Laminate Manager
Laminate Manager, the core of VERICUT Composite Programming (VCP) 8.1, reinvents users’ workflow for constructing composite parts in VCP. This feature organizes and manages all of the project files so that more time can be spent on the details that matter: optimization of the final composite part. With the introduction of a laminate scheme, users can now directly import laminate tree structures from CATIA’s Composite Workbench, Fibersim, and Excel into VCP.

Batch Processing
The introduction of Laminate Manager and its file management capabilities allow for a simple and versatile batch processing tool. Users can choose how far to automate their composites programming with customizable strategies – anywhere from generating a single ply to exporting part programs for the entire laminate. Files can be exported to users’ desired structure and placement to ensure seamless organization.

Laminate Analysis
With new analysis tools users can inspect and visualize defects, such as gaps and overlaps, through the thickness of the laminate. These tools allow engineers to review the compliance of composite manufacturing specifications such as course to course stagger directly inside of VCP.

Improved Post-Processing
Post-processing is now much more capable and customizable with the addition of flexible Python based post-processors. Whereas the legacy system had a fixed post-processing loop of subroutine calls, the new Python based system is extremely flexible with the structure in which ply data is processed.

Redesigned GUI
VCP 8.1 adopts a modern and easy-to-use ribbon interface that is consistent with all CGTech products. The new look and feel ensures that users will intuitively navigate from one feature to the next. Menu layouts have been rethought and simplified to streamline the user-experience and improve ease-of-use. A search bar has also been added that allows direct navigation to features. To further support the user, key bindings have also been added, providing another level of control and accessibility.

VCP 8.1 streamlines the composite design process with emphasized focus on the entire laminate.
New Contour Programming
The new Contour Programming feature of VCP allows users to control a variety of motion platforms directly with pre-defined contours. This feature was designed for ultrasonic knife, printing, and stitching processes but can be applied to a wide variety of other processes. CAD definitions are easily imported from specific formats like CATPart, prt, and sldprt as well as STEP.

Enhanced Material Projection
VERICUT Composite Simulation (VCS) and VCP have both had improvements to material projection and display, resulting in a more accurate representation of material placement. Axis systems, points, and other objects are now easier to see.

Redesigned Collision Avoidance Algorithm
The addition of an improved collision avoidance algorithm allows VCP to detect and avoid collisions with customizable granularity. These adjustments can be visualized on a course to course basis and applied to all created NC programs.