

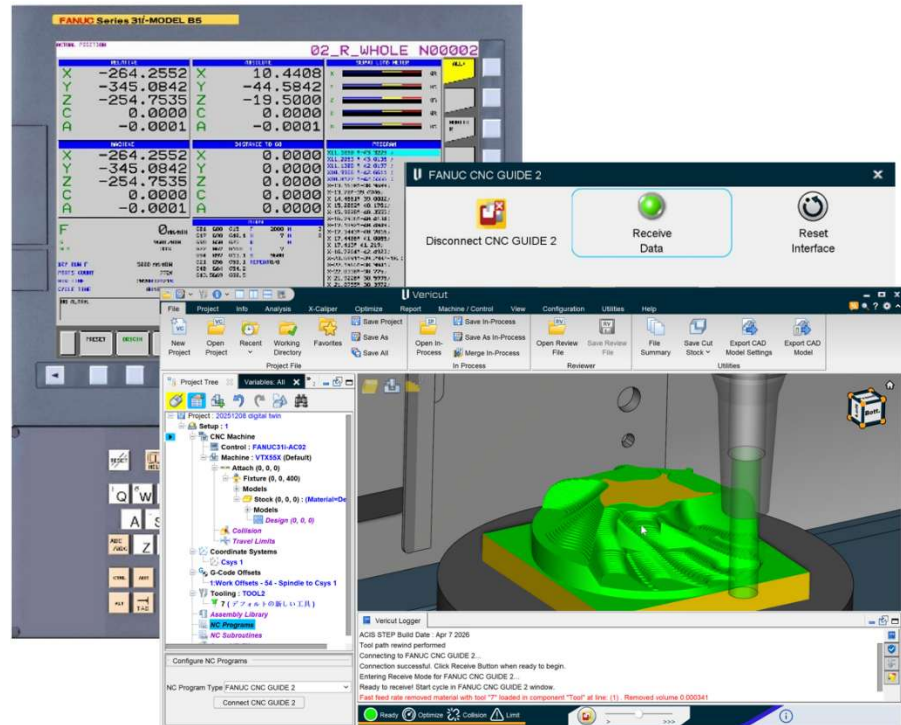
Vericut 9.7 Release Highlights

Fanuc CNC Guide 2

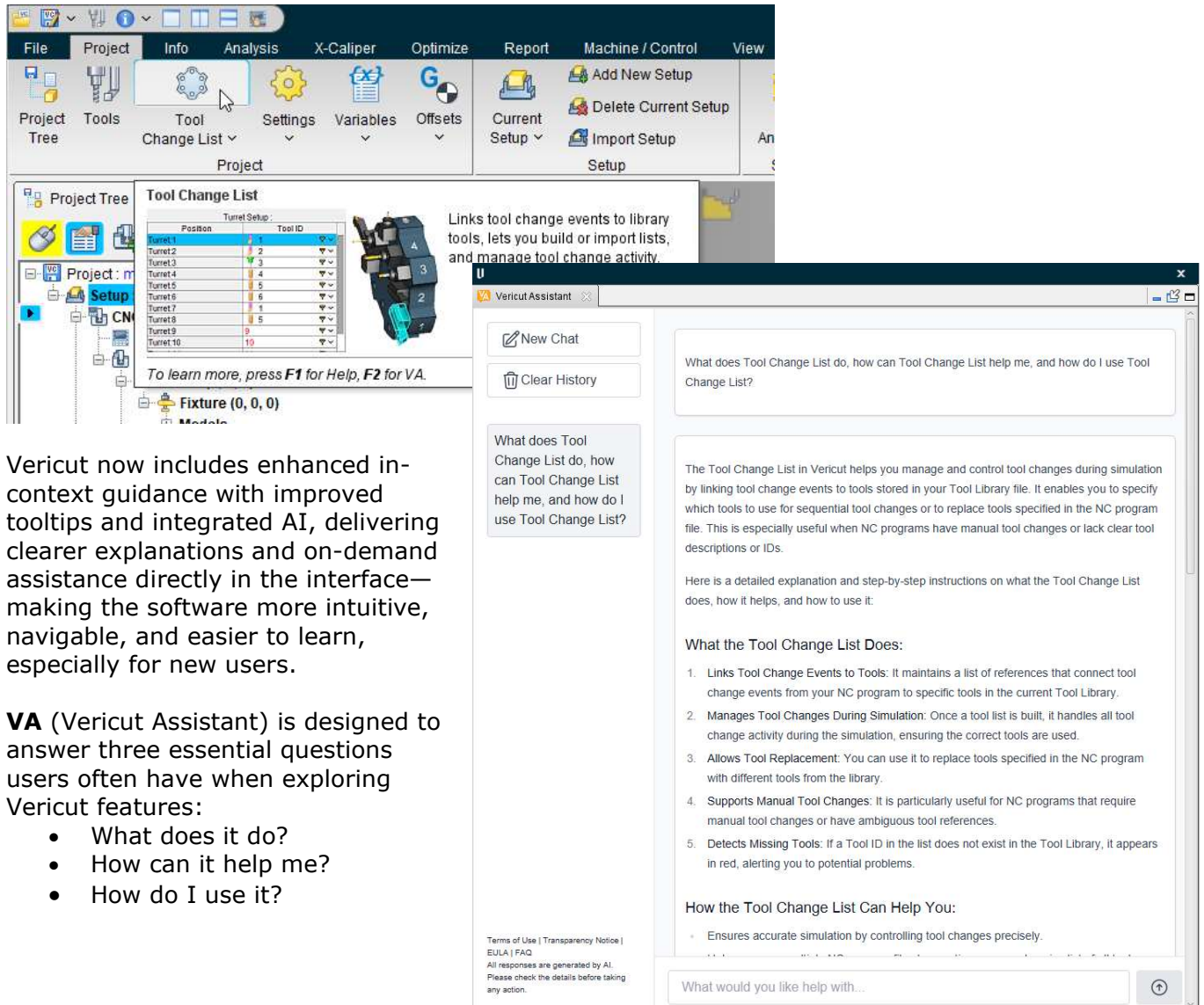
Vericut's new interface with **FANUC CNC Guide 2** brings high-fidelity FANUC CNC simulation directly into the verification workflow.

