

 RELEASE NOTES

Altair[®] Inspire[™] Form 2025

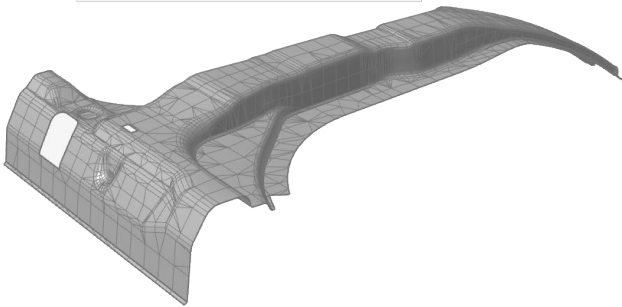
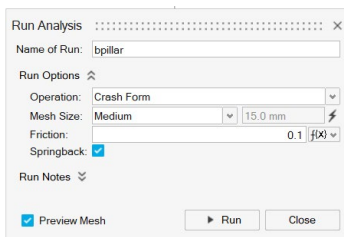
New Features and Enhancements 2025

The Inspire Form 2025 release includes the following new features and enhancements.

Feasibility

Preview Mesh

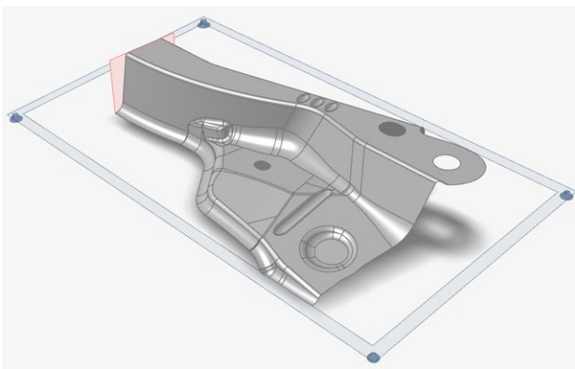
Run Analysis now includes a **Preview Mesh** checkbox so you can preview the mesh created based on the input parameters and finalize them before submitting the run.

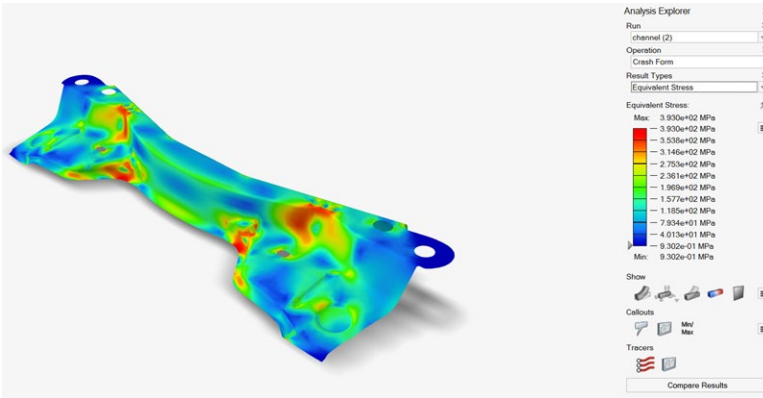


For more information, see [Feasibility Analysis](#).

Mirror Results for Symmetry

Added a **Mirror results for symmetry** checkbox to **Preferences > Inspire Form > General > Results**. When viewing analysis results, the model is reflected across existing symmetry planes to allow you to see the full model.





For more information, see [Preferences: Inspire Form](#).

FLC Datapoint Scaling

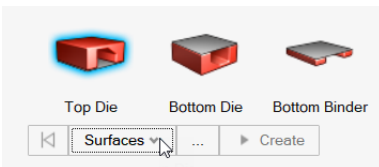
Forming Limit Curve (FLC) datapoints can now be scaled based on the test coupon thickness and assigned blank thickness.

For more information, see [Define the Blank Type and Material](#).

Tryout

Select Surfaces from Solids

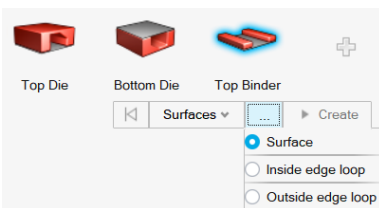
Added support for selecting surfaces directly from a solid to streamline the workflow and reduce model setup time when starting with a complete CAD model of the tooling.



For more information, see [Add Forming Operations](#).

