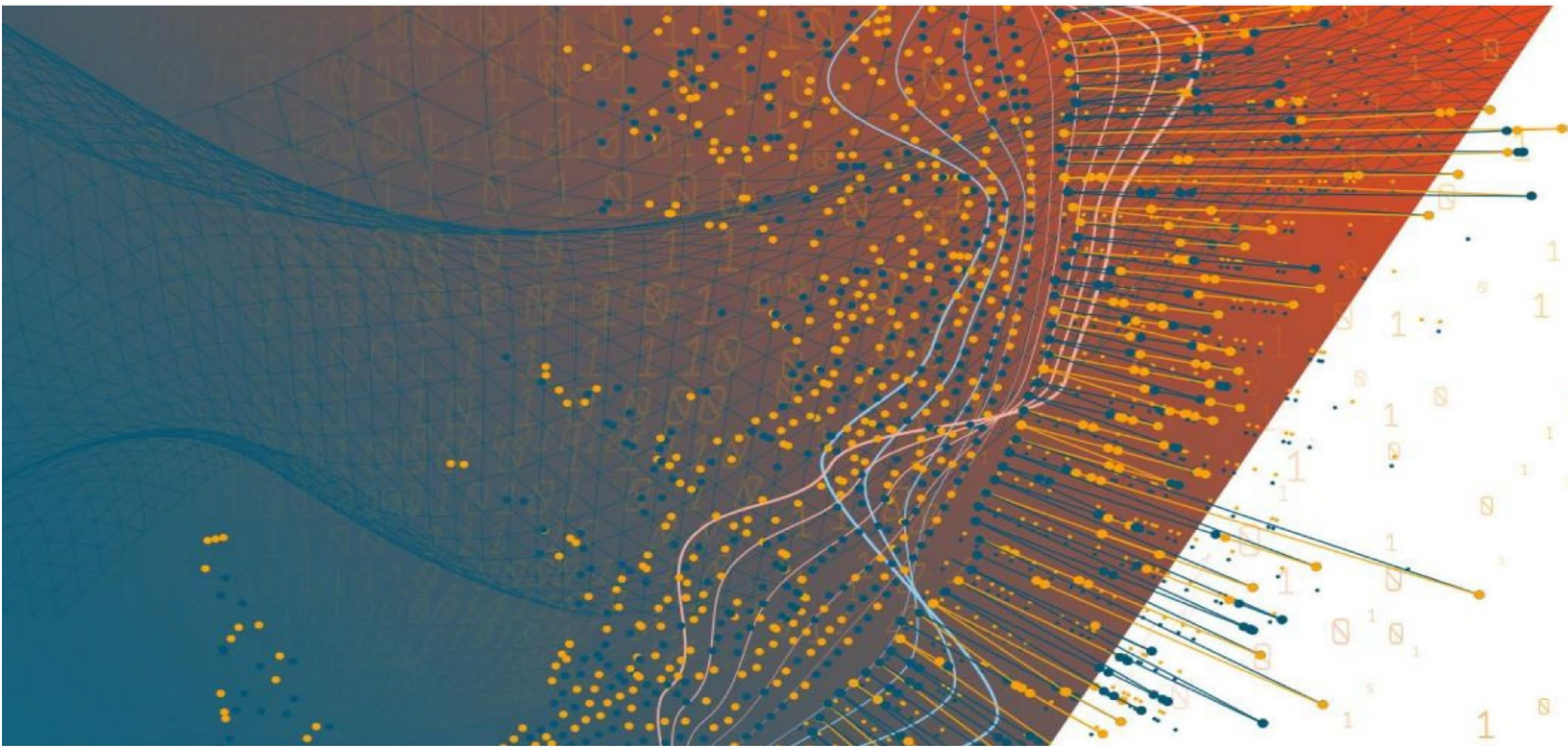




Altair® Inspire Extrude™ 2026

RELEASE NOTES

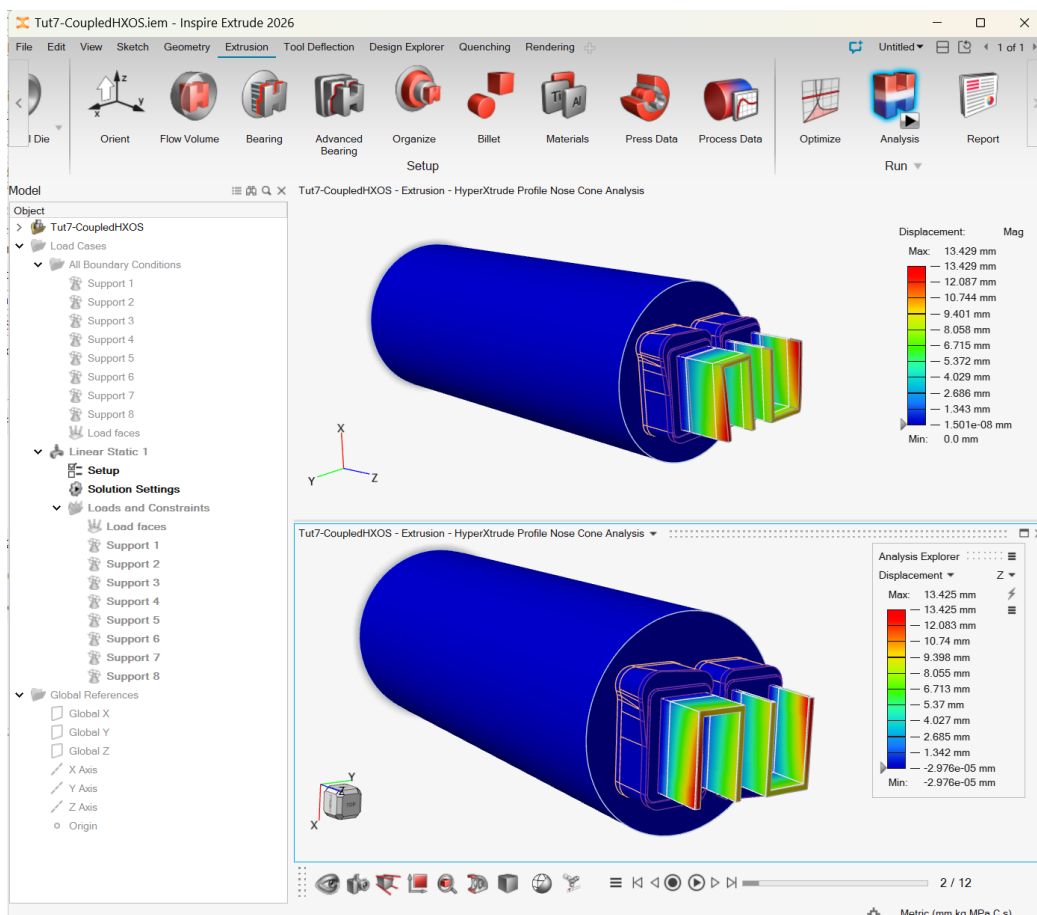
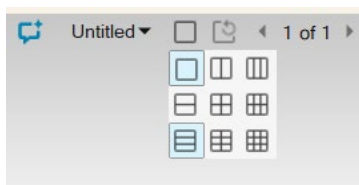
NEW FEATURES

General

Multi-Window Post-Processing

Compare analysis runs with multiple modeling windows that show the results of each run.

Use the **Set Page Layout** button in the top-right corner of the workspace to choose how windows are arranged.



For more information, see [Multiwindow Results](#).



