

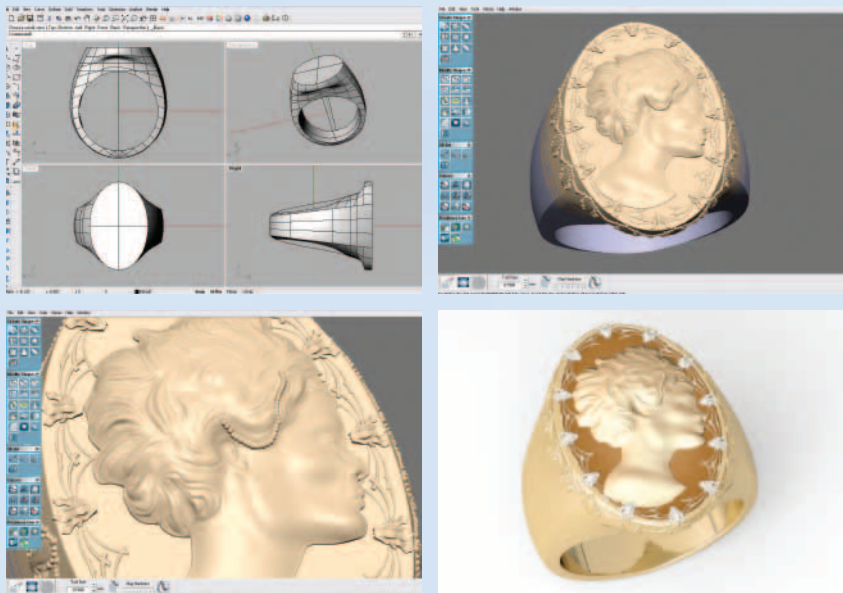
Best of both worlds—virtual clay modeling with Rhino™ NURBS models.

The ClayTools system for Rhino enables designers to use their sense of touch to rapidly create organic shapes and add sculptural details, handcrafted modifications, complex blends, and embossed textures to existing Rhino NURBS models.

The system uses a virtual clay metaphor that removes the constraints of technical modeling, and offers unparalleled speed and creative expression. The system includes the PHANTOM® Omni™ device – a true 3D interface with force feedback. Users work faster than ever before because they use their sense of touch to model virtual clay just like real clay.

Benefits:

- Best of both worlds – use existing Rhino models to create new designs that are more organic and sculpturally detailed than NURBS-only models
- Speed – fast, unconstrained modeling
- Design flexibility – create models that capture your artistic intent
- Leverage the digital domain – create multiple versions, duplicate handcrafted modifications, and create and use a library of parts



The ClayTools system is complementary to Rhino software. Designers can create models using their favorite tools in Rhino, and then import their models into the ClayTools system. Imported Rhino models can be used as reference or converted to virtual clay – either in total or selected parts. Using the PHANTOM Omni device, designers can feel the virtual clay to quickly create organic shapes and smudge, smooth, carve, and tug to add details, blends, and textures that are challenging to achieve with traditional modeling tools. Models can be output to RP and used for casting, or imported back into Rhino to be finished and exported for rendering, RP, or CAD/CAM.



The ClayTools system includes the ClayTools virtual clay modeling application and the PHANTOM® Omni™ device.

Selected Features

Create Shapes

- Extrude
- Inflate
- Spin
- Basic shapes
- Add clay

Modify Shapes

- Carve with ball, corn dog, scraper
- Smudge
- Attract
- Spikes
- Interactive smooth and smooth area
- Tug and tug area
- Wirecut: profile-based boolean operations
- Groove
- Interactive emboss
- Emboss with image
(planar, cylindrical or wrapped mapping)
- Mirror – batch and interactive

Curves

- Draw/edit curves
 - Fit to clay
 - Rebuild
 - Smooth
 - Add/remove points
- Project 3D or 2D curves to clay
- Combine/split curves
- Mirror curves
- Slice
- Cut/copy/paste

Virtual Clay Modeling with Rhino NURBS Models

Selected Features (cont.)

Position & Select Clay

- Paint select
- Lump select
- Profile select
- Separate with curves
- Cut/copy/paste

Import/Export

- Reduce for export
- Import 3D IGES curves
- Polygonal formats
 - StereoLitho (.stl)
 - Simultaneous multi-file import
 - Use as reference
 - Convert to clay – whole or parts
- Wavefront object (.obj)
- ZCorp (.zcp)
- Polygon (.ply)
- Native formats
 - ClayTools (.clc)
 - FreeForm® (.cly)
- Export curves, planes, saved views
 - IGES (.igs, .iges)
- Import 2D
- 2D curves: Illustrator® (.ai), IGES (.igs)
- Images: bitmap (.bmp), Adobe® Photoshop® (.psd), JPEG (.jpg)

Minimum System Requirements

- Intel Pentium® single 2.0 GHz or Dual 933 MHz
- 1 GB RAM
- Windows® 2000 or XP
- A FireWire® port (IEEE - 1394)
- A qualified workstation-class graphics card

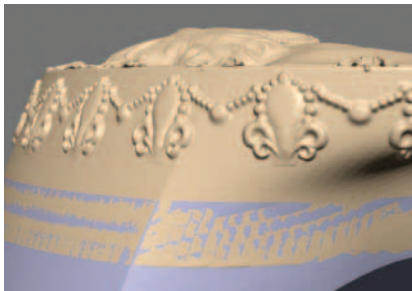
More details at ClayTools for Rhino
at www.sensable.com

Organic Shapes & Sculptural Details



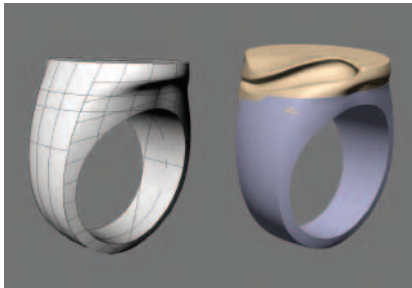
Quickly create organic shapes and sculptural details using virtual clay and digital sculpting tools.

Embossed Textures



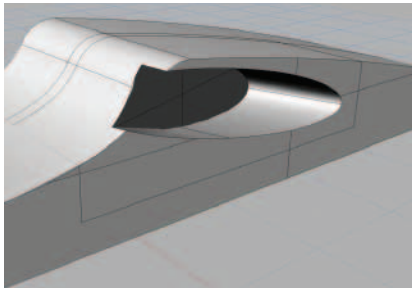
Use the Claytools system to add highly detailed, embossed textures to models.

Handcrafted Modifications

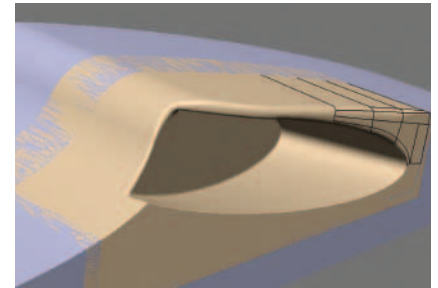


Use familiar tools in Rhino to create NURBS models. Then import into the ClayTools system and rapidly create handcrafted modifications.

Complex Blends



Create a NURBS model in Rhino.



Then import into the ClayTools system, convert to virtual clay and easily create complex blends. Then 3D curves can be exported back into Rhino.

Product and Corporate information: www.sensable.com

Product specifications are for ClayTools system for Rhino – v1.0 and are subject to change without notice.



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