Select Surfaces with an Edge Loop

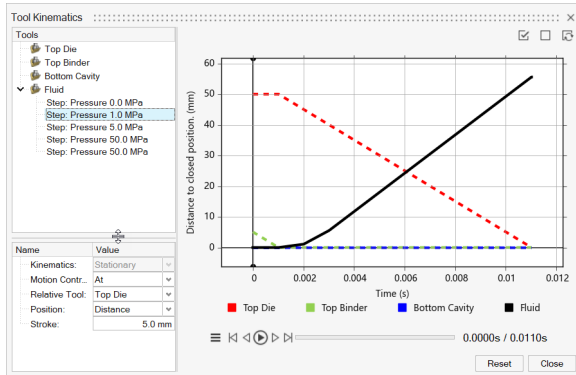
Added support for quickly selecting surfaces inside or outside an edge loop. When **Inside edge loop** or **Outside edge loop** is selected, clicking **Create** automatically selects the surface inside or outside the red loop indicator, significantly reducing model setup time.



For more information, see [Add Forming Operations](#).

Fluid Pressure Curves in Tool Kinematics

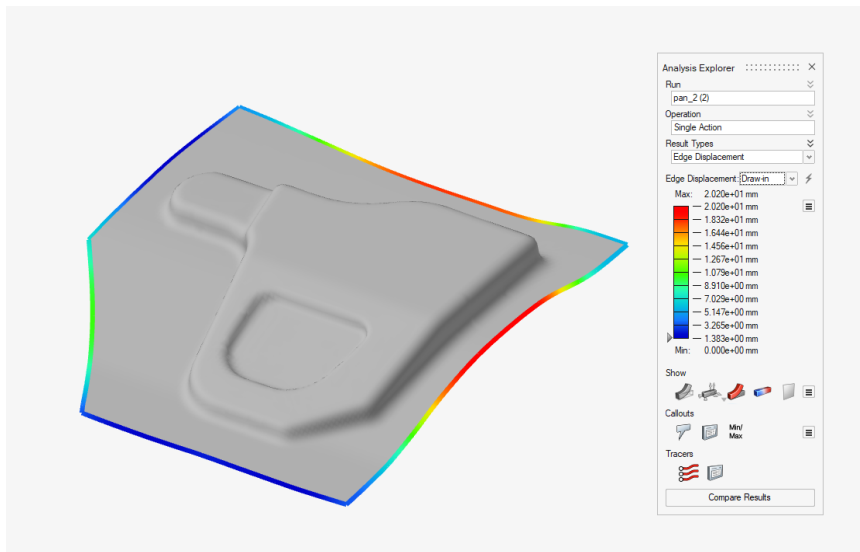
Added support for fluid pressure curves in Tool Kinematics. Users can now define pressure curves relative to the tool displacement and preview them before submitting the run.



For more information, see [Preview the Motion of a Forming Operation](#).

Draw-In for Edge Displacement

When viewing edge displacement analysis results, you can now choose **Draw-In** from the **Edge Displacement** dropdown to view only the displacement from the draw direction on the face.



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

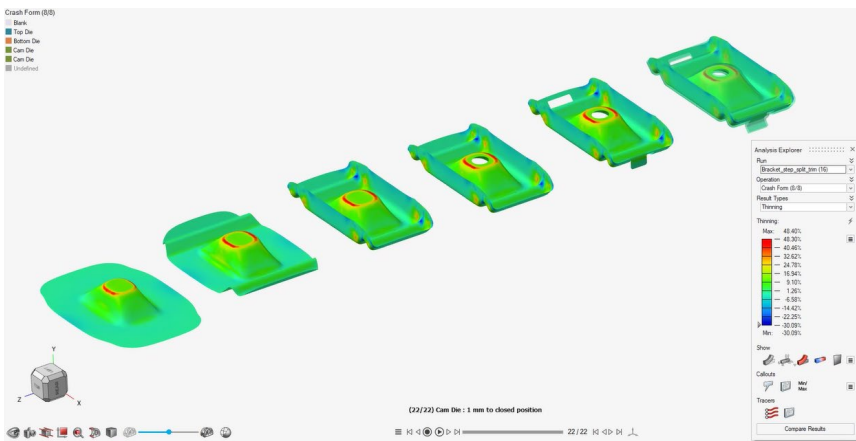
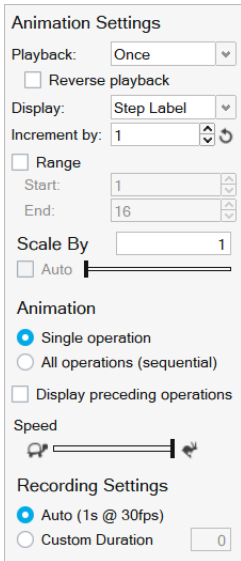
Export Springback Compensation

Inspire Form now supports exporting springback compensation data for use in Cimatron in addition to NX and Catia for geometry compensation. When the Compensate tool is selected, choose **Export** in the guide bar.



