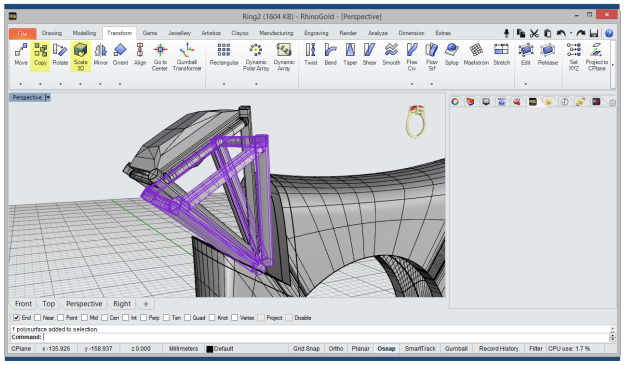
14 Gem Studio

Now, we'll define a 6mm Gem with Gems Studio tool, will choose a gem Princess type.



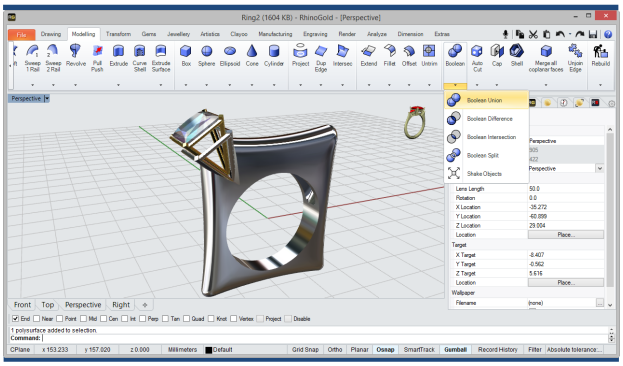
15 Head

Then, we'll apply a similar Gem Head for which are shown in the image, with the Head Tool, in the jewellery tab.



16 Copy/Scale 3D

Now, we'll copy the Head defined in the previous step, and will position it in a similar way to the picture, we help Copy and Scale 3D tools to perform these operations.



17 Boolean Union

Finally, we'll make a Boolean Union between the Shank and Heads, to unify the ring.