

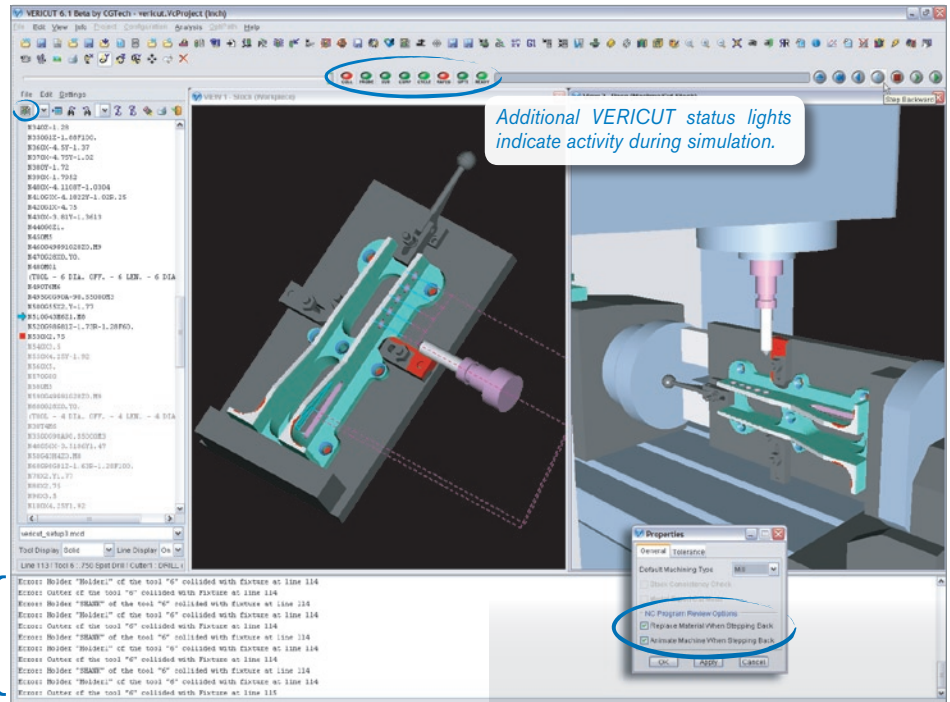
# VERICUT 6.1

## New & Improved Features

### NC Program Review Integration

In VERICUT 6.1, NC Program Review is integrated in VERICUT's main desktop, using VERICUT's desktop menus and graphics. An icon button in the NC Program window switches modes between the Info display and the Review display. When in Review mode, the user can navigate backwards from the last NC program line simulated. Error messages and NC program text is highlighted when a collision on the stock or fixture is selected. Entering Review mode adds Step Backward and Play Backward buttons to VERICUT's other VCR buttons. The existing Step, Play, Rewind and Reset buttons also change to interact in Review mode, providing easy navigation through the NC program. Optionally, material can be replaced while stepping backwards, and then removed again while stepping forward, giving the ability to easily identify and closely evaluate problem areas. Both machine views and profile views are now active in Review mode, including an optional tool path line display in the profile view. Additionally, synchronized subsystem simulation (such as for multi-channel controls) can now be displayed in Review mode.

*A new logger display shows messages in a scrolling list. Messages are organized by category. Each category of message can be blanked or displayed via right-mouse menu or View > Logger View Options. Selecting an error or warning message in the list highlights the associated NC program line in the NC program display. The logger display is a dockable panel and can be located horizontally within the desktop (as shown above) or outside the desktop.*



### Machine Simulation in Review Mode

When stepping or playing backwards the machine can now be animated. When this option is selected in the Properties dialog, VERICUT stores the machine locations for backwards animation.

### Replace Removed Material to the Previously Cut Stock

Material can now be added back to the cut stock when stepping back by enabling this feature in the Properties dialog. 500 backwards steps are stored when this optional feature is selected.

### AUTO-DIFF

AUTO-DIFF Constant Gouge Check can now optionally check for a minimum amount of excess material relative to the design model. This is typically used where roughing cuts should leave a specific minimum amount of material for subsequent machining. AUTO-DIFF profile is improved to give more robust results on large and complex profiles where the design and cut stock models are nearly coincident.

