



Design a Valentines Gift for Sweetheart

Valentine's day is coming! What surprise will you prepare for your sweetheart?

Look this attractive valentine gift designed by ZW3D. It is prepared for any designer.



Figure 1 Valentines Gift

Step1: Create the reference Plane1 and Plane2 by offsetting XZ plane for locating curves.

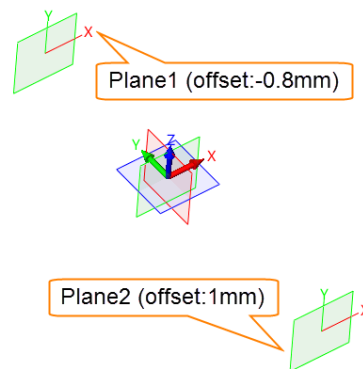


Figure 2 Reference Planne1

Step2: Draw the 3D curves on these three plans

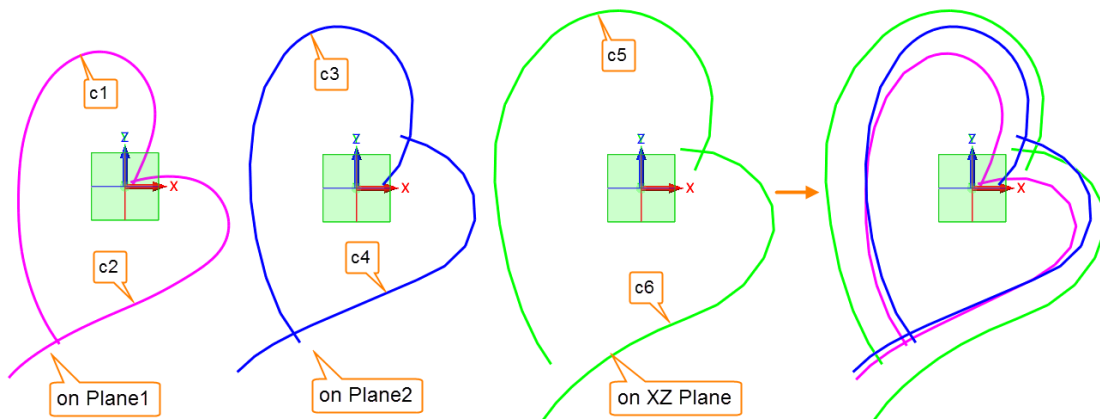


Figure3 3D Curves



Step3: Create another two planes by offsetting and rotating the XZ plane for the projection.

Set parameters as shown in the image below.

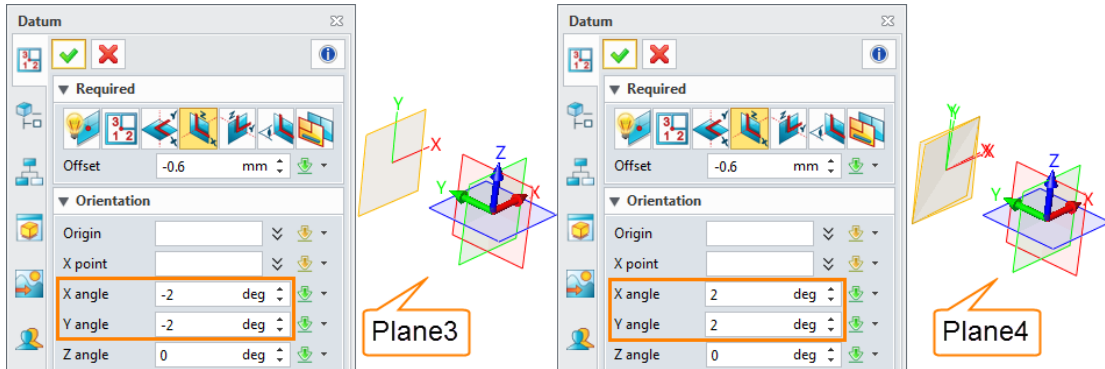


Figure4 Projection Plane-1

Step4: Project curve1 to plane3 to get curve P1, and project curve2 to plane4 to get P2.

