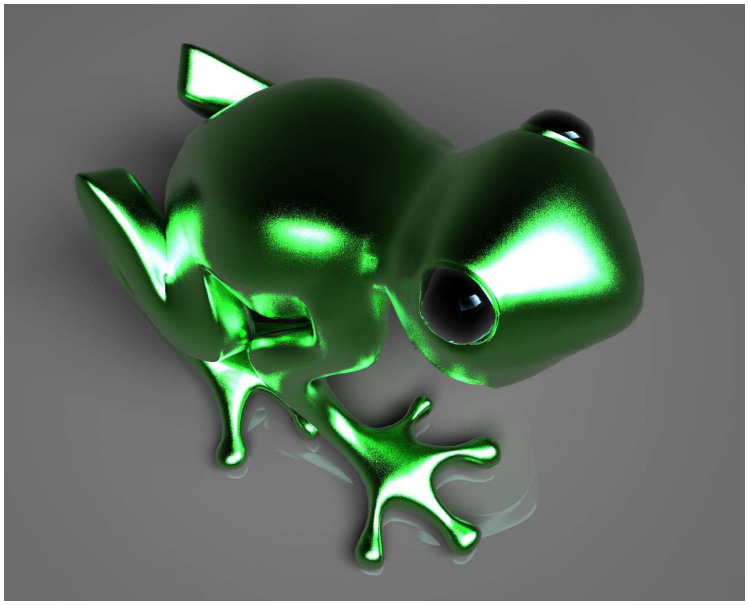
T-Splines

Fast, unconstrained and natural jewelry design

>Saskia Dattner uses T-Splines for Rhino every day, in each of her designs. In many cases, she can complete a design in one fourth of the time that it would take using Rhino alone.

"Rhino in combination with T-Splines comes very close to the work I did before I used computer programs, working with wax and plaster and goldsmith tools. With T-Splines, there are no limits set to plastic deformation and my designs become natural."

Saskia Dattner, Designer and Goldsmith, Pforzheim, Germany



The customer

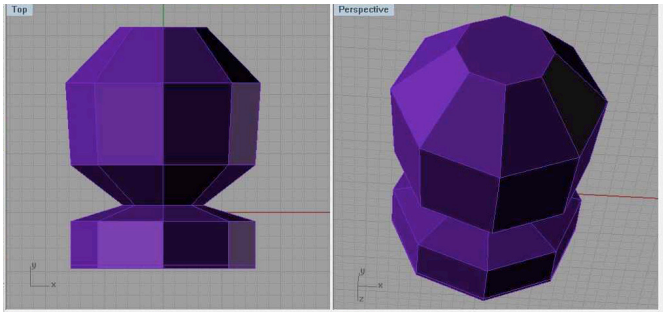
Saskia Dattner Jewely Design, Pforzheim, Germany.

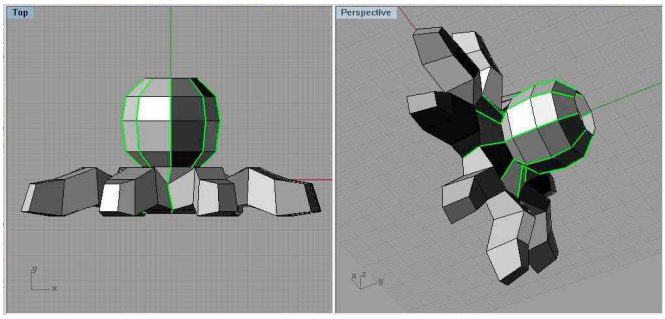
Pforzheim is called the Golden City because it has historically accounted for most of Germany's exported jewelry.

