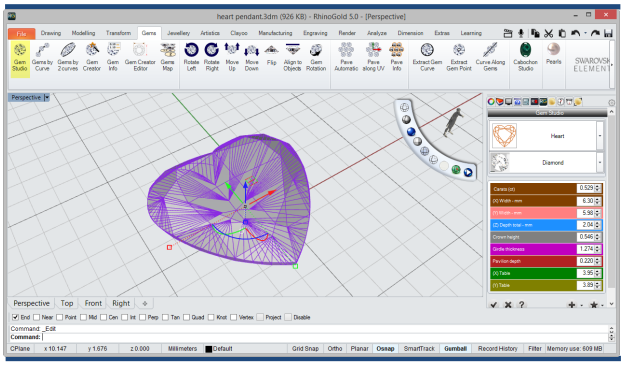
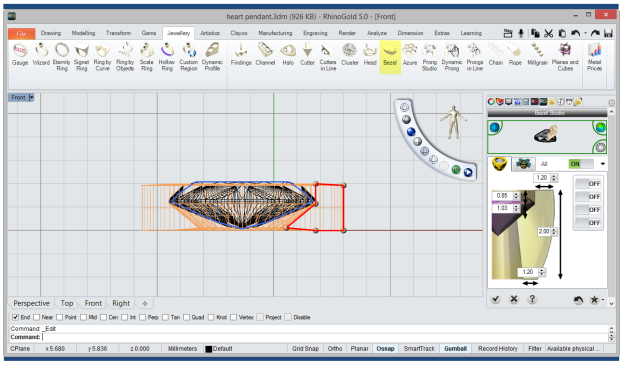
Heart Pendant

In this tutorial we are going to try some of the most useful commands in RhinoGold. Tools such as Smart Curve, Spiral, Extrude, Gems by 2 curves, Gem Studio, Bezel and Pipe.



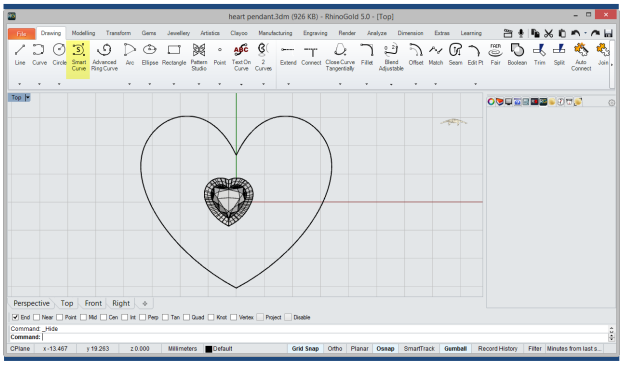
1 Gem Studio

First, we'll define a cut herat gem of 6.30 mm, with the Gem Studio tool.



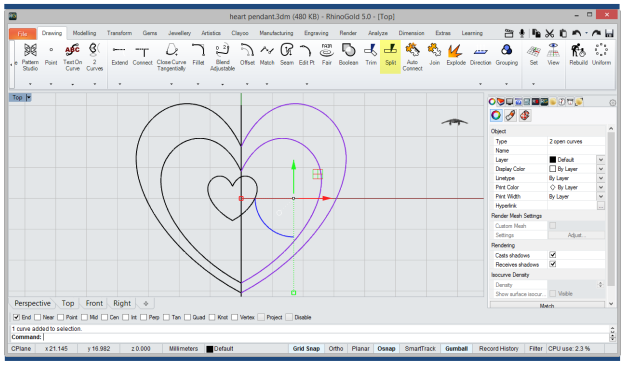
2 Bezel

Then, apply the Bezel tool, in the Jewellery tab and define a bezel that fits the cut gem.