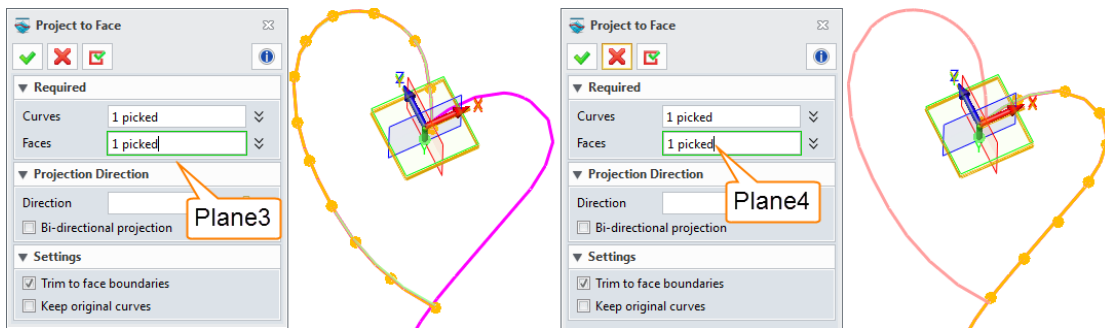


Figure5 Project Curve to Plane

Step5: Use the same way (Offset value is 0.8mm) to create Plane5/6, and then respectively project curve5/6 to these planes.

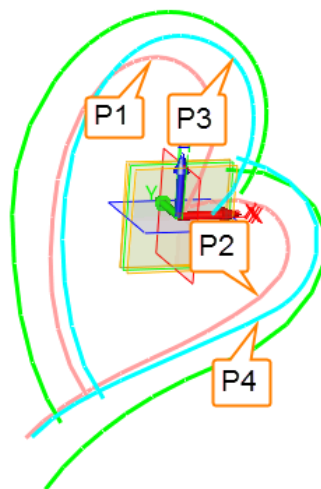


Figure6 Projection Curves



Step6: Create the surfaces with loft command.

Select P1 and P3 to create the first loft surface, then select P3 and c5 to create the second loft surface; at last pick c5 and P1 to create the third loft surface. Refer to the image below to define the correct boundary constraints. Sew these three surfaces together.

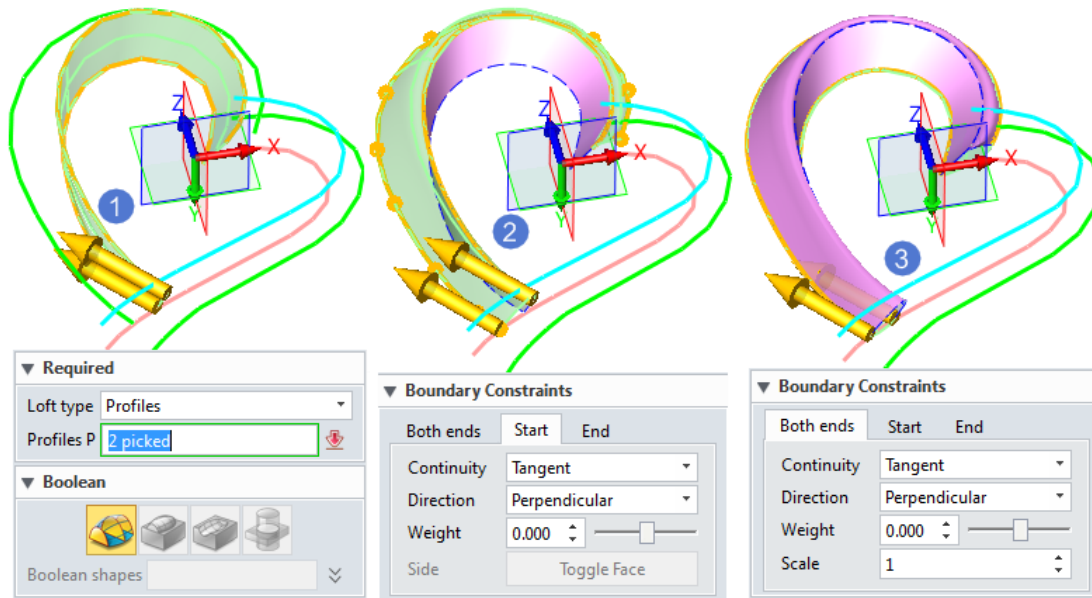


Figure 7 Loft Surfaces

Step7: With the same method to create another three surfaces, then sew them together.

Step8: Use surface tools or fill gap command to quickly create the side surfaces.

Now the surface model is changed to the solid model.