### Siemens 840D VNCK

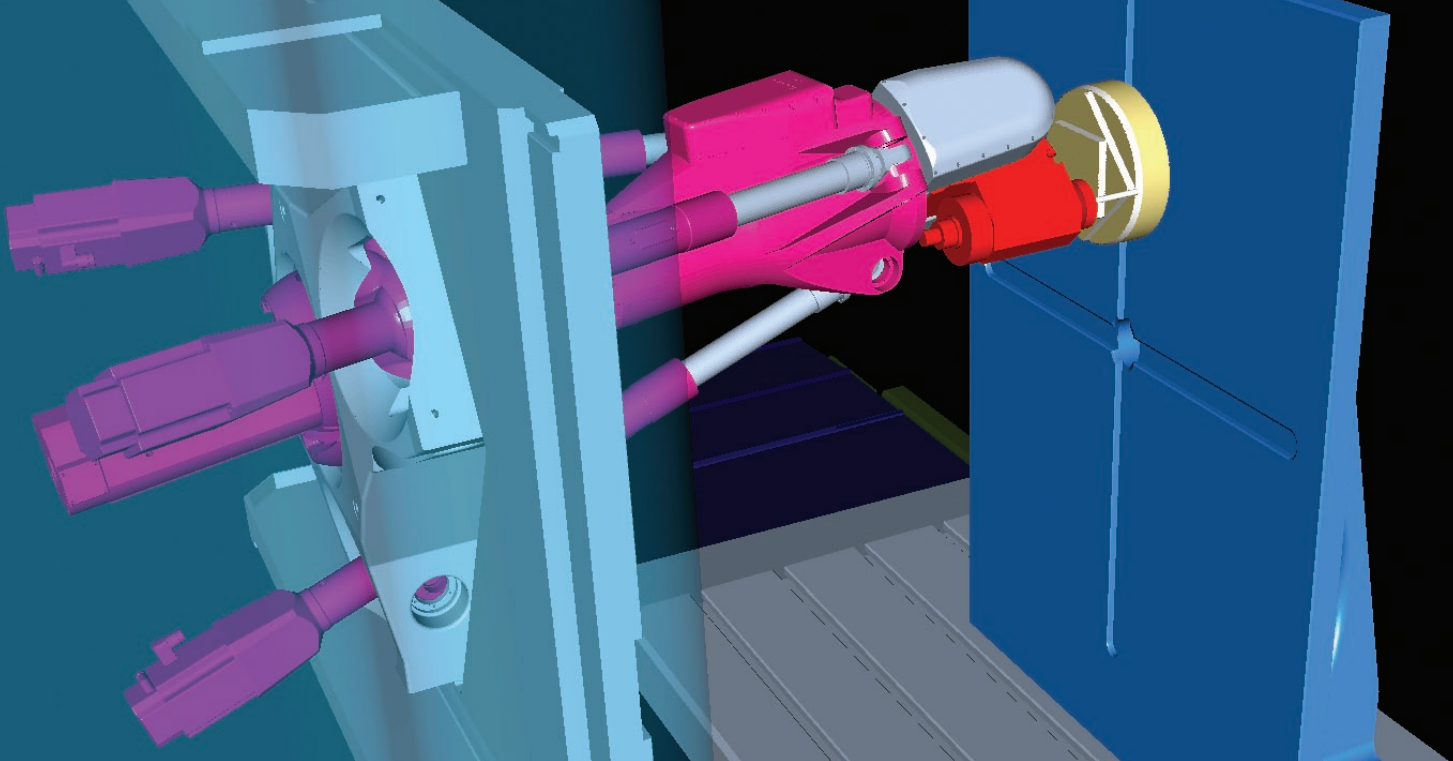
The Siemens 840D VNCK, version 1.5, uses a new VERICUT simulation API. The simulation API allows an external program to control the VERICUT simulation.

**64-Bit Hardware Supported**

VERICUT 6.1 runs as a 64-bit application on Windows XP64.

