Rhino**ceros**®

Nurbs modeling for Windows

Born out of a compulsion to create, a fascination with free forms, and a passion for precision–Rhino satisfies the obsession to dream, explore, and design in 3-D. Start with a sketch, drawing, physical model, or only an idea—Rhino provides the tools to accurately model your designs ready for rendering, animation, drafting, engineering, analysis, and manufacturing. Only imagination and an ordinary Windows PC are needed.

Rhino can create, edit, analyze, and translate NURBS curves, surfaces, and solids in Windows. There are no limits on complexity, degree, or size.

The main features include:
• **Uninhibited free-form 3-D modeling** tools like those found only in products costing 20 to 50 times more. Model any shape you can imagine.
• **Accuracy** needed to design, prototype, engineer, analyze, and manufacture anything from an airplane to jewelry.
• **Compatibility** with all your other design, drafting, CAM, engineering, analysis, rendering, animation, and illustration software.
• **Accessible**. So easy to learn and use that you can focus on design without being distracted by the software.
• **Fast**, even on an ordinary laptop computer. No special hardware is needed.
• **Affordable**. Priced like other Windows software.

Localized interface and documentation in English, Spanish, German, Italian, French, Czech, and Polish.

See the complete list of features and download an Evaluation version at **www.rhino3d.com**

DEVELOPER SUPPORT

The tools for customizing Rhino include:

• Command Scripts and VB Scripts
• C++ Plug-ins
• I/O toolkit available to read and write Rhino 3DM files without Rhino.

Localization and marketing services are available to developers who would like to make their Rhino-related products available worldwide.

Visit **http://www.rhino3d.com/developer.htm**

NURBS?

*NURBS, Non-Uniform Rational B-Splines, are mathematical representations of 3-D geometry that can accurately describe any shape from a simple 2-D line, circle, arc, or curve to the most complex 3-D organic free-form surface or solid.

Images courtesy of Federico Fargas, Cafer, Marko Osala, Heath Satow, René Medel, Jari Saarinen, 3 Search, Alex Antich, Facundo Miri, Glen Aldomodoviz, Jack Gordon and Scott Davidson.
Meet the expert users, our technical staff and development team in the Rhino Support Newsgroup http://www.rhino3d.com/support.htm

DIRECT
dimensions
rapid solutions to 3D problems...®

FLAMINGO®

Raytracing and radiosity for Rhino

Rendering
Flamingo brings the raytrace and radiosity rendering to Rhino. Create photometrically accurate images with reflections, refraction, diffusion, translucency, transparency, color bleeding, shadows, depth of field, depth attenuation, ClearFinish™, and indirect lighting.

Animation
Viewpoint animation for walk-throughs and fly-bys, and sunlight animation for shadow studies.
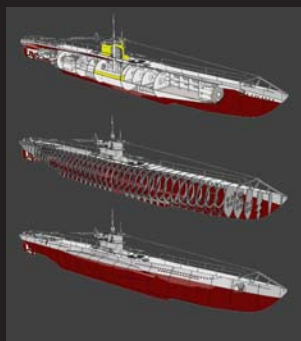
Other features
Procedural clouds, fractal-generated 3-D plants, procedural 2-D and 3-D materials and extensive material, plant, and background libraries.

See the complete list of features and download an Evaluation version at **www.flamingo3d.com**

Penguin

Non-photoreal renderer for Rhino

Penguin is a conceptual, sketch and cartoon, non-photometric scan line renderer. With Penguin you can create stylized images of your models with an artistic look for enhanced graphic and visual appeal.
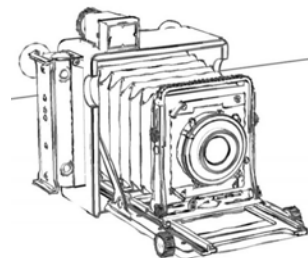
Sketch rendering mode
Simulates hand drafting. It allows you to create images in styles that look like drawings using pencil, ink, chalk, pen marker, watercolor (and others).

Cartoon rendering mode
Objects rendered with a limited number of shades and edges that look like illustration images.

See the complete list of features and download an Evaluation version at **www.penguin3d.com**

Bongo

Keyframe animation for Rhino

Bongo™ brings professional animation into Rhino, using familiar keyframe tools found in most high-end animation packages.

You can move, scale, and rotate Rhino objects without exporting. Objects and viewport animations are editable in the Rhino window using simple drag and drop. Modify your objects and motion data without losing valuable time changing between programs.

Easily preview your animations inside Rhino, in real time, in any shading mode. Then render straight to an animation file using any Rhino renderer.

See the complete list of features and download an Evaluation version at **www.bongo3d.com**

PACISOFT