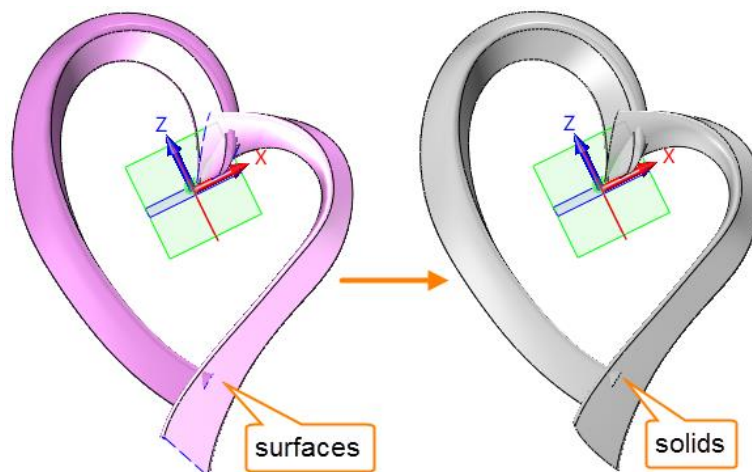


Figure 8 Solid Model

Step9: Refer to the following image design the connection area to get a smooth shape.

Use two planes to trim the shapes, then create the smooth blend curves. With UV curve mesh tool to design the connection surface.

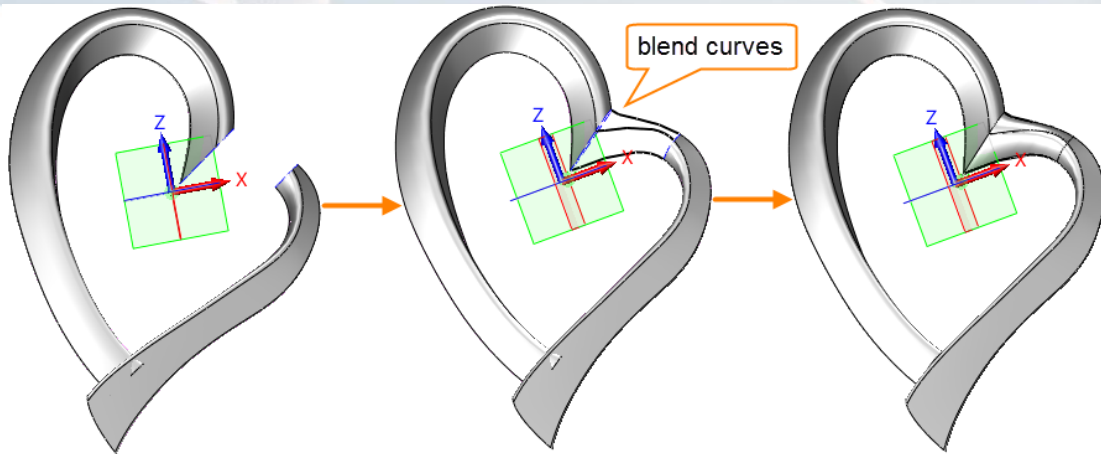


Figure 9 Optimize Design

Step 10: Insert the diamond component and design a bracket for supporting the diamond.

Step 11: Pattern some splints on the surface, as shown in the image below.

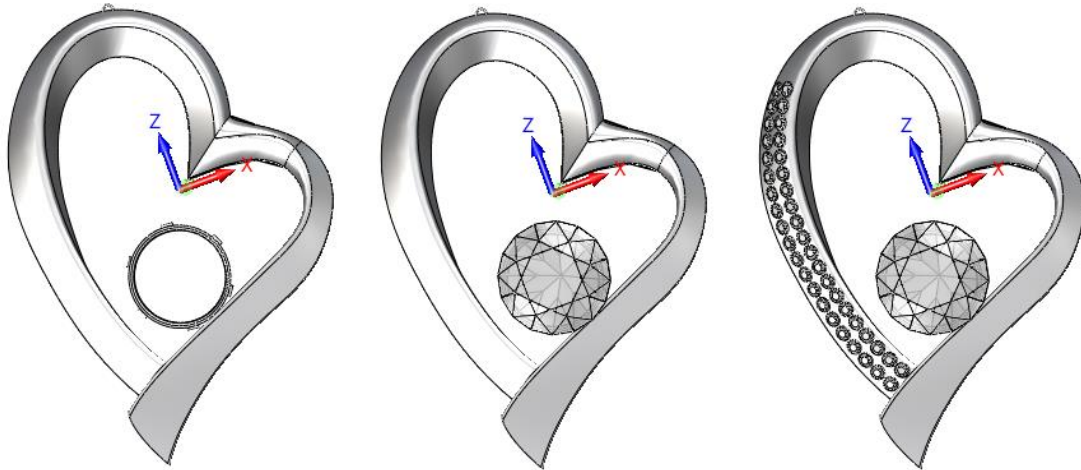


Figure 10 Final Design

Step12: Render your design in KeyShot and get an attractive a Valentines gift for your lover.



Figure11 Product