

*TDM Solutions;*

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***[www.tdmsolutions.com](http://www.tdmsolutions.com)***

**2009**

# Background

TDM Solutions is a company that provides CAD/CAM solutions to a variety of industries, focusing in jewelry, and also including the automotive, casts and molds, prototype, footwear and general mechanical industries.

Developer of design and manufacturing applications, enhancing RhinoGold, and others as RhinoMold, RhinoNest and RhinoShoe.

TDM Solutions was founded in 2001 and the headquarters are in Barcelona, Spain.

Nowadays is working over 25 countries with more than 70 resellers.

# RhinoGold<sup>®</sup>

# What is RhinoGold?

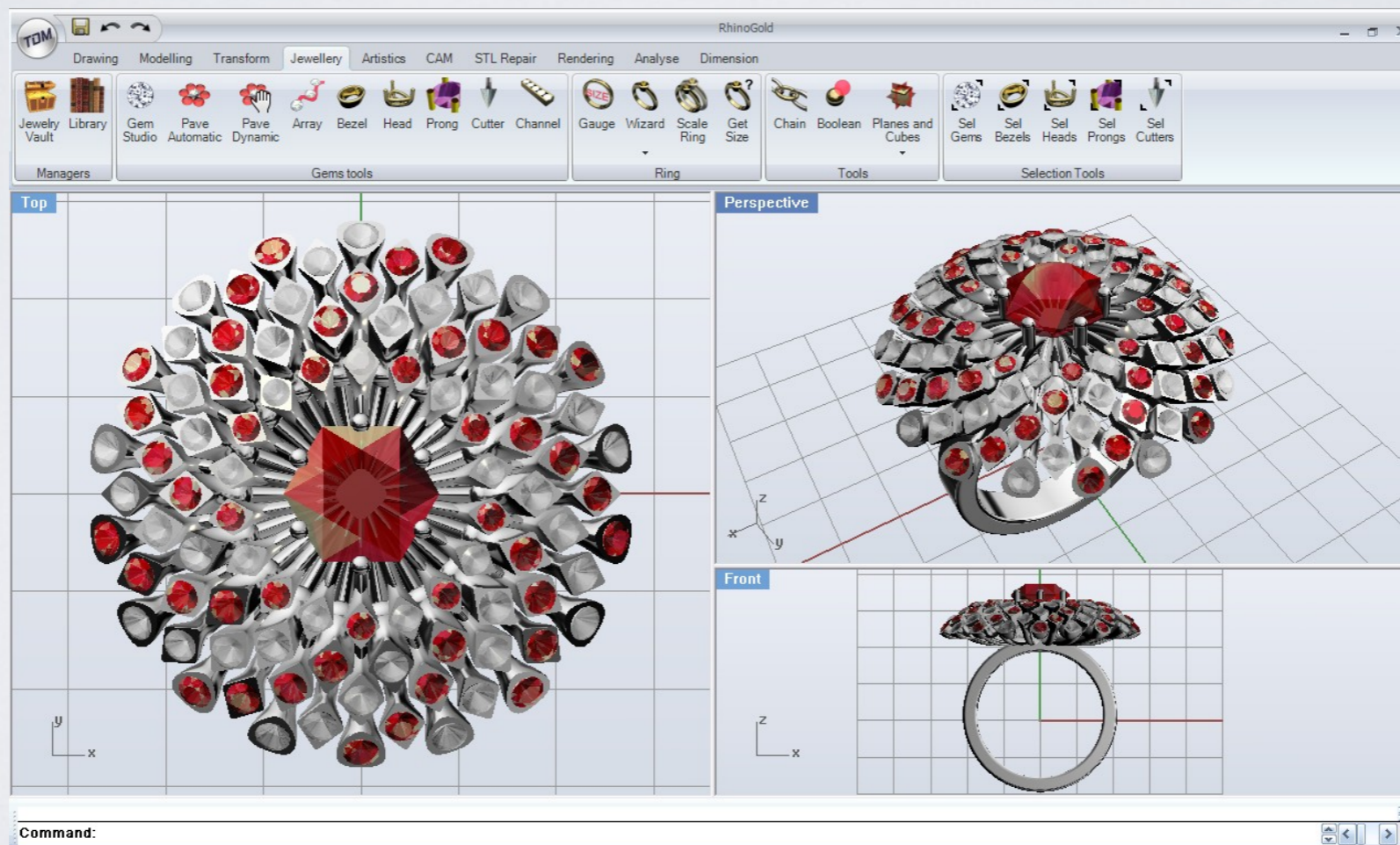
RhinoGold is the preferred software for jewelry design and manufacturing.

RhinoGold makes it possible for jewelry designers and manufacturers to fully modify and manufacture jewelry precisely but quickly without sacrificing a clear and intuitive interface that both simplifies and cuts down learning time.

Now easier, faster and more powerful thanks to Fleximetrical Technology.



With such tools as Gem Studio, Automatic and Dynamic Pave, the Head Studio, the Bezel Studio, the Ring Wizard, the Ring Scaler, the Channel Studio, Tools for calculating metal and gem weights, the CAM export Assistant, the STL Repair Assistant, and many more, has become one of the most powerful 3D design solutions on the market.



# Advantages of RhinoGold

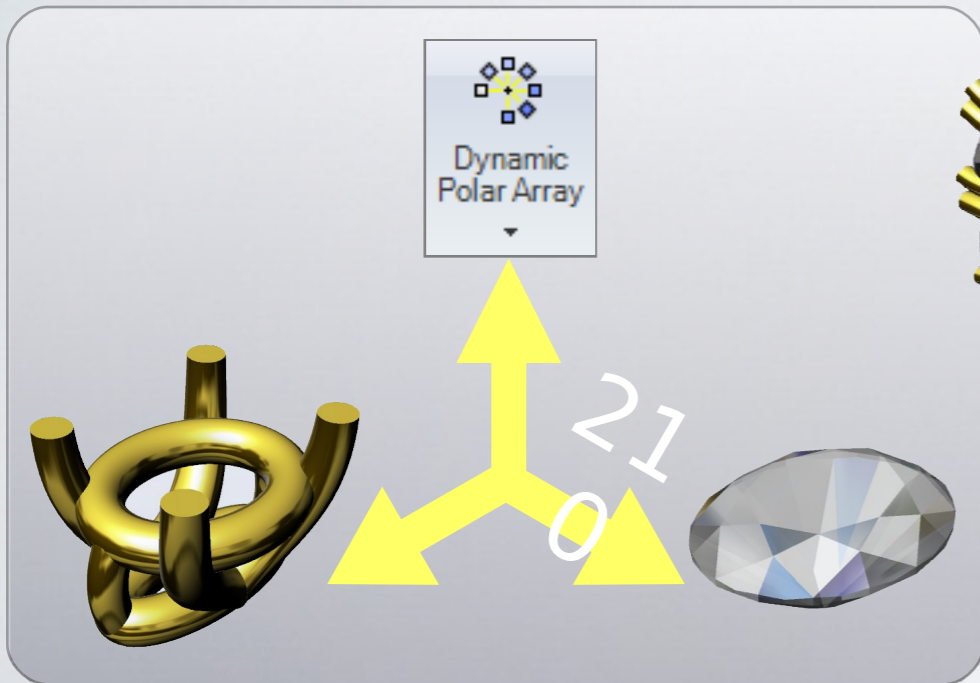
- It is a jewelry specific software designed by jewelers for jewelers.
- Quick to learn, intended to reduce the time taken for the learning curve.
  - Easy and agile, the tools have a real-time preview function.
- Precision and professionalism in all stages of modeling, making it ready to use for manufacture.
- A multitude of advanced tools for experts in the field, intended to cover all the steps of production from initial design to manufacture, not to forget tools for presenting the designs and creating catalogues...
  - Includes basic rendering and real-time renderer, all compatible with other renderers such as Flamingo, Penguin, Hypershot, V-Ray, Brazil and others...
    - An affordable price and no maintenance fees.
    - The possibility to attend classroom or online



# Fleximetric Technology

This new technology developed by TDM Solutions allows creating parametrical objects to be edited without the complexity of the standard linear parametric tree of parametrical softwares.

The fleximetric objects and the transformation are editable independently, and create relation between them.



To create this sample ring we used this three commands: Gem Studio, Head Studio and Dynamic Polar Array.

We can edit the parameters of the array, numbers objects,... Gem size or shape or head parameters, and automatically upgrade your model

Can you imagine how many combinations you can create in seconds?

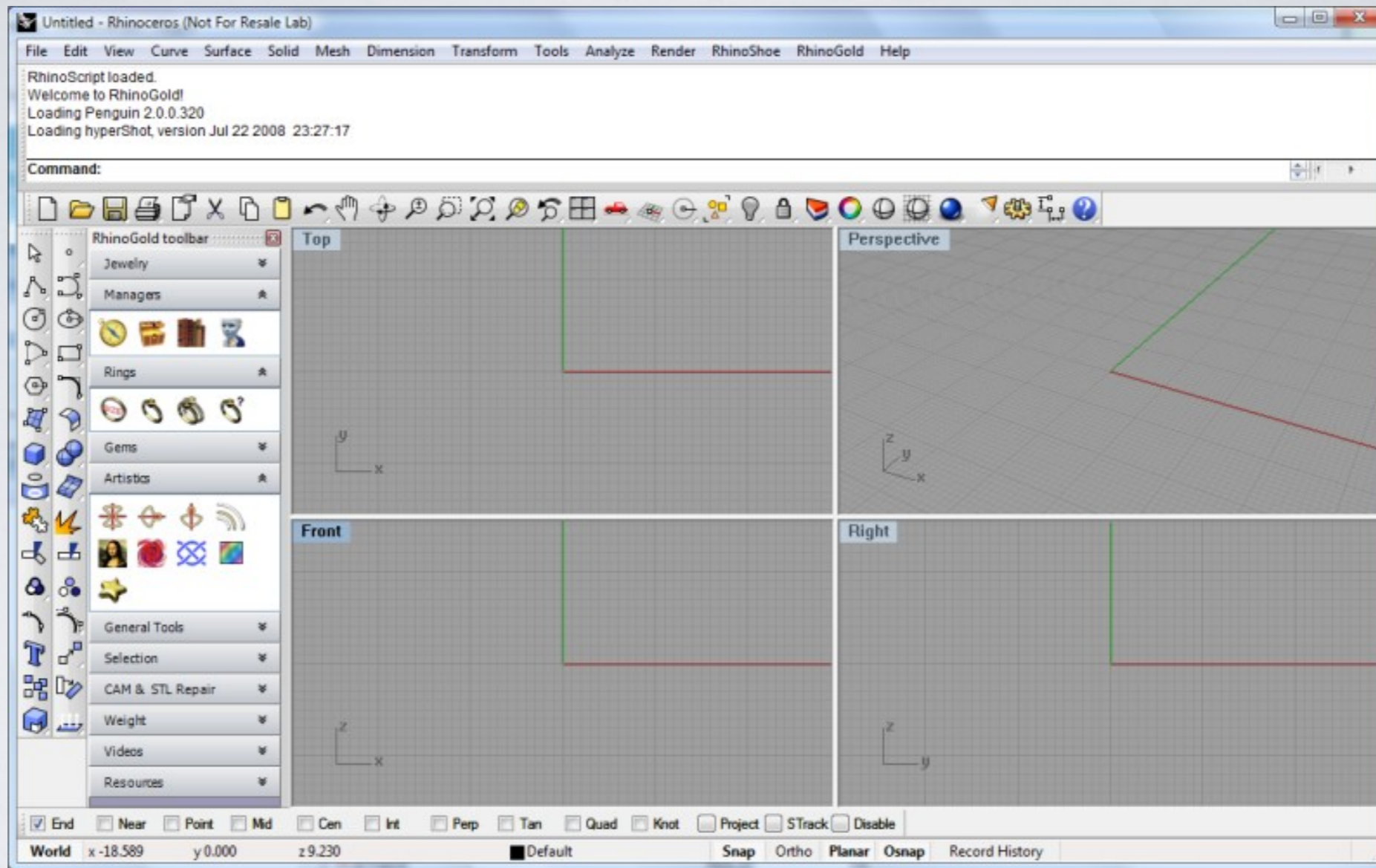
# Two interfaces in one solution



RhinoGold® allows to use two interfaces, one for Rhino users and other for non Rhinoceros users.



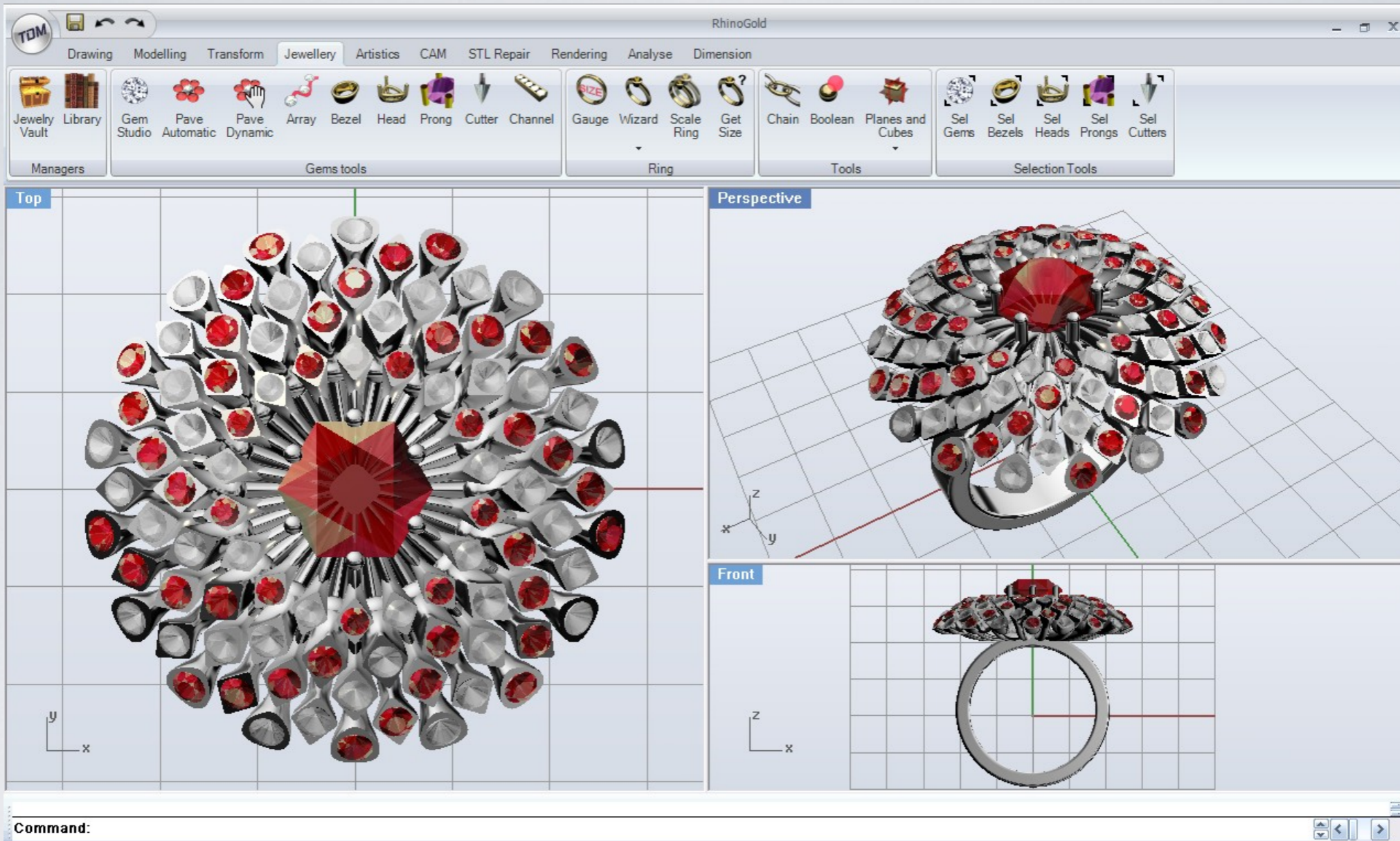
# Rhinoceros Interface



Completely integrated in Rhinoceros as a  
plug-in

[www.rhinogold.com](http://www.rhinogold.com)

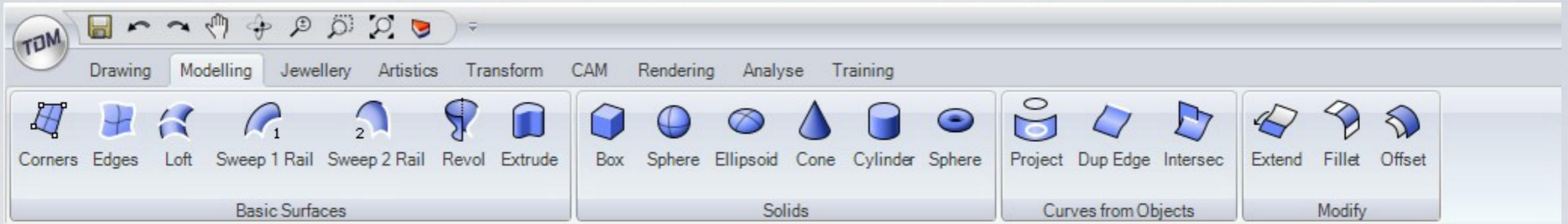
# RhinoGold Interface



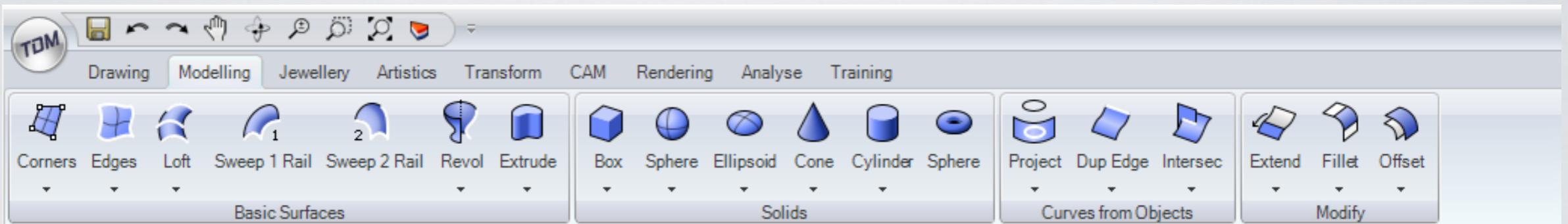
Interface for jewelry designer and manufacturers

# Adaptable Interface

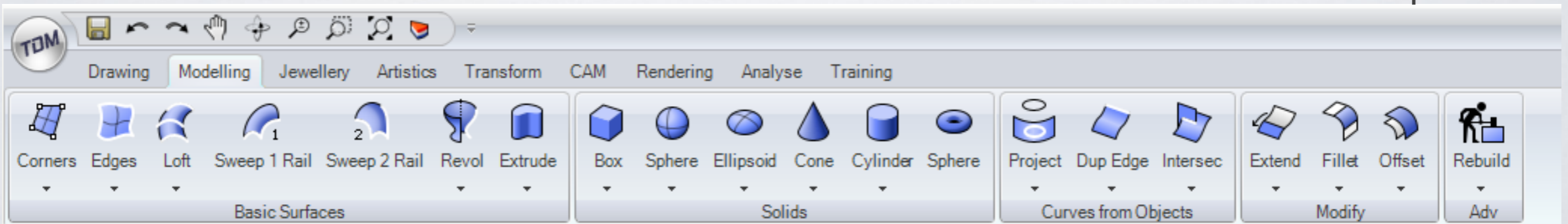
Beginners



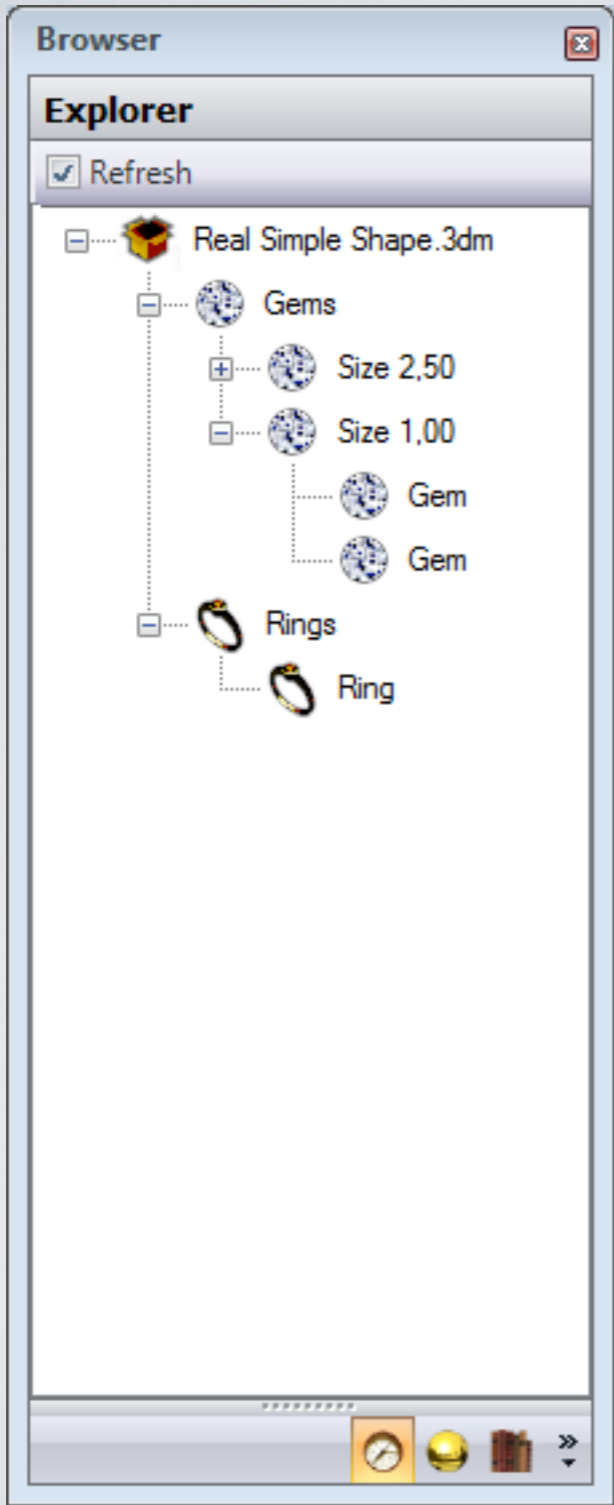
Medium



Experts



# The Browser

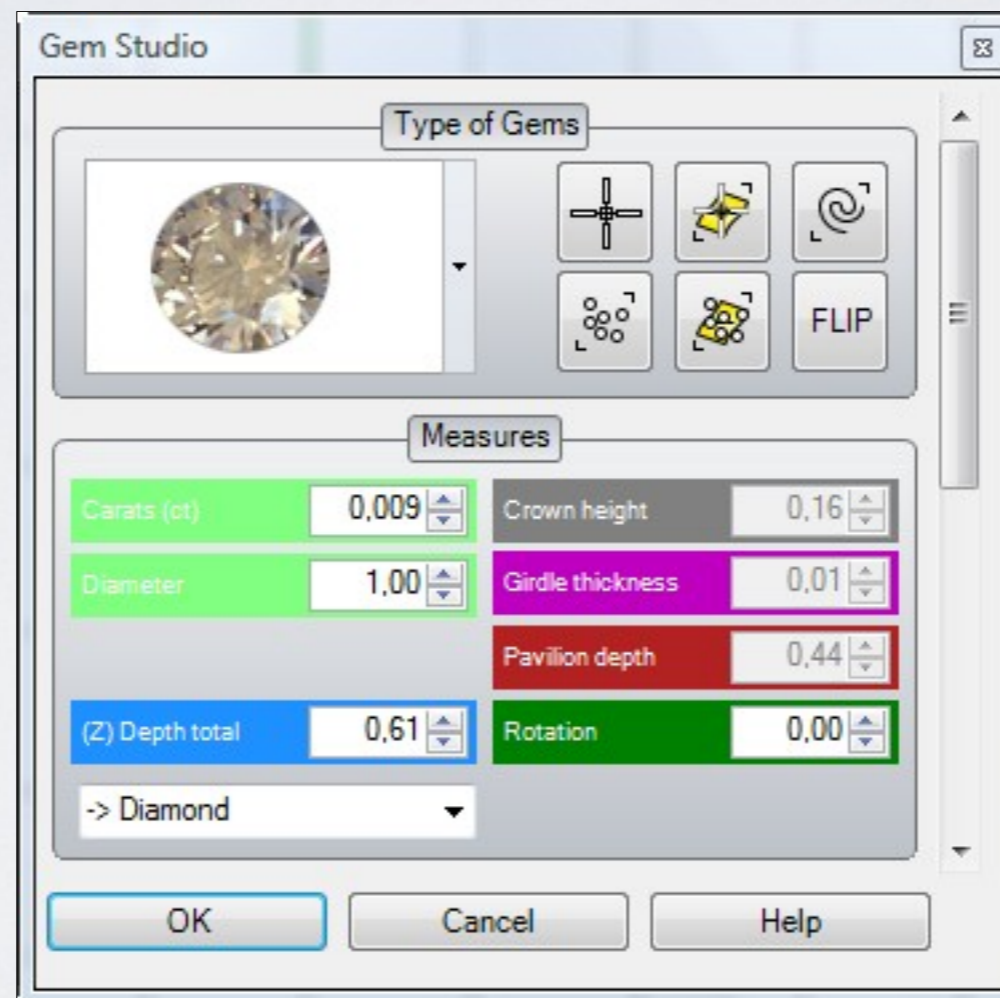




# Jewelry Tools

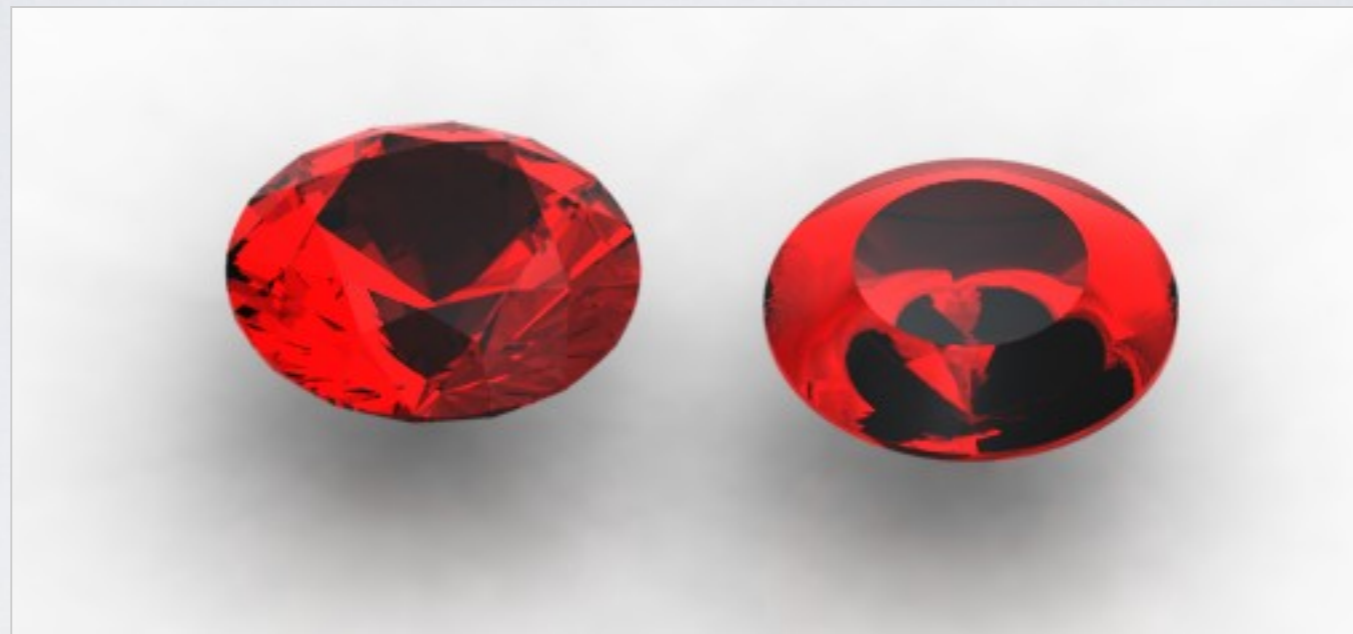
# Gem Studio

Gem Studio allows us to place different stone cuts in our models in accordance with the GIA (Gemological Institute of America) and custom sizes. New stones cuts in 2.0



# Performance Optimization for Gems

This functionality simplify the gem shape, it improves x24 the performance. Convert in one click to simple shape, and real shape.