Animation Settings

Added **Display preceding operations** checkbox in Animation Settings to allow you to view still images of all preceding operations. You can now visualize a complete strip layout with results of progressive and transfer die-forming processes as in a physical press.

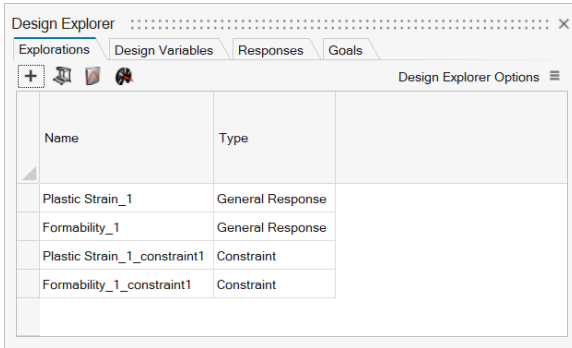


For more information, see [Animate and Record Results](#).

Design Explorer

Design Explorer for Feasibility Analysis

Added the Design Explorer for feasibility analysis. Optimization in the Design Explorer helps designers arrive at optimal designs that improve the manufacturability of each part. Design of Experiments in the Design Explorer allows designers to study the tradeoffs among various designs and how each affects manufacturability.



The screenshot shows the Design Explorer window with tabs for Explorations, Design Variables, Responses, and Goals. Below the tabs is a toolbar with icons for adding, deleting, and refreshing, along with a 'Design Explorer Options' menu. The main area contains a table with the following data:

Name	Type
Plastic Strain_1	General Response
Formability_1	General Response
Plastic Strain_1_constraint1	Constraint
Formability_1_constraint1	Constraint

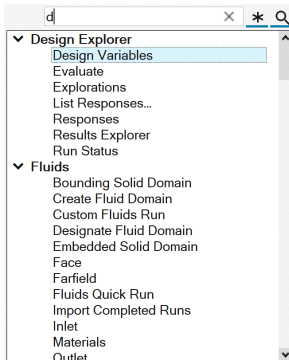
For more information, see [Design Explorer](#).

General

Tool Search

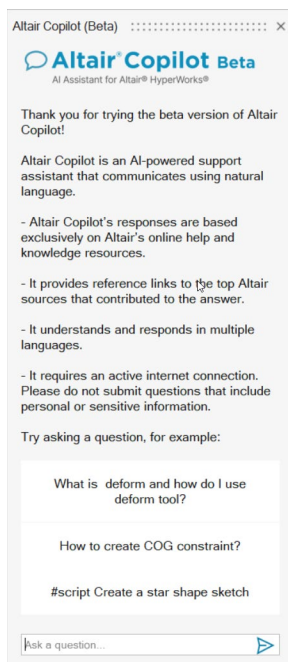
Added support for finding and opening tools.

1. Enable the Search tool by pressing **Ctrl + F**.
2. In the search bar, enter a string.
Predicted results appear in a list.



Altair Copilot Beta

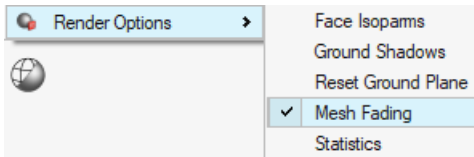
Altair Copilot is an AI-powered support assistant that understands natural language and can answer questions based exclusively on Altair's online help material and other Altair knowledge sources.



For more information, see [Altair Copilot \(Beta\)](#)

Finite Element Mesh

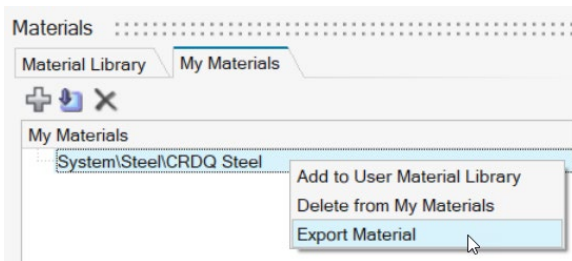
Finite element (FE) mesh is now displayed at all zoom levels when the mesh fading option is turned off in render options



Export User-Created Materials

User-created materials can now be exported in .xml format.