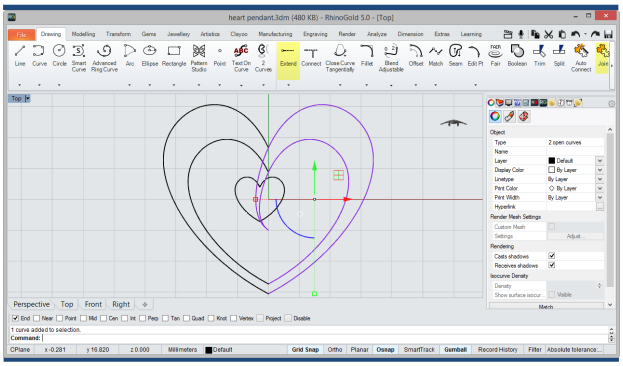
3 Smart Curve

Now, we'll select the Smart Curve tool and will trace a curve of 30 mm, as shown in the image



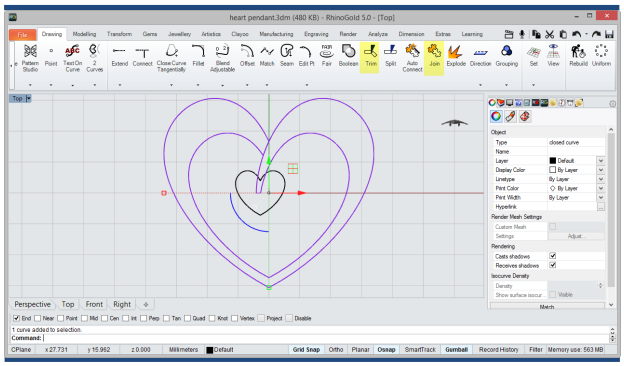
4 Split

In this step, we'll trace a vertical curve sectioned to the previous curve and select the Split tool to divide the two halves.



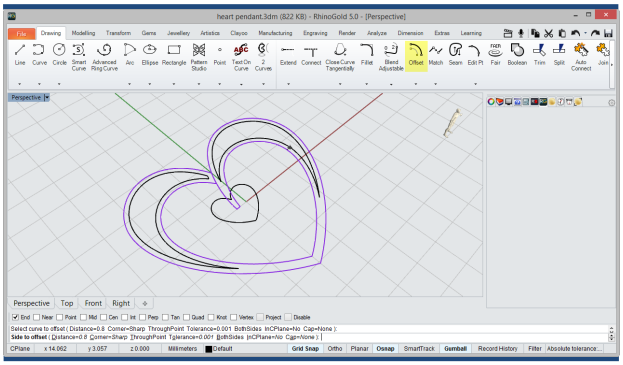
5 Extend/Join

Then, we'll select the Extend tool in the Drawing tab and will trace two curves at the ends of the main curve, then will put together the curves with the Join tool.



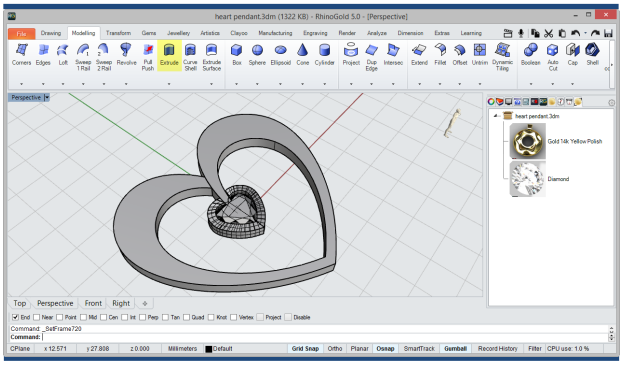
6 Trim/Join

Now, we'll select the Trim tool and remove all intersected curves, then we'll unite the curves in one with the Join tool.