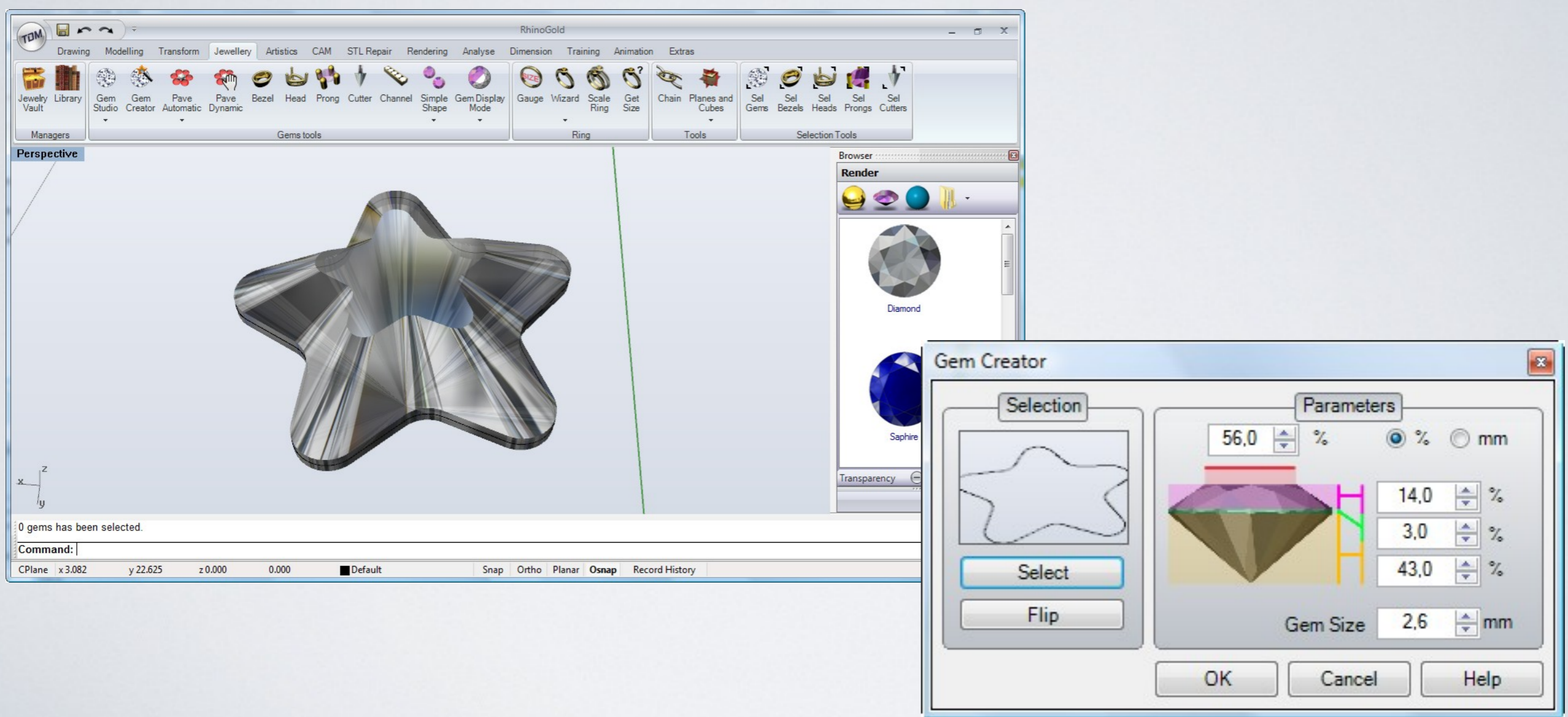
Comparison: 200 gems in 2.0 is so light as 8 gems  
in 1.0

**NEW!**  
2.0

# Gem Creator

This tool allows us to create any gem shape using a curve.

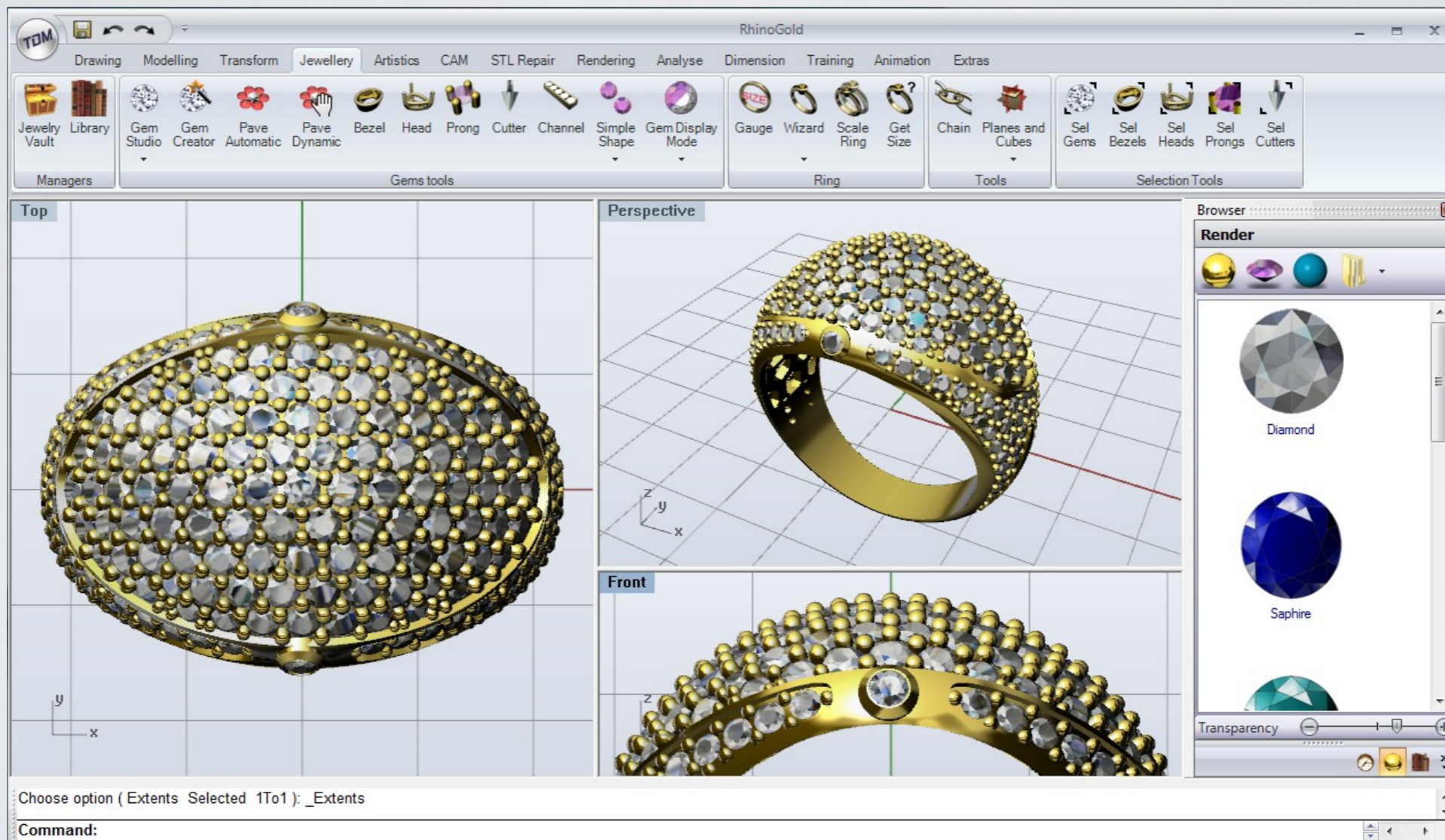
This new functionalities break any limitation using any gem cut.





# Paves

RhinoGold offers a powerful tool for pave design, in automatic and dynamic mode.





## *Automatic*

Create automatically a pave. We have the option to define one size or use our stock. Patterns available.

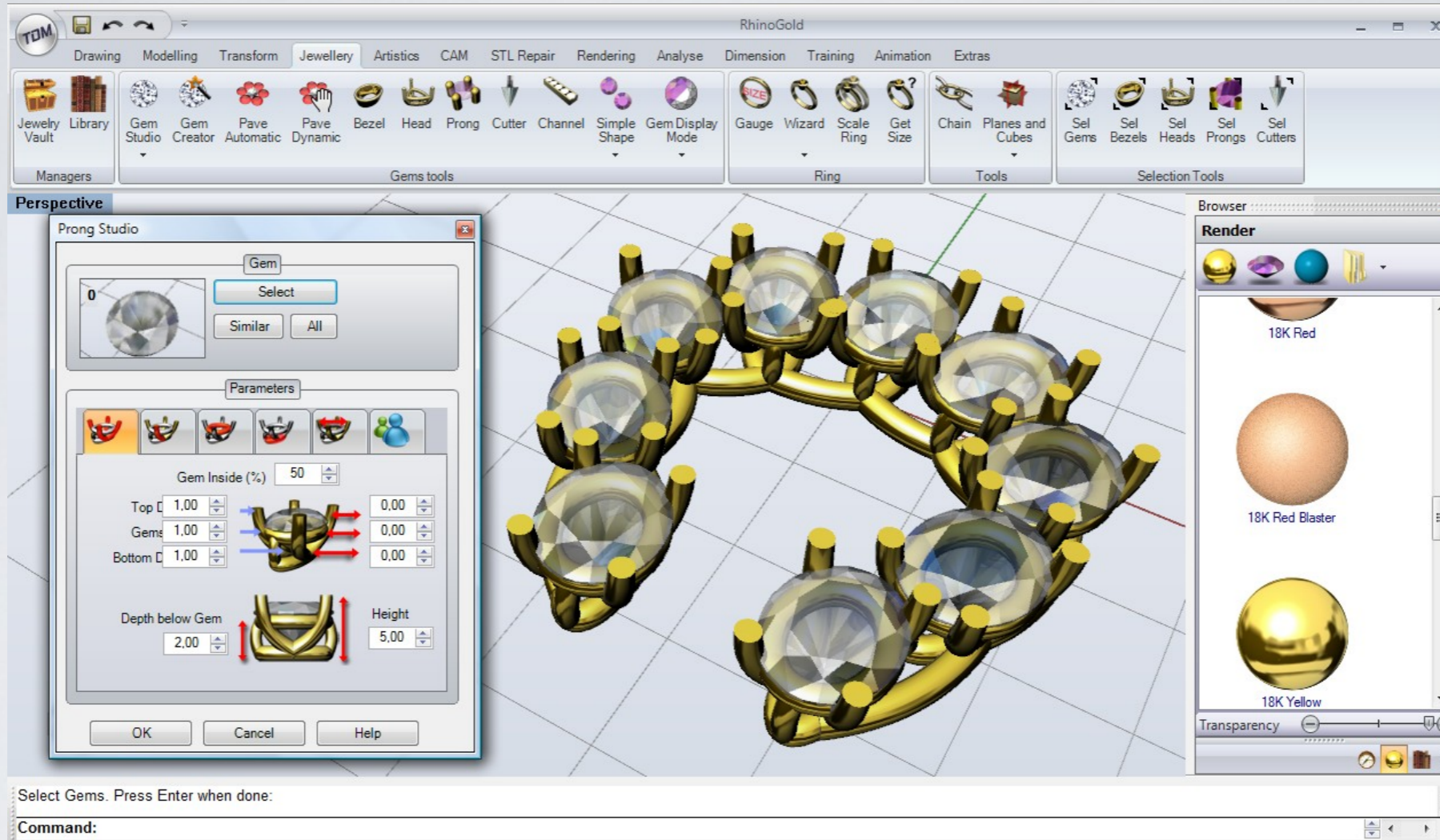
## *Pave UV*

Create automatically a pave along the topology of the surface. We have the option to define one size or use our stock.

## *Dynamic Pave*

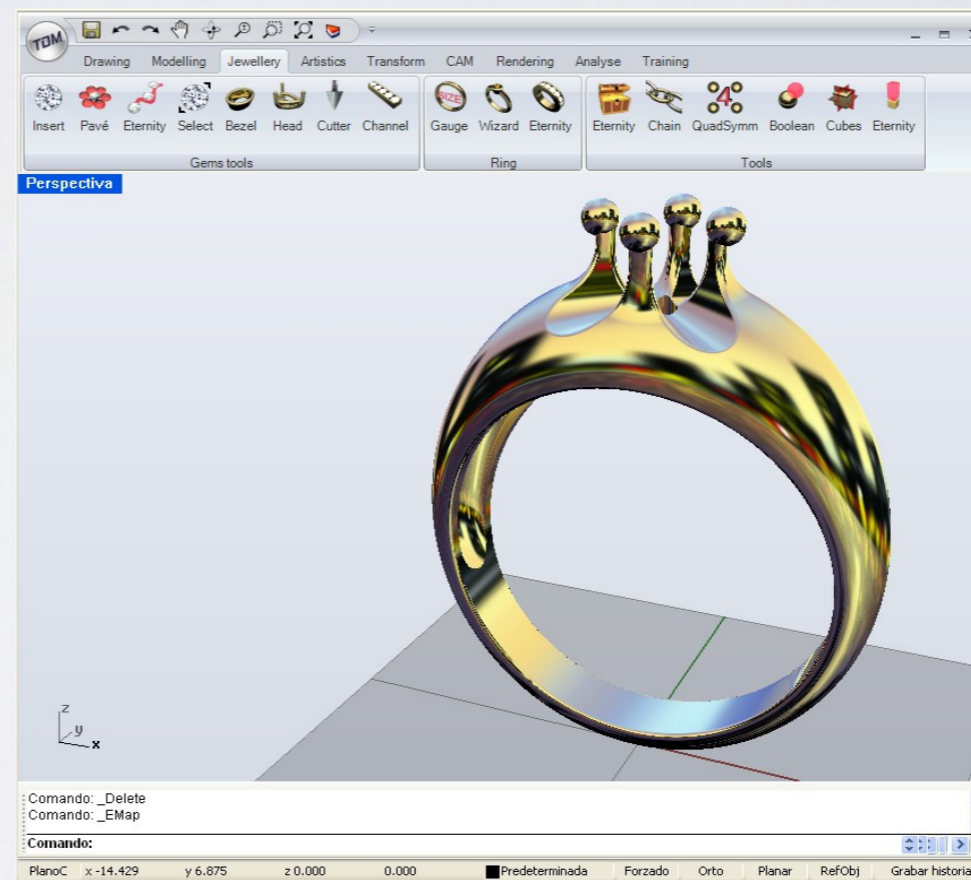
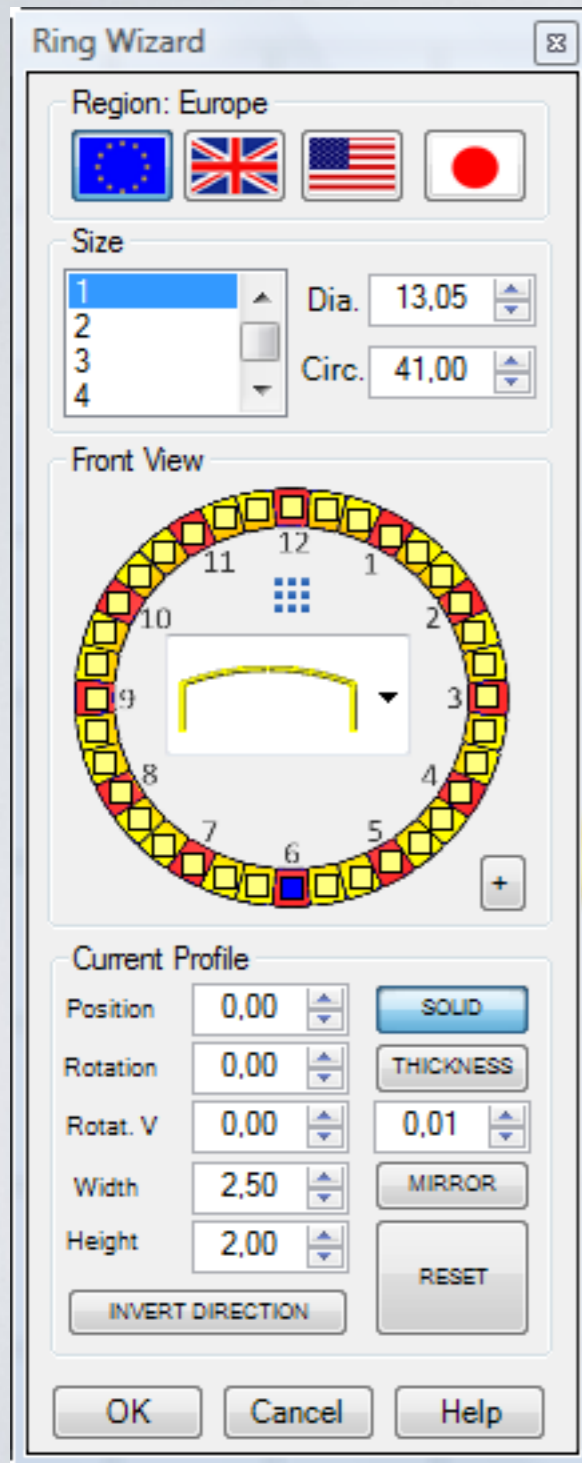
Extremely useful to complement the automatic or advanced human paves.

# Bezel Studio, Head Studio and Cutter Studio



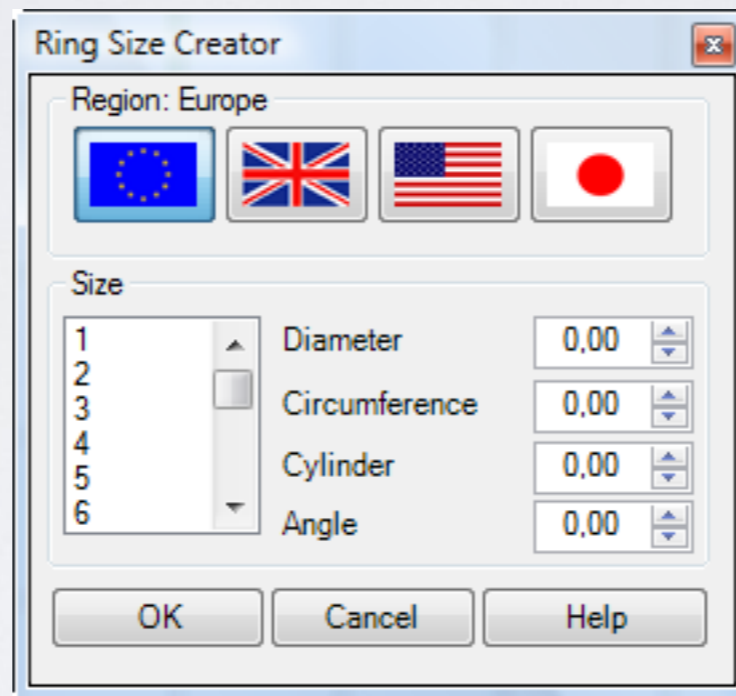
# Ring Wizard

Wizard to create rings according to profiles. It is very quick and practical for new users and really powerful for advanced users. The rings are editable parametrically.



# Ring Size Creator

RhinoGold creates the base circle, the starting point for modeling our ring, using standard measures from Europe, the UK, the United States and Japan.

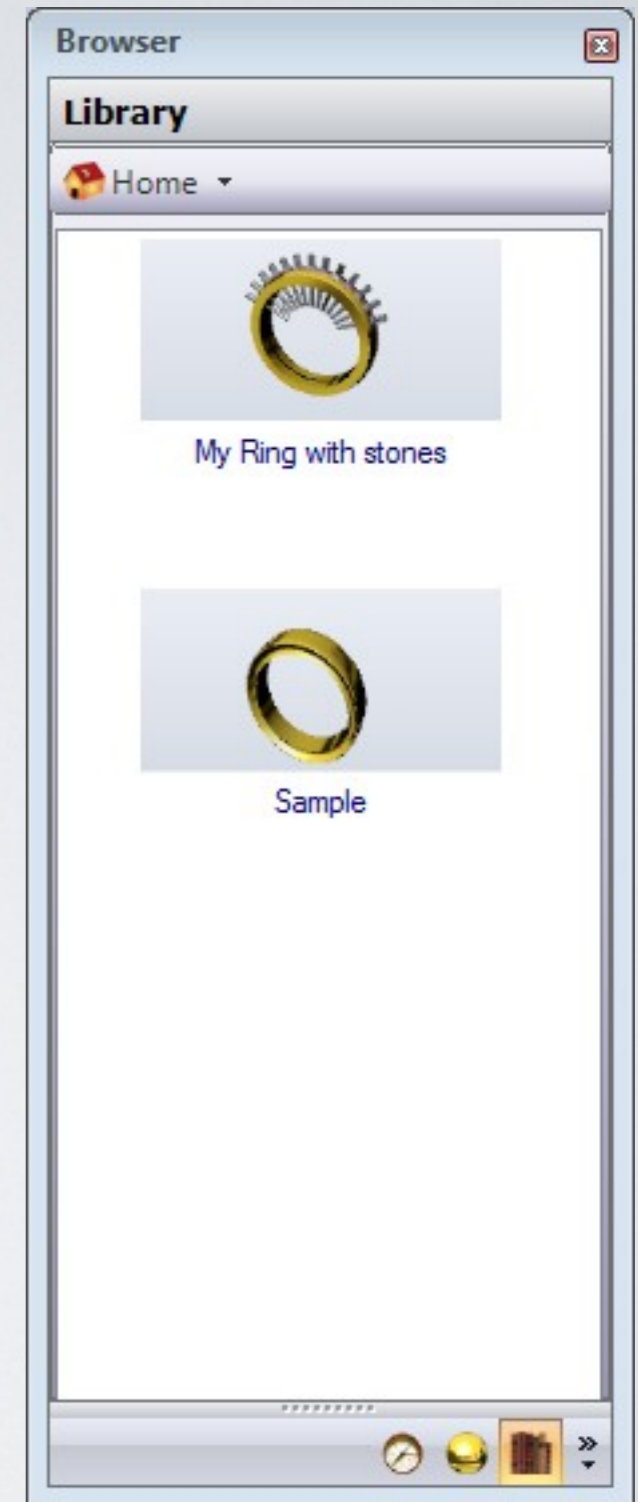


# Jewellery Vault and Library

**NEW!**  
2.0

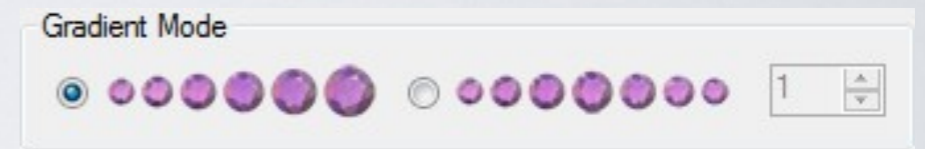
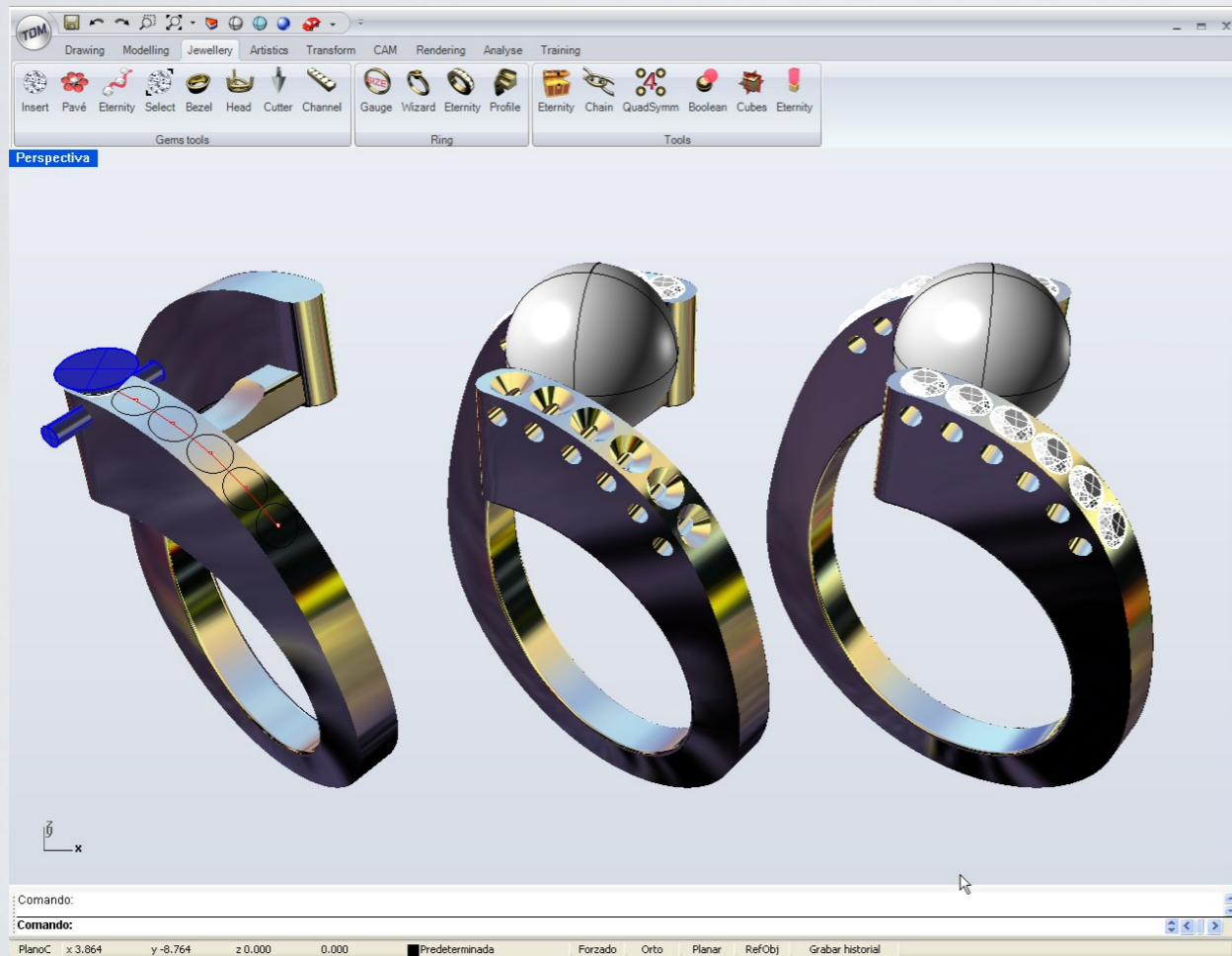
Jewelry Vault makes it easy for us to manage our different models. In this way, users can create their own component libraries to use in future designs.

