

# Altair® Inspire Mold™ 2026

RELEASE NOTES

# NEW FEATURES

Inspire Mold 2026 includes the following new features and enhancements.

## Part Analysis Tools



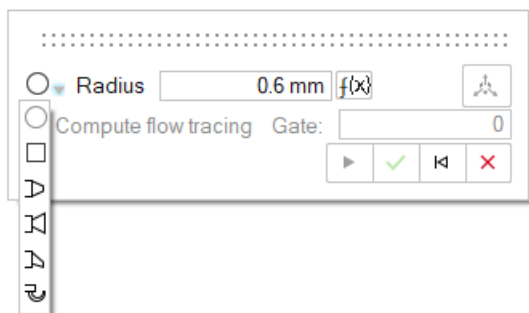
The Mold Opening Direction tool has been moved to a new subribbon that includes a Fillet Radius tool, a Critical Areas tool, and a Thickness tool. These tools can give insights on potential problem areas in your part.

For more information, see [Fillet Radius Analysis](#), [Critical Areas Analysis](#), and [Thickness Analysis](#) in the help.

## New Gate Shapes



You now have the option to add new gate shapes, including pin gates, fan gates, submarine gates, and hook gates, to your model. With these new gate shapes, you now have greater control over how the material is injected into the part's mold cavity.



For more information, see [Add/Edit Gate](#) in the help.



# ENHANCEMENTS

## Part Insert Update



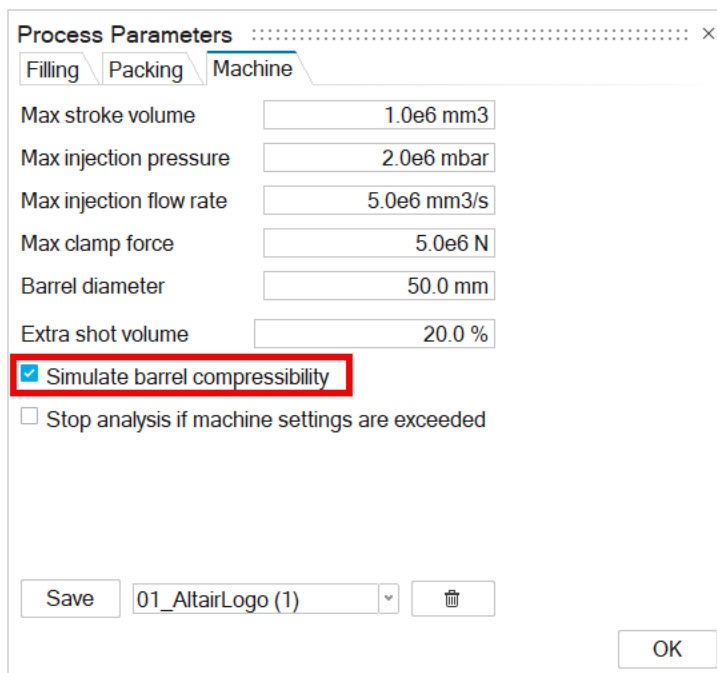
You can now run a molding analysis with a part insert when no mold is modeled. This update avoids mold meshing when the geometry is not available or required, reduces preprocessing effort, enabling quicker evaluations in early design stages, and yields shorter calculation times by avoiding unnecessary calculations.

For more information, see [Part Insert](#) in the Help.

## Compressible Barrel Settings



The solver now supports simulating the compressibility of the material inside the barrel during the molding process. Compressibility is enabled by default, and can be disabled if desired. Fill drivers are now treated as screw movement, not direct inlet velocity. As the polymer compresses before injection, fill times may be longer than with incompressible flow. It is recommended to keep the barrel volume about 20% larger than the part volume, allowing 10% for packing and 10% for cushion. This feature more accurately simulates the behavior of the liquid material during molding.