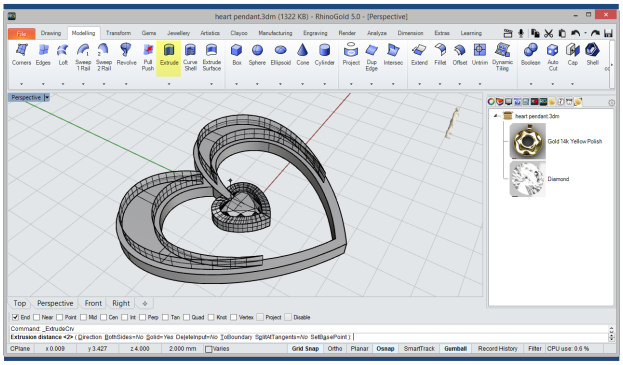
7 Offset/Join

In this step, we'll define four new curves using the Offset tool, and unite between them with the Join tool, as shown in the picture.



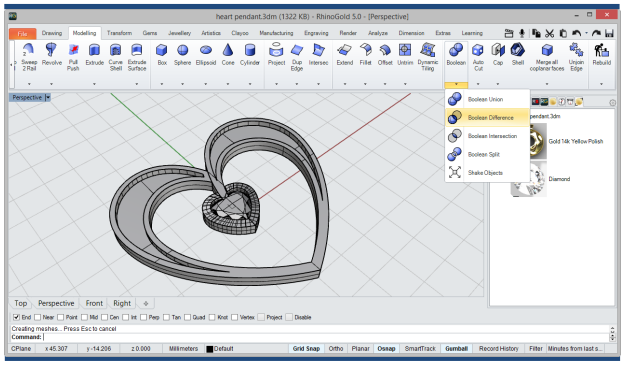
8 Extrude

Then, we'll apply a 2 mm Extrusion to the attached curve with the Extrude tool.



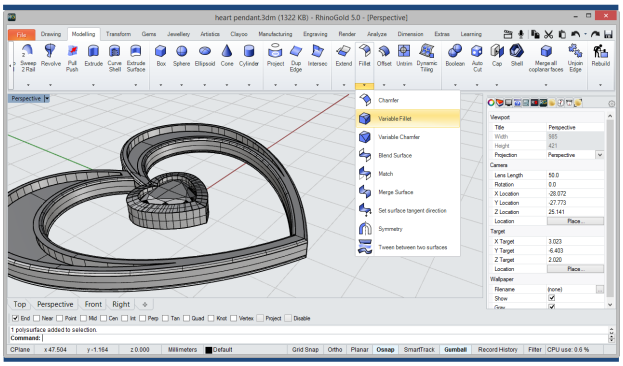
9 Extrude

Then, repeat the Extrude operation but in this case with the inner offset curves, will make a 2mm extrusion on both sides.



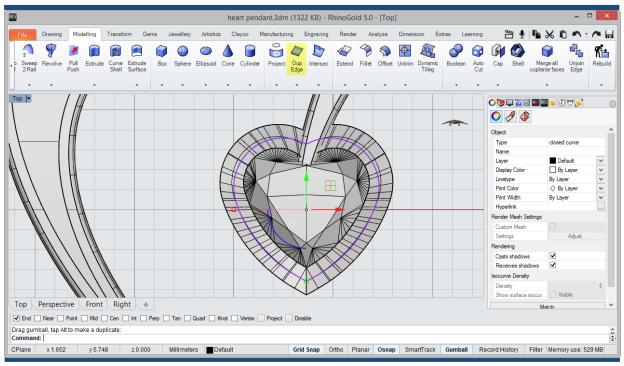
10 Boolean Difference

Now, we'll apply a Boolean Difference between the two extrusions.



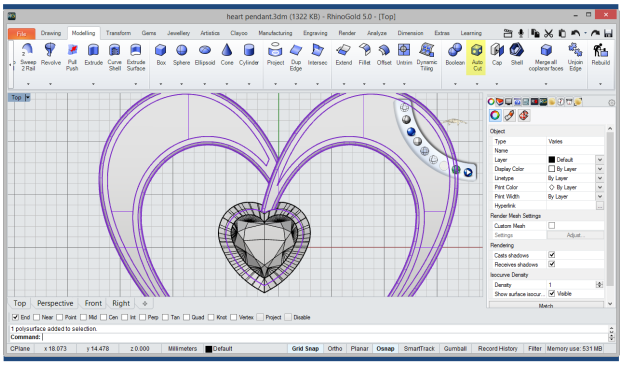
11 Variable Fillet

In this step select the variable Fillet tool and apply it to the extruded solid, define a 0.3 mm fillet.