It is integrated to the browser and it is really interesting to create your own parametrical library.

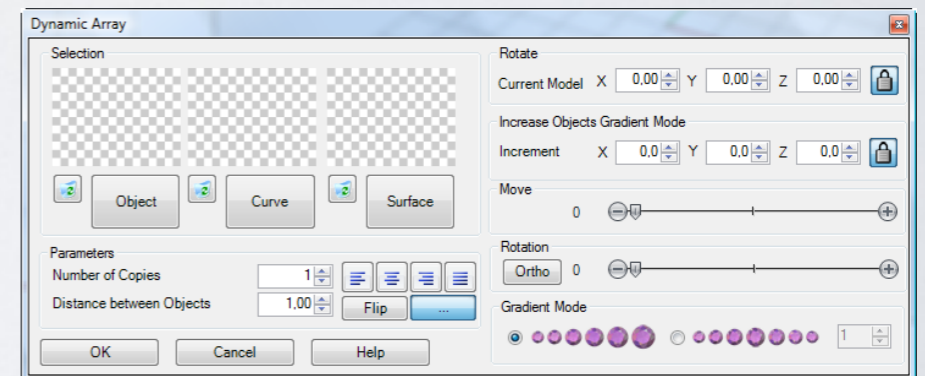


# Linear Arrays

It allows us to create arrays both easily and dynamically and permits us to define advanced parameters, such as scaling, rotation, gradients...

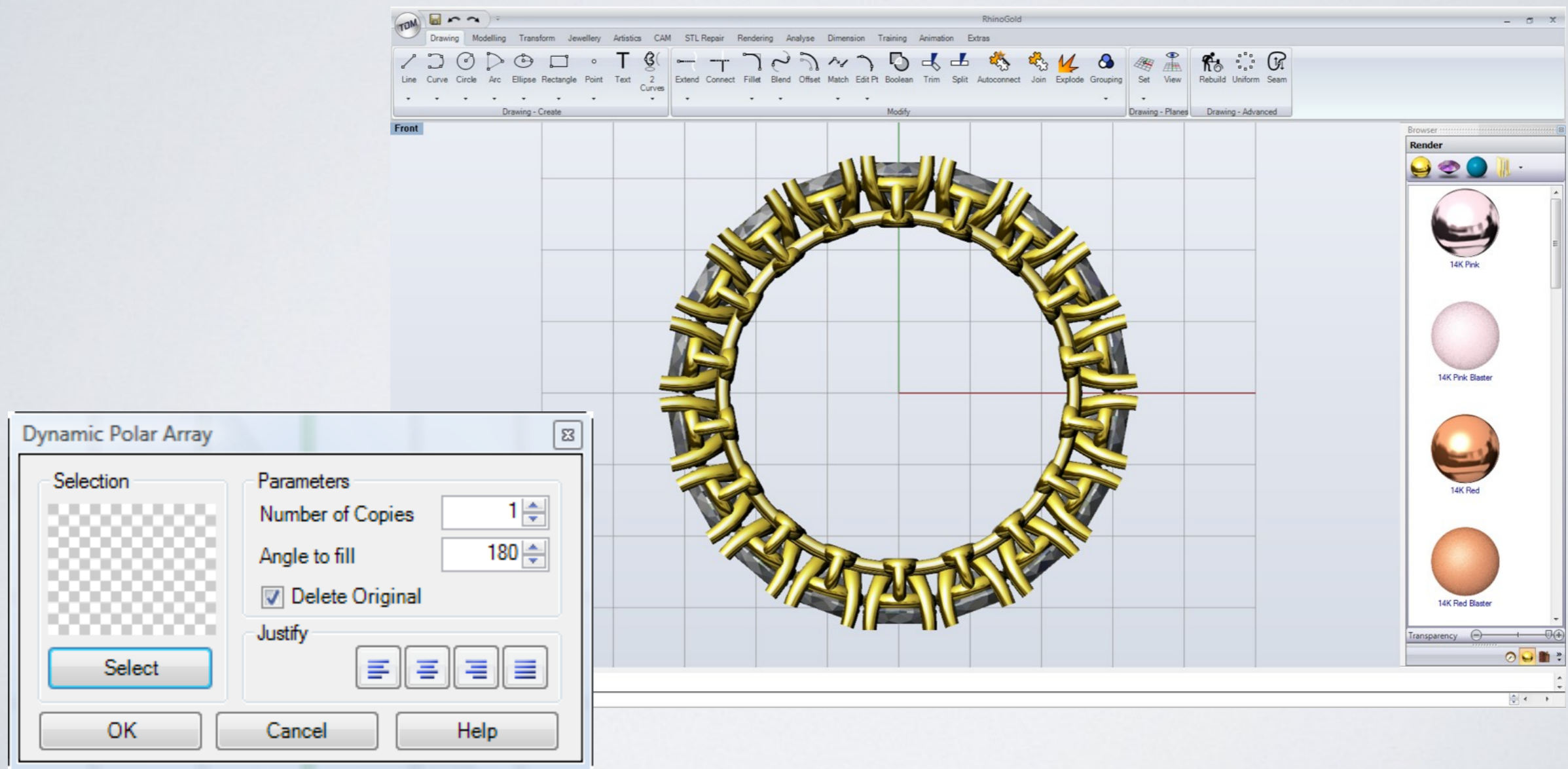


Gradient Available



# Polar Arrays

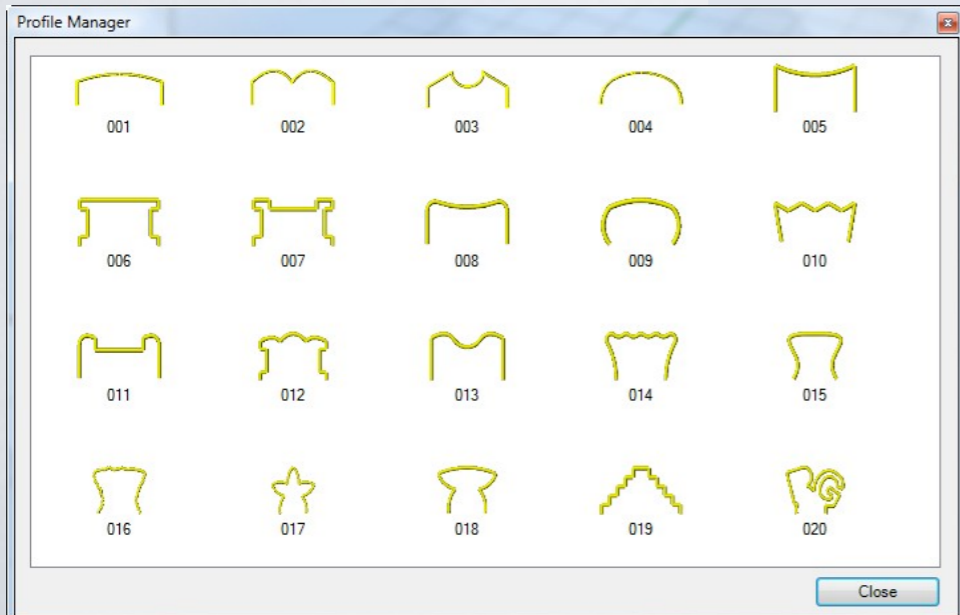
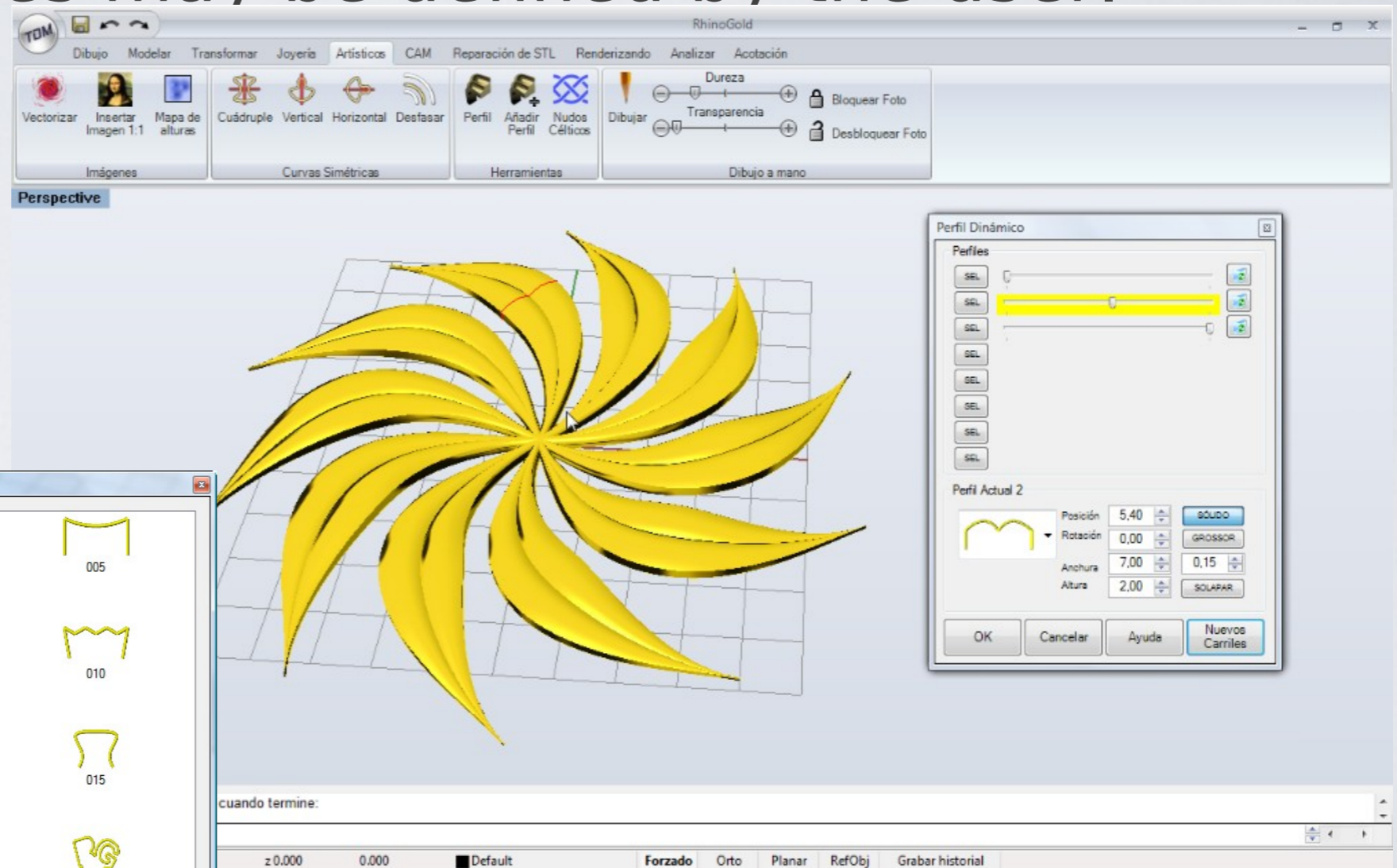
It allows us to create polar arrays easily and dynamically and permits us to define advanced parameters, such as copies, angle, justify...





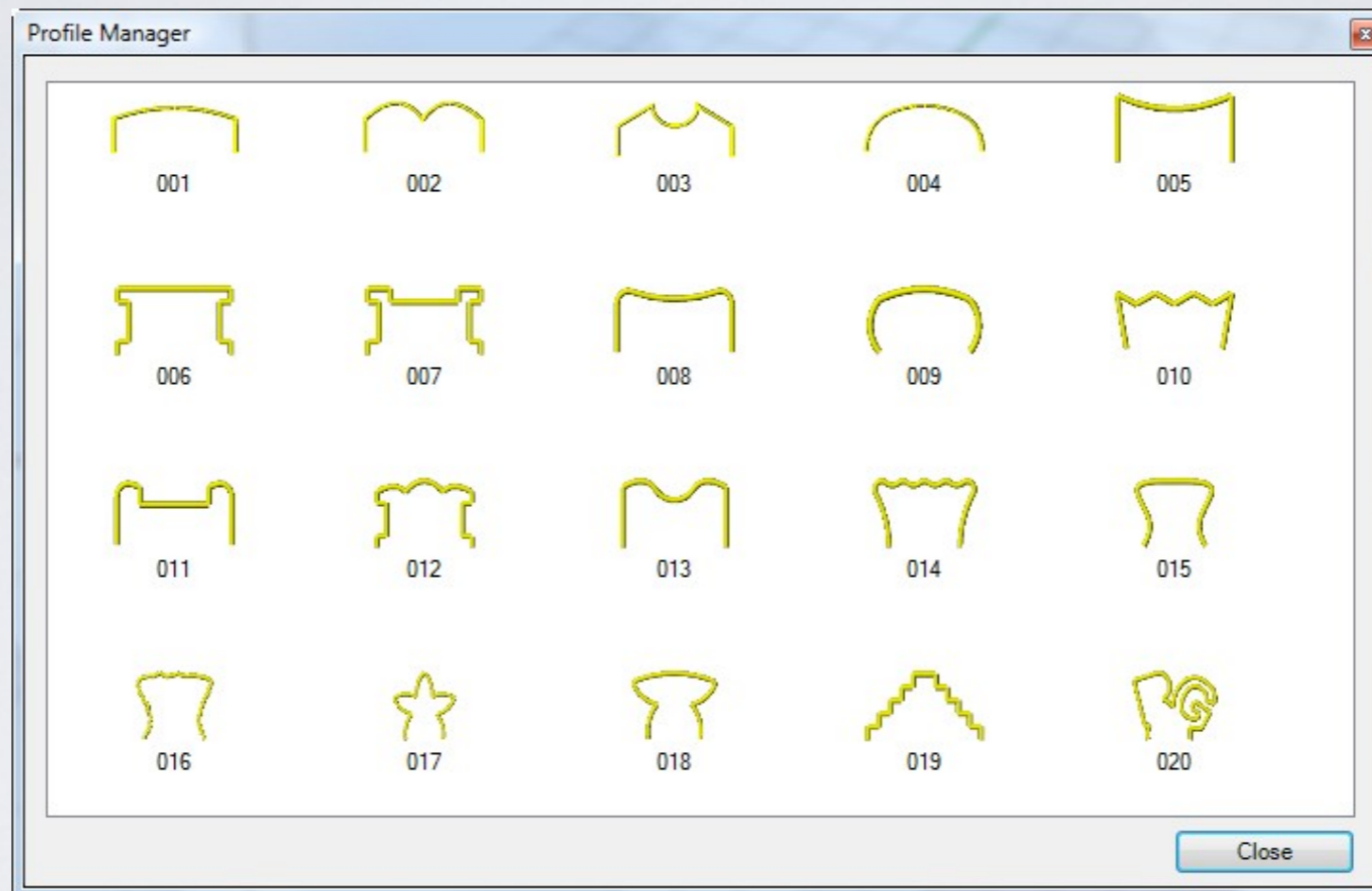
# Dynamic Profiles

This allows us to use our section library to move them, rotate them and change sizes. Very useful for creating any type of accessory in a matter of seconds. The profiles may be defined by the user.



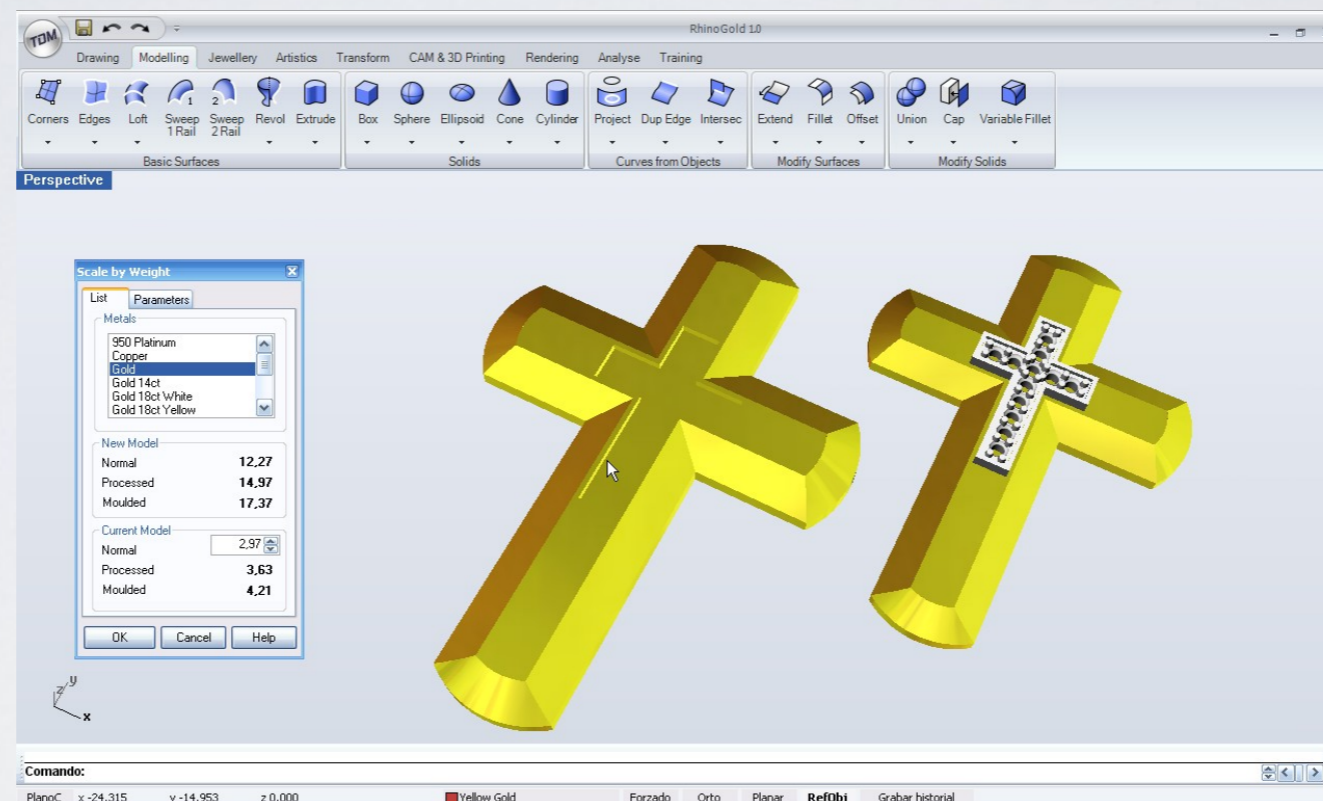
# Profile Manager

Now is really easy to manage your curve profiles.



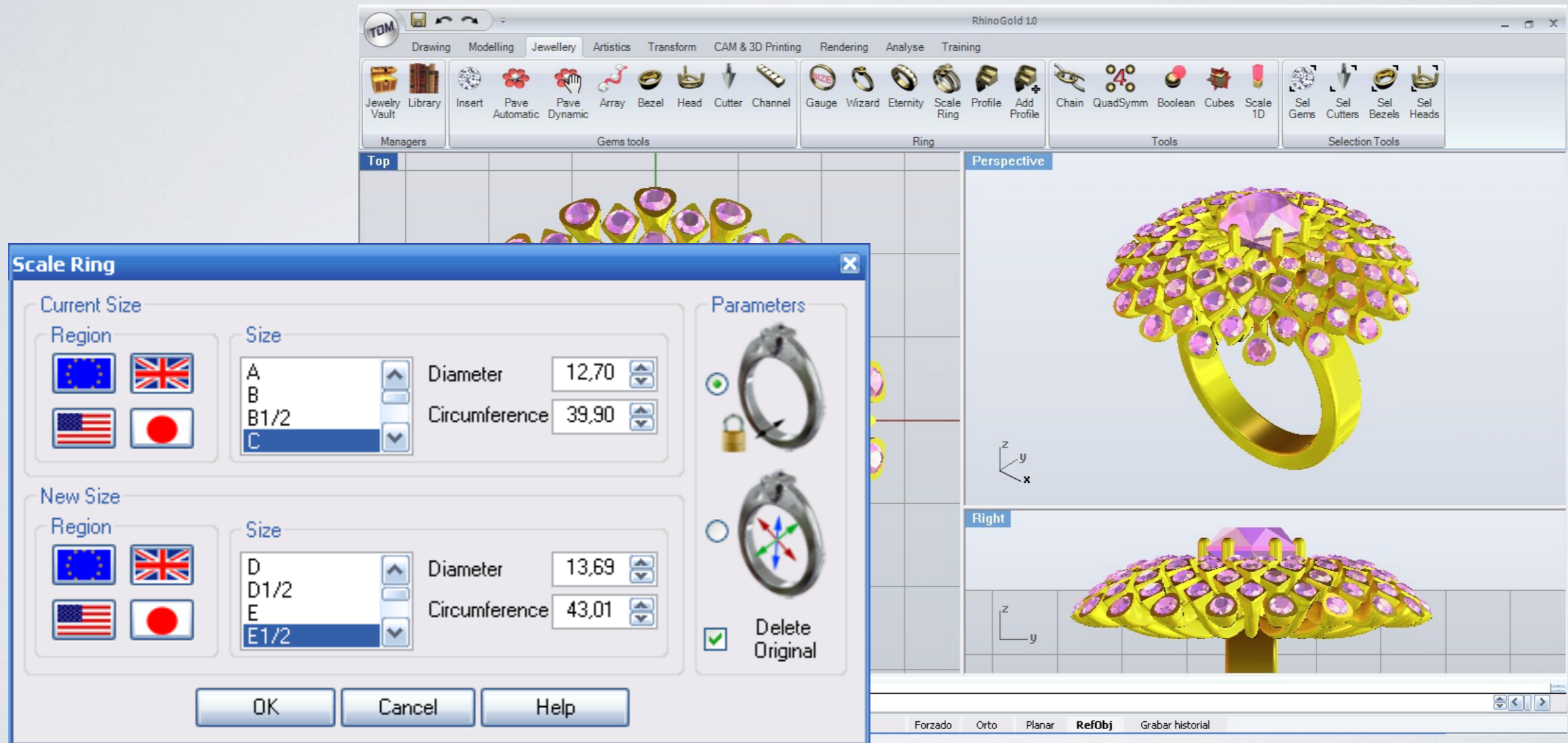
# Scale by Weight

Scale by weight allows scaling just defining the new weight.