### CGTech

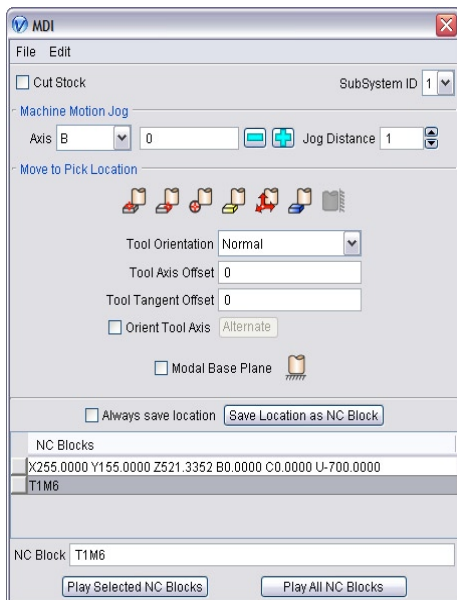
9000 Research Dr.  
Irvine, California 92618  
Phone: (949) 753-1050  
FAX: (949) 753-1053  
E-mail: info@cgtech.com



VERICUT 6.1 has been enhanced to support the parallel kinematics of the Tricept head above.

### MDI Dialog

MDI is significantly enhanced to include axis jog buttons and tool positioning by graphical picks. This can be especially useful during planning stages. Using the simple MDI controls, you can make sure your machine can reach all the necessary features of the part. Tool positioning includes offset values along the tool axis and side of the tool.



The MDI in VERICUT now includes axis jog buttons and tool positioning by graphical picks.

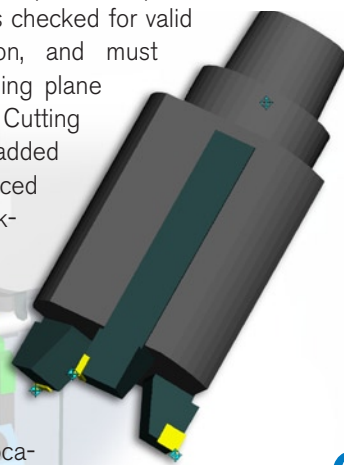
### Manage Machine and Control Configurations

Encrypted machine and control files may be optionally created and used. The encrypted

files cannot be modified. Menu features are reorganized so “project-specific” settings, and “machine/control-specific” settings are clearly separated. When using encrypted machine/control files the machine/control configuration menus are disabled. If desired, you can also completely remove the machine/control Configuration menu from VERICUT’s main menu bar. These changes allow sites with many VERICUT users and machine configurations to better manage their machine simulation environment.

### Tool Enhancements

Turning tools with multiple inserts (such as “Flash” tools or other types of tools with multiple inserts) are now supported—including definition of multiple driven points. Each insert’s position is checked for valid turning orientation, and must lie in a valid turning plane before it will cut. Cutting limit checking (added in 6.0) is enhanced to include checking Minimum/Maximum RPM values. A new model choice automatically creates a milling tool’s gage location at the highest point on the tool assembly.



### CAD/CAM Interfaces Updates

VERICUT’s CAD/CAM Interfaces make verifying NC Programs from within your CAD/CAM system easy and convenient. You can verify individual operations, a series of operations, or a set of complete NC programs. All stock, fixture, and design geometry is automatically transferred to VERICUT in the correct orientation, along with the NC program, tooling, machine and control data and other simulation parameters. The following CAD/CAM interface updates have been made in 6.1:

- Unigraphics Interface – merges tools from the UG session with tools in the template project file’s Tool Library.
- CATV Interface – CATIA V5 users can choose how to apply the part operation’s machining axis in their VERICUT simulation by selecting the offset table (Program Zero, Work Offset, etc.) and relationship to the machine (tool, rotary axis pivot, etc.). CATV allows the user to select sketch geometry used to define tool shapes in CATIA. This geometry is then used to create tools in VERICUT. CATIA length units (inch or millimeter) are now automatically detected and set in the VERICUT session.