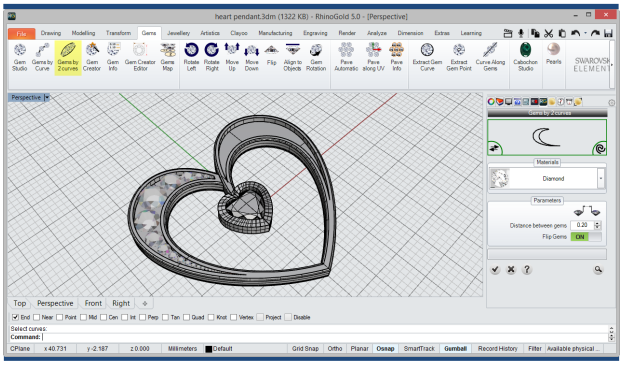
12 Extract Isocurve

Following on the Modelling tab, we'll apply the Extract Isocurve tool to the bezel.



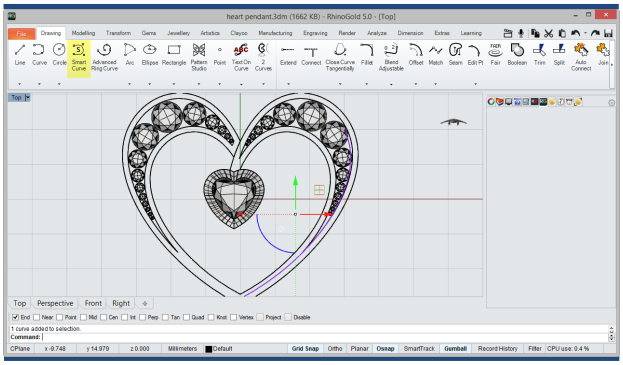
13 Auto Cut

Then, we'll apply the Auto Cut tool between the isocurve and the extruded solid, to adjust the solid to the bezel shape.



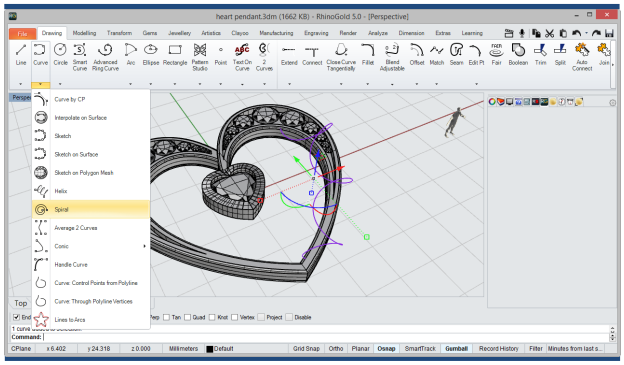
14 Gems by 2 curves

Now, we'll define a gems with gems by 2 curves tool, the minimum size that we'll define the gems will be 1 mm.



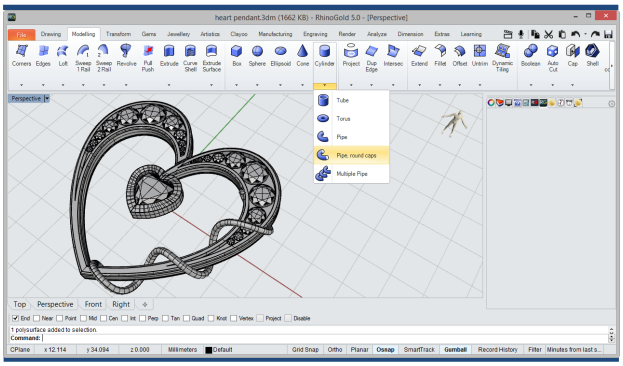
15 Smart Curve

In this step, we'll trace a curve similar to the picture, with Smart Curve tool.