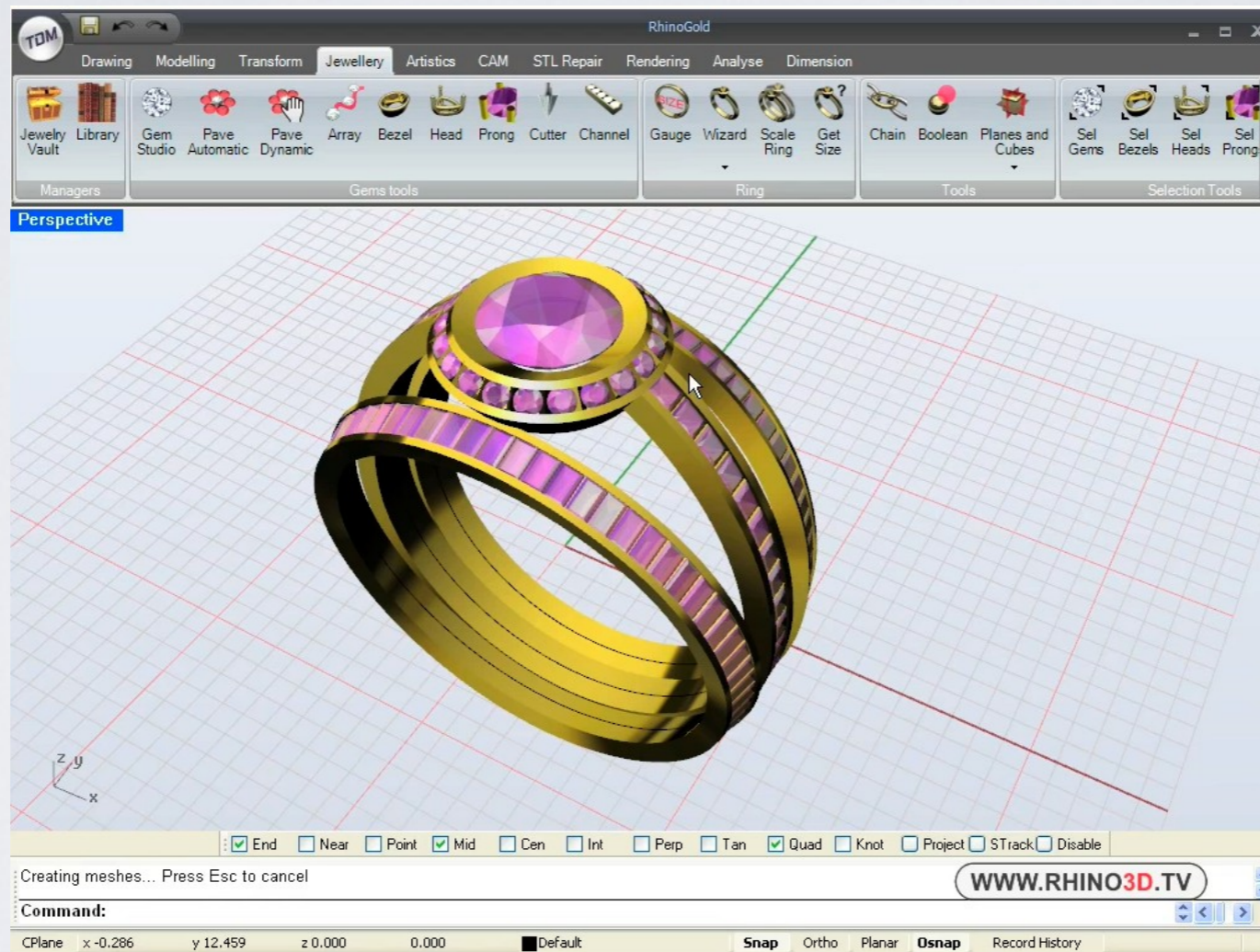
# Scale Rings

Scale Ring allows us to scale one ring to other sizes just in one click.



# Channel Studio

Channel makes it easy for us to create channels from a curve on a surface.

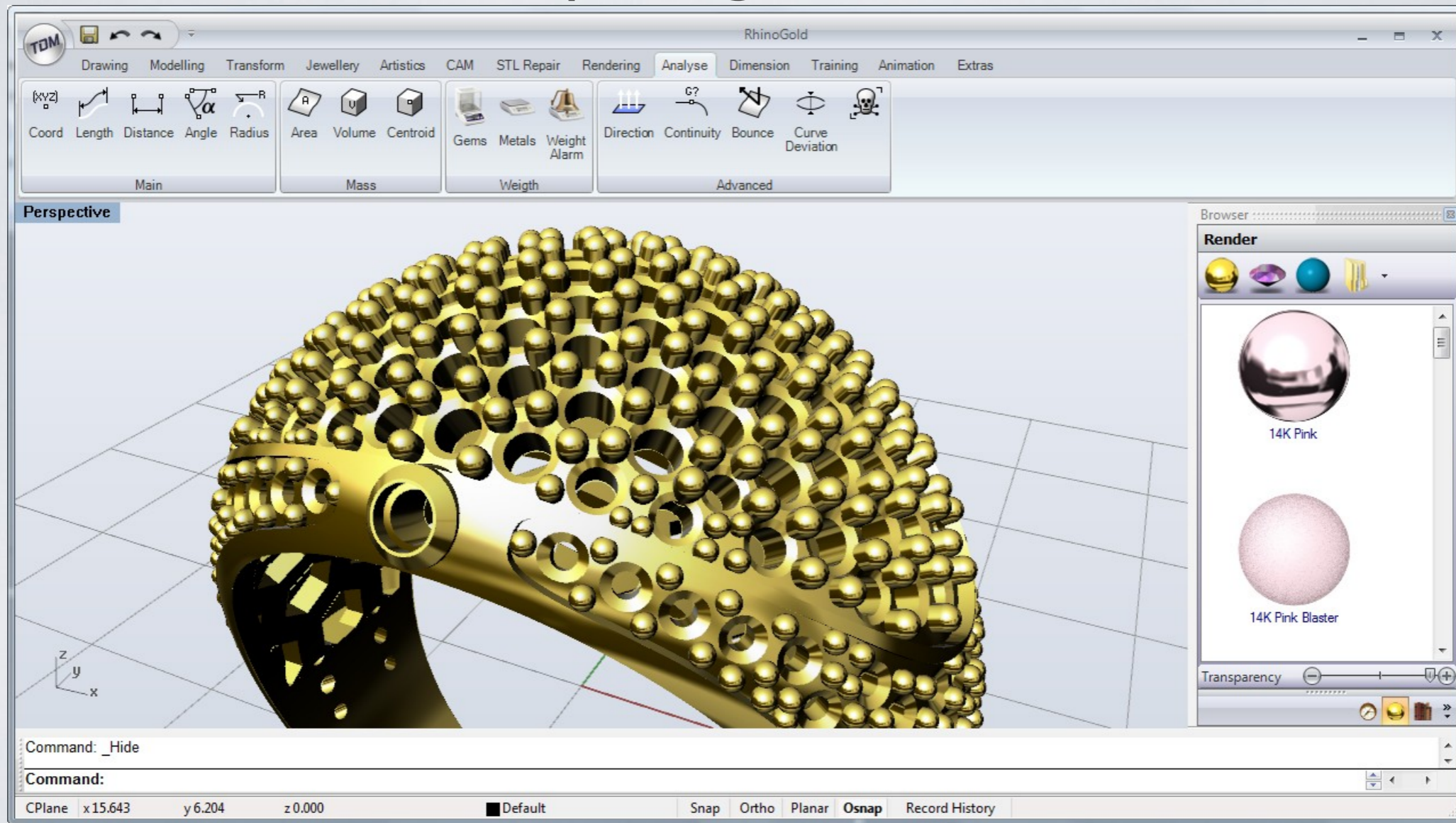


Courtesy of [www.Rhino3d.tv](http://www.Rhino3d.tv)

[www.rhinogold.com](http://www.rhinogold.com)

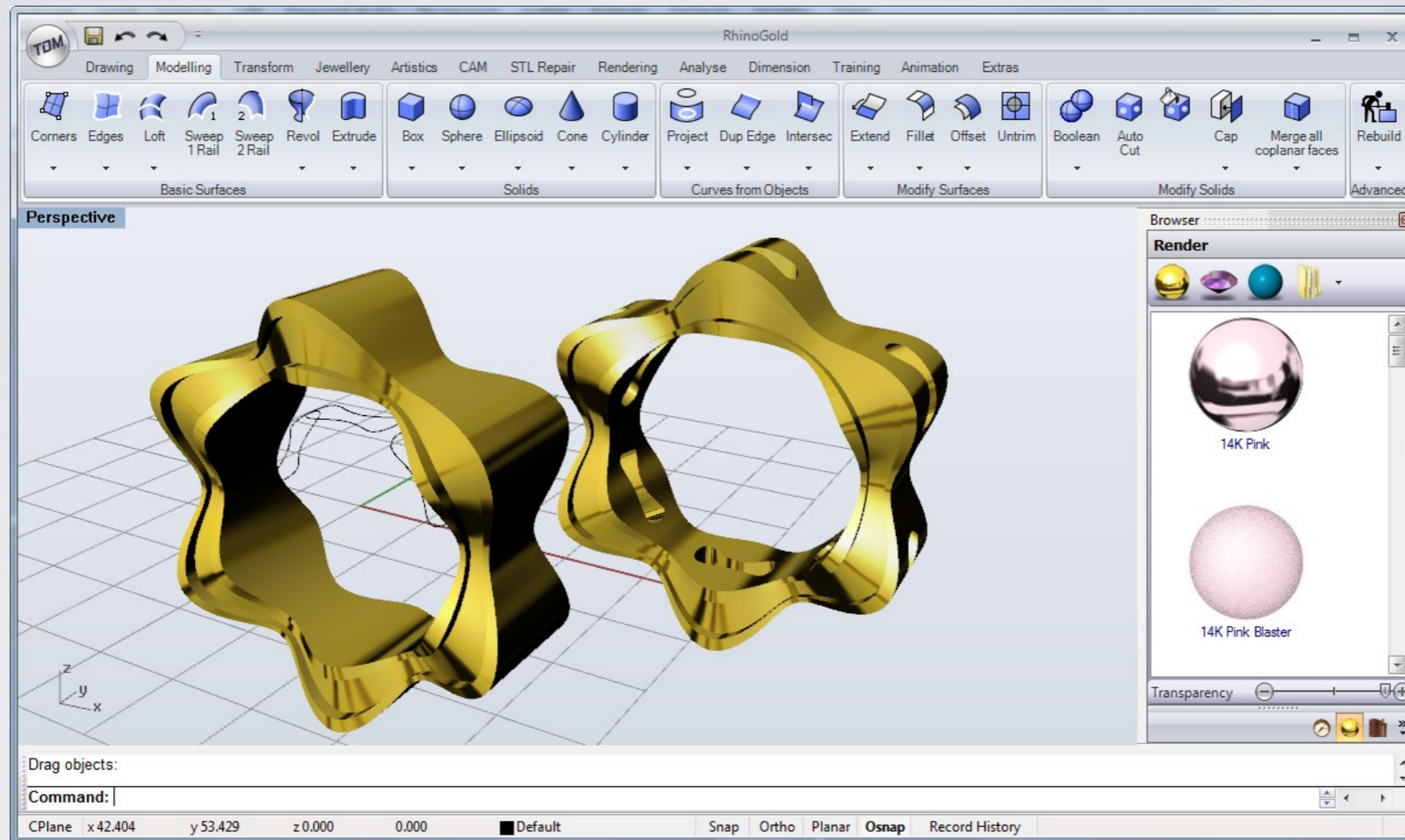
# Copy by Gems

Powerful and easy tool to copy any object from stones. Useful for creating grain or complex prongs.



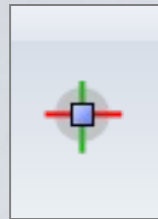
# AutoCut & AutoFill

Allows cut 3D objects using curves. This tool reduces the process of extrude planar curves and Boolean difference in just one step.

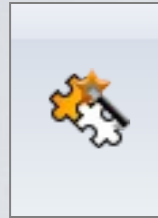


AutoFill is the opposite function, it removes the cuts of the 3D objects.

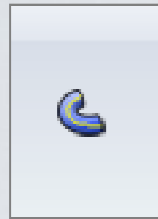
# Improve the effectiveness



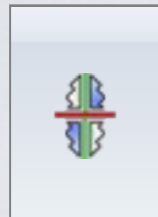
Go to center



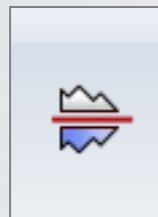
Autoconnect curves



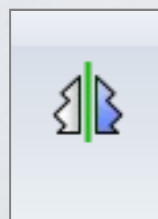
Extract pipe center



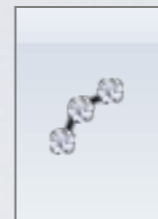
Quadruple symmetry



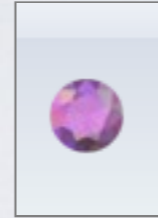
Vertical symmetry



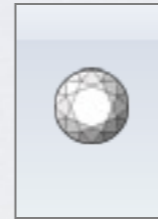
Horizontal symmetry



Curve from Gems



Render Gem Display Mode



Shaded Gem Display Mode



Wireframe Gem Display Mode



Extract Gem Base Curve



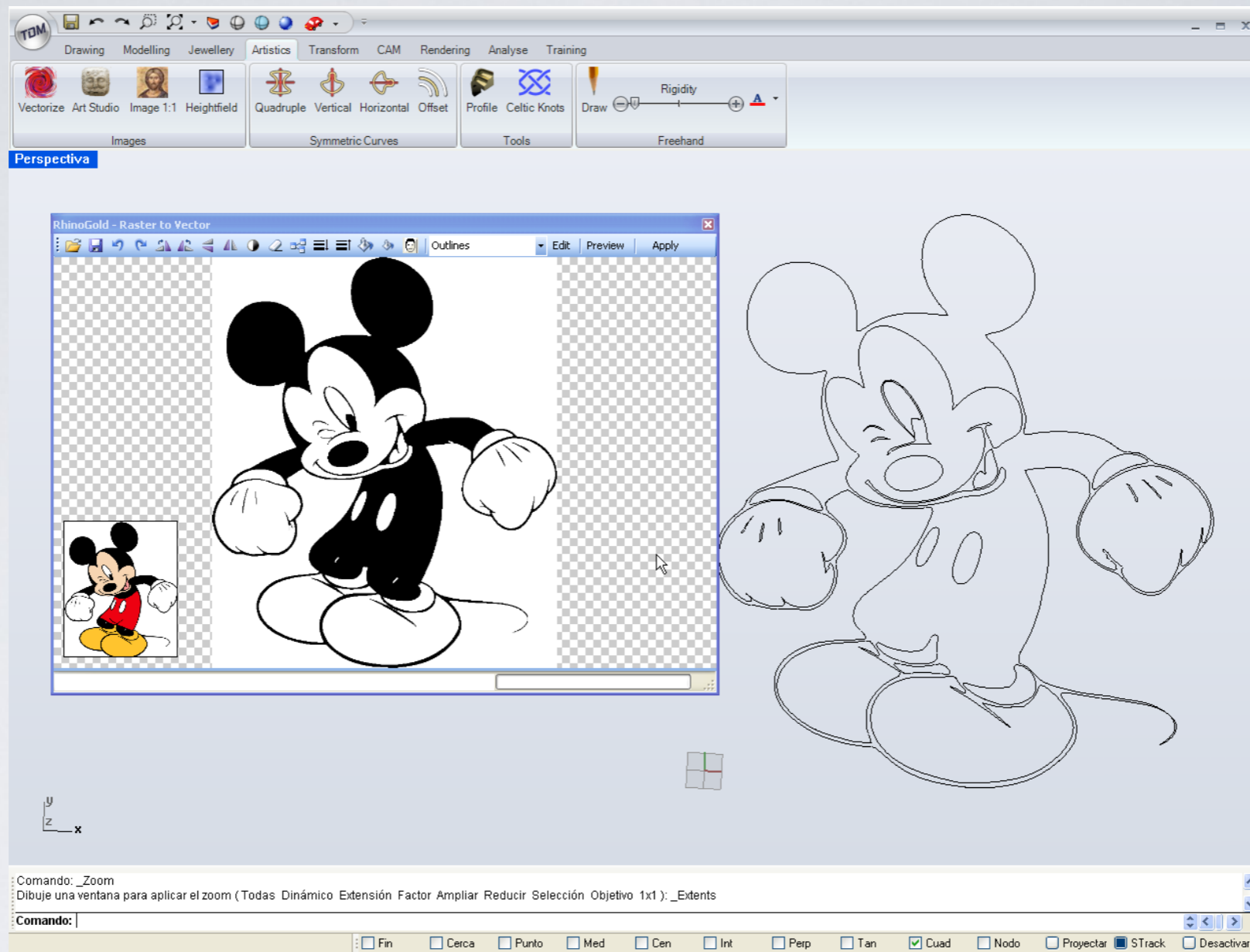
Offset In/Out





# Artistic Tools

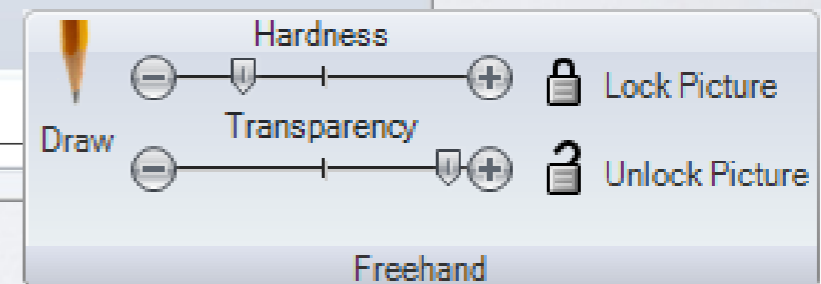
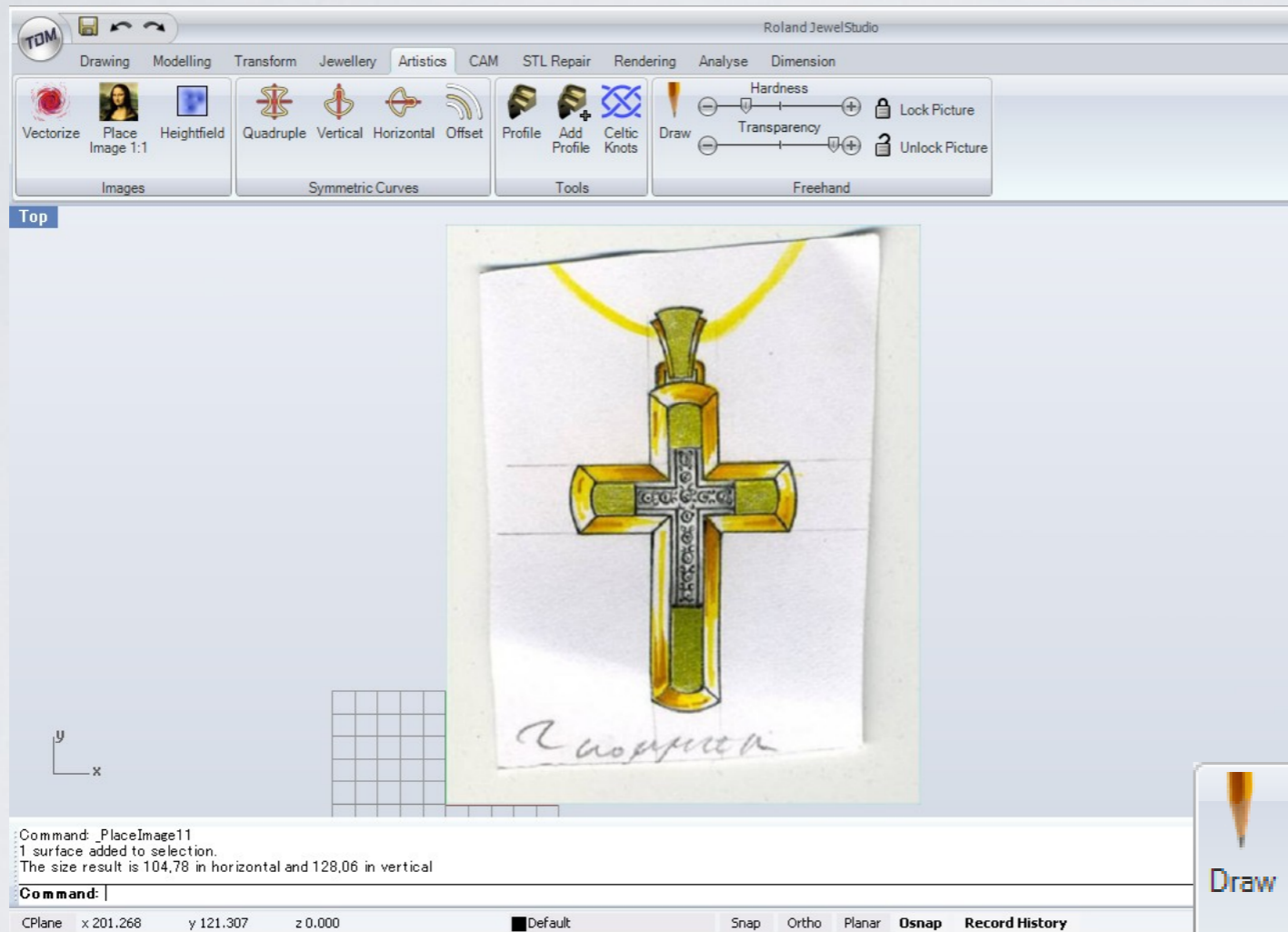
# Raster to Vector



Convert images and hand drawings to graphic vectors, useful for 3D design, milling and engraving.

# Place Image 1:1

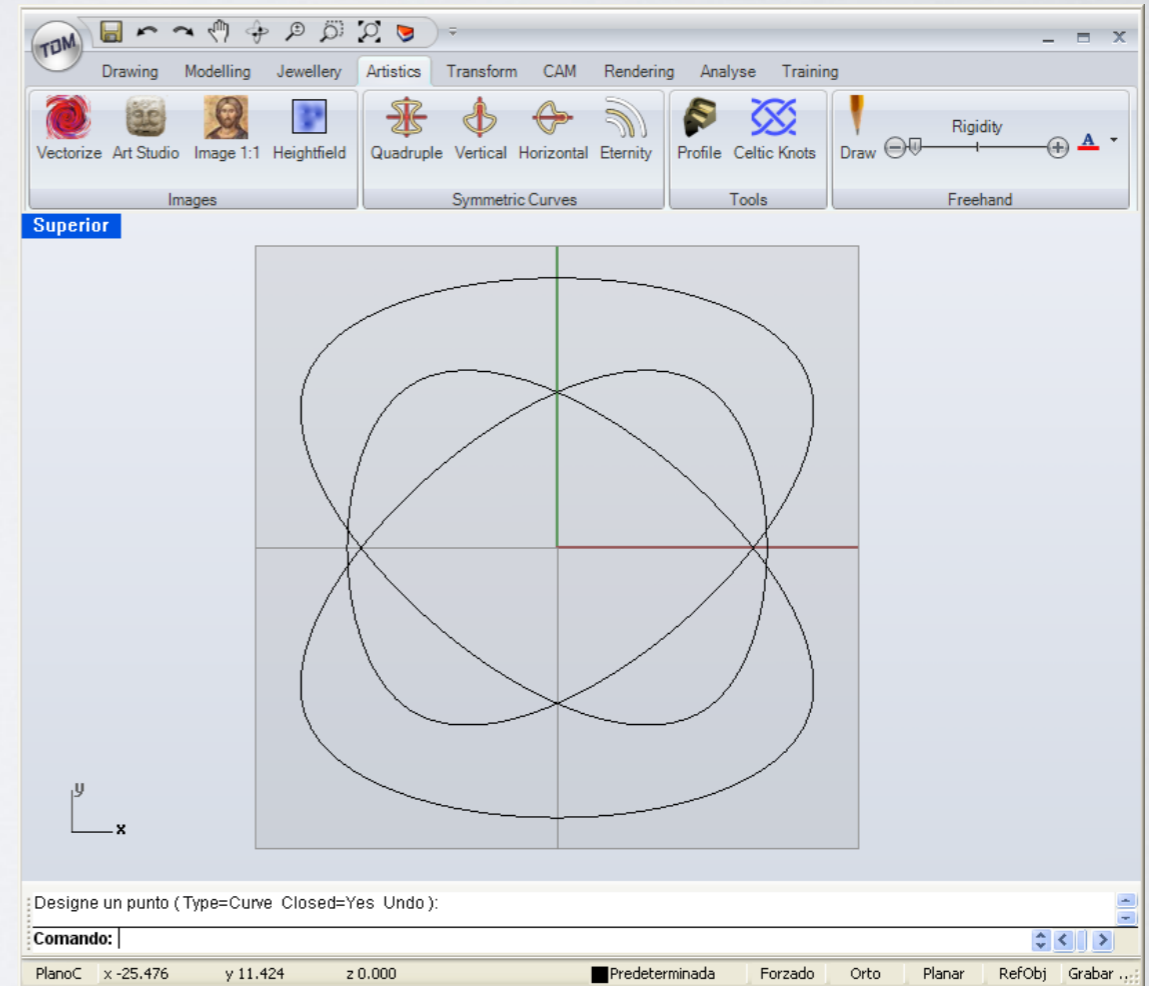
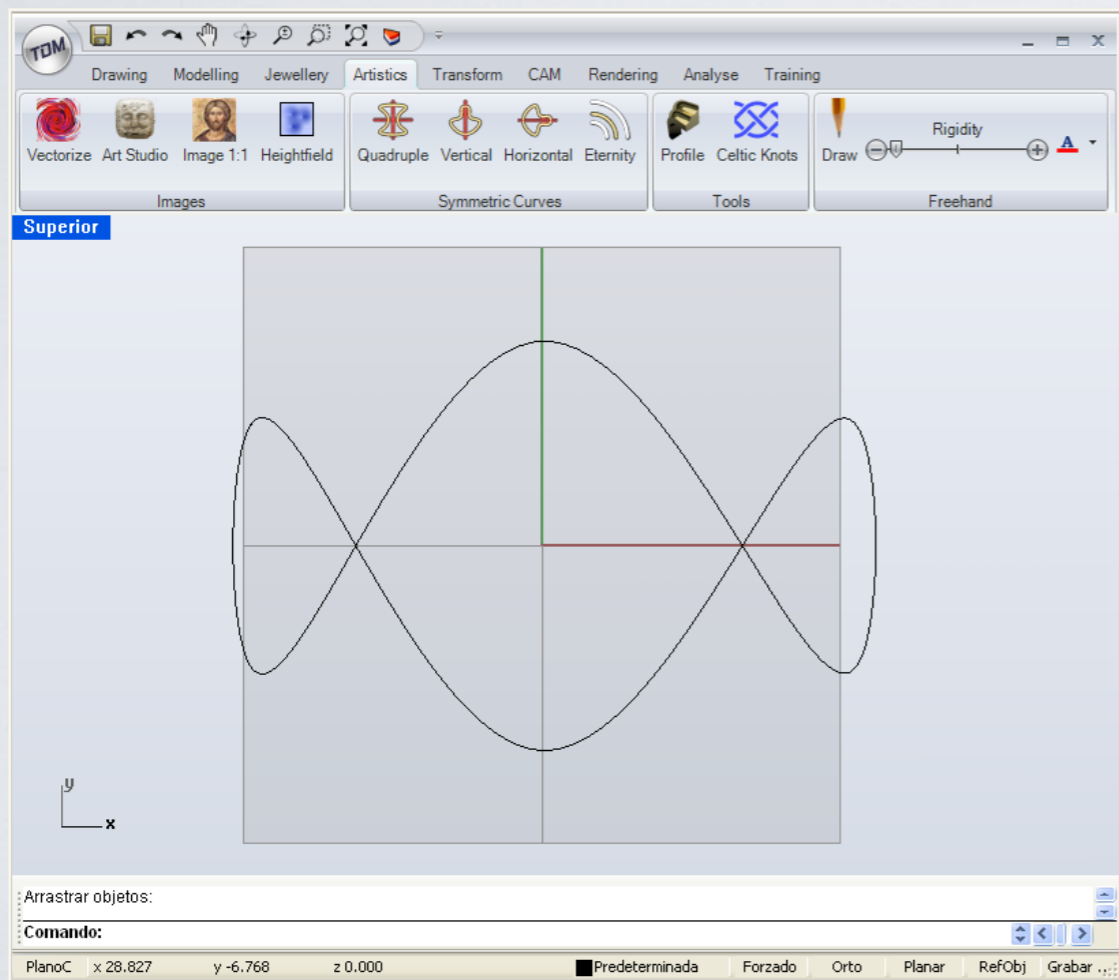
We can import any sketch, drawing or image at 1:1 scale just in one click.