Plots from the Main Text Output File

The primary output file (*.out) contains extensive data and diagnostics. In this release, the mass and heat balance tables from the output file are presented as bar charts, while the convergence data is illustrated as a graph. These enhancements enable customers to interpret the results with greater clarity and depth. (INSTRUDE-4098)

Meshing Improvement

A comprehensive revision of the backend meshing framework has been implemented across all profiles. The update leverages the latest SimLab batch meshing methodologies to deliver enhanced mesh quality. This functionality can currently be enabled through user preferences and is scheduled to become the default meshing approach in the forthcoming release. (INSTRUDE-4115)

Polymer Extrusion

Design Explorer Support in Inspire Extrude

Inspire enables comprehensive design evaluation and DOE/optimization studies through Design Explorer, supporting both geometry and process variables. This functionality is also used to generate synthetic data for AI-related studies.

For the polymer extrusion implementation, this release formally supports only variations in inlet speed and temperature. In certain cases, depending on how the model is constructed, selected geometry variables may also be functional. (INSTRUDE-4198)

For more information, see [Design Explorer](#).



IMPROVEMENTS

Metal Extrusion

Smoother Flow Front in Die Filling Analysis

Filling front predicted by the die filling analysis is made smoother by removing the digital filtering and implementing a distance function.

Mesh Biasing Defaults

You can select either Inspire or HM for the default mesh biasing parameters. (INSTRUDE-4260)

DE Post-Processing

Multi-window post-processing is enabled in the DE results explorer. (INSTRUDE-4277)

Weld Surface Determination

Weld regions are identified by tracking material flow from each porthole. When the number of portholes exceeded 15, this process required significant computational time. The algorithm has now been optimized, resulting in improved performance. For this analysis type, the solver supports up to 30 portholes.



RESOLVED ISSUES

Metal Extrusion

Issue ID

Description

INSTRUDE-4099, INSTRUDE-4104

DE post-processing had issues when loading results upon selection and a crash issue when loading results from the status dialog.

INSTRUDE-4281

For the bearing start curve, exporting model data for multi-hole hollow dies took a very long time.

INSTRUDE-4264

Bearing mesh with biasing had failures for a few models. This issue has been resolved by improving the mesh method, which has eliminated these mesh failures in HM batch.

SLVHXT-829

The change to compute gap thickness introduced in 2025.1 is now applied only when the pset parameter MeshPerturbationDCT is set to 1. The default value of this parameter remains 0. This reverts the code behavior to its previous state in version 2024.1 and resolves issues observed in a few models.

SLVHXT-798

Bearing friction was affected in profiles that were uniformly thick but contained minor thickness variations due to CAD irregularities. The problem arose from how the nondimensional gap thickness was computed and applied, leading to oscillations in stick-slip zones.

SLVHXT-822

For models with billet skin, certain informational printouts were repeated.



SLVHXT-631

In stationary quenching analysis, both the profile and quench box must lie within the positive Z quadrant. The solver automatically centers the profile within the quench box; after centering, no part of the profile should extend into the negative Z quadrant. Ensuring these conditions during manual setup prevents the previously reported issues. This will be automated in subsequent releases.

N/A

In hollow cone spray quenching, the inner angle of the hollow cone is read and validated to ensure it is nonzero. A typographical error in the code that affected this validation has been corrected in this release.

Friction Stir Welding

Issue ID

SLVHXT-830

Description

A solver issue incorrectly applied a filter function meant for die filling analysis to FSW results, altering the output during H3D file writing.



KNOWN ISSUES

The following known issues will be addressed in a future release:

- On October 14, 2025, Microsoft Windows 10 reached its end of support. Following Microsoft's messaging, all Altair 2026.0 applications no longer support Windows 10. Altair is providing this information to help our customers accommodate this change. Altair 2026.0 supports the Windows 11 operating system, along with our other Linux-based operating systems. Please contact your local Altair support team if you have any questions or concerns.
- Windows does not support Unicode characters in folder names by default. When using a run folder that contains Unicode characters, please enable **Beta: Use Unicode UTF-8 for worldwide language support** in the Windows system locale settings.
 - Select Start → Settings.
 - In Settings, select **Time & language**.
 - Select Language & region.
 - Select Administrative language settings.
 - Click Change system locale.
- Select the Beta: Use Unicode UTF-8 for worldwide language support checkbox.

