

What's NEW in VCP 9.4.2.1

IMPORTANT! - Licensing is NOT included in software shipments. See "How to get a license" below for details.

March 25, 2024

Dear VERICUT® User:

Thank you for your continued investment in VERICUT, an important part of your NC programming and machining process!

The VERICUT Composites Programming 9.4.2.1 is packed with new features making it more powerful and easier to use. This letter describes important changes in VERICUT Composites Programming 9.4.2.1. Please take a moment to review what's new and improved in this release.

Maintenance and Licensing Information

NOTE: This software requires VERICUT 9.4 licensing and Sentinel 9.8.1 License Server installation.

To Get a License – use the link below to submit a License Request:

http://www.cgtech.com/vericut_support/request-license/.

Licensing is sent via Email only.

VERICUT 9.4.2.1 runs on 64-bit Windows, and is supported on Windows 10 and 11 computers.

Software maintenance keeps you on the cutting edge - CGTech provides update software to customers with current software maintenance. Your continued maintenance ensures that you have the most advanced verification technology available. If your maintenance has expired, please contact your CGTech representative (<http://www.cgtech.com/about/contact-us/>).

Sincerely,

Olivier Munaux

CGTech VERICUT Composites Product Manager

VCP 9.4.2.1

Problems Resolved in VCP 9.4.2.1

An issue causing VCP to unexpectedly exit when modifying the position of a headpath relative to the course/tows has been fixed.

An issue preventing Generate Courses None (<<) from removing all tows has been fixed.

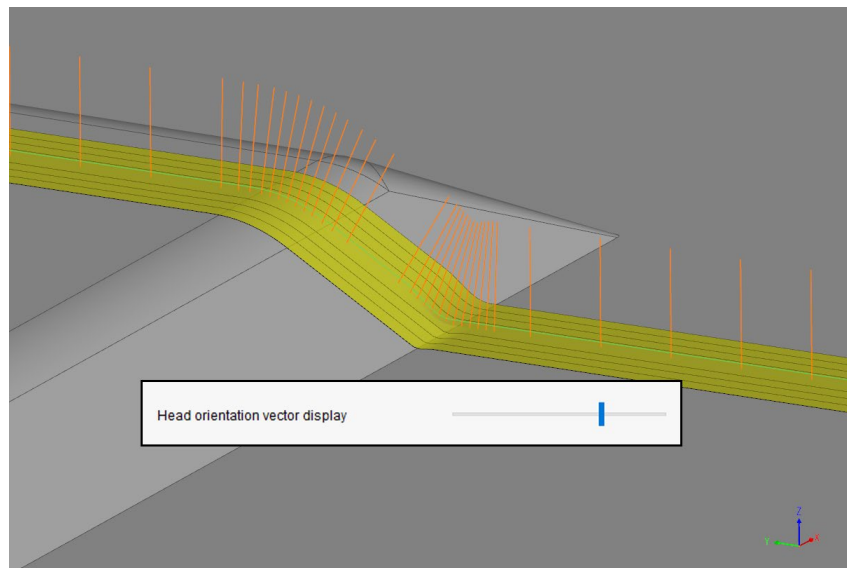
An issue preventing Laser Projection files to be generated on Contour courses has been resolved.

An issue returning incorrect tow numbers to the Post Processor has been fixed.

VCP 9.4.2

Enhancements in VCP 9.4.2

Added ability to adjust the size of head orientation vectors shown within the Roller Visualization, and Post cards in **Preferences -> Colors -> Display Settings**.



Consolidated robot kinematic logic to a new Python class within core VCP, making post writing easier and more standardized.

Robot Library JNI was updated to support rotisseries.

Problems Resolved in VCP 9.4.2

An issue causing Lead-In length to be shortened when using a Boundary Inset has been resolved.

Ply boundaries, Head paths, and Cutouts now use new logic to generate Laser Projection Data.

An issue preventing courses from being generated on a thick part in some areas has been resolved.

An issue preventing VCP from detecting all gaps during gap detection has been fixed.

An error while editing an Option pin placed at the beginning or end of a link has been resolved.

An issue preventing the editing of Option pins on a Contour course has been resolved.

A problem where Minimum Length tows caused poor trimming on helical wraps has been fixed.

An issue where ATL course width was returning incorrect values has been resolved.

An issue causing duplicate cut data points in rare occasions has been resolved.

A problem causing tow trim issues in Winding paths has been resolved.