Hardness and smooth curves for graphic  
tablets  
[www.rhinogold.com](http://www.rhinogold.com)

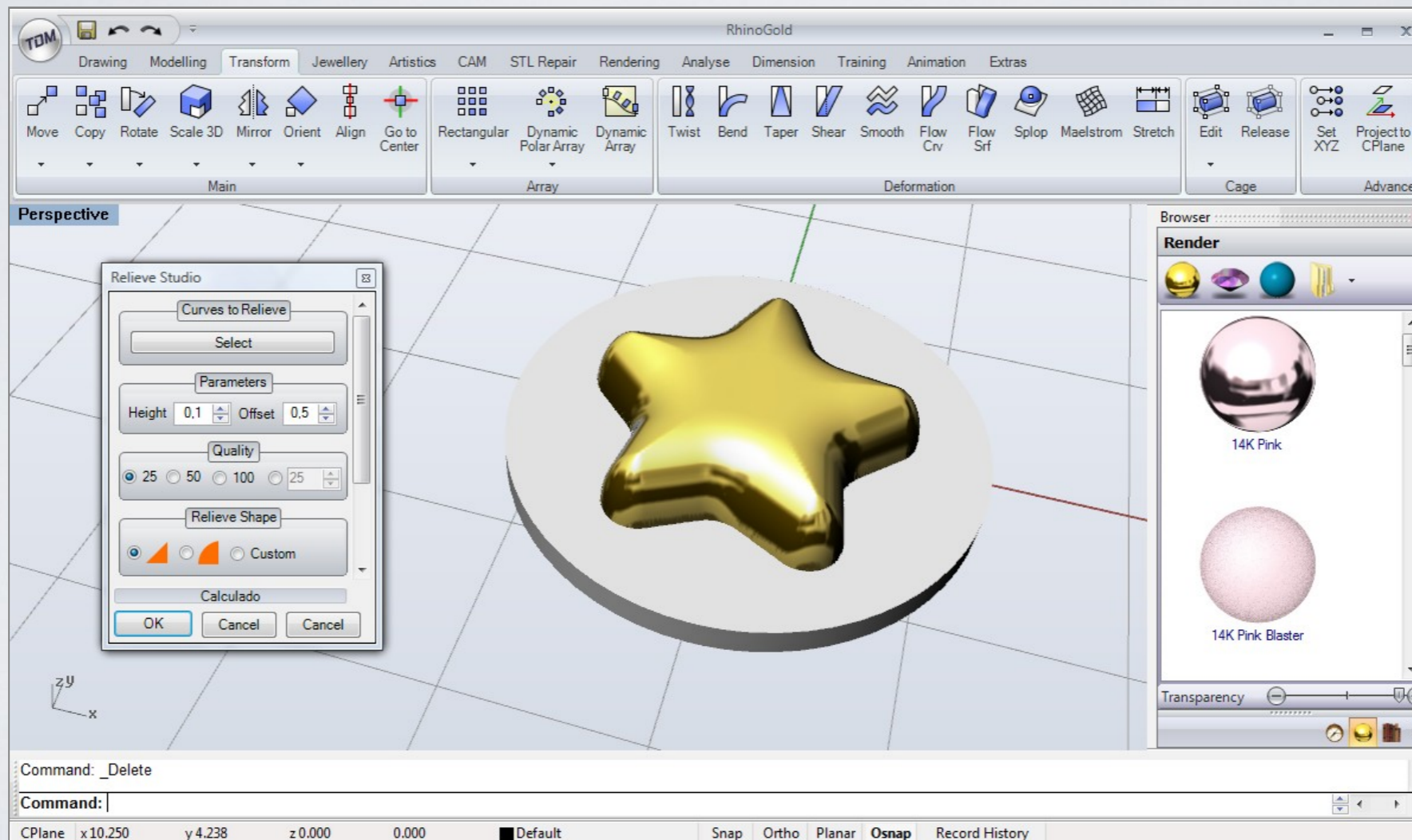
# Symmetric curves

Jewelry manufacturers do not create a half and then copy it symmetrically. This is the reason for this tool, it is highly useful to get a sense of volume.



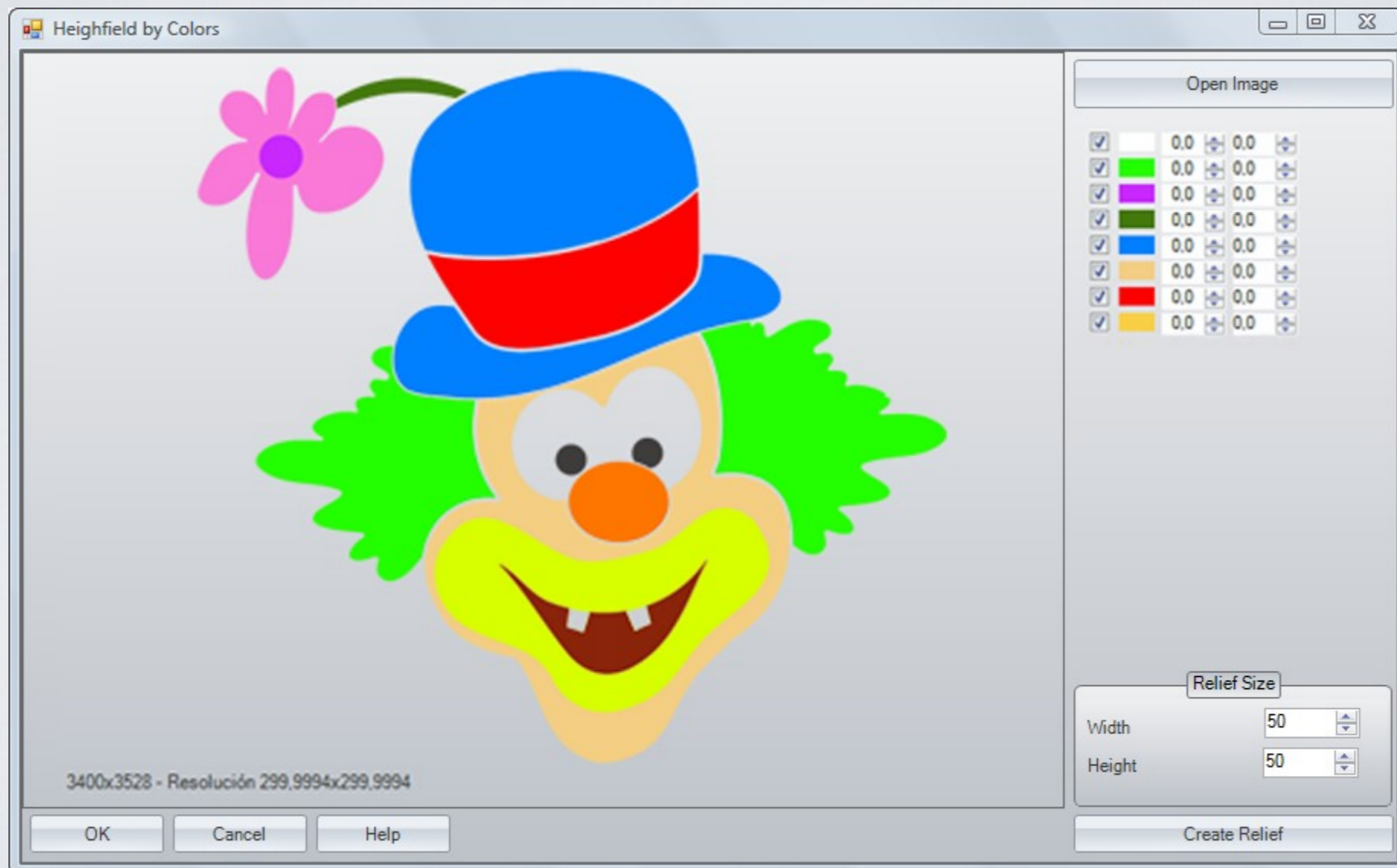
# Relief Studio

This tool creates reliefs from curves. We have the option to define the relieve profile. The result can be created in meshes or surfaces.



# Heightfield by Colors

Creates 3D models from pictures, but in color. Define a height for each color, and pumping on the transparency.



# Textures 3D

From an image, create easily a 3D texture on an object.

3D textures are fully manufactured because is a standard geometrical object.

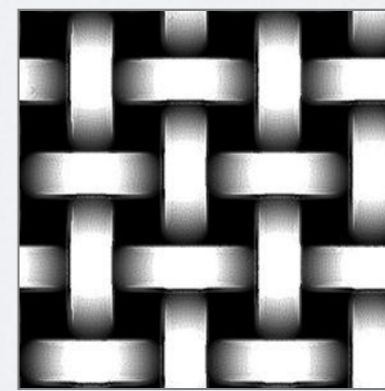
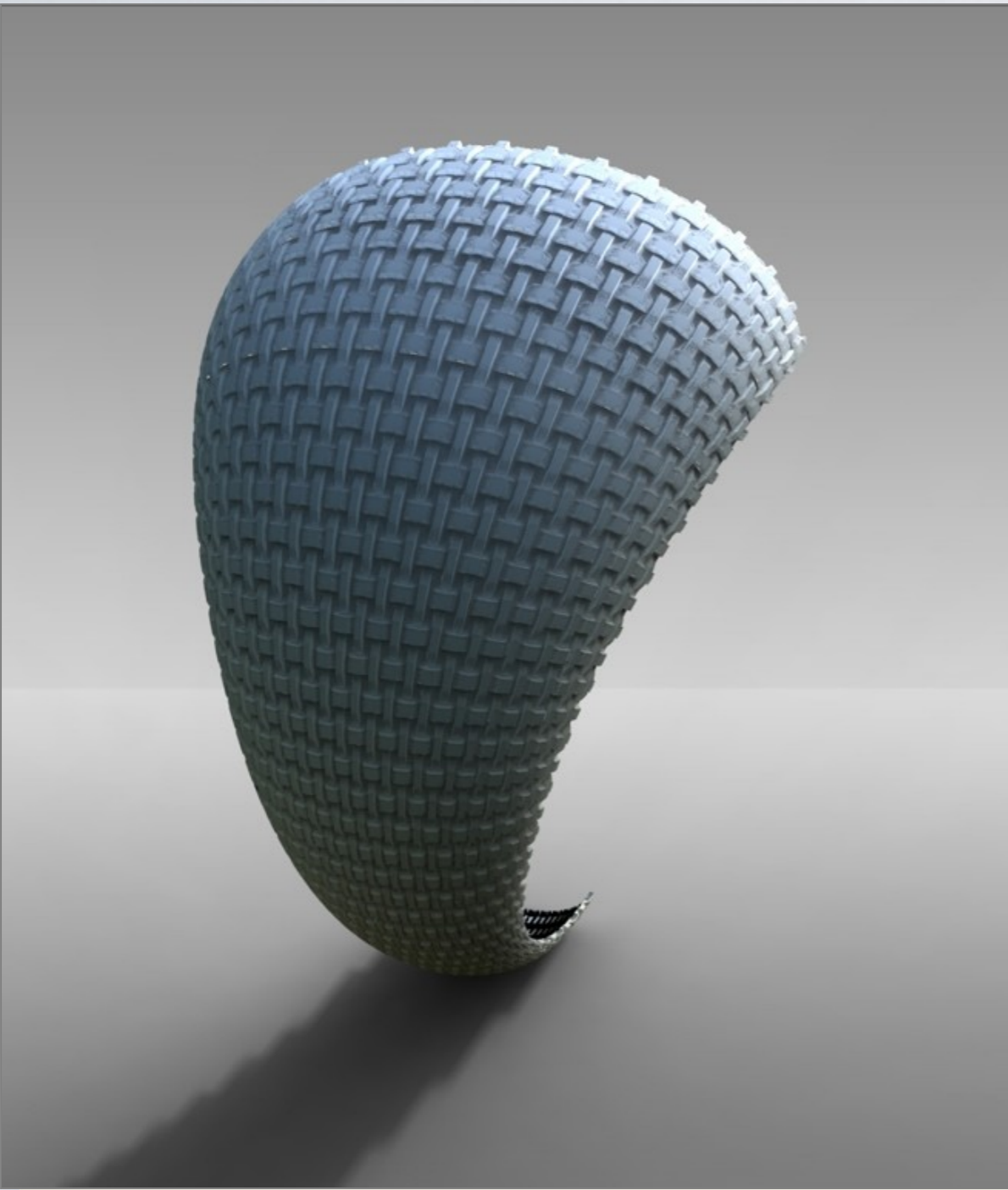
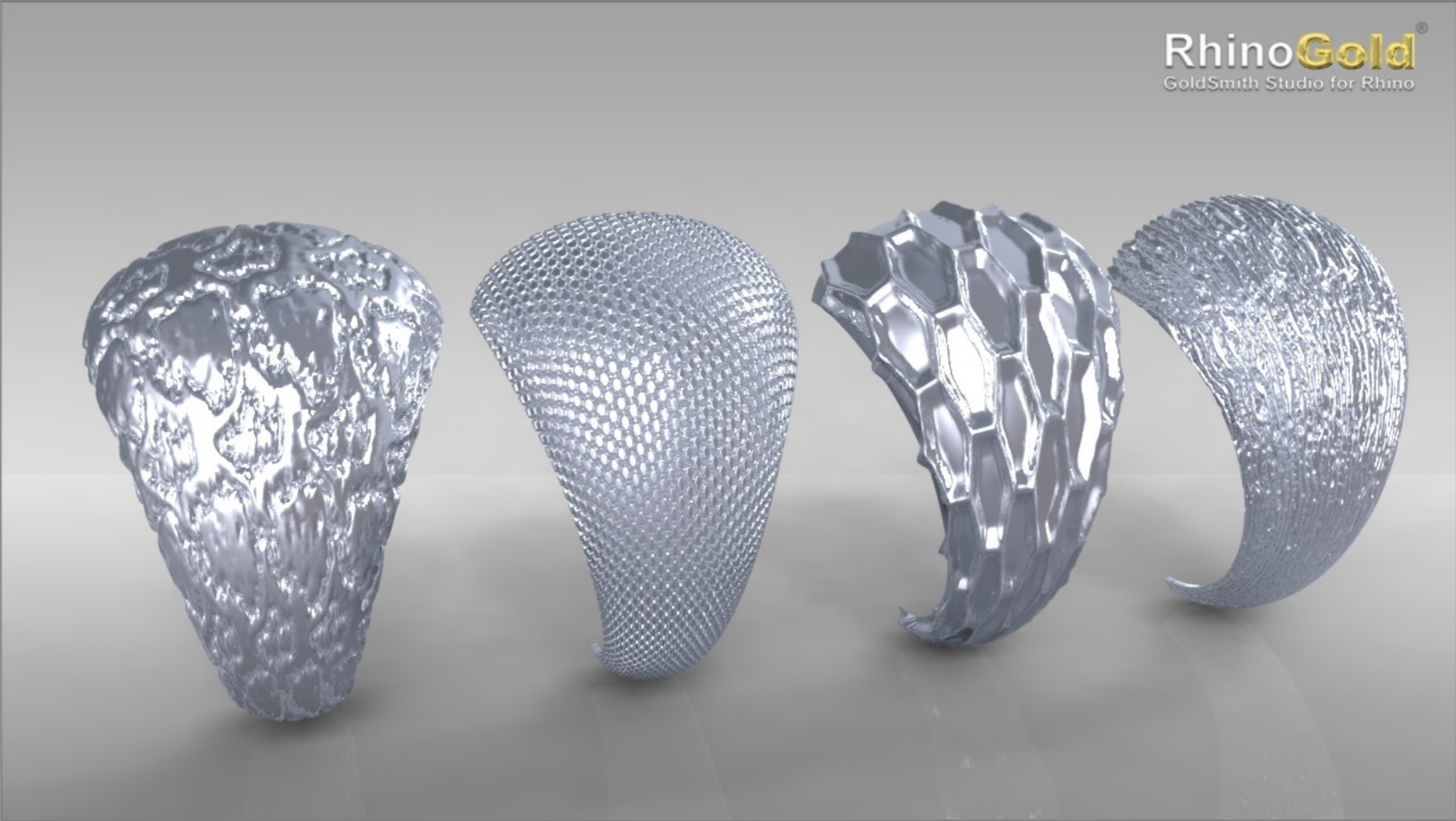


Image sample used in this sample in format jpeg.

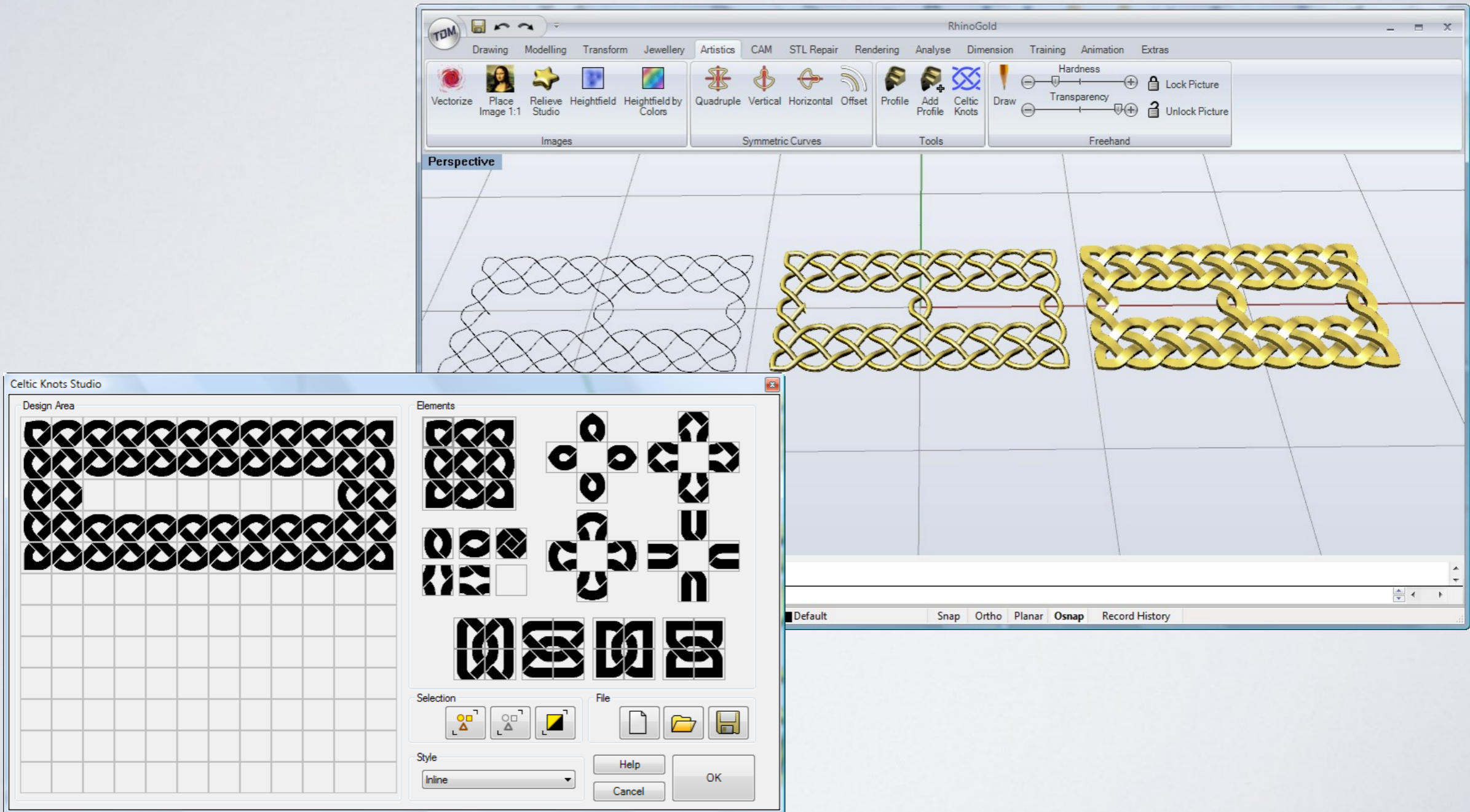
# Textures 3D





# Celtic Knots

Creates Celtic knots in 2D and 3D, in curve and solids

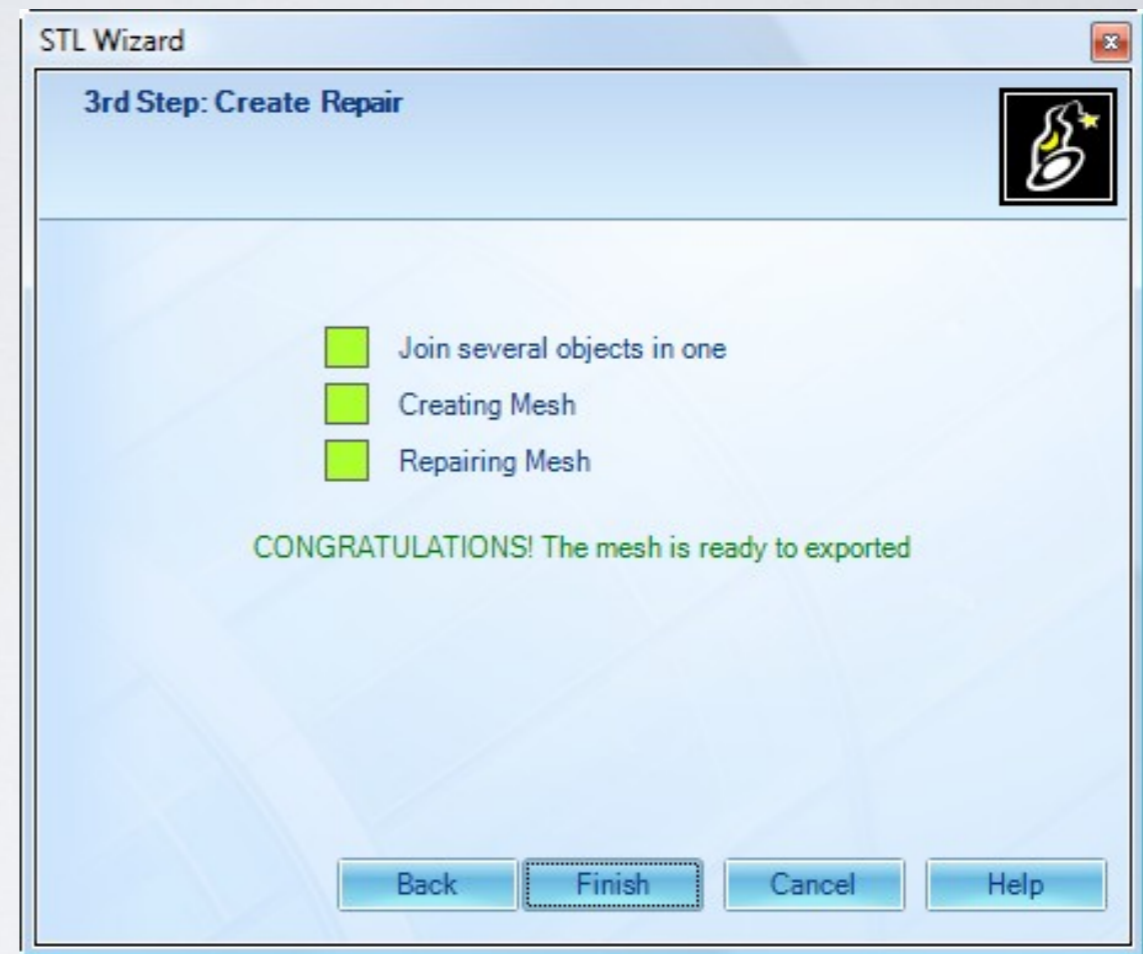
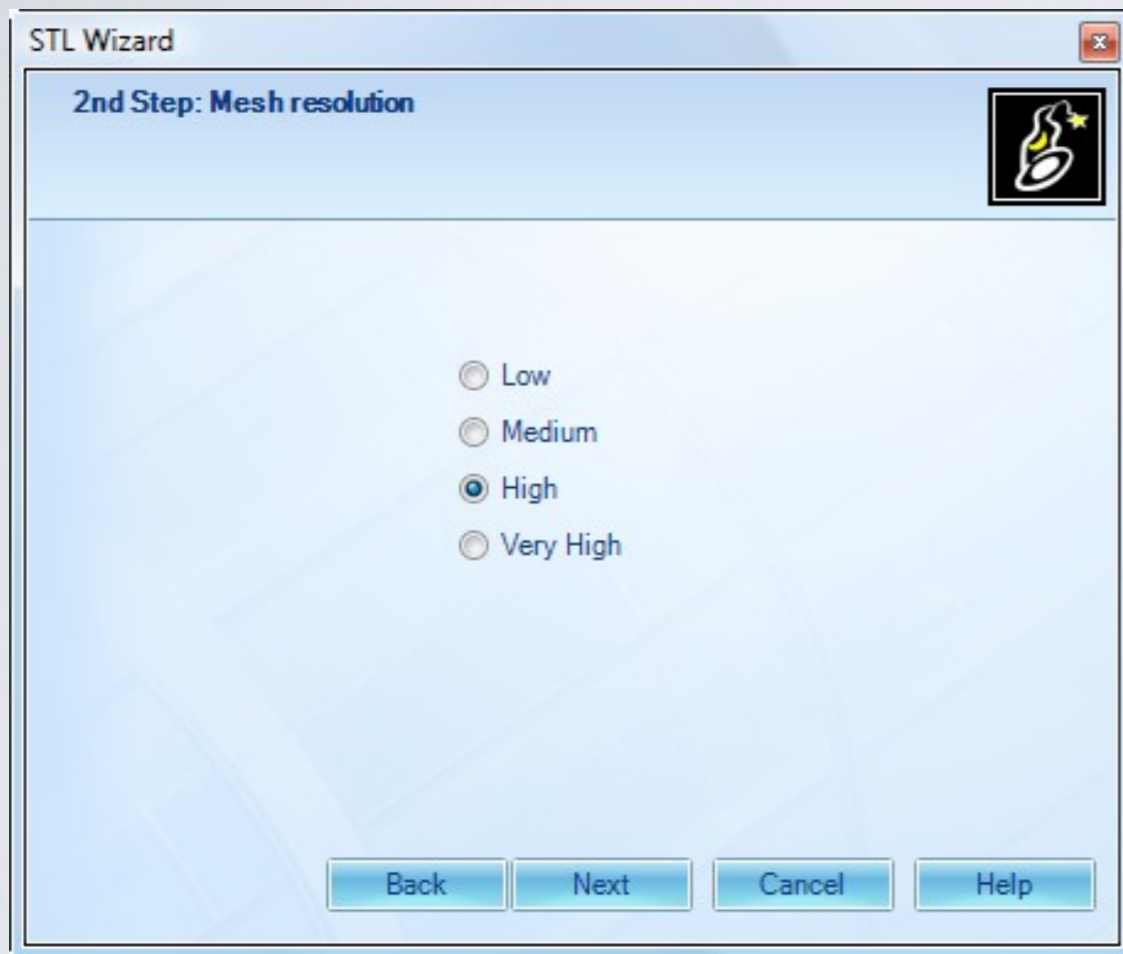