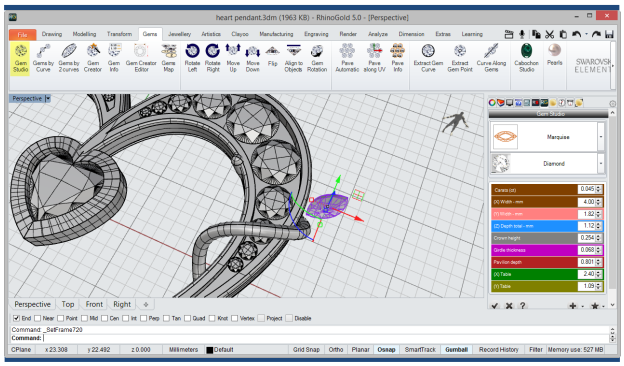
16 Spiral Around Curve

Then, we'll select the spiral tool within the submenu Curve and define a spiral along the smart curve with the "around curve" option enabled in the command line.



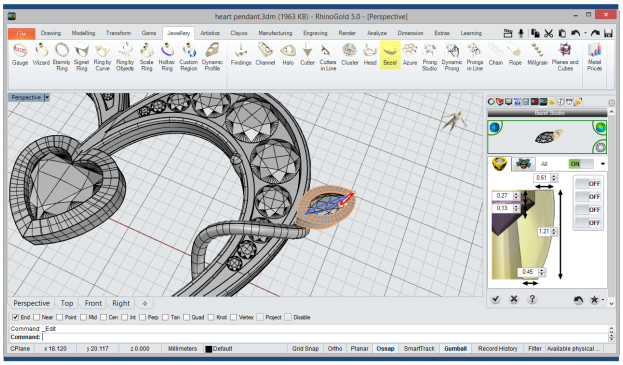
17 Pipe round caps

In this step, we'll apply the pipe tool with rounded caps to the spiral with 1mm in diameter.



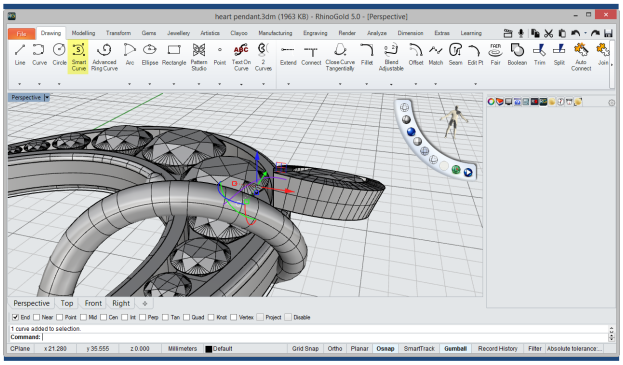
18 Gem Studio

Then, with the tool Gems Studio we'll define a "Marquise" cut gem of 4 mm, we'll position beside the pipe.



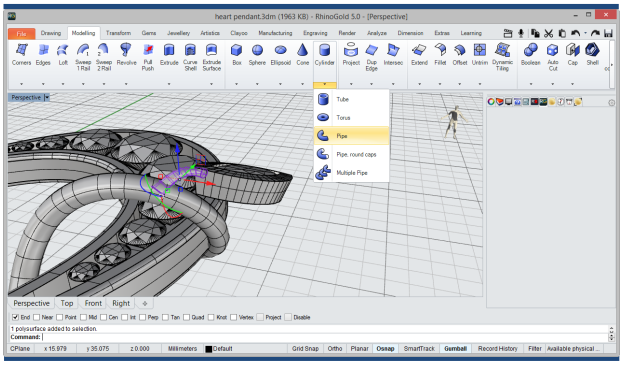
19 Bezel

Next, we`ll define a bezel adapted to the gem shape with the Bezel tool.