An issue preventing the Grader from working in all configurations has been fixed.

VCP 9.4.1.1

Problems Resolved in VCP 9.4.1.1

An issue causing an execution interruption while laying only one side of odd number of tows has been resolved.

An issue causing multiple option pins to be changed while modifying one has been resolved.

An issue causing incorrect scrap display in some edge cases on wide tape after a trimming operation has been resolved.

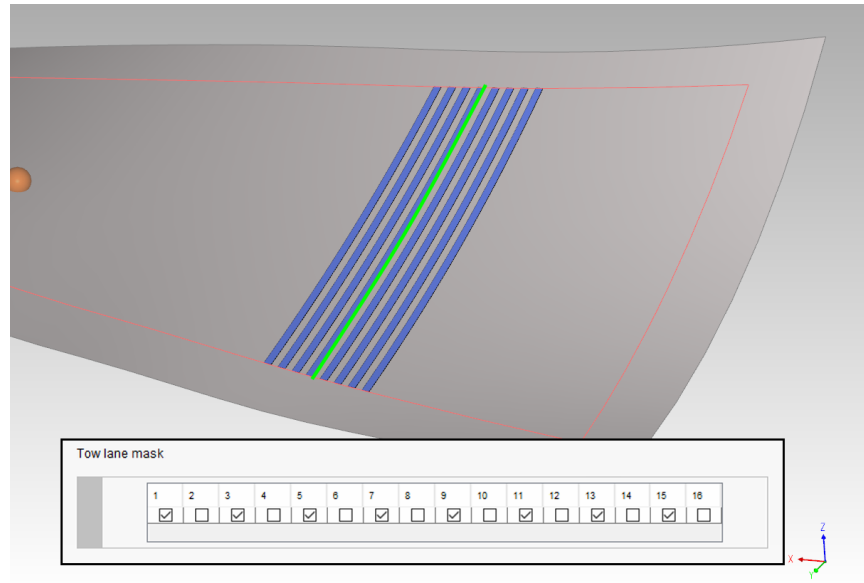
A rare case where `point.width()` returned an incorrect result has been resolved.

ATL cut data filtering has been enhanced to eliminate the occurrence of overlapping cuts.

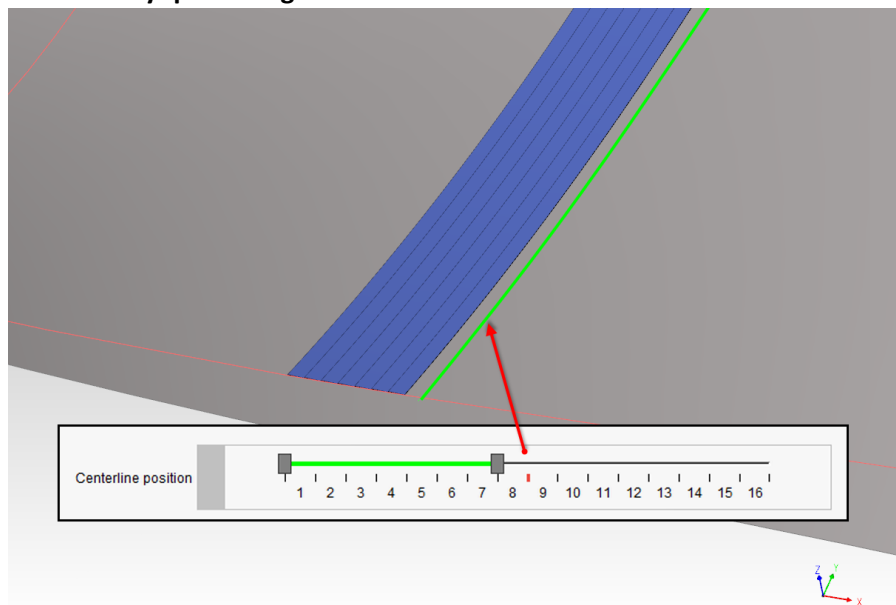
VCP 9.4.1

Enhancements in VCP 9.4.1

Added the ability to define which tows are active while laying tape in **Setup -> Head**.

