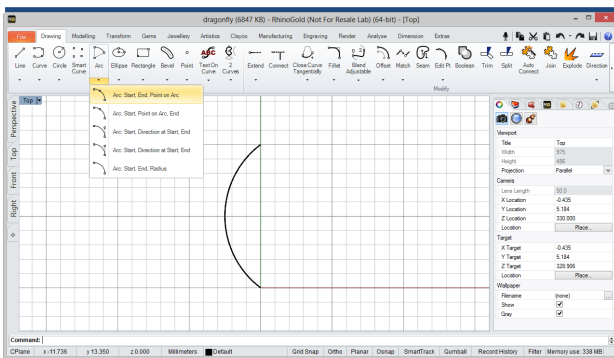




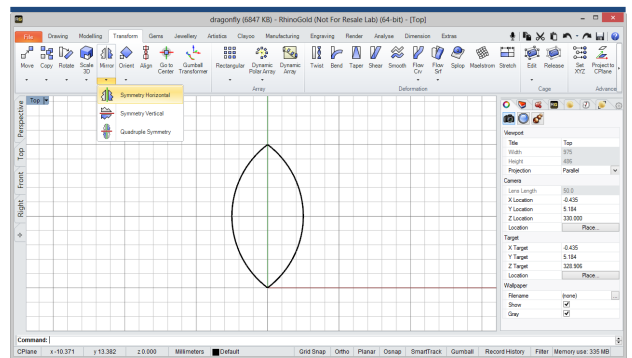
Dragonfly

In this tutorial we will try out some of the most useful commands in RhinoGold. Powerful tools such as Gem Studio, Boolean Operations, Head Studio and Bezel Studio.



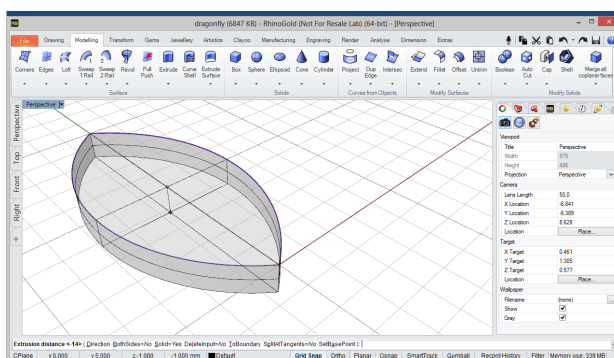
1 Arc: Start, End, Point on Arc

Under the Drawing tab, with the Arc: Start, End, Point on Arc tool, create a curve in the top view as the above image.



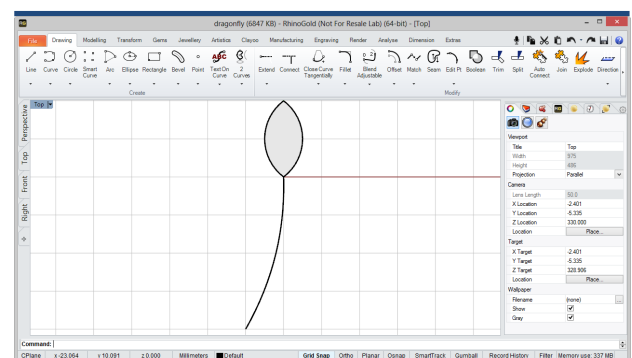
2 Mirror: Symmetry Horizontal

We can create another curve onto the other side by using the Symmetry Horizontal tool under the transform tab.



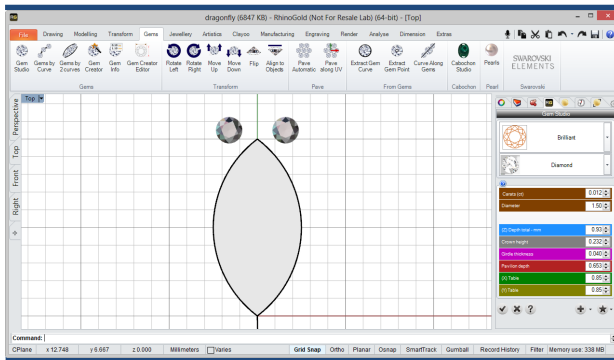
3 Extrude

Under the Modeling tab, using the Extrude tool we can create a solid from the curves in this case by extruding it down by 1mm.



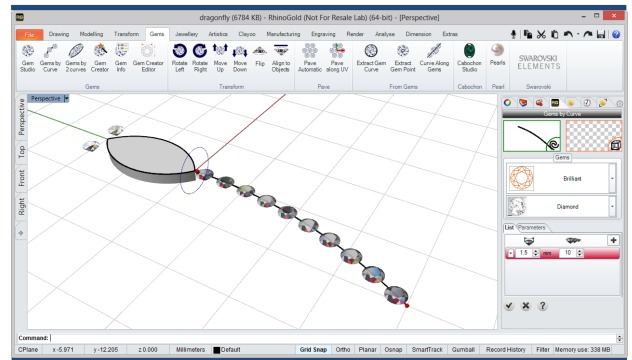
4 Smart Curve

Then, in the top view, under the Drawing tab with the Smart Curve tool we can define a curve that will be our reference for applying gems.