CNC Guide 2 replicates real machine behavior, enabling rapid program proving without using a physical machine.

By embedding authentic FANUC logic, Vericut gives users greater confidence that verified programs will run as expected on the shop floor.



Enhanced Tooltips and AI-Assisted Guidance



The screenshot displays the Vericut software interface. The top menu bar includes File, Project, Info, Analysis, X-Caliper, Optimize, Report, Machine / Control, and View. Below the menu is a toolbar with icons for Project Tree, Tools, Tool Change List, Settings, Variables, Offsets, Current Setup, Add New Setup, Delete Current Setup, and Import Setup. The main workspace shows a 3D model of a machine tool. A tooltip for the Tool Change List is visible, containing a table of tool changes and a description: 'Links tool change events to library tools, lets you build or import lists, and manage tool change activity.' The Vericut Assistant chat window is open on the right, showing a user query and a detailed AI response about the Tool Change List's functionality.

Tool Change List

Position	Tool ID
Turret1	1
Turret2	2
Turret3	3
Turret4	4
Turret5	5
Turret6	6
Turret7	1
Turret8	5
Turret9	9
Turret10	10

To learn more, press **F1** for Help, **F2** for VA.

Links tool change events to library tools, lets you build or import lists, and manage tool change activity.

Vericut Assistant

New Chat

Clear History

What does Tool Change List do, how can Tool Change List help me, and how do I use Tool Change List?

The Tool Change List in Vericut helps you manage and control tool changes during simulation by linking tool change events to tools stored in your Tool Library file. It enables you to specify which tools to use for sequential tool changes or to replace tools specified in the NC program file. This is especially useful when NC programs have manual tool changes or lack clear tool descriptions or IDs.

Here is a detailed explanation and step-by-step instructions on what the Tool Change List does, how it helps, and how to use it:

What the Tool Change List Does:

1. Links Tool Change Events to Tools: It maintains a list of references that connect tool change events from your NC program to specific tools in the current Tool Library.
2. Manages Tool Changes During Simulation: Once a tool list is built, it handles all tool change activity during the simulation, ensuring the correct tools are used.
3. Allows Tool Replacement: You can use it to replace tools specified in the NC program with different tools from the library.
4. Supports Manual Tool Changes: It is particularly useful for NC programs that require manual tool changes or have ambiguous tool references.
5. Detects Missing Tools: If a Tool ID in the list does not exist in the Tool Library, it appears in red, alerting you to potential problems.

How the Tool Change List Can Help You:

- Ensures accurate simulation by controlling tool changes precisely.

