



Version 14.11
Release Notes



7665 Commerce Way
Eden Prairie, MN 55344 USA
Telephone: (952) 937-3000
Fax: (952) 937-0070
www.stratasys.com

November 10, 2020
Document # 104062-0047

Insight 14.11 Changes

Insight enhancements and updates since the release of version 14.10



Improvements have been incorporated in all categories. To take advantage of the changes, it is recommended that jobs processed with previous versions of Insight be reprocessed prior to part building.

Modeler and Material Configuration Updates

- Stratasys F900 and Fortus 900mc system software – System software version 4.10.0 will not be available through the standard downloaded upgrade (.upg) file. Please contact a service representative or [Stratasys Customer Support](#) for information regarding this important system software update.
- ASA T40 part first layer improvement – Updated the build properties of the base layers below the part first layer to improve the quality of the part first layer and to prevent delamination. This change affects the use of ASA model material with the T40 extrusion tip on Stratasys F900 and Fortus 900mc modelers using either SR30 or SR35 support materials.
[Insight 14.11. GC-65826]
- Stratasys F900 ASA T40 estimation – Improved the accuracy of the time and volume estimation for ASA model material on the Stratasys F900 modeler using the T40 model tip. The Insight 14.11 estimation is intended for use with the new 4.10.0 system software. See above for more details.
[Insight 14.11]

Toolpaths

- Custom groups and sparse fill – Fixed the behavior of the sparse fill option Include in part sparse fill to only influence the appropriate curves with the custom group and to have no impact on the curves outside of the specific custom group.
[Insight 14.11. GC-65968]
- Custom groups and Apply contour style to selected feature only – Restored the prior software behavior to allow enabling the *Apply contour style to selected feature* when the *Contour style* is set to *None*. The most recent software only allowed the Apply contour style to selected feature when one or more contours were specified.
[Insight 14.11. GC-66540]

Supports

- None

Insight

- Wall thickness filtering – Restored the use of the magenta display color in the Edit > Filter > Wall Thickness operation to highlight the curves modified by the thickening action.
[Insight 14.11. GC-64688]

Control Center

- None

Insight Release Highlights

Insight enhancements, updates, and fixes contained in recent Insight releases.

Modeler and Material Configuration Updates

- Antero™ 840CN03 on the Fortus 450mc – Antero 840CN03 is a blend of the Stratasys® Antero 800NA model material that has electrostatic discharge (ESD) properties and is compatible for use in manufacturing applications that contact sensitive electronic parts and components. One slice height is available for Antero 840CN03: 0.010 inch (0.2540 mm).
[Insight 14.10]
- Antero™ 840CN03 on the Stratasys F900 – Antero 840CN03 is a blend of the Stratasys® Antero 800NA model material that has electrostatic discharge (ESD) properties and is compatible for use in manufacturing applications that contact sensitive electronic parts and components. One slice height is available for Antero 840CN03: 0.010 inch (0.2540 mm).
[Insight 13.10]
- Diran™ 410MF07 on the Stratasys F370 – Diran 410MF07 is a new Nylon-based durable, non-marring model material suitable for many tooling and fixture applications. Three slice heights are offered for Diran 410MF07: 0.007, 0.010, and 0.013 inch (0.1778, 0.2540, and 0.3302 mm).
[Insight 13.10]
- F123 ABS-ESD7 on the Stratasys F370 – ABS-ESD7 is an ABS thermoplastic with static dissipative properties for applications where a static charge can damage products, impair their performance or cause an explosion in a flammable environment. Use ABS-ESD7 to lower the cost and speed the production of jigs, fixtures, prototypes and production parts that need the security of ESD protection. Two slice heights are offered for ABS-ESD7: 0.007 and 0.010 inch (0.1778 and 0.2540 mm).
[Insight 13.11]
- Improved F123 ABS part quality – Improved the upward facing surface density and appearance for ABS model material on the Stratasys F370 using the 0.010 inch (0.254 mm) slice height.
[Insight 14.8. GC-63199]
- Improved Stratasys F123 ASA part quality – Improved the upward facing surface density and appearance for the ASA model material on the Stratasys F370 using the 0.007 inch (0.178 mm) slice height.
[Insight 14.8. GC-63201]
- TPU92A on the Stratasys F370 – Added the 0.007 inch (0.1778 mm) slice height option for building parts with TPU92A on the Stratasys F370. The new TPU slice height option requires the use of F123 Controller Software version 2.1.
[Insight 13.10]
- TPU92A on the Stratasys F370 – Improved the overall part quality for parts using TPU92A on the Stratasys F370 built with the 0.010 inch (0.2540 mm) slice height. The part quality improvements require use of F123 Controller Software version 2.1.
[Insight 13.10. GC-57307]
- Nylon12CF part quality – Improved the model part quality using the combination of Nylon12CF and variable width remnant fill.
[Insight 13.10. GC-56569]
- ASA T40 part sparse fill quality – Prevented a failure to create toolpaths when using the combination of sparse fill with ASA model material and the T40 extrusion tip on the Fortus 900mc and Stratasys F900 modelers.
[Insight 14.10. GC-65673]
- ASA T40 part quality – Improved the flatness and appearance of the bottom part layer when using ASA model material with the T40 model tip on the Fortus 900mc and Stratasys F900