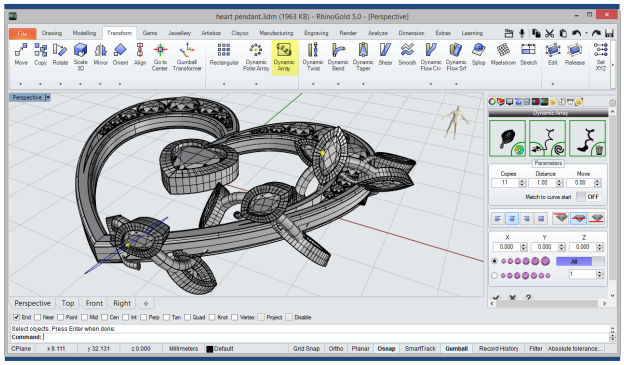
20 Smart Curve

Now, we'll trace a curve that connect the bezel with the pipe, we'll use the Smart Curve tool.



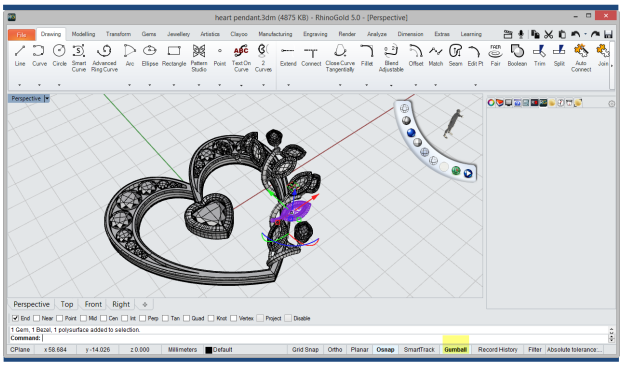
21 Pipe

In this step, we'll repeat the operation with the Pipe tool, in this case applying to the Smart curve traced in the previous step.



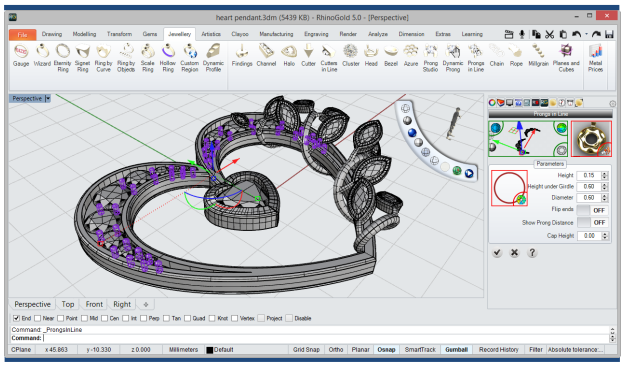
22 Dynamic Array

Then, we'll select the Dynamic Array tool and apply it between the gem "Marquise" and the spiral curve, generate an Array of 11 copies, obtaining a result like image.



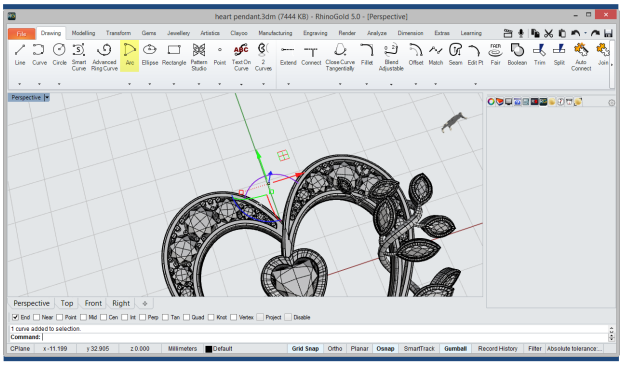
23 Gumball

In this step will position the set gems in accordance with the pipe, we help the Gumball command.