Terms of Use | Transparency Notice | EULA | FAQ

All responses are generated by AI. Please check the details before taking any action.

What would you like help with...

Vericut now includes enhanced in-context guidance with improved tooltips and integrated AI, delivering clearer explanations and on-demand assistance directly in the interface—making the software more intuitive, navigable, and easier to learn, especially for new users.

VA (Vericut Assistant) is designed to answer three essential questions users often have when exploring Vericut features:

- What does it do?
- How can it help me?
- How do I use it?

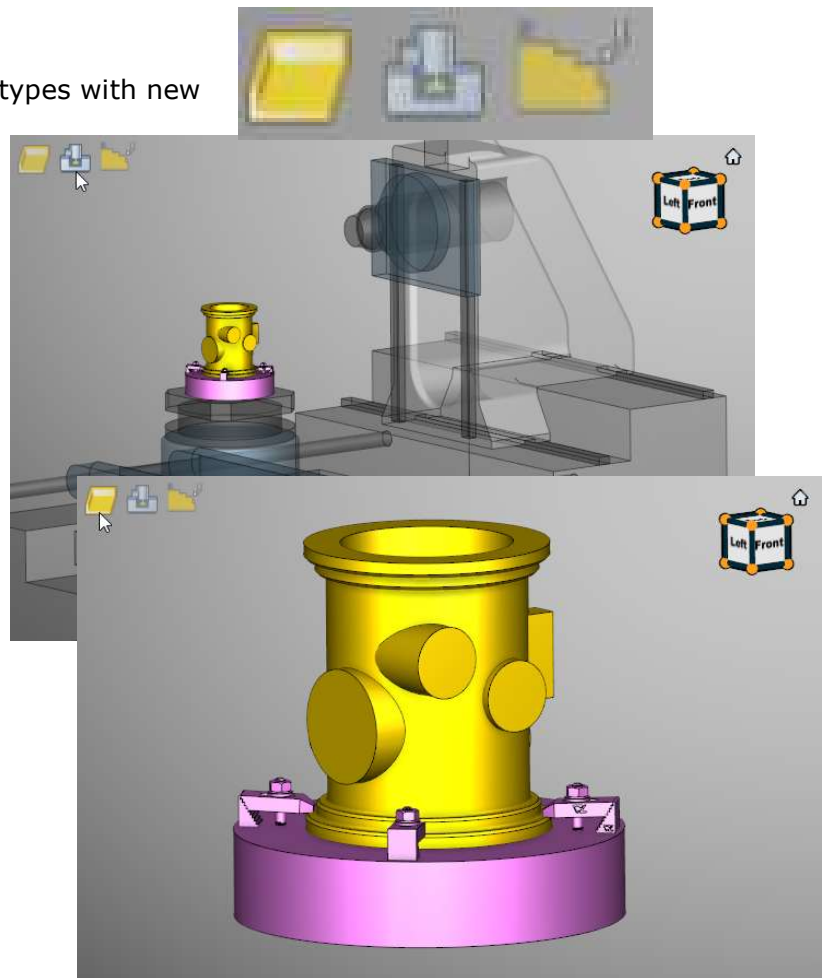
Enhanced View Controls

Users can now quickly access key view types with new on-screen icons in the graphics area.

Workpiece, Machine, and Profile views are now displayed in the top-left corner opposite the View Cube, making them easy to discover and switch between previously hidden menus.

These commonly used options are now always visible, helping users navigate the interface faster while improving overall workflow efficiency.

By surfacing these controls directly in the workspace, Vericut now makes essential functionality immediately visible and accessible.



Animation Bar UI Refresh



The Animation Bar has been redesigned for a cleaner, more modern, and intuitive experience. Controls such as **Play** buttons and the **Animation Speed** adjustment are now better organized and centralized for easier access.

The updated design simplifies visual elements, reducing clutter and minimizing reliance on hard-to-interpret indicator lights. This results in a more user-friendly interface that helps users operate animations more confidently and efficiently.

Training Viewer Panel

The new **Training Viewer** panel displays the active training session's instruction file with built-in navigation features, making it easier to follow along and stay oriented within the workflow.

This dockable Vericut panel renders training content directly from the Welcome screen, ensuring a seamless connection between onboarding and execution.

By integrating training materials into the workspace, users can access step-by-step guidance without leaving Vericut, improving efficiency and reducing the need for external applications.

