T·Splines for Rhino

Organic modeling for 3D design

T-Splines for Rhinoceros® 3D is a fully integrated plugin for creating manufacturable organic models.

Benefits

T-Splines for Rhino offers designers a high level of surface control, compatibility with NURBS and mesh surfaces, and new organic surface creation tools.

- **Modeling control:** T-Splines models typically have 50 percent fewer control points than NURBS, the standard modeling surface in 3D design and manufacturing. This gives designers higher control over the surface, and allows faster creation and optimization of complex surfaces.

- **Compatibility:** 100 percent lossless conversion of T-Splines surfaces to NURBS ensures full industry compatibility and seamless integration in design processes.
- **Value:** Free push-button translation of low-polygon count meshes and subdivision surfaces to T-Splines is included in the plugin at no additional cost.
- **Surface quality:** T-Splines models by default are watertight and very easy to smooth, making them ideal for offsetting and manufacturing.

Applications

T-Splines for Rhino is used in many industries where manufacturable organic shapes are desirable. T-Splines models can be converted to NURBS or meshes for rendering and manufacturing.

Product design

© Joaquin Laborda

Architecture

© magma architecture

Furniture

© Peter Donders

Jewelry

© Ricardo Amaral

Marine

Medical

© Zygote Media
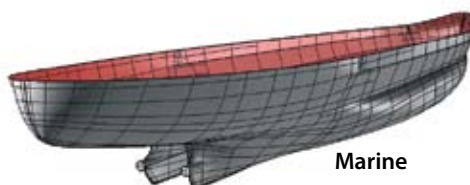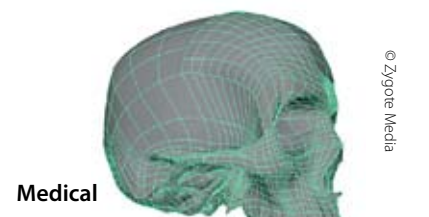
Workflows

T-Splines introduces four modeling workflows to designers:
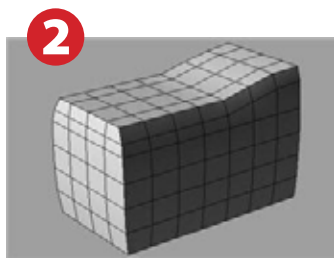
①

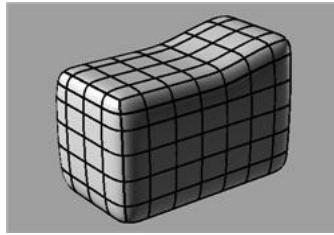Disjoint surfaces
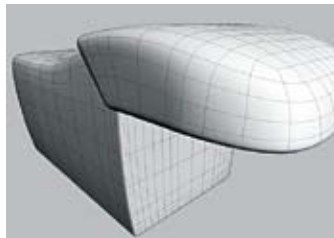

Merging…

Fully merged

Smooth model

②

.Obj file

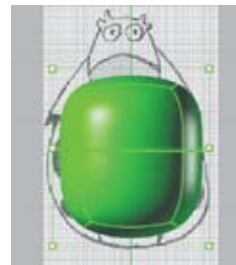Converted to T-Splines

Additional work done
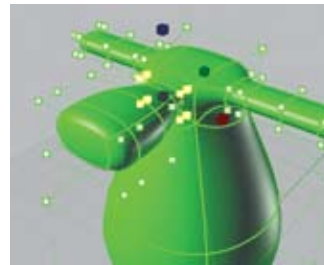
© Lorenzo Banchini

③

Mesh box

Smoothed, extruded

More extrusions

Tweaking

© Sergio Silva, Ricardo Amaral
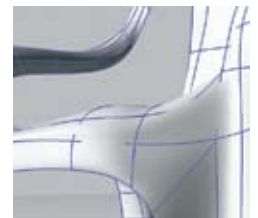

④

Input curves

Check intersections

Check topology layout

Initial fit (needs adjusting)

Improved refit

1. Merging: Merge disjointed NURBS surfaces together to create a single surface. Since these surfaces are smooth and continuous, they are easy to edit, offset, and machine.

2. Mesh to NURBS conversion: Start with a low-polygon count (under 5,000 faces) .obj mesh file. Convert to T-Splines to smooth the mesh and use it as a NURBS.

3. Push/pull modeling: Start with a mesh box. Pull on faces to add geometry, insert more control, and generate a smooth, gap-free model.

4. Surfacing from curves: Lay out curves to define the entire model. Select the curves all at once and walk through the three-step wizard to create the model.

Try today

Free trials, licenses, case studies and tutorials are available at www.tsplines.com and major Rhino resellers. Purchase today for $497.

T·Splines