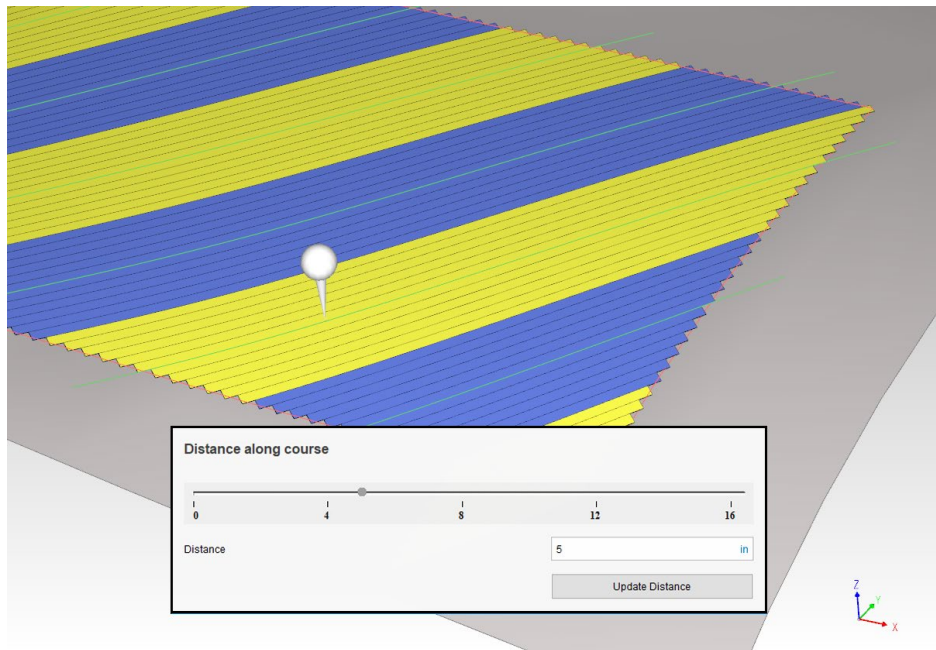


Added the ability to easily define which tows are being laid while generating courses in **Generate -> Courses -> Layup Coverage**.




Release Notes

Added a feature to allow for easier modification of Option Pin locations in **Modify -> Option Pins**.




Added the ability to disable course-course tow trimming in **Setup -> Layup -> Advanced Path Generation Settings -> Do not preform course-course trimming**

Added the ability to Hide/Show batch actions in **Batch Manager ->** 

Exposed the Robot API to the Python Post Processor for Angle <-> Matrix conversions.

Added flexibility when dividing courses with 'n' tows into courses with 'm' tows in **Modify -> Divide**.

Added a flag to **File -> Form Surfaces** to alert the user that an imported surface has been healed.

Added the ability to set linking start point to the end of a course. **Generate->Links->Start Point** 

Refined head reversal logic for more clarity and control when linking.

Added a batch mode to remove all links from a ply.

Problems Resolved in VCP 9.4.1

Resolved an issue where ATL fiber compaction was not being displayed properly.

Resolved an issue preventing single tows from being properly rendered.

Fixed an issue preventing some STEP files from being imported.

Added an error message when attempting to import unsupported CAD models.

Fixed an issue preventing proper ATL course generation in some instances.

Resolved an issue with Laser Inspection files when using ATL.

Resolved an issue preventing "Insert pin every..." from working on ATL courses.

Resolved an issue where head normals were not being calculated properly during lead in/out in rare circumstances.

Fixed an issue causing poor trimming of wide tape to a boundary.

Resolved an issue causing a crash while running the "Determine Stagger Point" batch action.

Fixed an issue with overlapping cut geometry in ATL.

VCP 9.4.0.4

Enhancements in VCP 9.4.0.4

Temporary visuals (Points, Curves) have been exposed in the Python API.

A triangle was added to the mouse icon in **Tools -> Axes -> Create new coordinate system** to remind users of a hidden *right-click* menu.

Problems Resolved in VCP 9.4.0.4

An issue sorting boundaries with long names in the Layout Coverage card has been resolved.

An issue causing incorrect course angle generation in ATL when using a 0.0 Minimum course-course gap has been resolved.

An issue with incorrect Steering Radius analysis “heat” map coloring has been resolved.

An issue preventing courses from being generated on a dome part has been resolved.

An unexpected exit caused by generating ATL courses with more than 1 tow has been resolved.

An issue causing missing surfaces when exporting ATL surfaces has been resolved.

An issue causing unexpected results when extending ATL courses to full width has been resolved.

An issue causing side cuts to be removed when breaking ATL packet to courses has been resolved.

An issue causing unexpected results when cutting ATL courses to a boundary has been resolved.