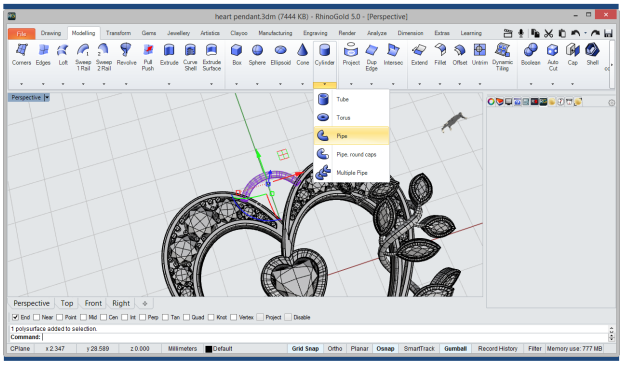
24 Prongs in Line/Edit Prongs

Then, we'll define the gem prongs with the Prongs in Line tool. We'll finish adjusting the prongs using the Edit Prongs option.



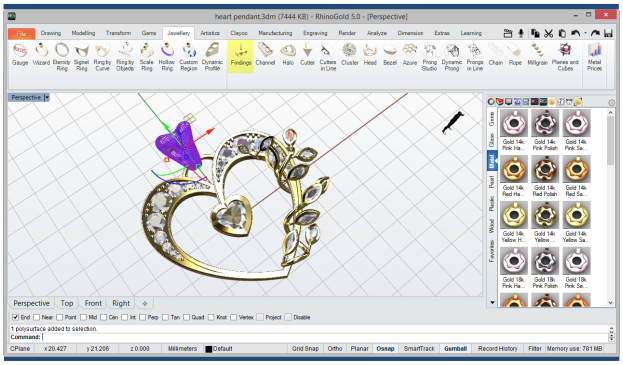
25 Arc

Next, we'll trace a curve with the Arc tool, as shown in the image.



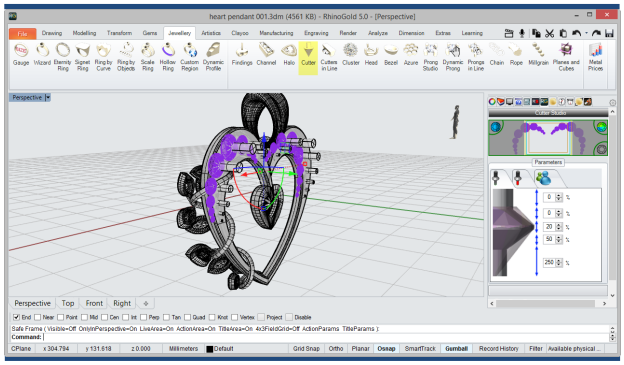
26 Pipe

Now, repeat the operation with the Pipe tool applied in the smart curve.



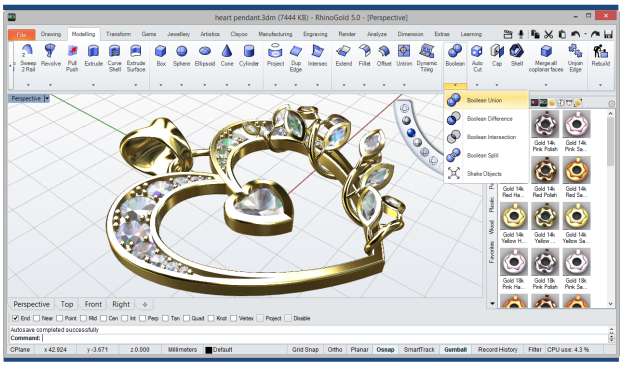
27 Findings

In this step we'll define a Finding for pendant, with the Findings tool and we'll position it as shown in the image.



28 Cutters/Boolean Difference

Then, we'll define the gem cutters of the large solid and apply a Boolean Difference to the cutters to subtract from the solid surface.



29 Boolean Union

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