Right-click a user-created material and select **Export Material**.



Known Issues

- Surface selection by edge does not work for open loops or on solid faces [INSFORM-3236].
- Colors can display incorrectly when mesh display, symmetry, and thickened shells are turned on [INSFORM-3231].
- Blank shape prediction does not work if the forming has Gravity as the first operation and the solver run was performed with coarse mesh option [INFORM-3151].
- Export blank shape is not fully supported for adaptive blank/sheet mesh [INSFORM-2845].
- Edge results (strain displacements) are not supported for adaptive blank/sheet mesh [INSFORM-2845].
- Clamps and supports in springback constraints not supported for solid blanks [INSFORM-2487].

Resolved Issues

The following issues have been resolved for the 2025 release:

General:

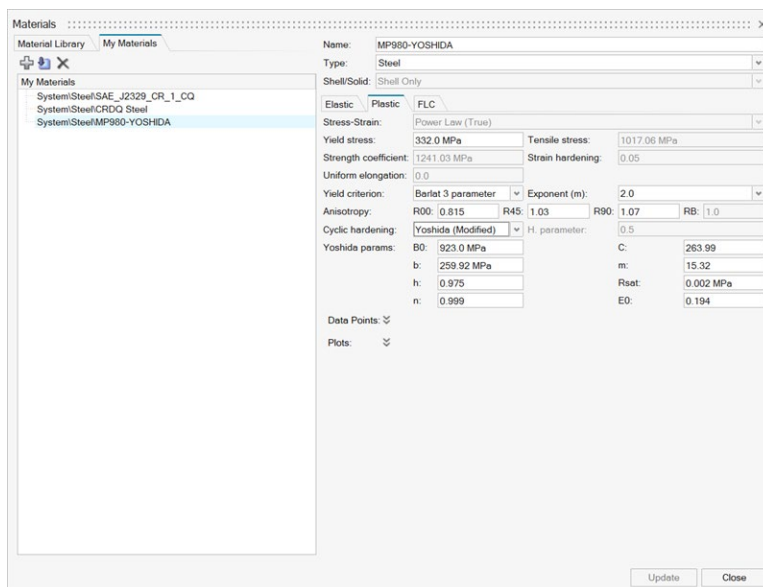
- Section view is now shown along the section cut plane for surface/sheet parts [INSFORM-3089].
- Box fit measure has been improved for accuracy and compactness [INSFORM-2878].

Feasibility

- Blank fit has been improved for accuracy [INSFORM-2512].

Tryout:

- Inspire Form solver now runs single and multioperation forming simulation in all supported Linux distributions [INSFORM-3163].
- **Yoshida (Original)** and **Yoshida (Modified)** hardening are now supported for materials when a Barlat 3 parameter is selected in the Materials dialog [INSFORM-3075].



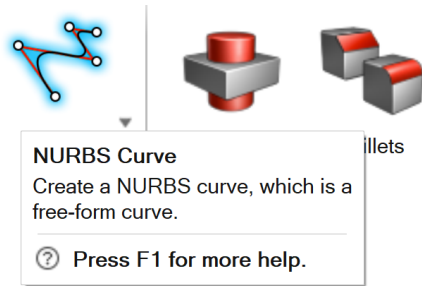
- Reports now include thickness and %thinning results for blanks modeled with solid elements [INSFORM-3119].
- Inspire Form solver now runs with adaptive mesh and improved stability [INSFORM-3213].
- Drawbead parameters are now saved with .iform files [INSFORM-2512].
- Solid-blank meshing has been improved to create uniform layers of hexa and penta elements [INSFORM-3073].
- Blank shape prediction robustness has been improved to handle complex outlines and holes [INSFORM-3109].

Learn More About Inspire Form

You can learn more about new and existing features in Inspire Form using the following resources:



In-Application User Assistance

Inspire provides two types of user assistance. **Enhanced tooltips** appear when you hover over icons and other features. They describe what the tool does.



Workflow help appears when you select a tool that opens a guide panel, guide bar, or microdialog. The text prompts you what to do next.



Click to place the control points.  

Click  to view additional tips and shortcuts. Some tools also include a video .



Click to place the control points.  