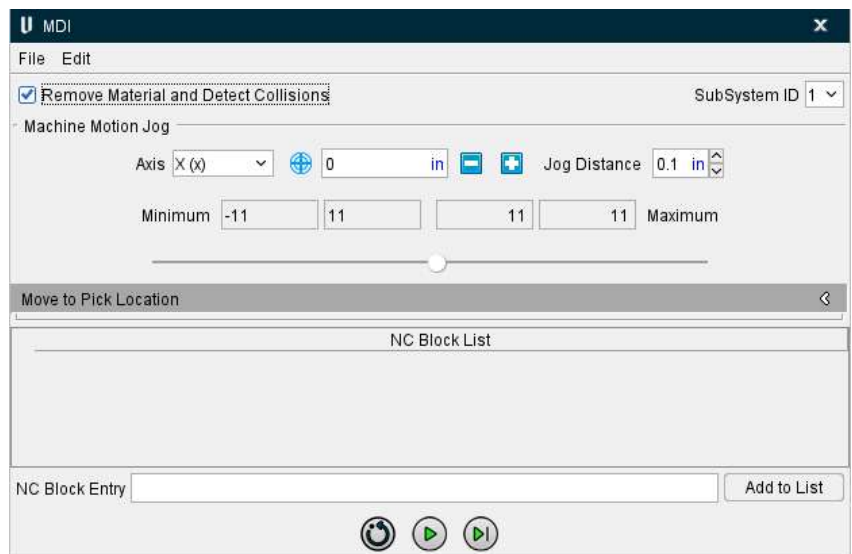


MDI Window UI Improvements

The MDI window has been updated for improved consistency and usability. **Play** and **Step** controls now align with updated Vericut animation controls, providing a more familiar and intuitive experience.

The interface has also been simplified and cleaned up, reducing visual clutter. Less frequently used options, such as **Move to Pick Location** settings, are now collapsed by default, keeping the workspace focused.

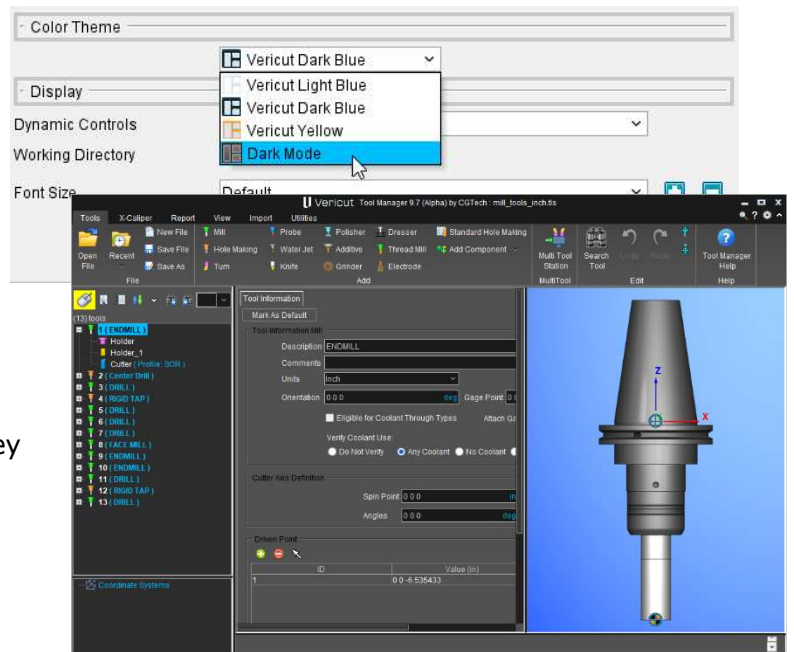
Additionally, when the MDI window is opened, **Remove Material and Detect Collisions** is enabled by default, supporting more efficient and reliable simulation workflows.



Tool Manager Color Theme Support

Standalone Tool Manager now has a new **Color Theme** section in the **Preferences** window, making it easy to change the color to options like Vericut Dark Blue or Dark Mode. These options are the same as existing Color Theme options in the Vericut Preferences window.

This update improves visual consistency across products while giving users more flexibility to choose the interface theme they prefer.