An issue preventing the Steering Radius measurement pin from being displayed has been resolved.

An issue causing twisted surfaces when exporting ATL surfaces has been resolved.

An issue causing incorrect Roll Center offset motion has been resolved.

An issue preventing the Distance along course function to work in the Contour card has been resolved.

VCP 9.4.0.3

Enhancements in VCP 9.4.0.3

Users can now set the transparency of courses to allow boundaries and other geometry to show through.

Start Points are now visible even when they coincide with an existing point.

Problems Resolved in VCP 9.4.0.3

Updating links no longer reverts head paths defined as links.

ATL Option pins now correctly post on Lead-ins and Run-outs.

An issue with ATL roller compaction visualization has been resolved.

An issue with ATL Query to gap analysis has been resolved.

VCP 9.4.0.2

Enhancements in VCP 9.4.0.2

Updated documentation for Maximum on-form traverse regarding wide tape.

Problems Resolved in VCP 9.4.0.2

An issue where VCP was missing some collisions has been resolved.

A bug preventing islands to render properly when using ATL has been resolved.

An issue when restoring all original cuts has been resolved.

Issues with 'create on-part scrap cuts' have been resolved.

Issues with 'remove on-part scrap cuts' have been resolved.

VCP 9.4.0.1

Enhancements in VCP 9.4.0.1

Updated VCP training sessions for version 9.4.

Updated VCS training sessions for version 9.4.

Problems Resolved in VCP 9.4.0.1

An issue with poor trimming while using 'cut all courses to the selected boundary' has been fixed.

An issue causing crashes when using 'cut all courses to the selected boundary' has been fixed.

An issue with ATL gap analysis has been fixed.

An issue causing poor trimming when exporting CATIA files in batch mode has been resolved.

An issue which generated an incorrect error message when using 'make full width' has been fixed.

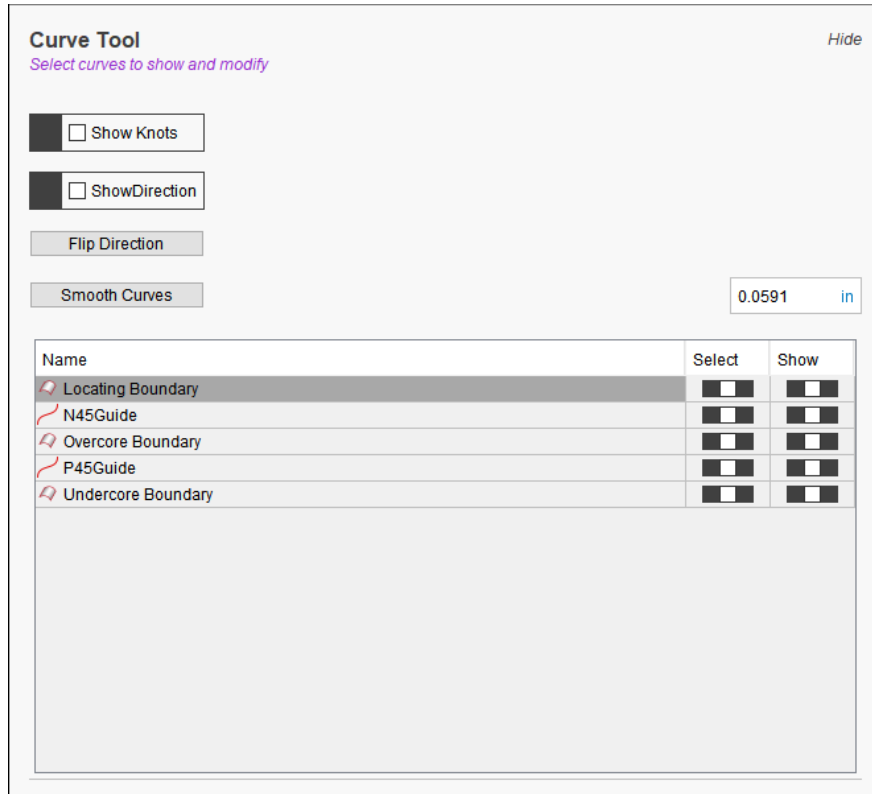
Issues with 'create on-part scrap cuts' have been resolved.

Issues with 'remove on-part scrap cuts' have been resolved.