modelers.
[Insight 13.10. GC-54983]

Toolpaths

- Adaptive Slice – Added new adaptive slice capabilities where the slicing interval and the layer thickness is no longer constant but varies based on the part geometry. The goal of adaptive slicing is to use thicker slices where the part walls are closer to vertical to increase build throughput while preserving feature detail and appearance. Adaptive slice is a new option for the Stratasys F900, Fortus 900mc, Fortus 450mc, and Stratasys F370 modelers for most materials and extrusion tips that offer 0.007 inch (0.178 mm) slice height and 0.010 inch (0.254 mm) slice height. When adaptive slice is applied to a range of parts using the nominal 0.007 inch (0.178mm) slice height there is an average 24% throughput increase. See the Insight help files for more details.
[Insight 14.8]
- End of toolpath motion – Restored the Insight 12.6 behavior for the end of extrusion motion that occurs at the end of each toolpath. This fix produces the expected end of extrusion motion to significantly reduce potential motion discontinuities during part building.
[Insight 14.4. GC-61911]
- Toolpath quality and enhanced visible surfaces – Fixed a toolpath failure that produced toolpath infill inside of an interior hole of the part.
[Insight 14.10. GC-65824]
- Seam placement and contour linking – Improved the placement of seams when contour linking is enabled to make the seam placement more consistent with the preferred seam location when contour linking is turned off.
[Insight 14.4. GC-62169]
- Custom groups and Apply contour style to selected feature only – Restored the prior software behavior to allow enabling the *Apply contour style to selected feature* when the *Contour style* is either *Single contour only* or *Multiple contours*. The most recent software only allowed the Apply contour style to selected feature when multiple contours were selected.
[Insight 14.10. GC-65672]
- Custom group parameter validation – Eliminated unwanted parameter value validation error messages when changing slice height or changing modeler types and using custom groups.
[Insight 14.10. GC-65700]
- Custom Groups and interior contour width – Added new custom group toolpath properties to control the outer contour width and the interior contour width, along with the number of contours that should use the new interior contour width.
[Insight 14.8]
- Custom Groups and ULTEM 1010 with T40A – Fixed missing toolpaths and part quality issues when using the combination of custom groups, sparse fill, and ULTEM 1010 with the T40A model tip.
[Insight 14.4. GC-60704]
- Custom group and contour selected feature only infill – Fixed the behavior when using Custom Groups, apply contour style to selected feature only, and multiple contours to avoid overfill caused by nearly coincident contours.
[Insight 14.4. GC-60705]
- Custom groups and enhanced visible surface style – Eliminated layers with unwanted solid infill when using custom groups and the enhanced visible surface style.
[Insight 14.4. GC-60282]