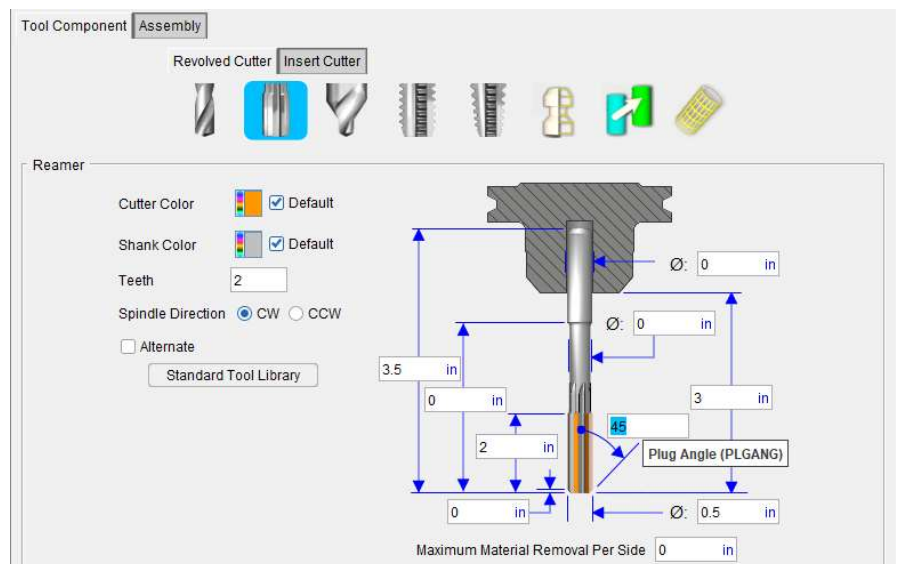


Adjustable Reamer Chamfer Angle

Reamer tools in Vericut now support an **adjustable chamfer angle** (ISO 13399: PLGANG), allowing for more accurate tool representation.

Previously fixed at 45°, the chamfer angle can now be defined based on imported tooling data, ensuring reamers reflect their true geometry.

This enhancement improves compatibility with external tooling systems and increases simulation accuracy.

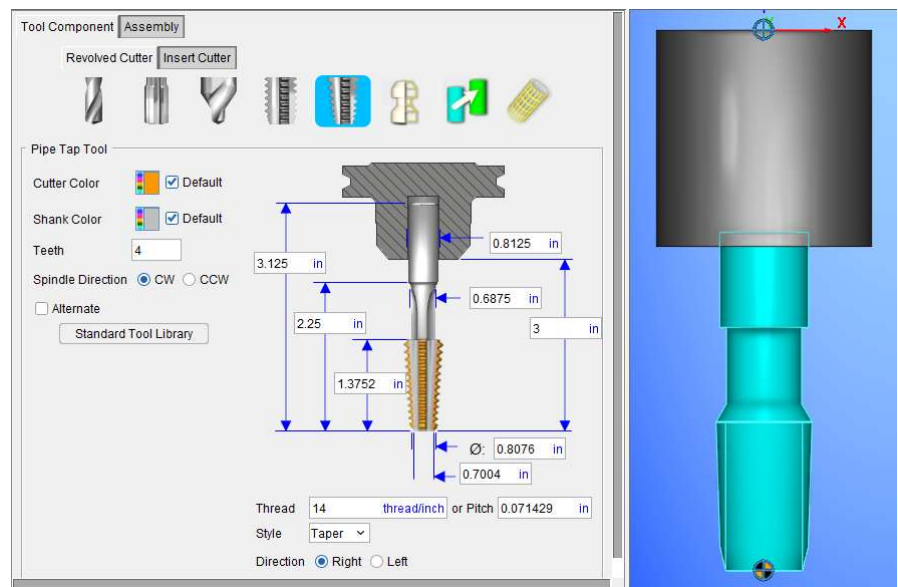


New Pipe Tap Tool in Tool Manager

Vericut 9.7 introduces a new **Pipe Tap tool type** in Tool Manager, enabling accurate definition and simulation of tapered pipe taps.

Users can now select from standard sizes across **NPT**, **BSPT**, and **BSPP** specifications, making it easy to create realistic tools that match industry standards. Unlike traditional taps, pipe taps include an external taper, which is now properly represented in simulation.

This enhancement addresses long-standing user requests and improves accuracy when working with pipe threading operations.



"OK to Mill" Option for Center Drills

Center Drills now include an **OK to Mill** option, allowing them to be used for side cutting operations without triggering drill-related errors.

Available in the Tool Component tab, this option mirrors the existing functionality for standard drills, providing consistent behavior and greater flexibility in tool usage.

