

# HOOPS for MCAD & CAM

*A Robust Platform for the Rapid Development of High-Performance Applications.*

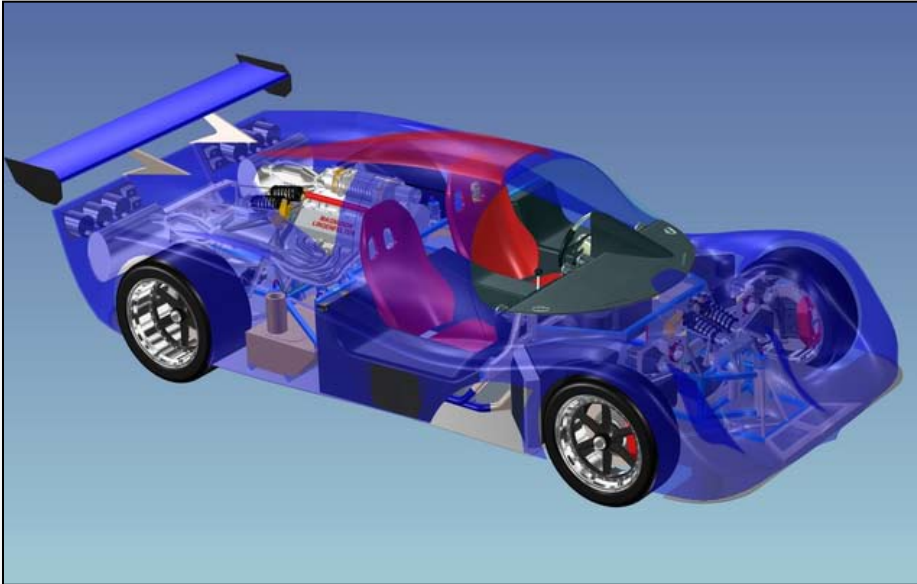


Image from IronCAD.

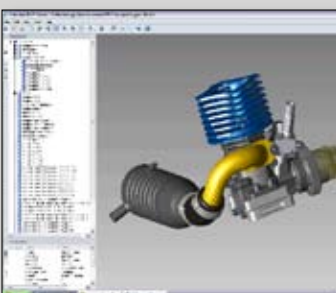
**H**OOPS is a 2D/3D development platform for creating or enhancing professional-grade applications. HOOPS' rich set of API's enable developers to work from a very high level – dramatically jumpstarting application development. Programming teams using HOOPS are able to produce more competitive applications, while reducing total R&D costs and accelerating project delivery.

## HOOPS WILL HELP YOU:

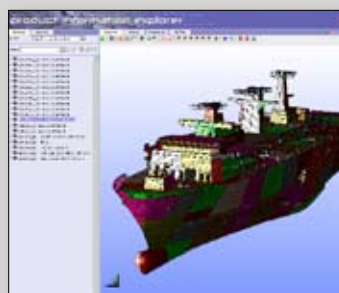
- **Develop High-Performance Applications**
- **Reduce R&D Costs**
- **Compress Time-to-Market**

HOOPS is the perfect platform for MCAD and CAM applications such as:

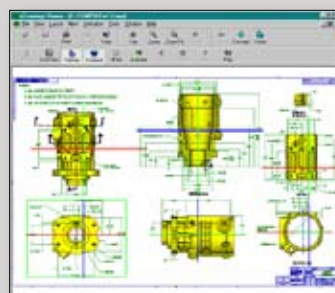
- **3D Modeling**
- **2D Drafting**
- **CAM**
- **CMM**
- **Digital Mock-Up**
- **View/Markup**
- **Technical Publications**
- **Parts Catalogues**
- **Reverse Engineering**
- **...And More**