- Variable width remnant fill – Improved the overall fill density through improved detection of short thin regions of the model that can be successfully filled with variable width remnant toolpaths.
[Insight 14.9. GC-62165]
- Variable width remnant fill – Improved the overall fill density by eliminating small voids to increase part quality when using the new variable width remnant fill option.
[Insight 14.4. GC-62165]
- Custom Groups improvement – Fixed a regression in behavior where curves in custom groups were removed from the custom groups when supports were created. Curves placed into custom groups now correctly remain in the custom groups during support generation.
[Insight 13.11. GC-59123]
- Linked contour improvement – Fixed a case where the link between successive contours is too long resulting in localized overfill. The new linking software selects a more appropriate link location on the adjacent contour to minimize the link distance.
[Insight 13.11. GC-58392]
- Seam Control – Improved the workflow for adjusting the seam location using the reference point. The use of the reference point in the Seam Control operation aligns the seam location of the part boundary curve or the selected toolpath and eliminates the need for the bypass seam control option. Using multiple reference point locations with multiple selections now produces predictable seam locations relative to the appropriate reference point location.
[Insight 13.10. GC-44350]
- Remnant fill – Improved the quality of toolpath infill when using standard remnant fill. For all modelers and all materials, remnants are regions where the desired contours or raster do not fit leading to a potential void. Remnant fill is used to fill these voids. The quality of the remnant fill has been improved for all materials and all modelers. Specific newer modelers support variable width remnant fill which further improves the fill density and strength.
[Insight 13.10]
- Multiple contours and sparse fill improvement – Improved the interaction of multiple contours and sparse fill to eliminate unintended overfill at the boundary between the inner contour and the interior sparse region.
[Insight 13.10. GC-52362]
- Custom group and contour selected feature only infill – Fixed the behavior when using Custom Groups, apply contour style to selected feature only, multiple contours, and the button to create toolpaths for the current custom group to prevent toolpaths from crossing over and filling in holes within the layer.
[Insight 13.10. GC-52345]
- Toolpath Simulation Data Export – Added the ability to export toolpath simulation data for the Fortus 450mc modeler.
[Insight 13.10. GC-40360]

Supports

- Box supports – Fixed a specific case of missing support toolpaths when using the box supports style.
[Insight 14.4. GC-61449]
- Wall stabilizers – Improved the behavior of the wall stabilizer to produce fingers that maintain contact with the part and to prevent unwanted crossings.
[Insight 13.10. GC-57603]

Insight

- Copy Thru Z and Undo – Fixed the behavior of the Undo button in the Copy Thru Z operation to retain the current layer to allow easy iterations within the operation: select curves and options: perform the copy, undo, change options and repeat.
[Insight 14.8. GC-62772]
- Copy Through Z – Fixed the operation of Copy Through Z to correctly copy curves below the bottom layer, creating new layers as necessary.
[Insight 13.11. GC-58652]
- Model and support tip correctness – Fixed issues pertaining to the display of the current model and support tip when loading saved jobs. Fixed issues pertaining to the tip specified in the CMB when a part is processed with the modeler configuration present at application launch.
[Insight 13.10 GC-56658, GC-57821]
- Copy Through Z – Fixed the operation of Copy Through Z to correctly copy curves to the specified destination layer. This fixes the ability to create new layers above the top of the sliced part and to create layers above the first layer when starting with curves created in Insight using the Edit menu tools.
[Insight 13.10. GC-56745, GC-57149]

Control Center

- None

Workstation Operating Systems

- Insight is exclusively a 64-bit Windows application and requires a supported 64-bit Microsoft operating system.
- Microsoft Windows 7 support – Stratasys maintenance and support for Microsoft Windows 7 ended in January 2020 to coincide with the Microsoft end of support date. Stratasys will no longer ensure that Insight and Control Center work with Windows 7 and will not offer support for operational issues involving Windows 7.
- Microsoft Windows Server 2008 support – Stratasys maintenance and support for Microsoft Windows Server 2008 has ended. Stratasys will no longer ensure that Insight and Control Center work with Microsoft Windows Server 2008 and will not offer support for operational issues involving Microsoft Windows Server 2008.

Supported System Types

- System obsolescence notice – Insight 12.0 was the last Insight product release to support the following printers. The deprecated printers have been removed from the Insight application software starting with the Insight 12.2 release.
 - Fortus 200mc
 - FDM Titan
 - FDM Titan TI
 - FDM Vantage SE
 - FDM Vantage S
 - FDM Vantage i
 - FDM Vantage X

Known Issues

- Variable width remnant fill and ASA T40A configuration – At this time do not use the new toolpath option for variable width remnant fill with the ASA T40A configuration as the toolpaths created using variable width may exceed the capabilities of the Fortus 900mc and Stratasys F900 modelers leading to build failures.
- TPU92A estimation – The time and volume estimation for parts processed with TPU92A model material may vary by as much as 15%. This issue will be resolved in an upcoming release.
- PC-ABS parts on Fortus 380mc and Fortus 450mc – For small parts built using PC-ABS on the Fortus 380mc and Fortus 450mc it is recommended to use the full height sacrificial tower option which is accessed using the Option button on the Packing tab of Control Center.