This enhancement enables more accurate simulation and expands the practical use of Center Drills in milling operations.

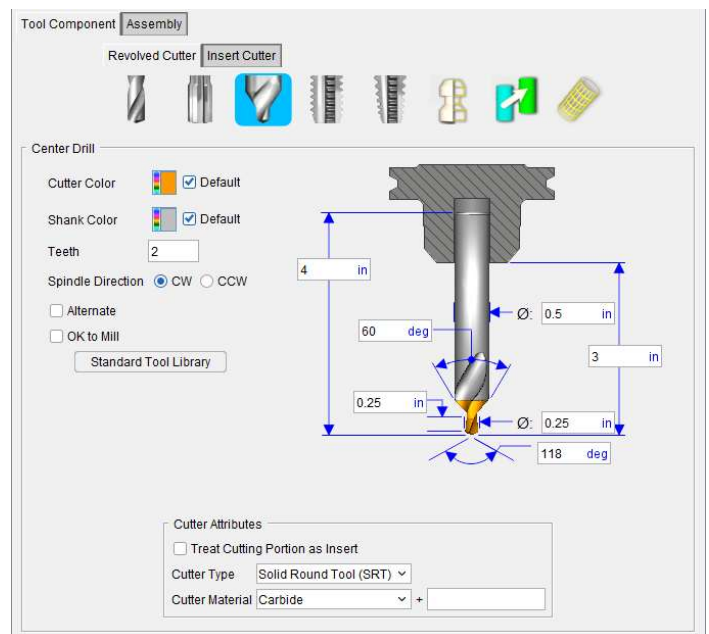
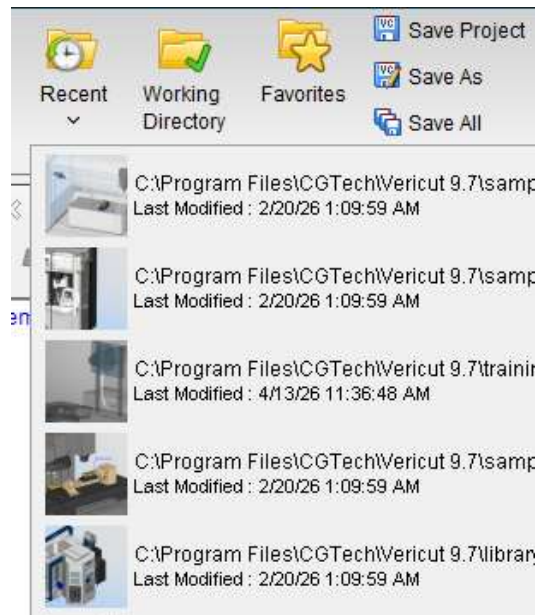


Image Preview in Open Recent

The Open Recent menu now includes image previews of Project files, making it easier to quickly identify and reopen projects.

Instead of relying solely on file names, users can visually recognize projects at a glance - saving time and improving workflow efficiency, especially when working with multiple or similarly named files.