# Manufacturing Tools

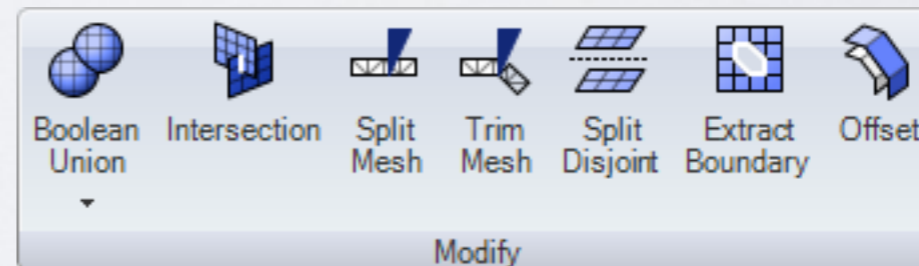
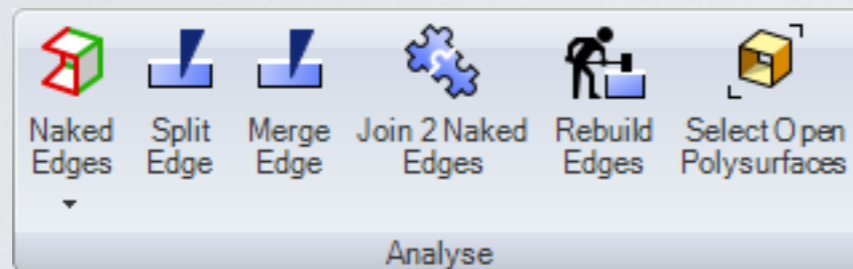
# STL Repairing Wizard

Wizard to repair and export geometry to STL for 3D Printers.



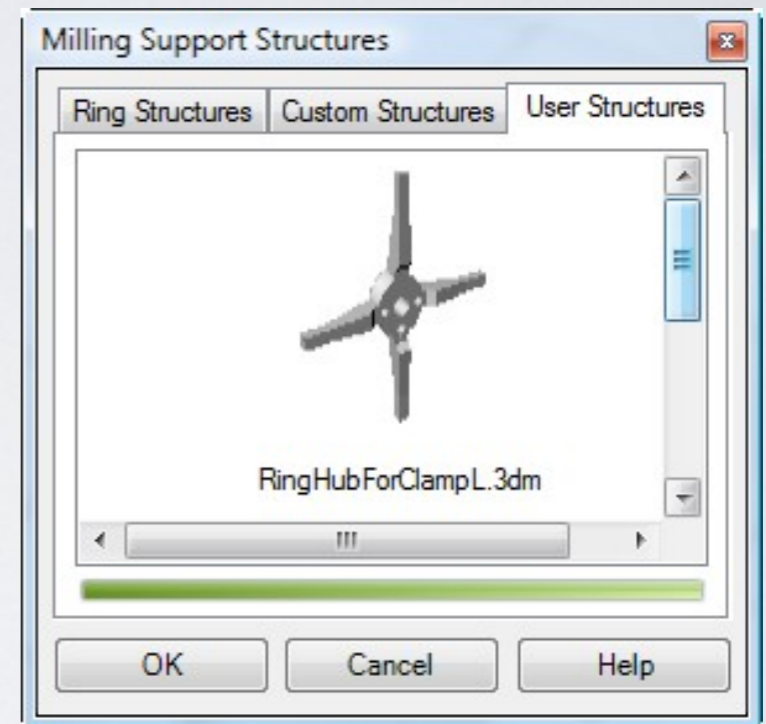
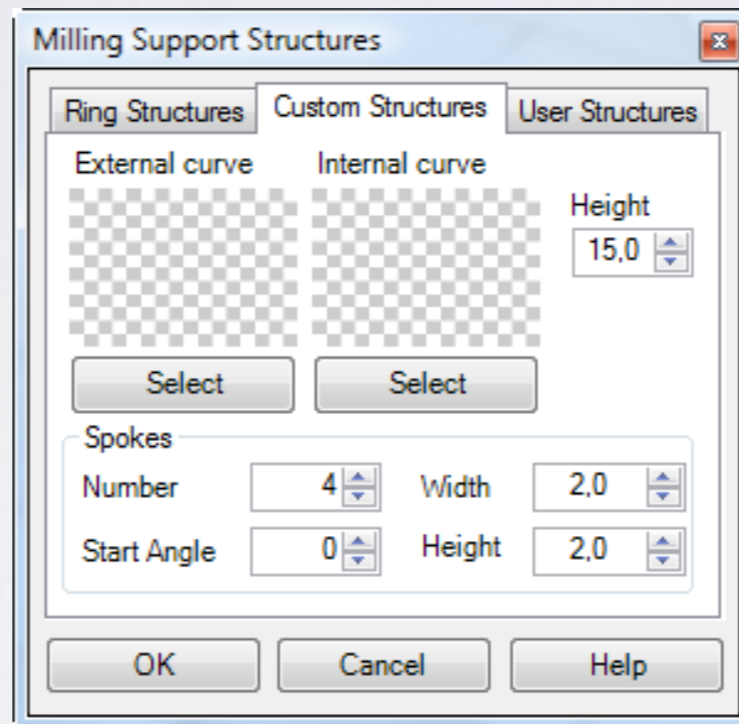
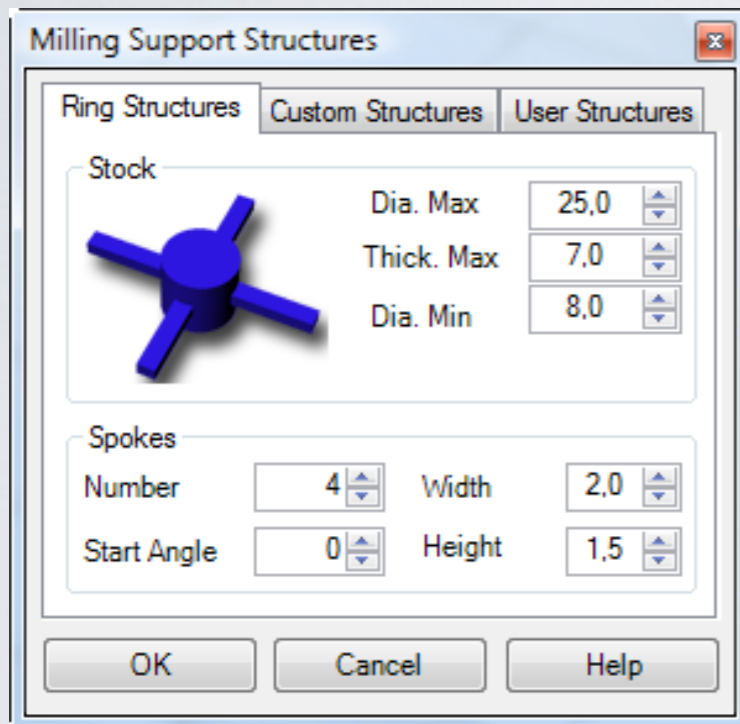
# STL Repairing tools

Allows Analyzing, Repairing and Modifying your STL

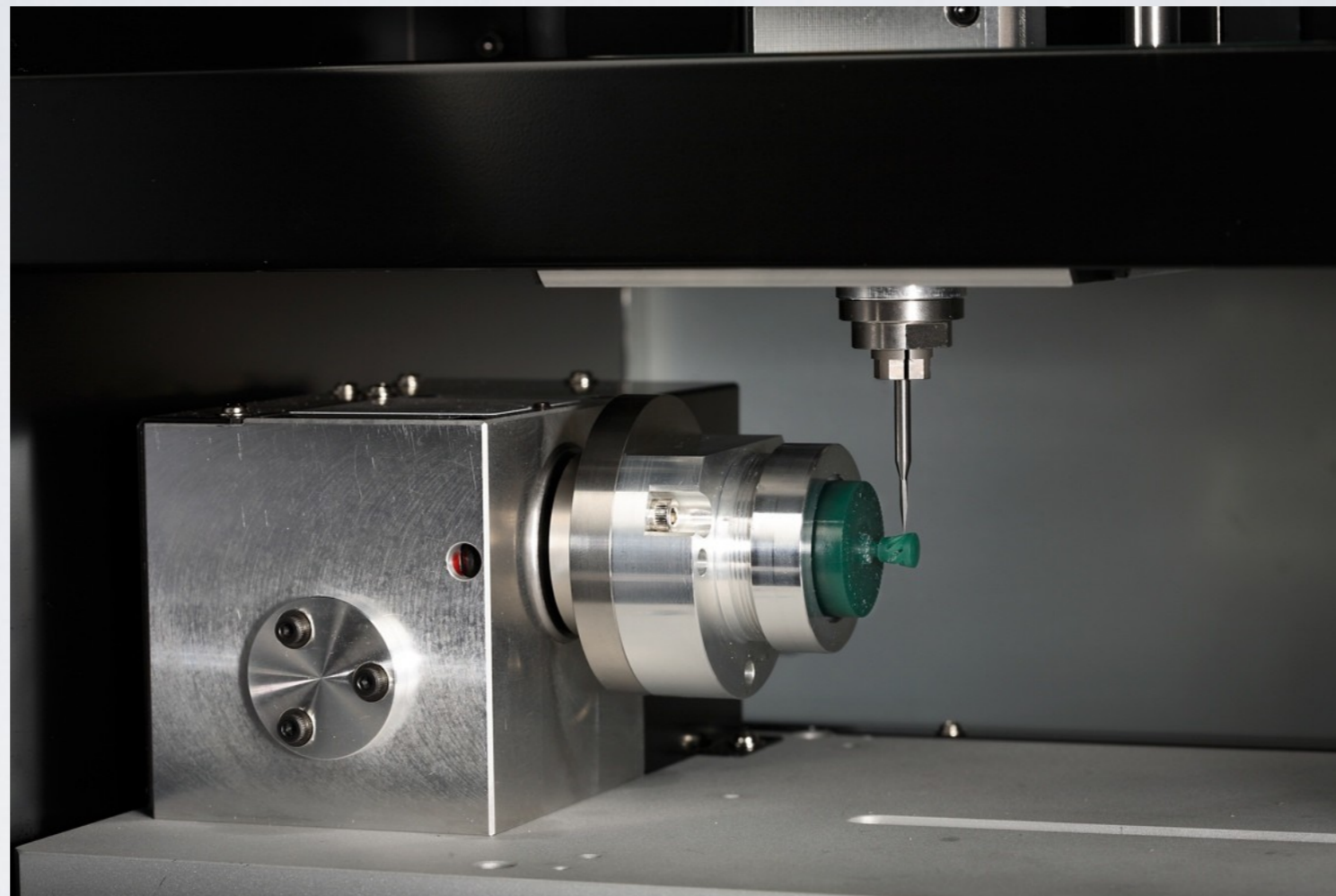


# Milling Support Structures

Creates milling support structure standard and custom, and allows managing own designs. Includes Roland JWX30 Milling Support Structures.



Integration to CAM systems  
Is fully integrated with the most popular CAM  
Systems, such as Modela Player, SRP Player,  
DeskProto,...



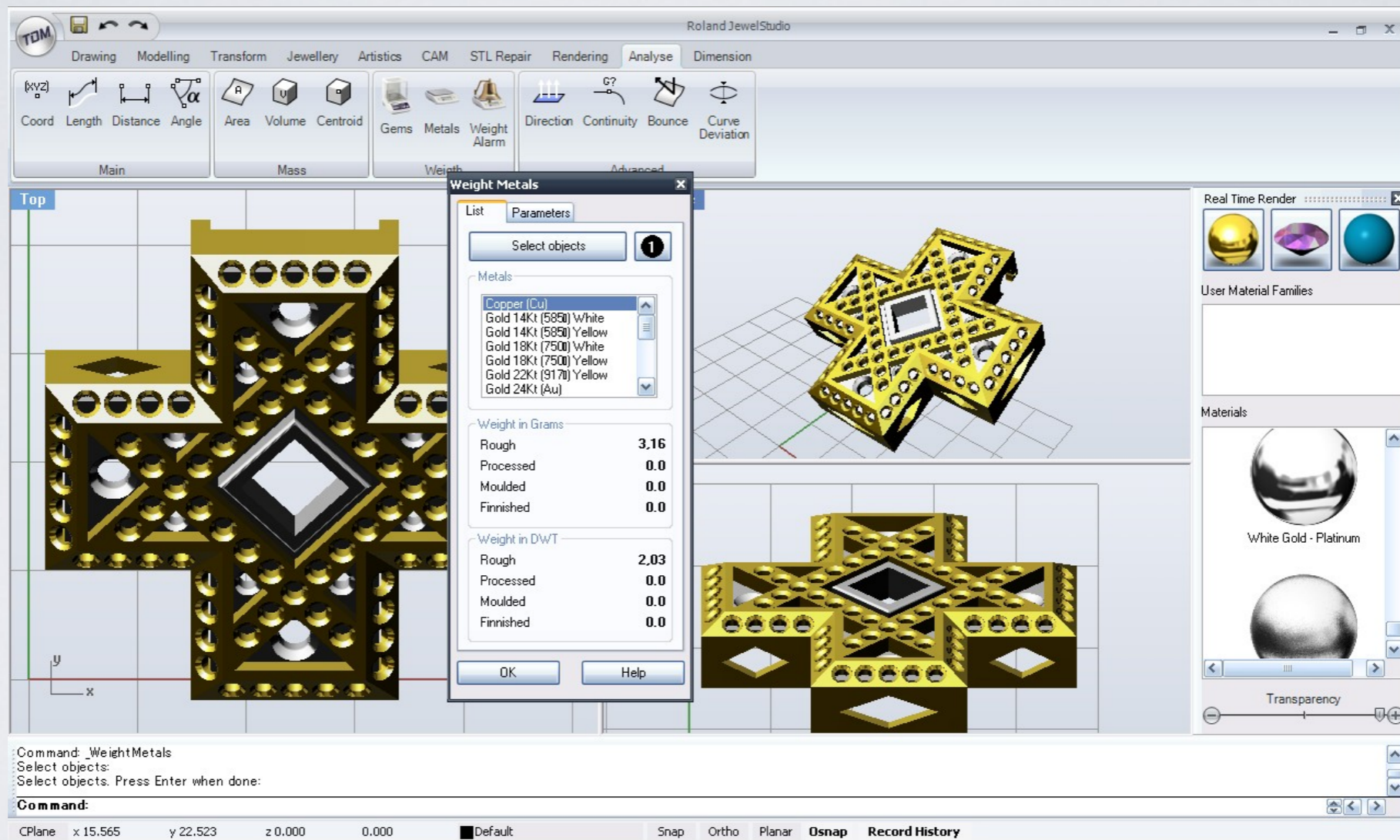
Roland JWX30



# Analyze Tools

# Weight for Metals and Gems

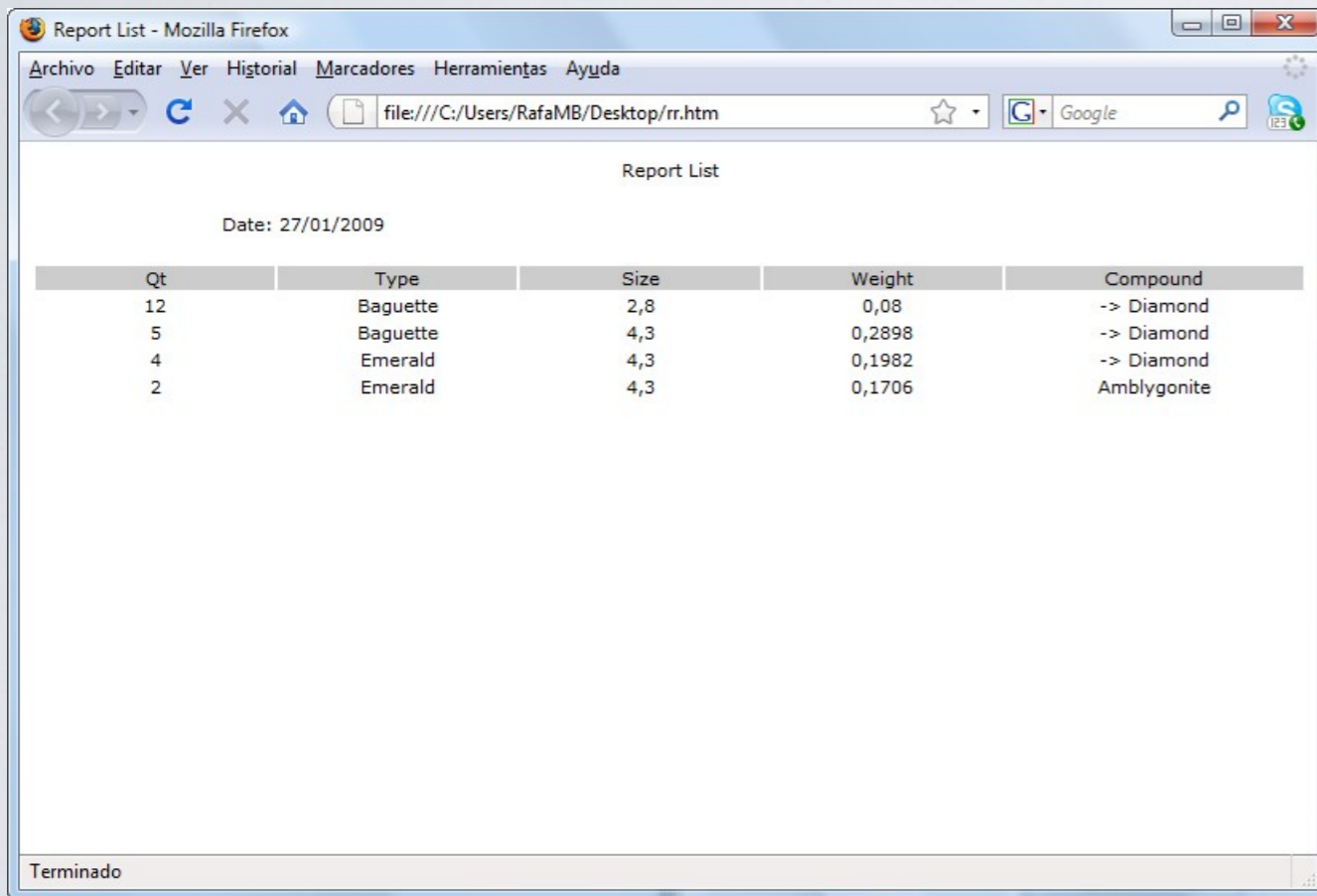
RhinoGold® Weight calculates the weight of our designs just in a single click.





# Report

This tool creates a report of your model



Report List - Mozilla Firefox

file:///C:/Users/RafaMB/Desktop/rr.htm

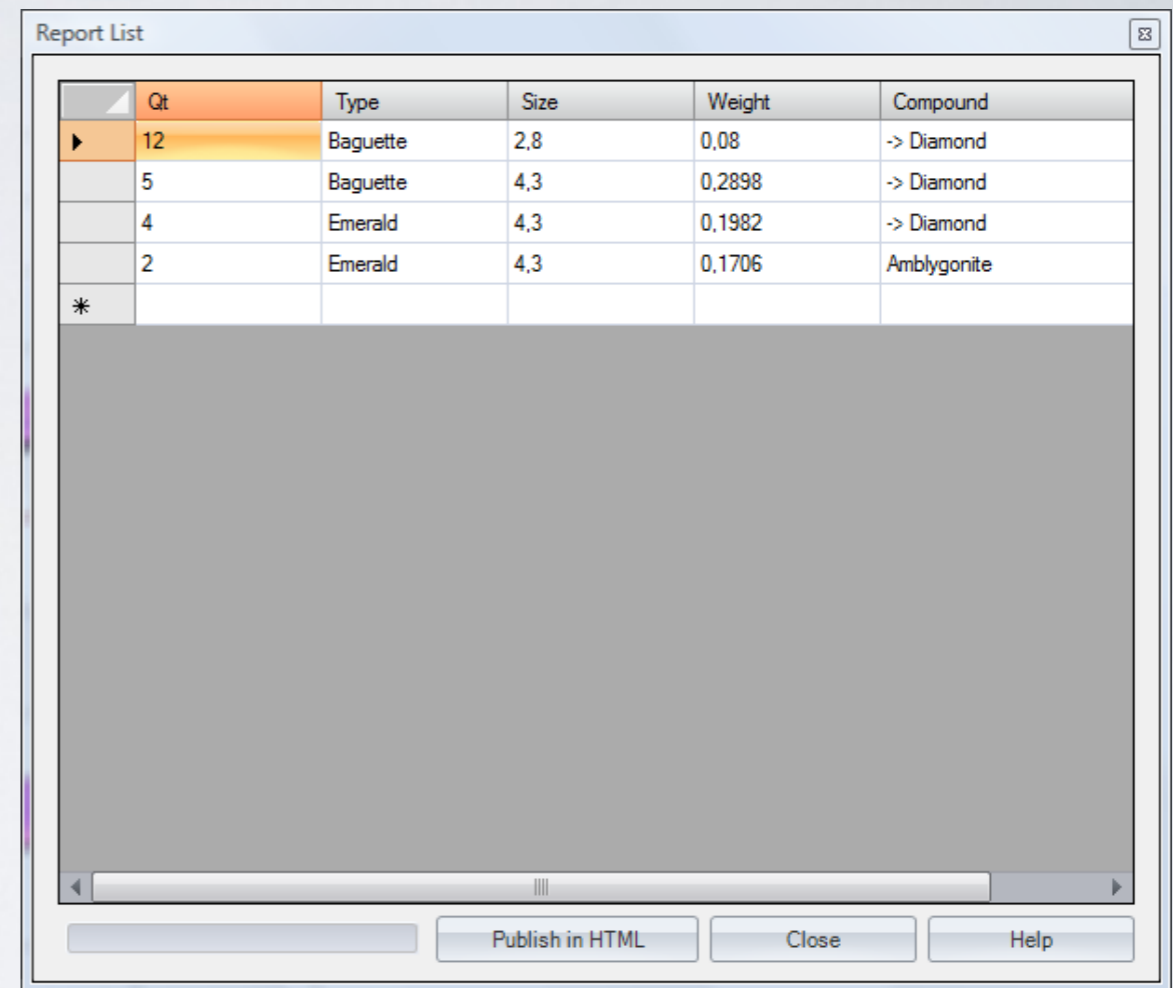
Report List

Date: 27/01/2009

Qt	Type	Size	Weight	Compound
12	Baguette	2,8	0,08	-> Diamond
5	Baguette	4,3	0,2898	-> Diamond
4	Emerald	4,3	0,1982	-> Diamond
2	Emerald	4,3	0,1706	Amblygonite

Terminado

Report in HTML



Report List

Qt	Type	Size	Weight	Compound
12	Baguette	2,8	0,08	-> Diamond
5	Baguette	4,3	0,2898	-> Diamond
4	Emerald	4,3	0,1982	-> Diamond
2	Emerald	4,3	0,1706	Amblygonite
*				

