



## T-Splines helps SchultzeWORKS create innovative product designs

>T-Splines 2.0 new direct surface modeling creation and editing tools speed up the industrial designer's work ow.



**SCHULTZEworks**  
lots of mostly bright ideas

**Company:** SchultzeWORKS DesignStudio  
**Industry:** Product Design & Development, Prototyping, 3D Modeling  
**Headquarters:** Pasadena, CA  
**Webpage:** [www.schultzeworks.com](http://www.schultzeworks.com)

SchultzeWORKS is an innovative and award-winning design firm employing hi-tech design and visualization techniques on a wide variety of projects. SchultzeWORKS offers services in industrial design, rendering, animation and prototyping for consumer electronics, housewares, furniture, and lighting projects.

This will sound like a commercial, but T-Splines saved me on two recent projects! I am asked so often about T-Splines, I developed a list of four things that make T-Splines a killer, must-have plug-in for Rhino:

1) You can currently increase the U&V's in Rhino for adding details, but they always go around the entire model (both directions) making your model overly complex and harder to edit. T-Splines lets you add details ONLY in specified areas, whereby they can stop and start as needed. The result is the T junction, which is what the software was named after.

2) If you have ever seen poly or sub-D modeling, you know how powerful it can be to simply extrude a face wherever needed. T-Splines lets you do the same thing but with a continuous and smooth NURBS surface. You can also extrude the same face, or region -- repeatedly -- and create forms that are impossible by NURBS alone.

3) A manipulator makes all of your editing even easier. This is a handy gizmo that let you select any number of control points and manipulate them via a handle for moving, rotating, or scaling. Rhino should have this built in!

4) Finally, T-splines is crazy-easy to use. If you already know Rhino, the tool-set has only a few more commands -- and all are extremely intuitive. This may be the coolest part about T-Splines, you can start using it right away. You can't say that about too many 3D apps.

**Dave Schultze, Owner**



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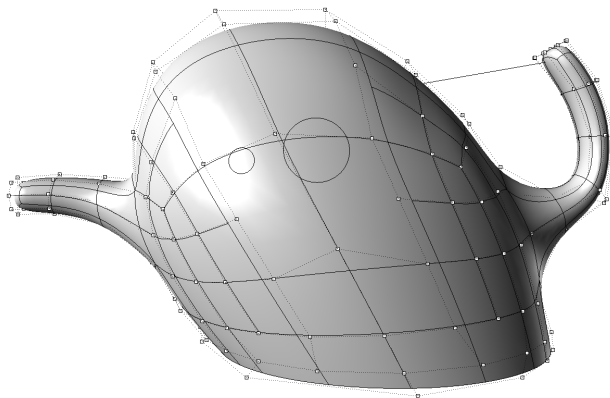


## The challenge

The primary challenge was to re-create the dynamic character-based form and still remain true to the expressiveness of the original design sketch. I needed the geometry to flow smoothly and remain uninterrupted across various transitional and functional areas. That's pretty hard to do, especially with a tight deadline.

## The solution

T-Splines greatly simplified the modeling tasks to execute such a demanding design. The capabilities of the software allowed for painless tweaks and almost endless iterations as we refined the forms and explored variations. T-Splines was a huge factor in the successful and timely completion.



## Future direction

While it did not win the competition, one judge informed me that my design form was among the most compelling and original. (It just wasn't a good fit.) SchultzeWORKS is now exploring licensing opportunities with other prospective manufacturers.

T-Splines has become an integral part of my toolset for all of my industrial design projects. And, due to increased interest and demand, I have just added T-Splines training to a new 3D VIZ class at OTIS College of Art and Design where I currently teach. I have also begun offering individual T-Splines training, in conjunction with my Rhino training, to corporate clients on demand. For more information, visit [www.professor3d.com](http://www.professor3d.com)



## Learn more

To learn more about T-Splines and how it could help accelerate and improve your design process, please visit [www.tsplines.com](http://www.tsplines.com)

To learn more about Rhino, please visit [www.rhino3d.com](http://www.rhino3d.com)