To edit after creation, right-click the NURBS curve in the History Browser (F6), and then select Edit.

F1 Show Help

Online and Offline Help

Press **F1** or select **File > Help > Help** to view the online help.

Altair® Inspire™ Form

2024 (Latest)

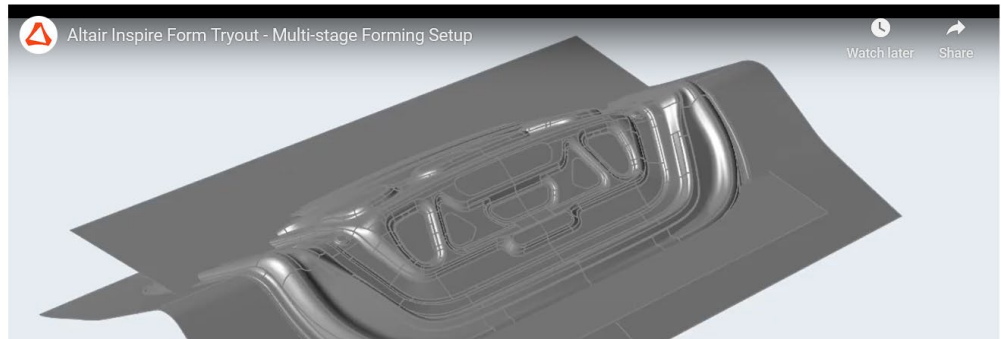
Home / Welcome

Search

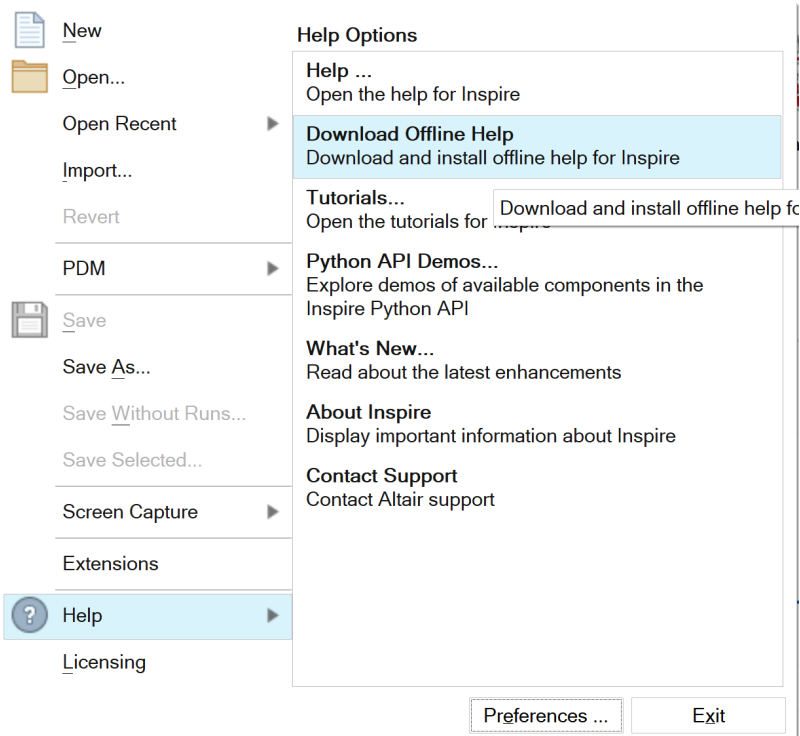


- Welcome
- > What's New
- > Get Started
- > Tutorials
- > Parametric Modeling
- > Feasibility Setup and Simulation
 - Die Face Design
- > Tryout Setup and Simulation
- > Rendering
 - Trim Angle Analysis
- > Simulation Results
- > Reference
 - Keyboard Shortcuts and Mouse Controls

Welcome to Altair Inspire Form



You can download an offline version by selecting **File > Help > Download Offline Help**. An internet connection is required to download.



Supported Languages

The language for the user interface and online help can be changed in the Preferences under Workspace > Language. User interface text is available in English, Chinese, French, German, Italian, Japanese, Korean, Portuguese, and Spanish.

The online and offline help is available in English at the time of release, and in Chinese, Japanese, and Korean generally 1 to 2 months after release. If a language is selected in the Preferences that is supported for the user interface text but not for the help, the English help is shown. Similarly, if an unsupported language is selected in the Download Offline Help dialog, the English offline help will be downloaded instead.