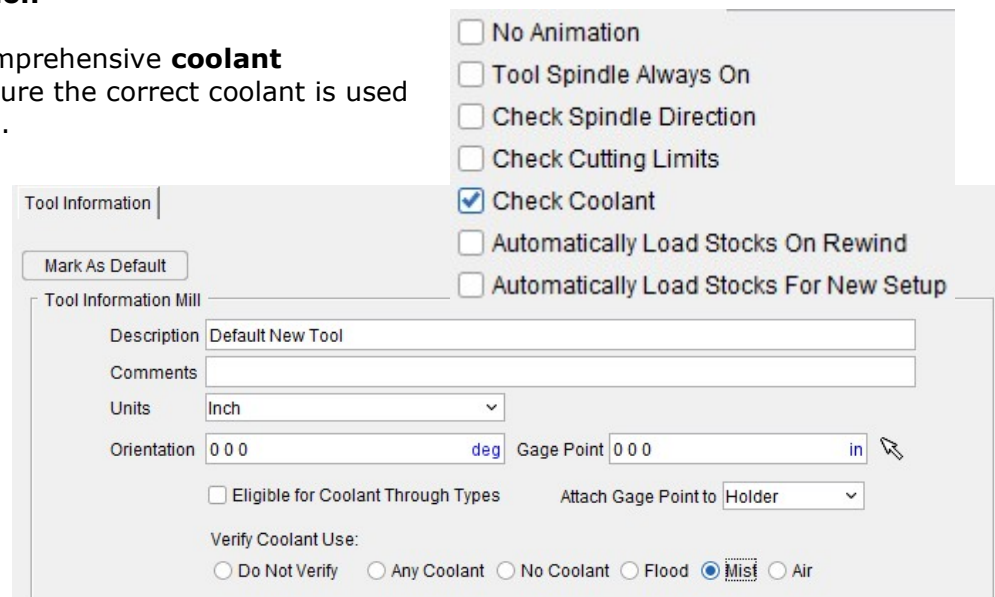
Enhanced Coolant Verification

Vericut now provides more comprehensive **coolant condition verification** to ensure the correct coolant is used for each tool during simulation.

When **Check Coolant** is enabled, Vericut verifies that the active coolant type (e.g., flood, mist, through-spindle, air) matches the tool's specified requirement as it enters material.

Mismatches will trigger a clear error message, helping prevent improper machining conditions.

New coolant macros have also been added to improve control and accuracy of coolant states.



This enhancement reduces risk of tool, machine, or part damage by enforcing correct coolant usage throughout the simulation.

Performance improvements

This release delivers notable **performance** gains across Vericut's Review mode and Reviewer, resulting in a faster and more responsive user experience.

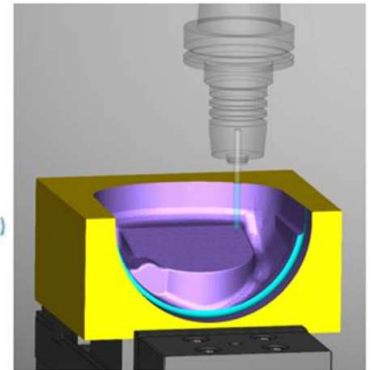
Benchmark testing shows significant improvements in processing efficiency and rendering performance, particularly for complex projects and multi-setup environments.

Additional Improvements include:

- **Processing speed:** 10–20% faster overall performance
- **Refine Display:** Approximately 5–10% improvement
- **Rendering (multi-setup VCT):** 50–80% improvement

Together, these enhancements help reduce wait times, improve visualization responsiveness, and accelerate overall workflow efficiency.

Part: "piston_mold" (V8.2 AUTO-DIFF sample)
 Stock size: 190 x 160 x 90 mm
 Cutting Res.: 0.5 mm
 Model Tol.: 0.1 mm
 NC program: 172,071 lines (G-code)



	9.6.2	9.7	Difference
Time to run full simulation:	7m 28s	4m 51s	1.5X faster
Memory used:	1745 MB	1356 MB	22% less memory used
Time to enter NC Program Review:	2.8s	13.7s	5X longer
Time to navigate in program ("Set Current")			
- 1/2 way thru program:	17s	3.8s	4-5X faster
- 1/4 way thru program:	33s	2.1s	16X faster
- 3/4 way thru program:	45s	6.5s	7X faster
- nearly finished program:	28s	10s	3X faster
Time to exit NC Program Review:	2.8s	3.4s	nearly equivalent
Time to save Review file:	1m 51s	20s	5-6X faster
Review file size:	651 MB	57 MB	11X smaller file size
Time to open Review file in Reviewer:	44s	30s	1.5X faster
Qty of program lines reviewed in 30 sec.:	1797	5542	3X lines reviewed
Avg. time to refine finished cut stock model:	1-2s	1-2s	equivalent

New Macros in V9.7

- CoolantAir
- CoolantAirOff
- CoolantAirThruOff
- CoolantFloodOff
- CoolantMistOff
- CoolantOffType
- CoolantThruOff
- CutterCompInterferenceAtStartWarning
- CutterCompRampoffSkipLast
- CutterCompRamponSkipFirst
- CutterCompShortCorner
- CycleMillPocketDepthSigned
- CycleMillPocketRefPlaneDelta
- CycleMillPocketSafeDistanceSigned
- CycleSubroutineSuspend
- CylindricalLogic
- EIARotaryIncrementalOption
- GetCurrentTime
- Heid_PolarCoordPoleCurPos
- Siemens840DSyncWaitMarkerVarInput
- SiemensTOROTAdjustModes
- WireEDMCutWidth
- WireEDMLogic
- WireEDMModeOnOff
- WireEDMThreadWire
- WireEDM_UV_Plane
- WireEDM_XY_Plane