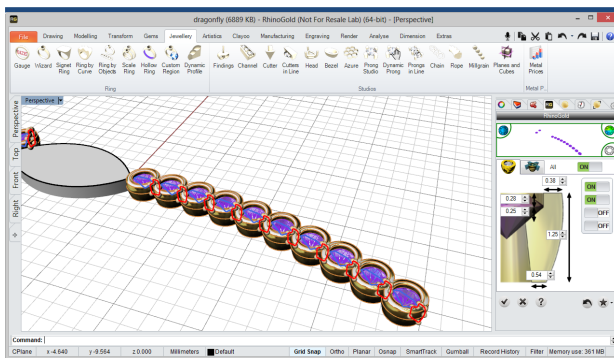
5 Gem Studio

Now, still in the top view, we can create two gems to define the Dragonfly's eyes. To do this use the Gem Studio under the Gems tab.



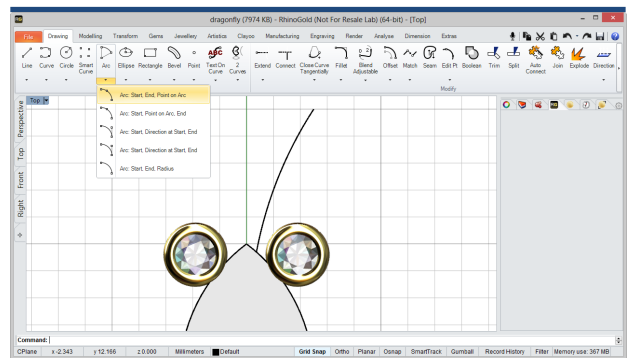
6 Gems by Curve

Then, still under the Gems Tab use the Gems by Curve tool to create some gems to be applied along the curve.



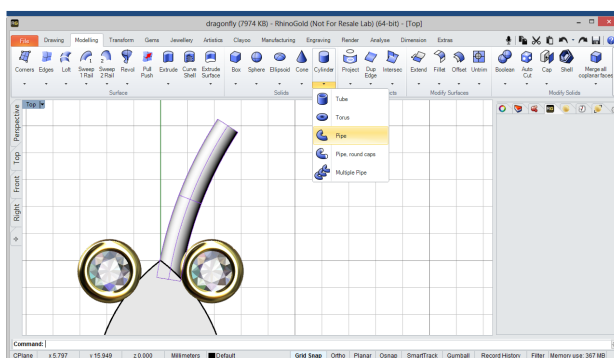
7 Bezel Studio

With the Bezel Studio tool under the Jewelry tab we can apply the bezels to support the existent gems.



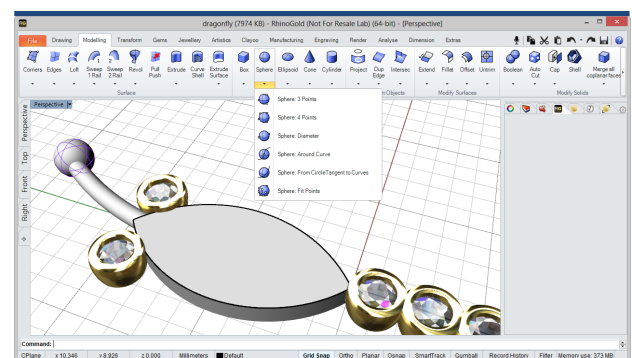
8 Arc: Start, End Point on Arc

Then, back to the Drawing tab with the Arc: Start, End, Point on Curve tool in the top view draw a curve to be used to create the Dragonfly's horns.



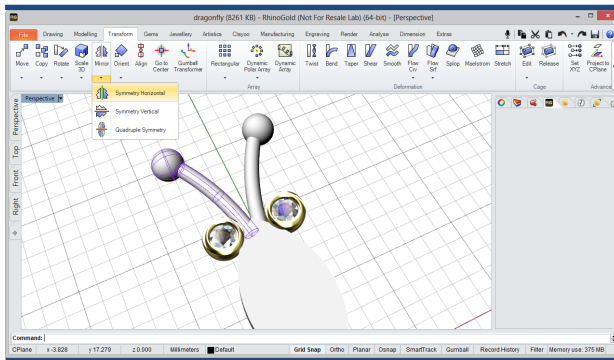
9 Pipe

Now, under the Modelling tab with the Pipe tool to define the Dragonfly's horn along the curve, in this case with a 0.9mm diameter.



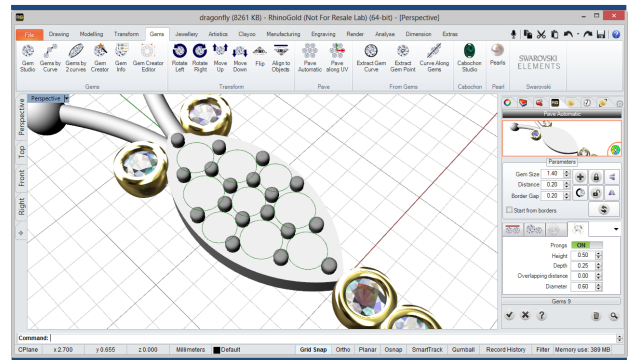
10 Sphere

Then, we can make a sphere onto the end of the horn as the above image shows, for this, use the Sphere tool under the Modelling tab. In this case give the sphere a 2mm diameter. It's important to activate the End option under the Osnap.