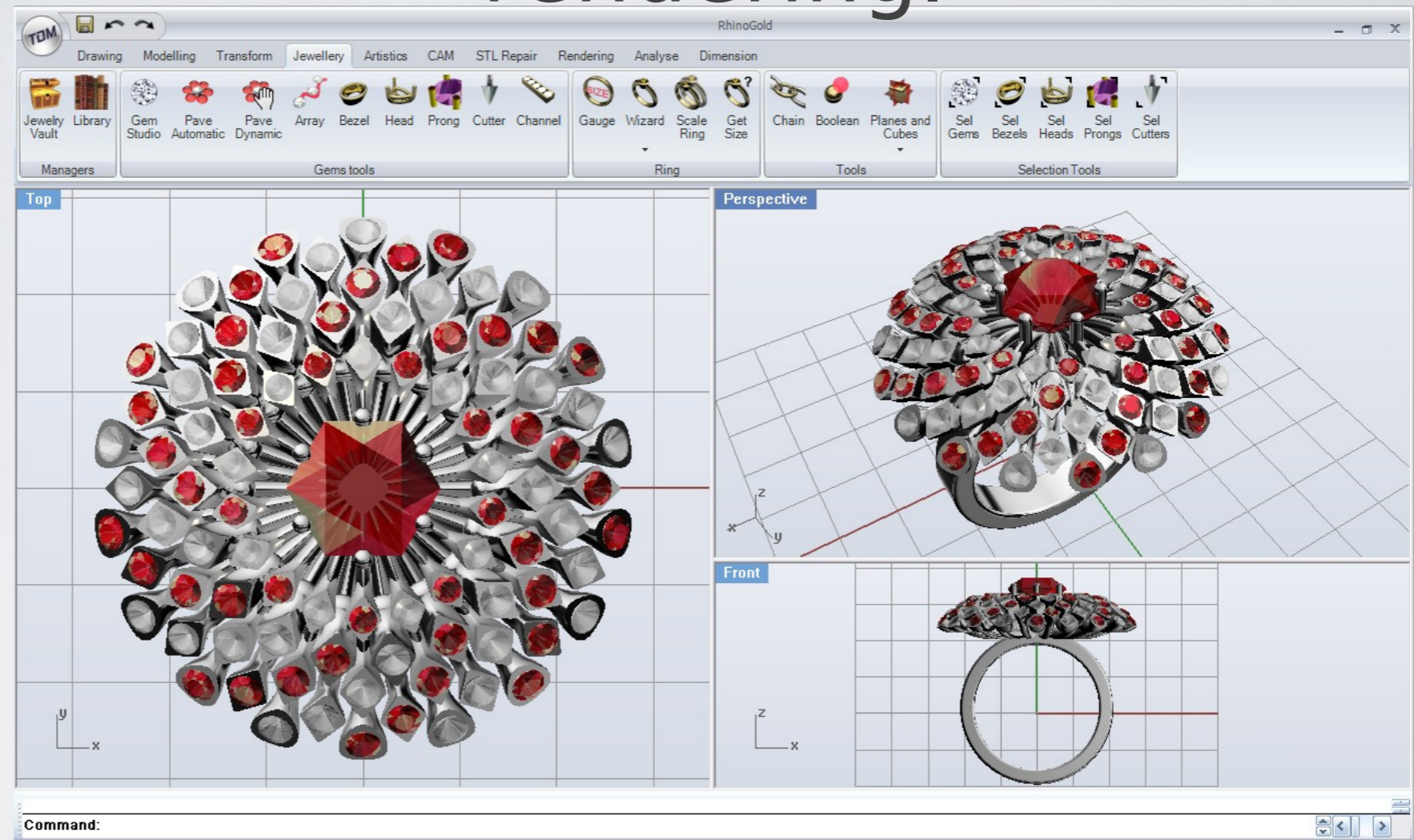
Publish in HTML Close Help

Report










# Communication tools

# Real time Rendering RhinoGold includes a real time rendering.



# Rendering Compatibility

	RhinoGold Render Studio
	Flamingo Render Raytrace 2.0 ▶
	Penguin Render 2.0 ▶
	HyperShot
	Brazil r/s Render
	V-Ray Render
	Maxwell Render

RhinoGold is totally compatible with Flamingo, Penguin, Brazil, HyperShot, V-Ray and Maxwell

# Rendering Compatibility



and includes jewelry material library for Flamingo, Brazil and HyperShot.



More than 200



jewelry materials:



Metals, stones and

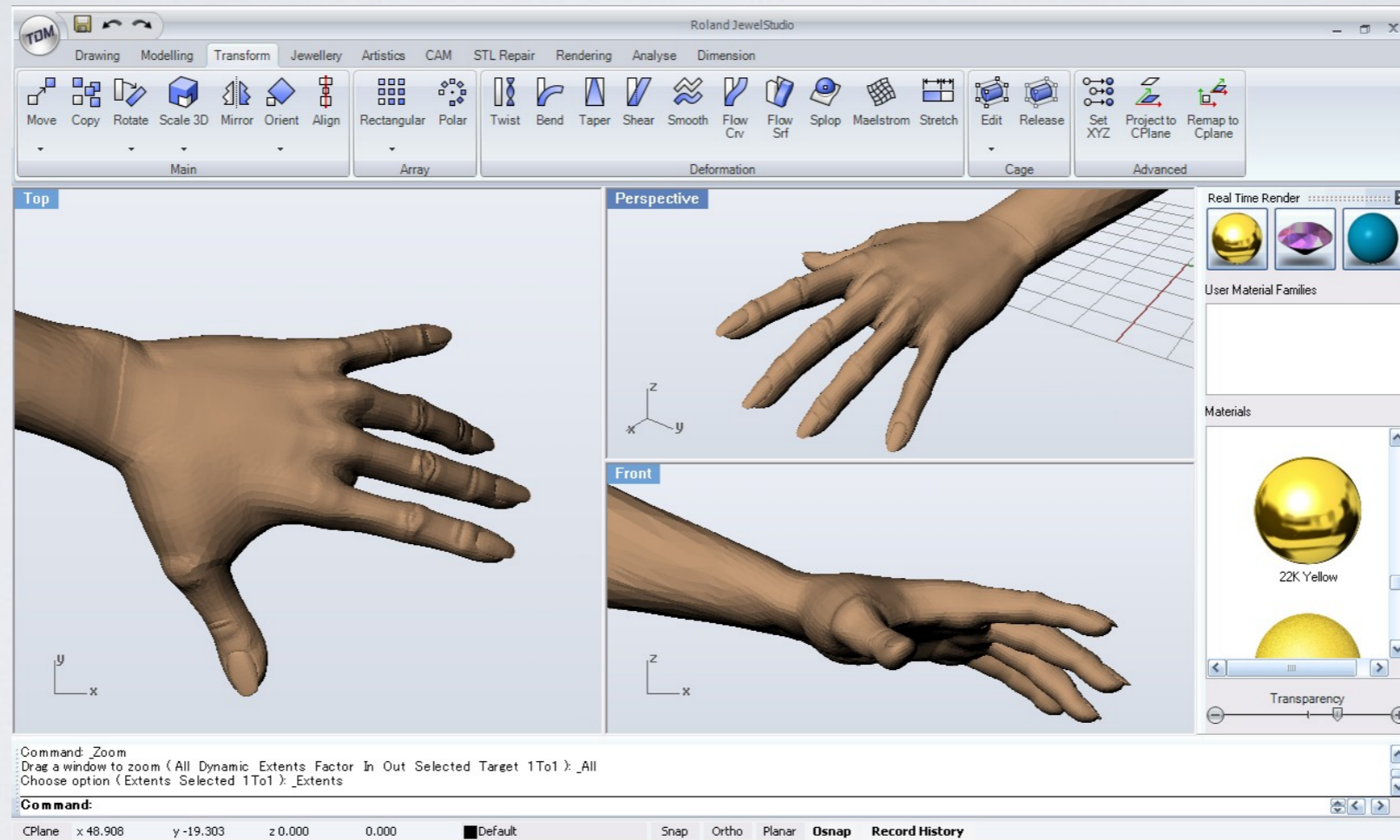


enamels

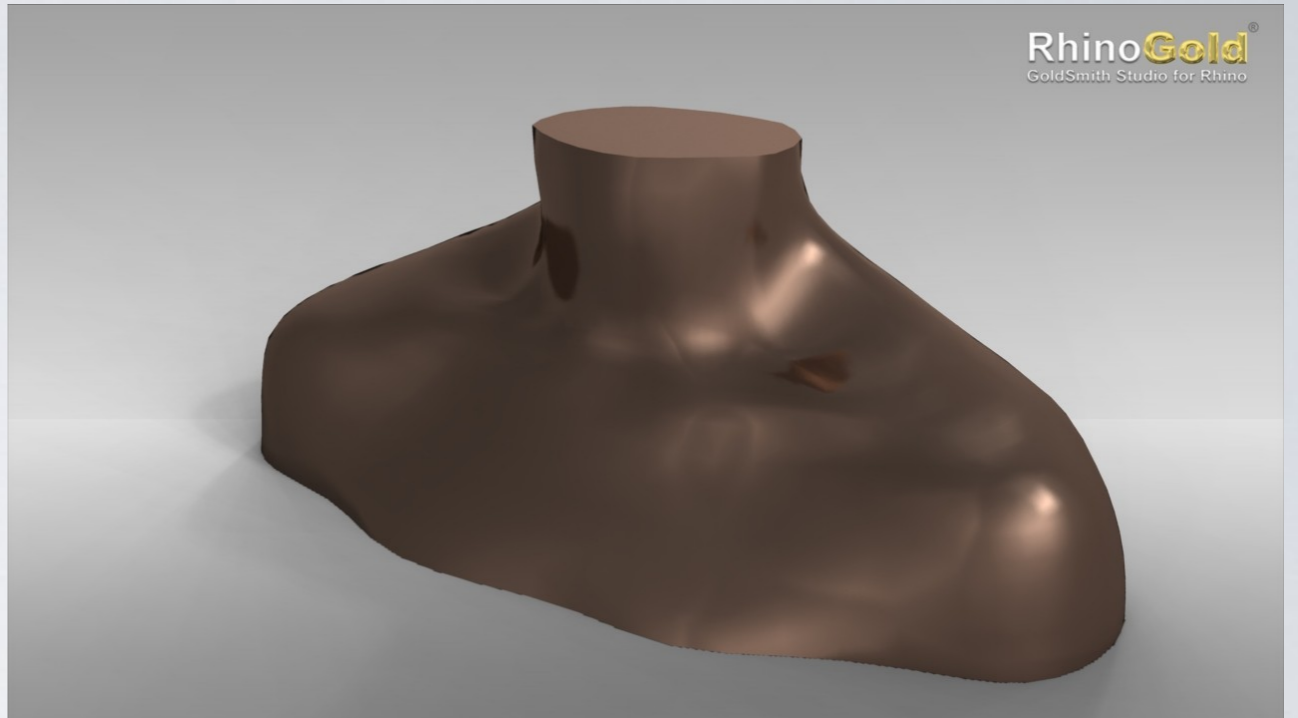
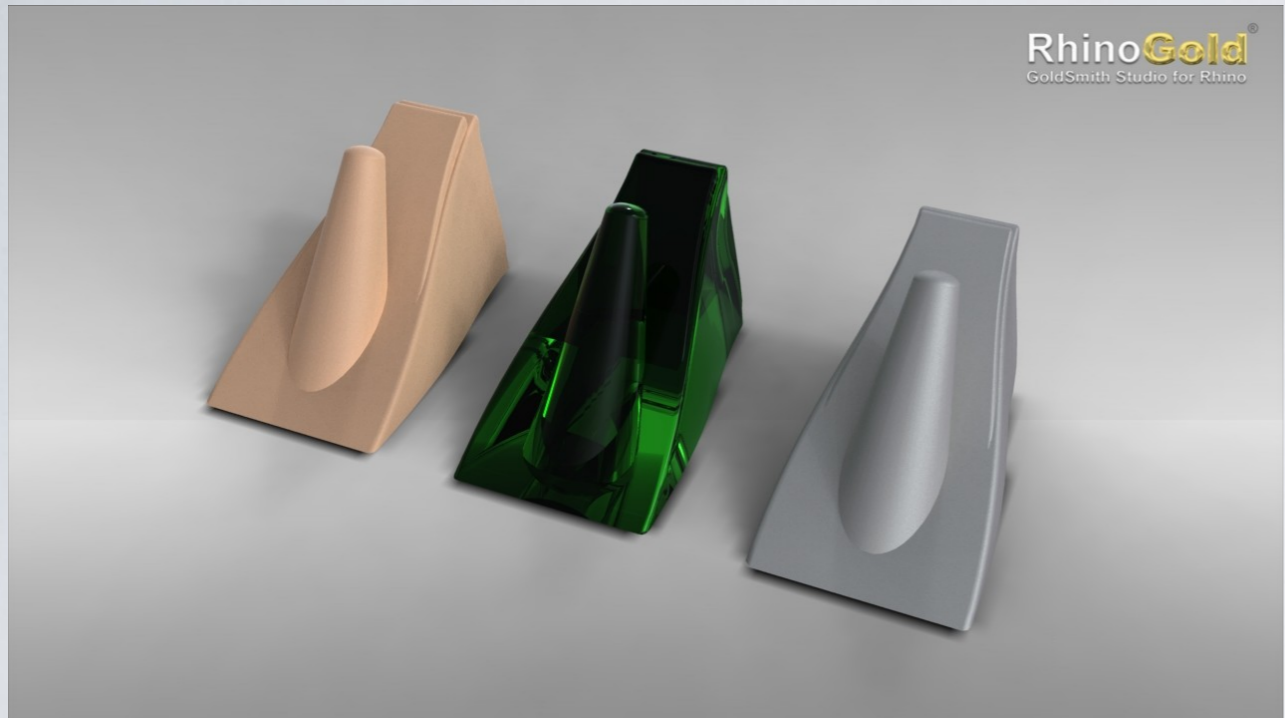


# Scenario

This allows us to add design presentation scenarios. The scenarios are modifiable and can be fully managed by the user.



# More scenarios

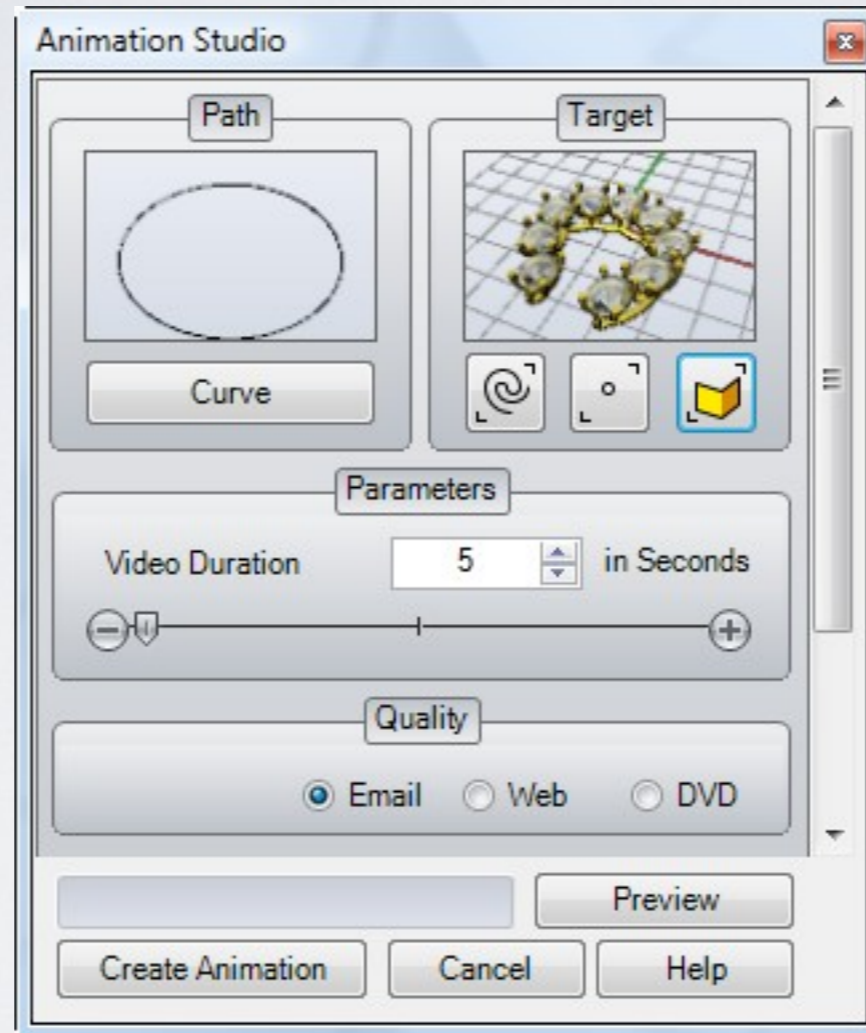




# Animation Studio

This allows us to create videos in seconds.

The user defines the camera parameters, the video quality: email, web and DVD, the favorite render and export it using your favorites codec.



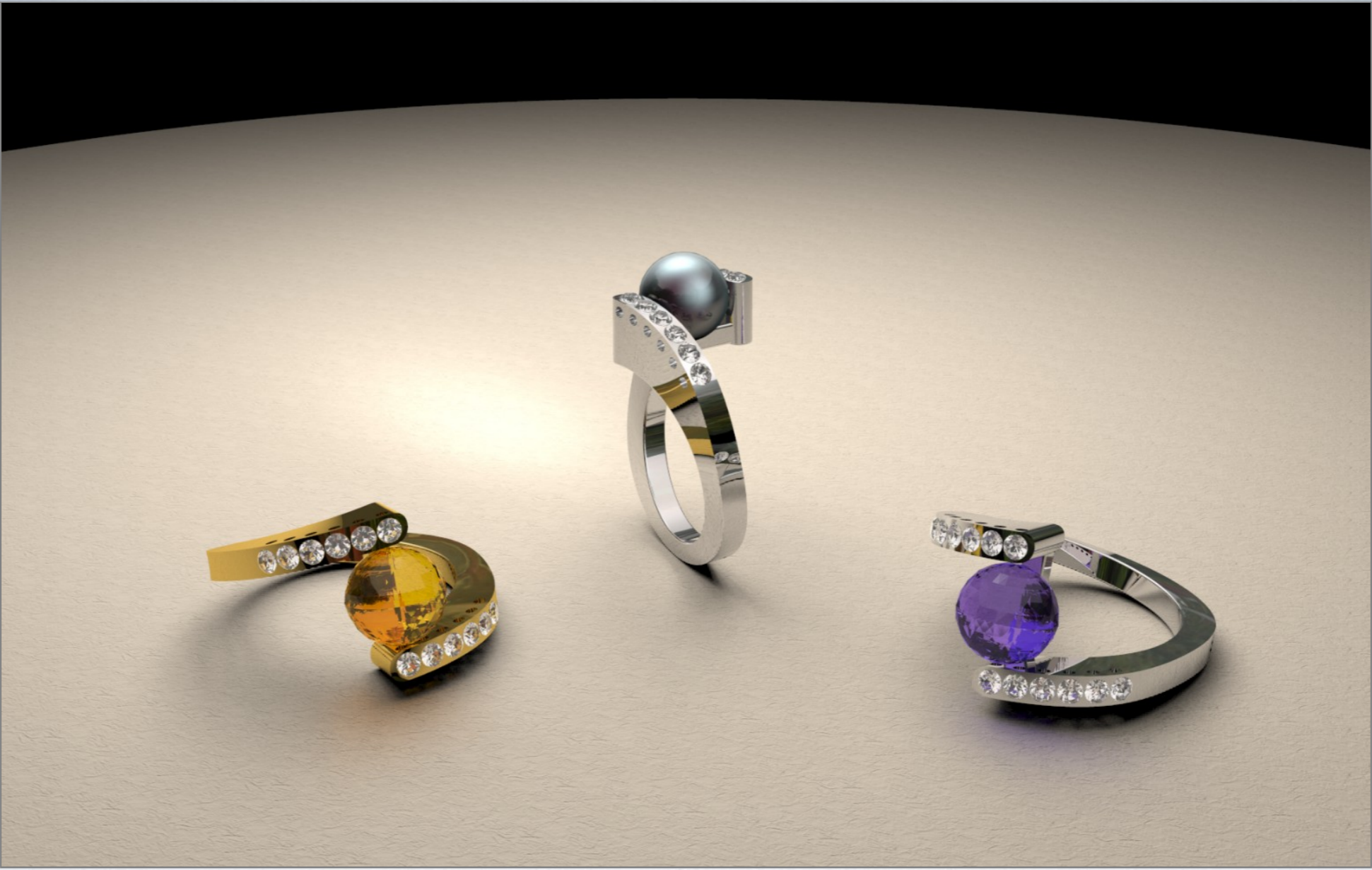


# Gallery





Virtual Jewelry - Athens (Greece)





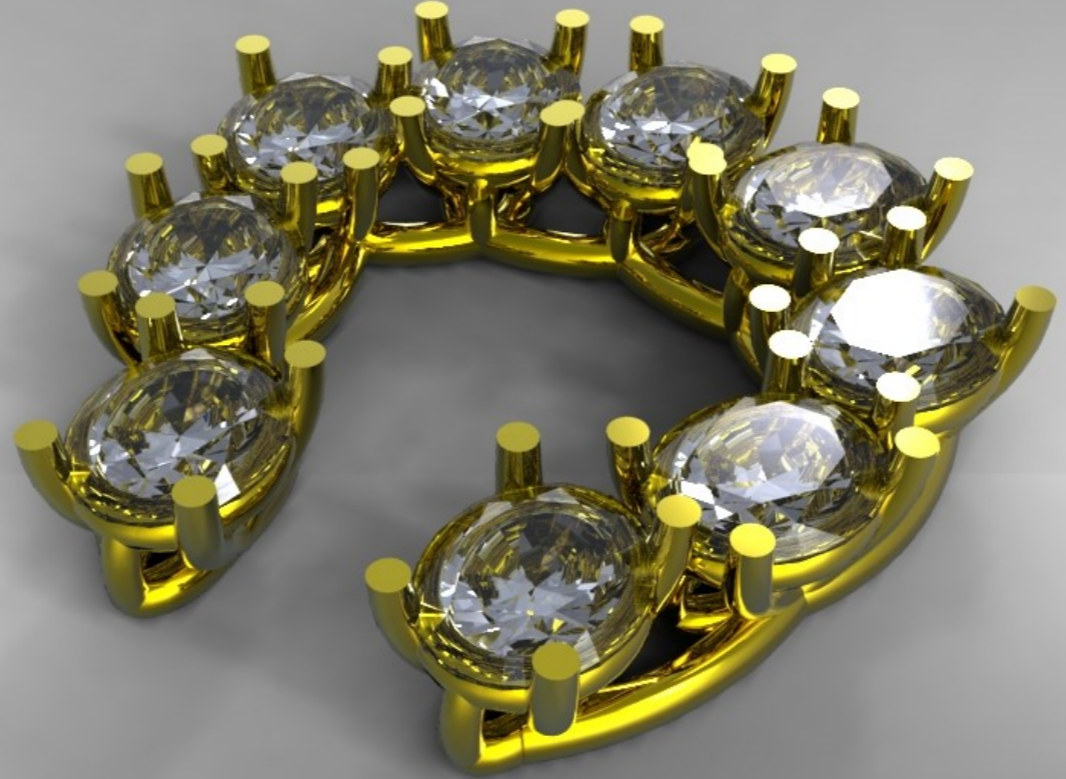
RhinoGold<sup>®</sup>  
GoldSmith Studio for Rhino