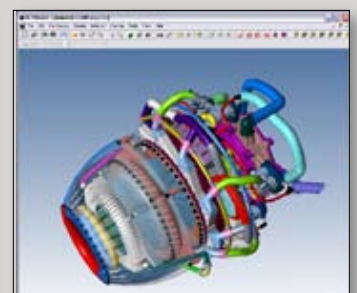
Screenshot from Autodesk



Screenshot from LSC Group



Screenshot from SolidWorks



Screenshot from IronCAD

## HOOPS MCAD & CAM Customers

HOOPS is used in over 175 engineering applications worldwide. HOOPS-based MCAD and CAM applications range from heavyweight mechanical design applications such as PTC's CADD5 to mid-range modelers such as IronCAD and KeyCreator - through to downstream design-review applications such as Solidworks' eDrawings and the Autodesk DWF Viewer. HOOPS-based CAM applications include products from companies such as Mitutoyo, Metris, Dukin and Thermwood, all of whom benefited from creating their software using the robust foundation of the HOOPS 2D/3D graphics platform.

## Tech Soft 3D Services

To help HOOPS developers get maximum return from their investment in HOOPS, Tech Soft 3D offers dedicated support, consulting and training; as well as extensive documentation, tutorials and sample code. These services are designed to assist developers make optimal use of the rich HOOPS API's and further speed the development of high-performance applications. In addition to gaining access to all of the power contained within the HOOPS libraries, you're also partnering with Tech Soft's dedicated team of graphics professionals – leveraging our extensive experience helping companies deliver industrial-grade 2D/3D applications.

## HOOPS for MCAD & CAM

By licensing HOOPS, you are building upon the market-proven HOOPS Foundation - a robust set of API's encapsulating all of the necessary graphics tools you'll need for the creation or enhancement of an advanced engineering application. In addition, you'll have immediate access to HOOPS' rich set of specialized technology that addresses the unique needs of MCAD & CAM applications.

### HOOPS' Foundation Capabilities Include:

- Rich 2D & 3D integrated scene-graph creation and management
- Fast interactive on-screen viewing, manipulation and interaction
- Full support for optimal rendering on both OpenGL and Direct3D
- High quality text rendering and management
- Crisp print and plot output
- Support for all major 32bit and 64bit platforms, including Windows Vista
- Comprehensive & intelligent handling on over 80 popular graphics-cards
- Pre-integrated with all major UI systems
- Highly compressed streaming format for graphics communication
- Source-code level sample applications for desktop, web, Java and .NET

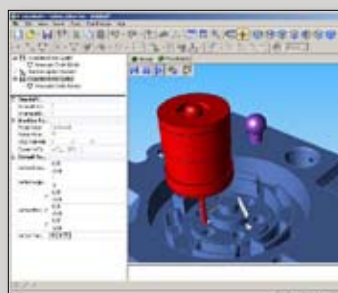
### HOOPS' Advanced Capabilities for MCAD & CAM Include:

- Powerful Large Model Visualization techniques for delivering interactive rendering on even the largest MCAD assemblies
- Sophisticated shader-based material & scene rendering
- Animation engine for exploded views, machine and probe simulation, etc.
- Professional annotation options including 3D billboard and occlusion
- Advanced sectioning on multiple planes for creating cut-away views
- Advanced multi-layer transparency for displaying hidden objects
- DWF Publishing\* and PDF Export for model publishing (2D & 3D)
- Static and sweep-based interference and proximity clash detection
- Boolean engine for constructing machine components
- Endcap-section calculations for high-quality shaded 2D plotting
- TCP/IP and HTTP Graphics server for collaborative applications
- Support for stereo and immersive viewing
- Direct integration with the Parasolid, ACIS and Granite modeling kernels\*
- Direct bridges to all major proprietary & standard MCAD file formats via 3D Interop\*
- Direct integrations with JT, DWG and DWF file format SDK's\*

\* Requires additional 3rd party toolkits.



Screenshot from Autodesk.



Screenshot from Renishaw



Screenshot from Kubotek

Tech Soft 3D, LLC  
 931 Ashby Avenue  
 Berkeley, CA 94710  
 USA  
 Phone: +1.541.389.5759  
 Fax: +1.503.914.0483  
[sales@techsoft3d.com](mailto:sales@techsoft3d.com)  
[www.techsoft3d.com](http://www.techsoft3d.com)

Copyright © 2007 Tech Soft 3D.  
 All rights reserved.