The screenshot shows the 'Process Parameters' dialog box with the 'Machine' tab selected. The 'Filling' and 'Packing' tabs are also visible. The 'Machine' tab contains the following settings:

Parameter	Value
Max stroke volume	1.0e6 mm3
Max injection pressure	2.0e6 mbar
Max injection flow rate	5.0e6 mm3/s
Max clamp force	5.0e6 N
Barrel diameter	50.0 mm
Extra shot volume	20.0 %

Below the settings, there are two checkboxes:

- ☒ Simulate barrel compressibility
- ☐ Stop analysis if machine settings are exceeded

At the bottom, there is a 'Save' button, a dropdown menu showing '01\_AltairLogo (1)', a trash icon, and an 'OK' button.

For more information, see [Machine Parameters](#) in the help.

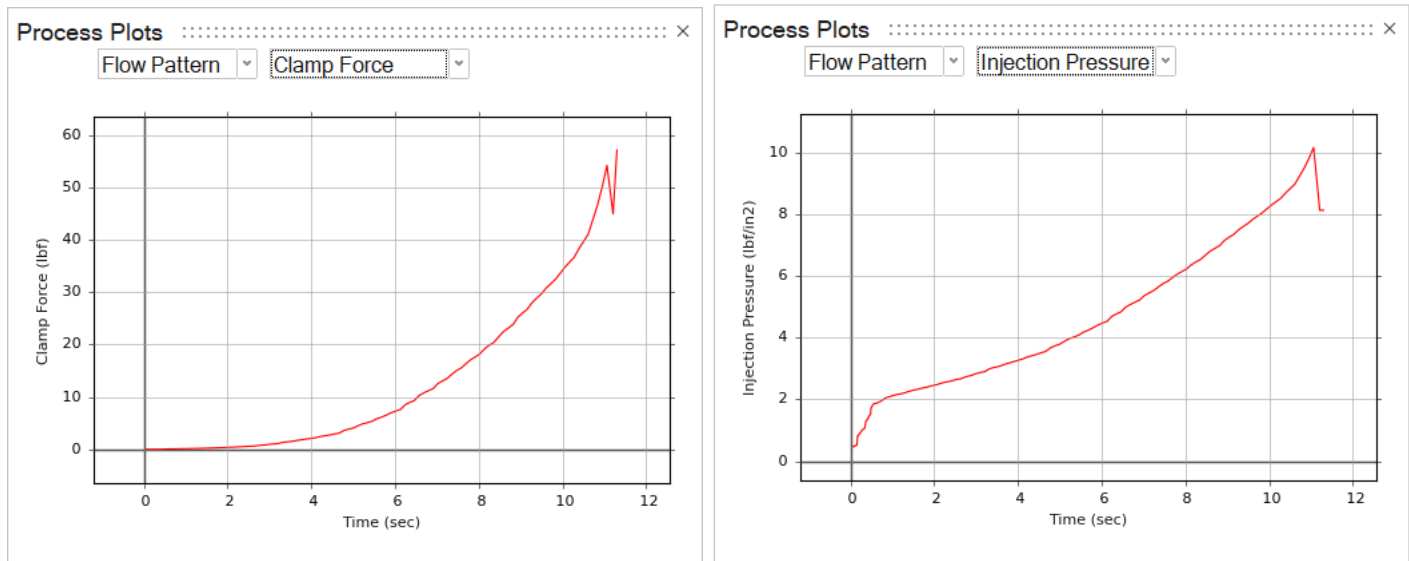


## Process Plots Update



The Process Plots window is now available when you run a quick analysis. You can now monitor injection pressure and evaluate clamping force requirements without running a full analysis, and save time by gaining early visibility into critical process parameters.

Further, clamping force can now be expressed in foot-pounds and Injection Pressure can now be expressed in pounds per square inch.



For more information, see [Show Analysis Results](#) in the help.

