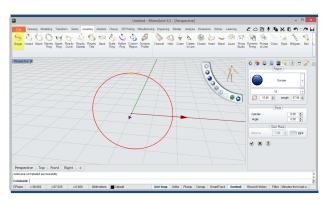


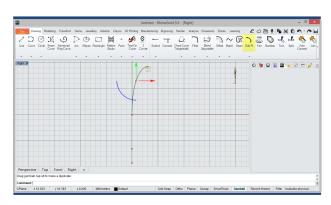


Diadem Ring

In this tutorial we'll try some of the more useful commands in RhinoGold. Powerful tools such as Smart Curve, Gauge, Head, Sweep 2 Rails, Halo and Gems by Curve.

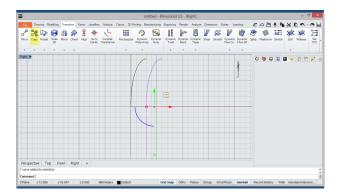


First, we'll go to the Jewellery tab and select the Gauge tool and define a European ring type of 18 in size.

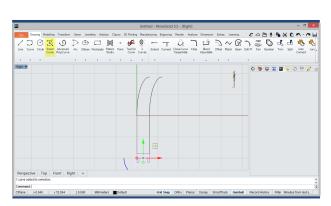


Edit Control Points

Then, we'll select the Edit Points tool on the Drawing tab and we'll position the three control points located at the top in the same way as shown in the picture, we'll work from the right view.



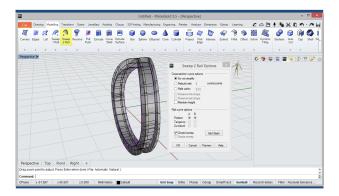
Now, with the Copy tool in the Transform tab we'll duplicate the curve defined above, and will position the copy to 3mm away from the original.



Smart Curve

In this step, we'll trace a 3mm closed curve with a similar shape to that shown in image, using the Smart Curve tool, at the Drawing tab and we'll position it on the bottom, touching the two curves.

Rhino Gold



Sweep 2 Rail

Then, we'll apply the Sweep 2 Rails tool, in the Modelling tab and define a solid from the 3 curves traced in the previous steps.

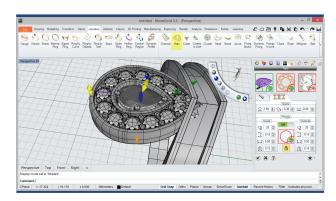


Gem Studio

In this step, we'll define a pear Gem cut of 4mm with the Gem Studio tool, in the Jewellery tab and will position it at the top of the solid.

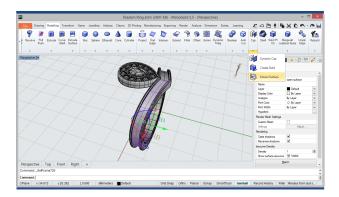


Now, we'll define the Head for the gem similar to that shown in the image, with the Head Studio tool, in the Jewellery tab.



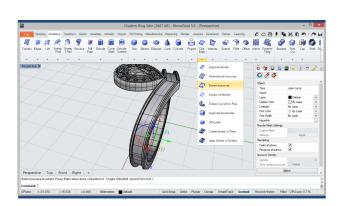
Halo

Then, we'll apply a Halo to the gem with 1.50 gems, with the Halo tool, in the Jewellery tab. In the case that appear displaced gems, we'll remove them and will position well gems and prongs, with the Gumball controller.



Extract Surface

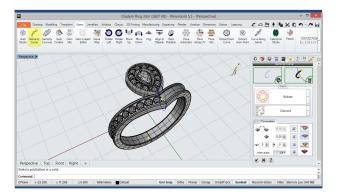
In this step, we'll select the Extract Surface tool within the submenu Cap, in Modelling tab and apply it in the central surface of the ring.



Extract Isocurves

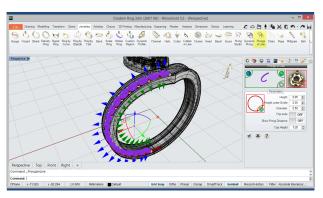
Now, we'll extract the central Surface curve of the ring with Extract Isocurves tool, in the Modeling tab.





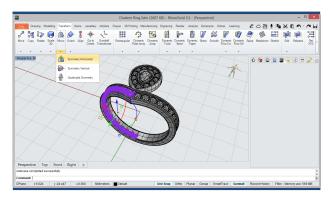
Gems by Curve

Next, we'll define some gems along the curve with the Gems by Curve tool, in the Gems tab. Select the curve and extracted surface to guide the gems.



Prongs in Line

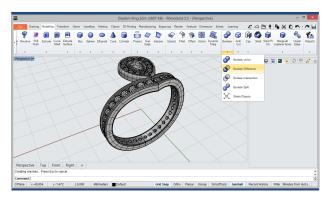
In this step, we'll define the prongs to the gems, with the Prongs in Line tool, in the Jewellery tab, if necessary we'll edit the prongs later, with the Edit Prongs option.



Symmetry Horizontal

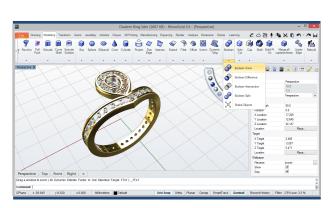
Now, we'll apply a symmetry to the gems group with the Symmetry Horizontal tool, in the Transform tab.

Then, we'll define the cutters to the gems with the Cutter Studio, in the Jewellery tab.



Boolean Difference

In this step, we'll apply a Boolean Difference to subtract the cutters from the ring surface.



Boolean Union

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