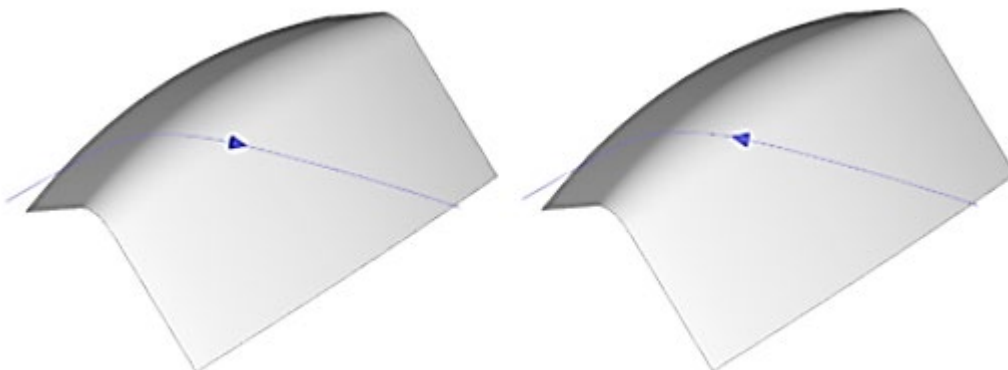
VCP 9.4

Enhancements in VCP 9.4

Added a new Curve Card to allow users to display and modify curves.

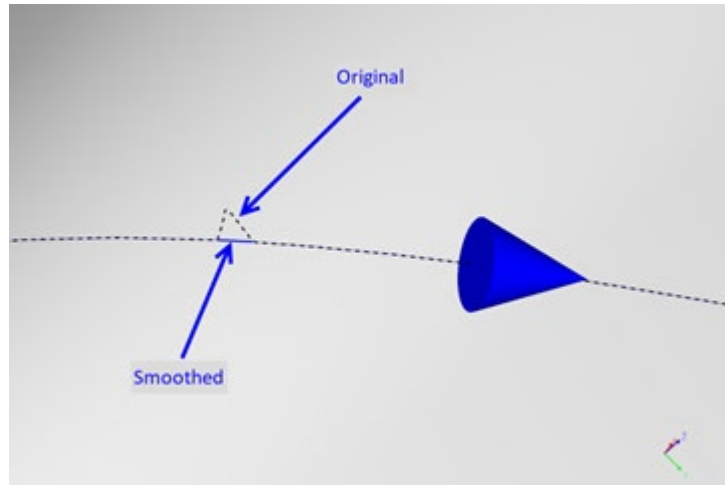


Added the ability for users to flip the direction of curves.





Release Notes



Added the ability for users to smooth curves.








Added the ability to generate Stagger Reference Curves from manually selected curve.