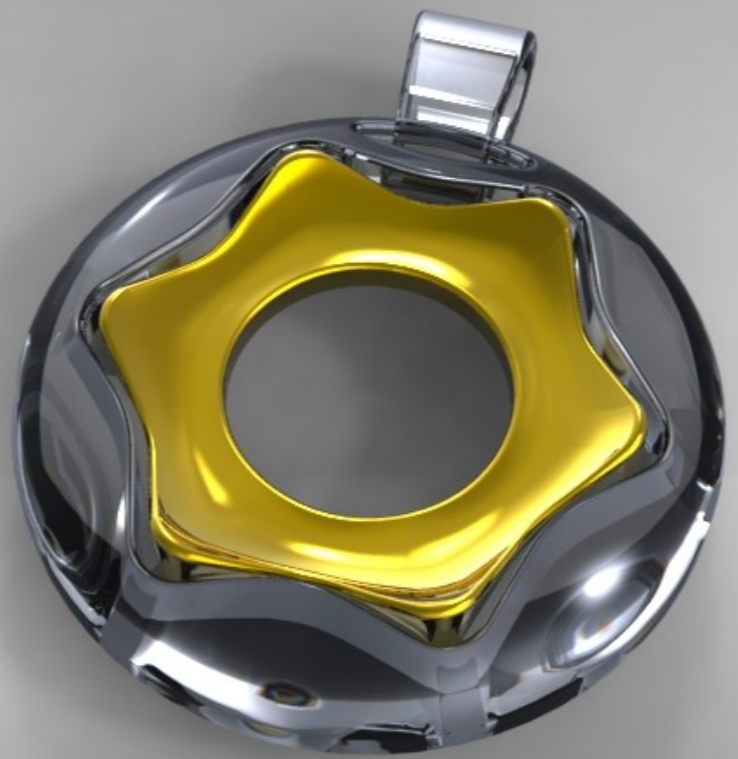


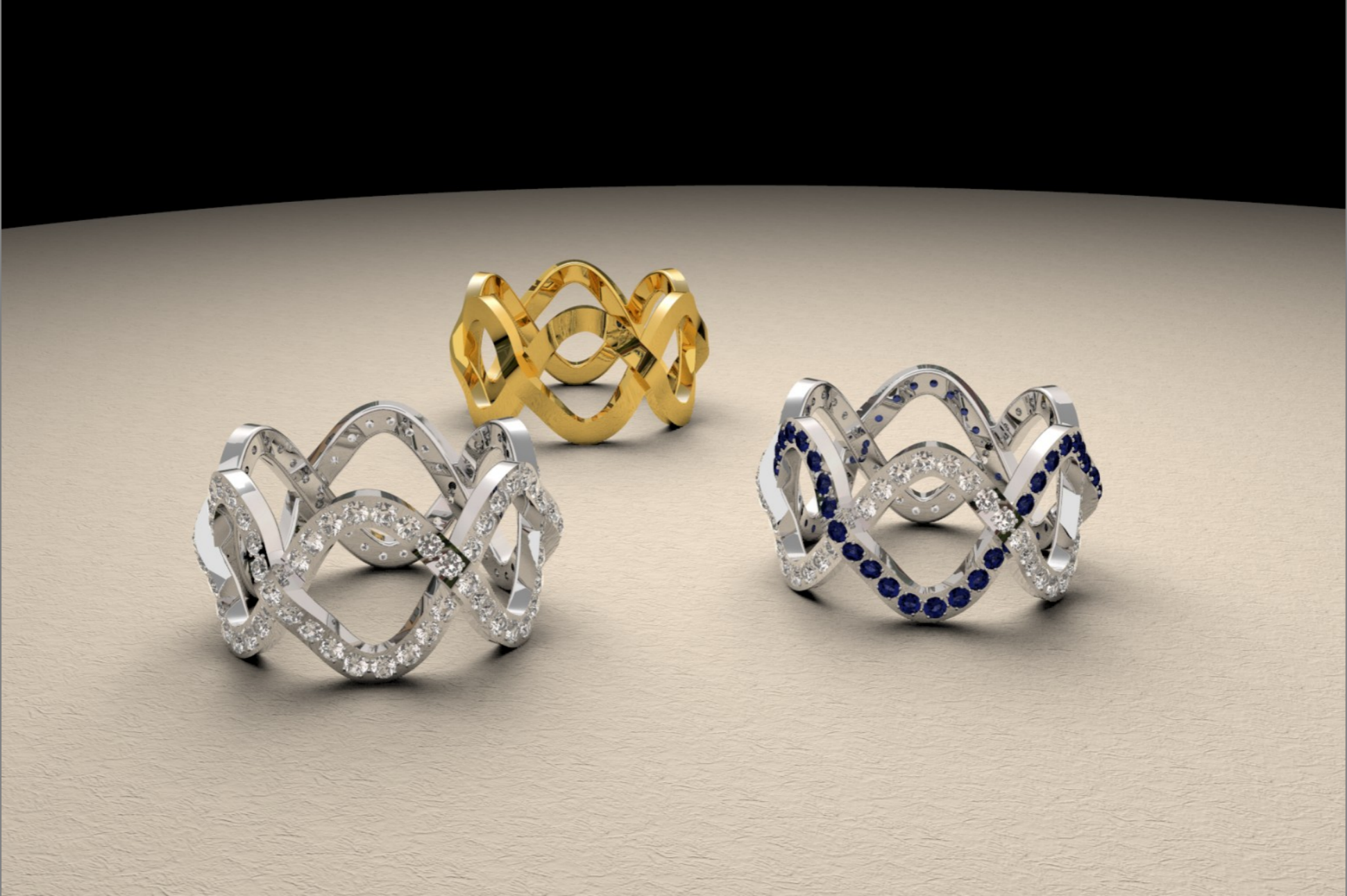
RhinoGold<sup>®</sup>  
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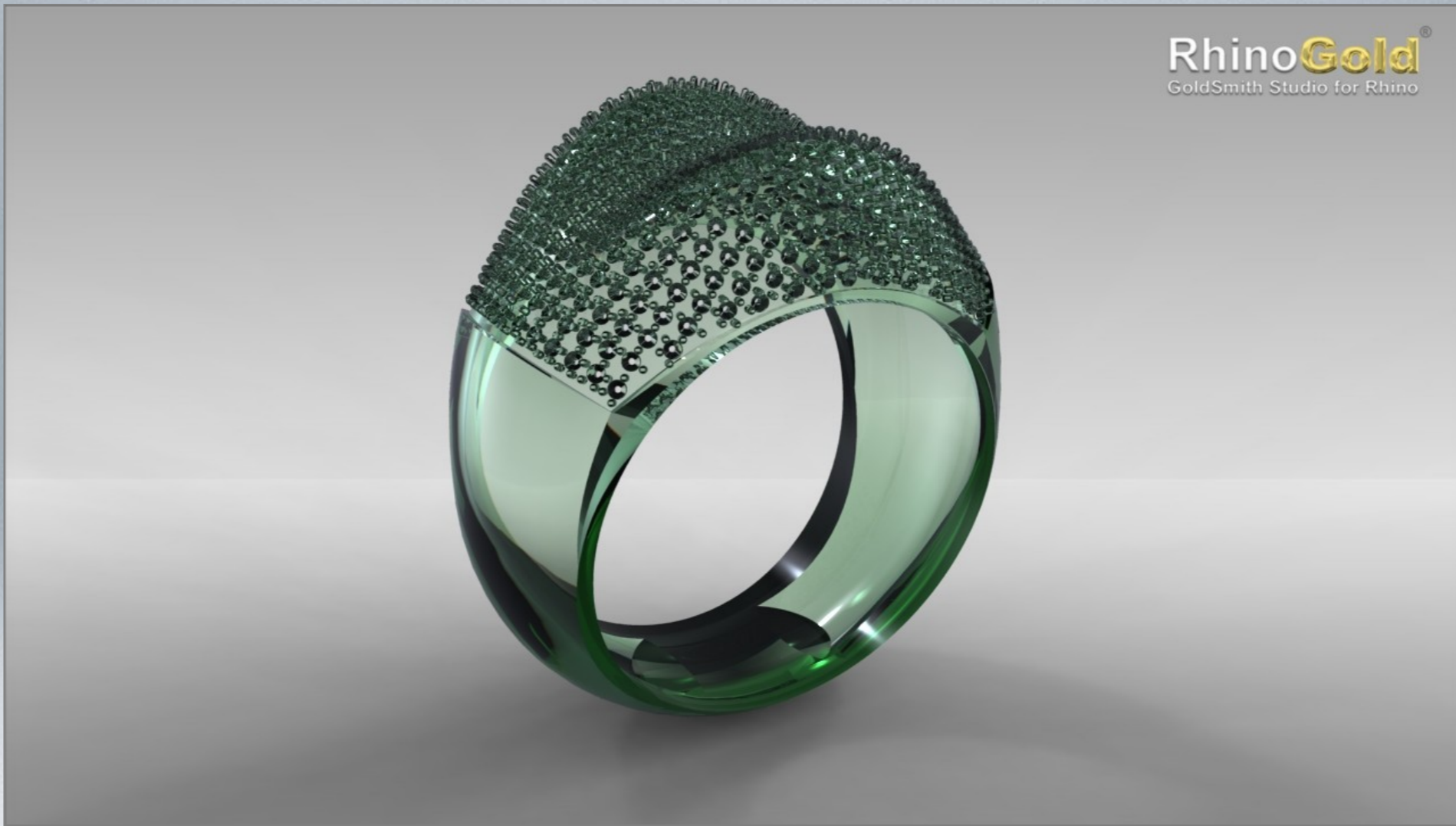
RhinoGold<sup>®</sup>  
GoldSmith Studio for Rhino













Javier Alonso - Córdoba (Spain)





# How to learn RhinoGold

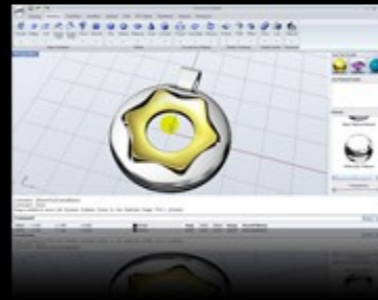
# *How to learn RhinoGold*

## How to learn RhinoGold?

Training



Tutorials



Documents



## And if I have a doubt?

Phone us!

**(+34) 93 7525215**

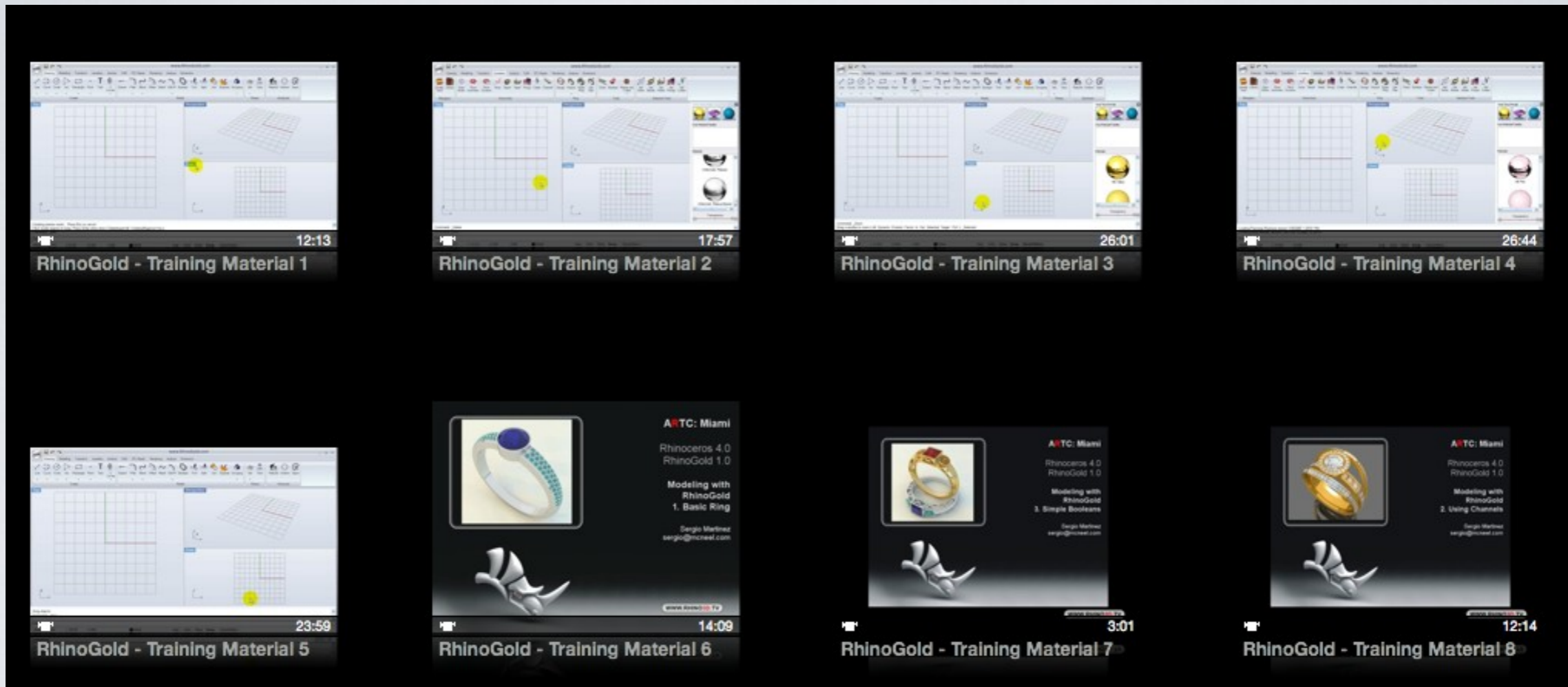
Email us!

[support@tdmsolutions.com](mailto:support@tdmsolutions.com)

Visit our forum and FAQ!

**24 hours a day,  
7 days a week**

# Training Material - Videos Step by Step



# Command Description

## RhinoGold<sup>®</sup> GoldSmith Studio for Rhino

### Command Description

Revision April 2008

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**RhinoGold<sup>®</sup>**  
GoldSmith Studio for Rhino

**User Profile**  
In RhinoGold mode, there is the User Profile option:



Notes:

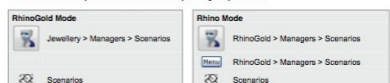
This option allows you to define a number of parameters and adapt the functions of RhinoGold to your needs or experience:

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**Scenario**  
This allows us to add design presentation scenarios.  
The scenarios are fully modifiable and can be fully managed by the user.



Steps:

1. Select a category:



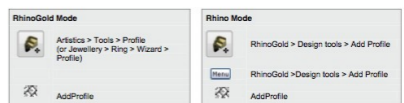
Notes:

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**Add profile**  
This tool allows us to create profile to use in RhinoGold commands like Dynamic profiles, Ring Wizard...



Steps:

1. Select the curve to create the profile. It must be an open and planar curve on the X-Y plane.

**Important Note:**  
Save in Profiles folder. By default is placed in c:\Program Files\RhinoGold 1.0\Profiles.  
Please select the curves on the Top View Plane. You may not be able to use such as Ring Wizard, when selected from other View Planes.  
Please maximize the Top View Plane before selecting the curve. This way, you will be able to see the selected curves much easier in the selection windows such as Ring Wizard.

Notes:

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# Training Guide

**RhinoGold<sup>®</sup>**  
GoldSmith Studio for Rhino

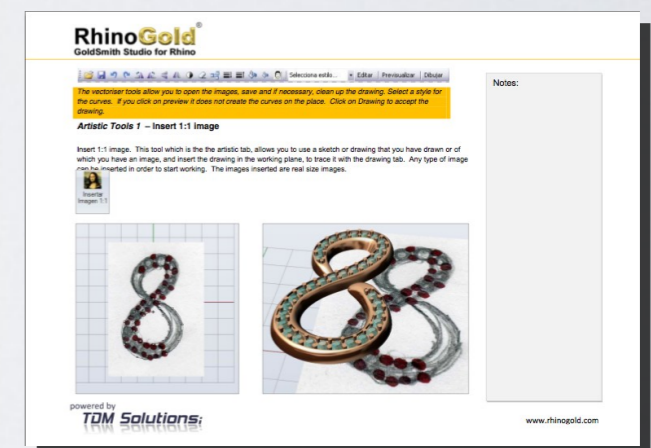
Training Guide

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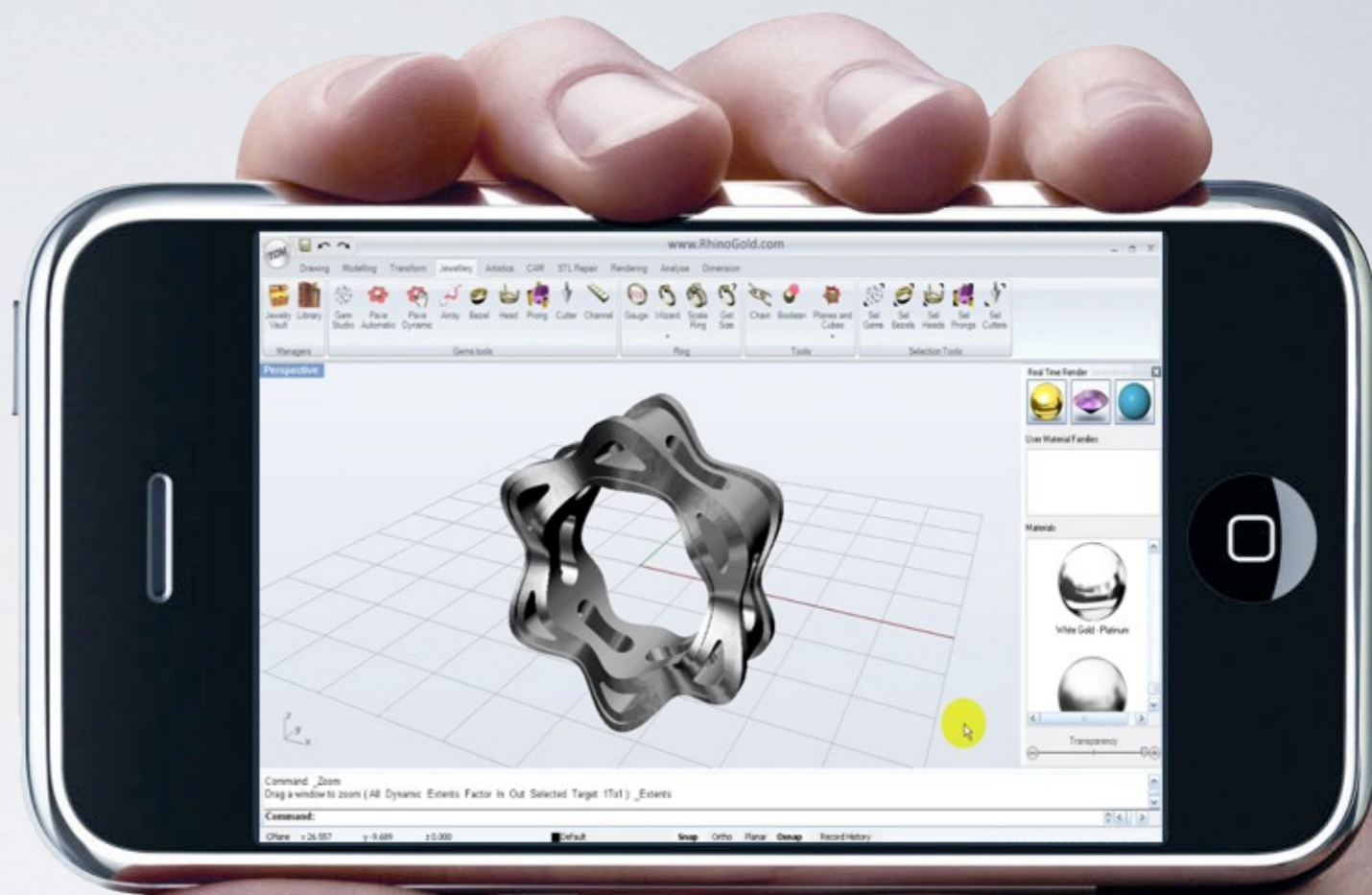
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*Training from beginners and experts,  
146 pages, including all the generic and jewelry commands and process.*

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# *iPod and iPhone Videos*



# Public Newsgroup and Free Support

The screenshot shows a web browser window displaying the forum index page for RhinoGold. The browser's address bar shows the URL <http://www.rhinogold.com/forum/>. The page features a search bar with the text "Search..." and a "Search" button, with a link to "Advanced search" below it. The forum title "TDM Solutions;" is visible in the top left. The main content area includes a "Board index" link, navigation links for "FAQ", "Register", and "Login", and a timestamp: "It is currently Tue Jun 02, 2009 2:15 pm". Below this, there are links for "View unanswered posts" and "View active topics". The forum is organized into three sections: "FORUM", "RHINOGOLD FAQs", and "RHINOGOLD USER GALLERY". Each section contains a table with columns for "FORUM", "TOPICS", "POSTS", and "LAST POST".

FORUM	TOPICS	POSTS	LAST POST
<b>RhinoGold</b>	112	577	by <b>rafaeldmt</b> Sat May 30, 2009 9:21 pm
<b>RhinoGold en Español</b>	3	5	by <b>rafaeldmt</b> Wed Apr 01, 2009 4:12 pm

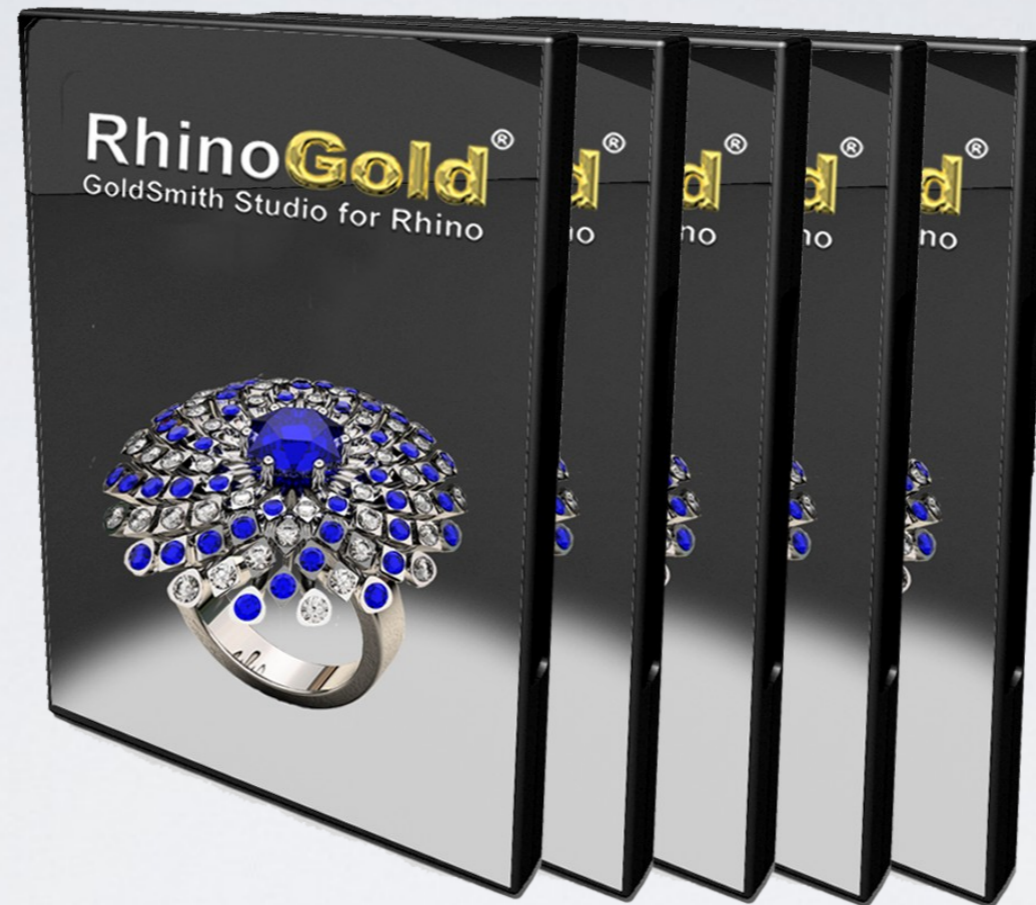
RHINOGOLD FAQs	TOPICS	POSTS	LAST POST
<b>RhinoGold FAQs</b> RhinoGold Frequently Asked Questions	1	1	by <b>rafaeldmt</b> Fri May 15, 2009 7:50 am
<b>RhinoGold FAQs en Español</b> Preguntas de uso frecuente de RhinoGold	0	0	No posts

RHINOGOLD USER GALLERY	TOPICS	POSTS	LAST POST
<b>RhinoGold User Gallery</b> RhinoGold User Gallery	5	15	by <b>p schmidt</b> Mon May 18, 2009 9:05 pm

*TDM Solutions:*

# *Educational and School Lab Licenses*

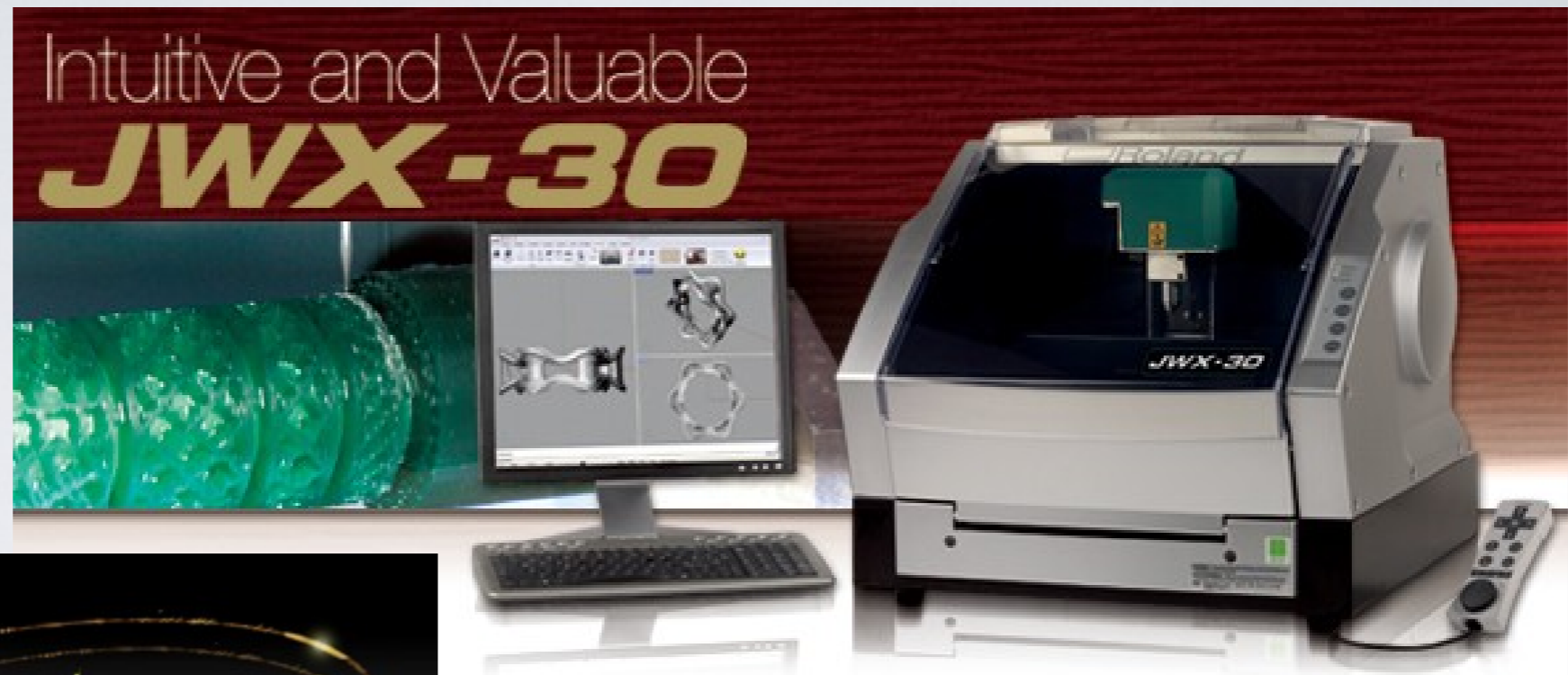


*Without limitations, functionality and time*

[www.rhinogold.com](http://www.rhinogold.com)



Roland DG integrates RhinoGold in Roland JWX30 worldwide.



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