## Warpage Control in Analysis Explorer



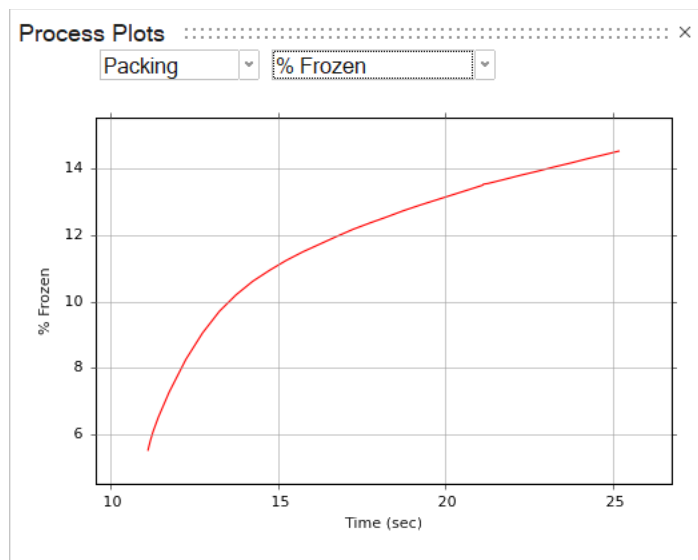
You can now customize the point of origin when visualizing warpage in the Analysis Explorer. This enhancement can help you improve accuracy by focusing on critical regions, measuring warpage relative to the most relevant point. It can also help you more easily compare displacements across different designs or simulation runs, and quickly identify areas that need design or process adjustments.

For more information, see [Show Analysis Results](#) in the help.



## New Result Data

In the Filling, Packing, and Cooling stages of an advanced analysis, Total Frozen Volume data is now available in the Process Plots window.



In the Packing stage of an advanced analysis, Volumetric Shrinkage data is now available in the Analysis Explorer.

For more information, see [Result Types](#) in the help.

## Material Data Now Saves in .imold Files

Custom materials are now saved in your model's .imold file so when you share the file, the materials data will be shared along with it.



# RESOLVED ISSUES

- Shell solver is now more robust.
- The solver now compensates for shrinkage in warp.
- Mesher now uses SimLab for greater stability.
- Improve accuracy in the level set movement:
- SLVAMSLVR-1555: scale velocity in levelset convection solver
- SLVAMSLVR-1555: compute compressible injected volume
- Improving robustness and accuracy in models with valves:
- SLVAMSLVR-1555: adjust time to reach time controllers
- SLVAMSLVR-1598: negative dt adjusting it with time controller
- SLVAMSLVR-1634: adjust dt several valves
- SLVAMSLVR-1560: define time controller with delay time
- Improved pressure control in transitions:
- [Molding] set zero pressure after hold time
- [Molding] SLVAMSLVR-1581: pressure exponential decay pressure
- [Molding] SLVAMSLVR-1584: pressure decay after pressure release
- SLVAMSLVR-1569: time pressure based on vp switchover time
- Sink mark improvements:
- [SLVAMSLVR-1579] Remove sink mark results from runner system
- Thickness use additional ref points for union
- Thermal improvements:



- [Molding] move clipping to thermal solvers
  - [Molding] Thermal Boundary layer improvements
- Misc:
  - INSMOLD-3258: print stresses at last step for warpage
  - [Molding] SLVAMSLVR-1668: print gate freeze time in out file
  - INSMOLD-3165: remove density from cycling h3d



# KNOWN ISSUES

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

- As of October 14, 2025, Microsoft Windows 10 reached its end of support. Following Microsoft's messaging, all Altair 2026 applications no longer support Windows 10. Altair is providing this information to help our customers accommodate this change. Altair 2026 supports the Windows 11 operating system, along with our other Linux-based operating systems. Please contact your local Altair support teams 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.



- MOTION - Certain boundary entities such as grounded Pin and structural support are hidden when leaving the Review Flexible Body Results context [INSPIRE-35999]





- MOTION - Combined motion load case is missing in re-analysis results for optimization from motion loads [INSPIRE 48809]