Reference Curves

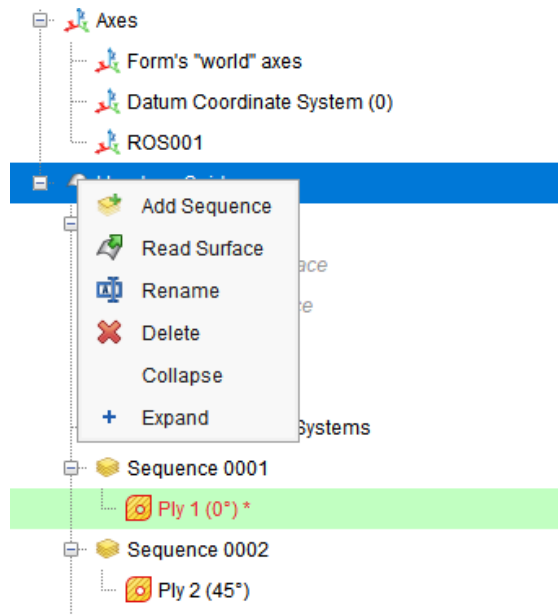
Base name  

Datum point  

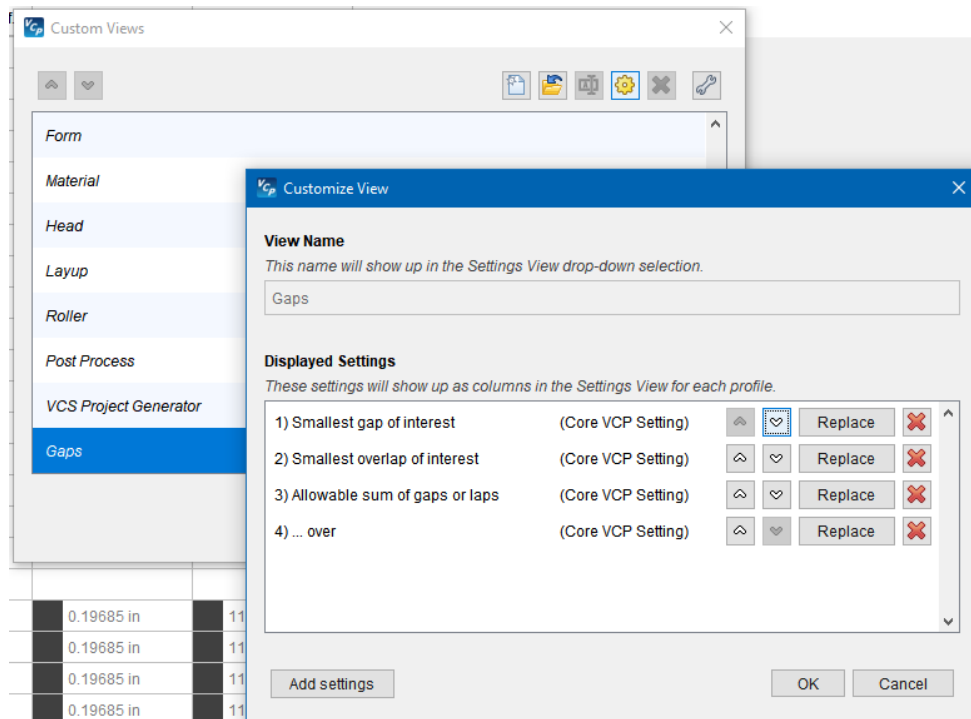
Name	Select
 Locating Boundary	
 N45Guide	<input type="checkbox"/>
 Overcore Boundary	
 P45Guide	<input type="checkbox"/>
 Undercore Boundary	

Release Notes

Added the ability to Expand/Collapse all options in the VCP Laminator Manager tree.



Added the ability to set default Analysis settings in profiles.



Release Notes

Added the ability to import CATIA 3DEXPERIENCE Composite files (requires additional license).

Features:

- Read CATIA CPD 3DXML file output up to version R2022X
- Read native programming CAD surfaces
- Read native tooling CAD surfaces
- Read Laminate stacking tree structure
- Read Ply boundaries
- Read Start points
- Read Fiber direction
- Read Material density

Enhanced the import of SOLIDWORKS files.

Added a Jython API for our robot library.

Added the ability to set the Material Bulk Factor as a percentage in Material Settings.

VCP now auto-populates file extensions when saving parts, surfaces, posts, etc.

Added the ability to remove all options pins on a selected course.

The user may now drag and drop post processors onto the Laminate Manager.

VCP now automatically checks for updates upon launch if desired.

VCP now allows the user to display ATL cuts in Preview Window relative to selected CSYS.

VCP now highlights the active or selected CSYS for easy reference.

Added the ability to query batch reports with the Python API

Exposed File->Import CAD Geometry to the Python API

Exposed File->Read Template to the Python API

Roll Center offset has been enhanced for use in thinner parts.

Problems Resolved in VCP 9.4

An issue preventing Modify Pin Location from working with ATL has been fixed.

An issue causing 'object has no attribute' error while loading some post processors has been fixed.

An unexpected program exit caused when Minimum form radius < 1mm has been fixed.

An issue preventing courses from being generated in some instances has been resolved.

An issue causing courses to extend past surface edges causing undesired twists has been resolved.

An issue causing barrel wraps to fail has been resolved.

An issue preventing Roller Diameter from updating in the Roller Visualization card has been fixed.

An issue causing a "TypeError" error message while running VCP in headless mode has been fixed.

An issue causing incorrect A/B course coloring has been resolved.

An issue preventing the course centerline from trimming in some situations has been resolved.

An issue causing "Delete and Add" buttons from being visible when adding New Advanced Rosette has been fixed.

An issue causing an unexpected program exit while using Generate VCS Project has been fixed.

An issue causing "Delete and Add" buttons from being visible when adding New Advanced Rosette has been fixed.

An issue causing an unexpected program exit when generating courses using Splice Cut lines has been fixed.

An issue with ATL on part Scrap Cuts has been fixed.

An issue with ATL Make Full Width has been fixed.

An issue with Gap and Lap reporting in ATL has been fixed.