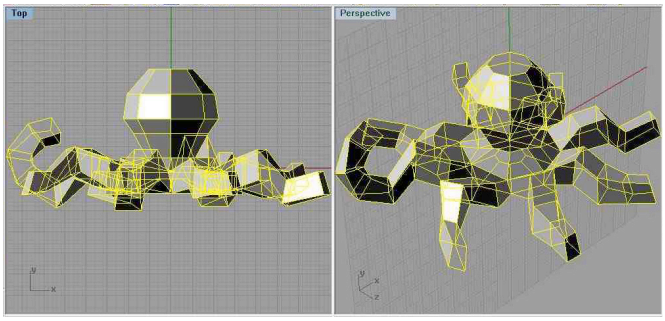
Background

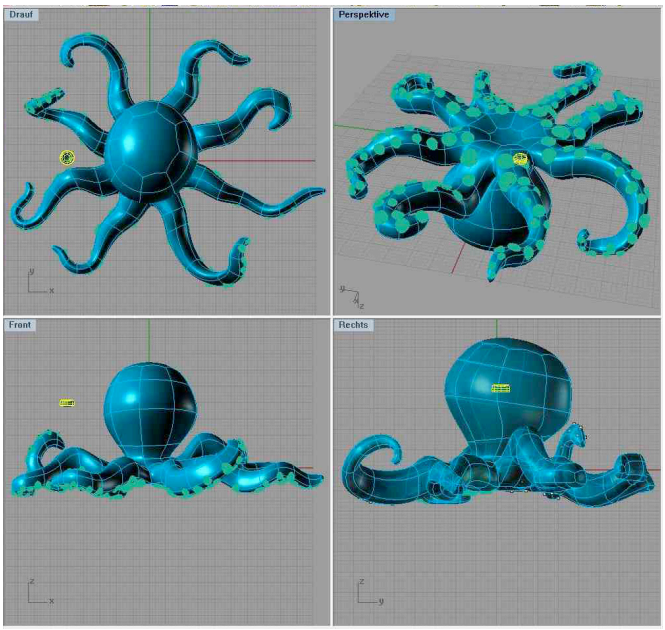
Saskia's training includes three years studying goldsmithing, followed by a four-year degree in jewelry design from the Fachhochschule Pforzheim. It is unusual for a designer to also have formal training in goldsmithing. In 2002, Saskia worked for a company that asked her to learn Rhino. She found it to be a powerful new medium, but even after using it for several years she wasn't totally satisfied with her designs. In 2009, her husband and business manager, Ami, read about T-Splines for Rhino and urged Saskia to try it. Saskia quickly discovered that T-Splines with Rhino gave her the creative freedom that she missed when using Rhino alone.

The two images on the left represent some of Saskia's latest work using T-Splines.









The challenge

Saskia explained, "In Rhino, you often have open edges. If you make a small mistake, you have a hole. This is a serious problem because manufacturing software will complain about it. Rhino does have an Edge Tools command that reveals naked edges, but closing these gaps in Rhino is a very time-consuming and unpleasant experience. If you repair one hole, it can open up a new hole."

The solution

"With T-Splines, unwanted holes are simply not a problem. A T-Spline surface will never break. T-Splines is very easy to handle." For this and other reasons, Saskia can work much more quickly with T-Splines than she can with Rhino alone. She estimates that a recent job that would have taken her 10-12 hours using Rhino alone, took only 2.5 hours to complete using T-Splines for Rhino.

Saskia also reports that T-Splines gives her the creative freedom that she missed when using Rhino alone. She observed, "Rhino in combination with T-Splines comes very close to the work I did before I used computer programs, working with wax and plaster and goldsmith tools. With T-Splines, there are no limits set to plastic deformation, and my designs become natural."

The image series on left ilustrates the steps taken to create the Octopus jewelry piece shown on the front page of this case study.

Future direction

Saskia now uses T-Splines for Rhino every day, in each of her designs.

Learn more

Several other examples of Saskia's work are posted in the T-Splines gallery. A German-produced video showing how some of her work goes from being designed in T-Splines to becoming a physical product is also available on the T-Splines blog.

To learn more about T-Splines and how it can help accelerate and improve your design process, please visit www.tsplines.com

To learn more about Rhino, please visit www.rhino3d.com