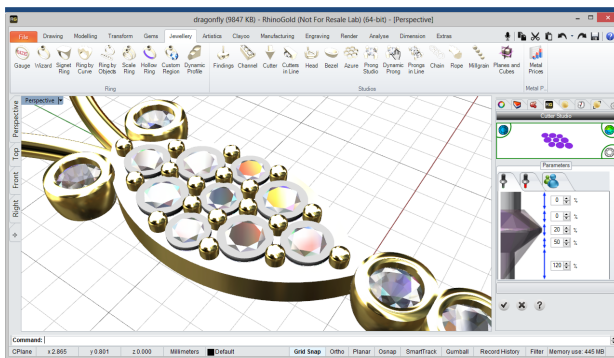
11 Mirror: Symmetry Horizontal

We can now create another horn onto the other side. For this, under the Transform tab use the Symmetry Horizontal tool as the above image shows.



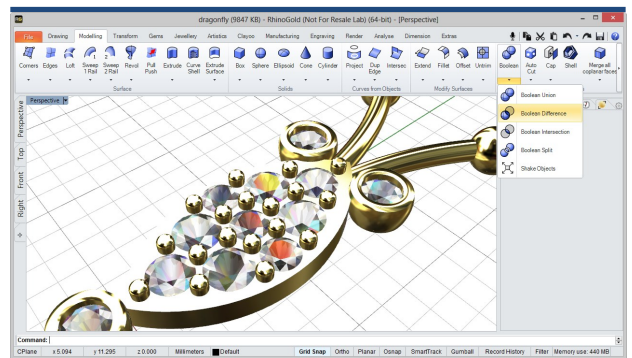
12 Pave Automatic

Back to the Gems Tab with the Pave Automatic tool we can define the gems to be applied onto the Dragonfly's body. We can also define the prongs inside the pave tool.



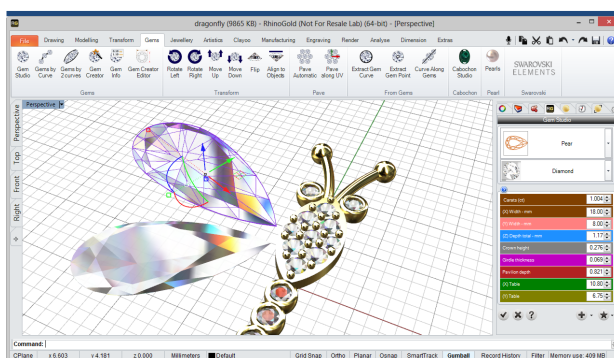
13 Cutter Studio

Under the Jewelry tab with the Cutter Studio tool we can apply the cutters to the body's gems as shown in the image above.



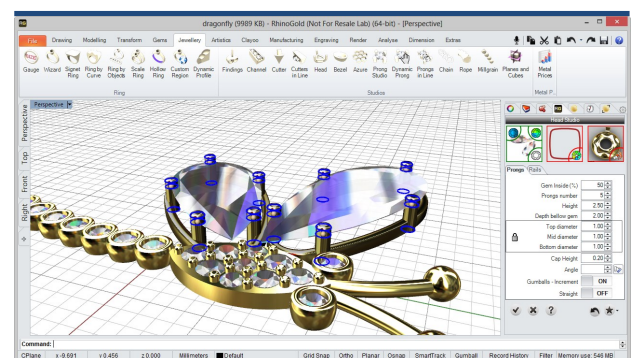
14 Boolean Difference

Now we can remove the cutters from the Dragonfly's body, do this by using the Boolean Difference tool under the Modelling tab.



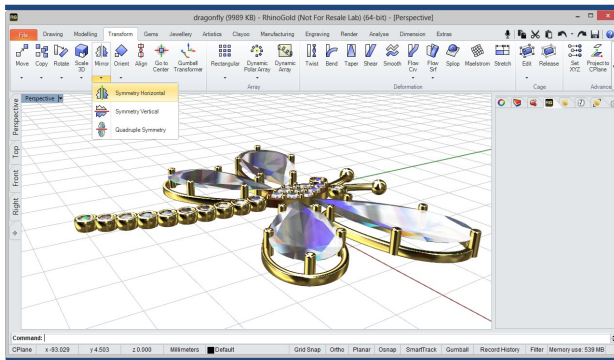
15 Gem Studio

Next create the gems to define the wings using the Gem Studio tool under the Gems tab. We can also activate the Gumball transformer to rotate and place the gems.



16 Head Studio

Then, under the Jewelry Tab use the Head Studio tool to create the support for the wings's gems, in this case use five prongs for each one.



17 Symmetry Horizontal / Boolean Operations

Then, back to the Transform tab with the Symmetric Horizontal tool create the other sides wings. The last step is to unite all of the metal parts into a single solid by using the Boolean Union tool under the modeling tab.