RELEASE NOTES

Altair® Inspire™ Form 2023

New Features and Enhancements 2023

The Inspire Form 2023 release includes the following new features and enhancements.

General

- All guide bar styles have been updated.
- Construction History is now available, along with new auto-grouping functionality. This allows you to roll the model build process backwards or forwards to quickly edit and create multiple variants.
- The Rendering tab was added to Inspire Form. Use the Editors, Libraries, and Render tools to create photorealistic renderings of your designs.
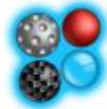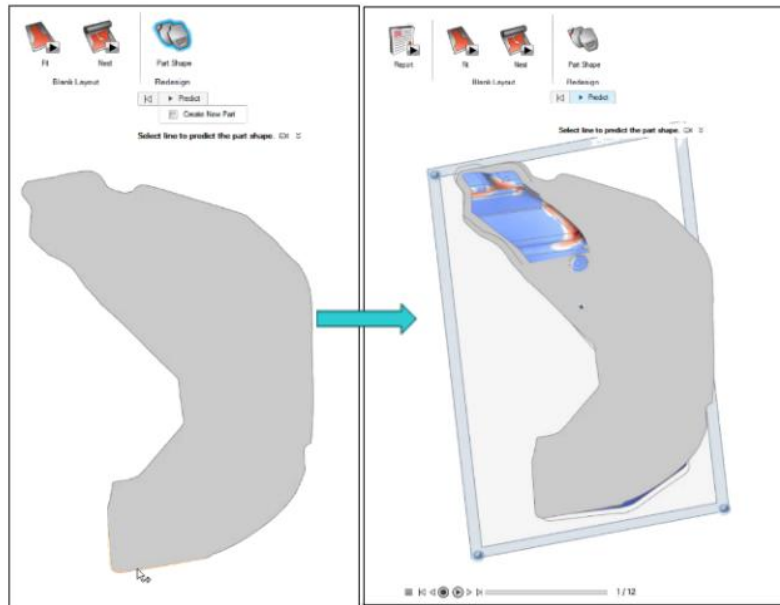

Feasibility

- There is a new Part Shape tool on the ribbon in a new Redesign section. This tool is useful to redesign the part boundary based on the feedback from nesting analyses to improve design sustainability.
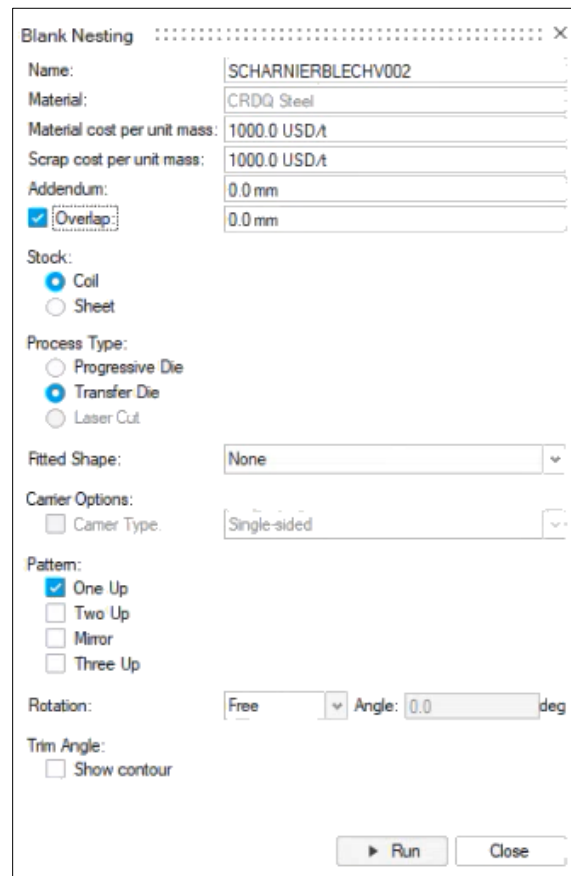
The Part Shape tool extracts a blank shape from nesting to redesign the final part shape.

- In Feasibility Preferences, you can now choose between the RADIOSS and Optistruct solver for springback analysis.
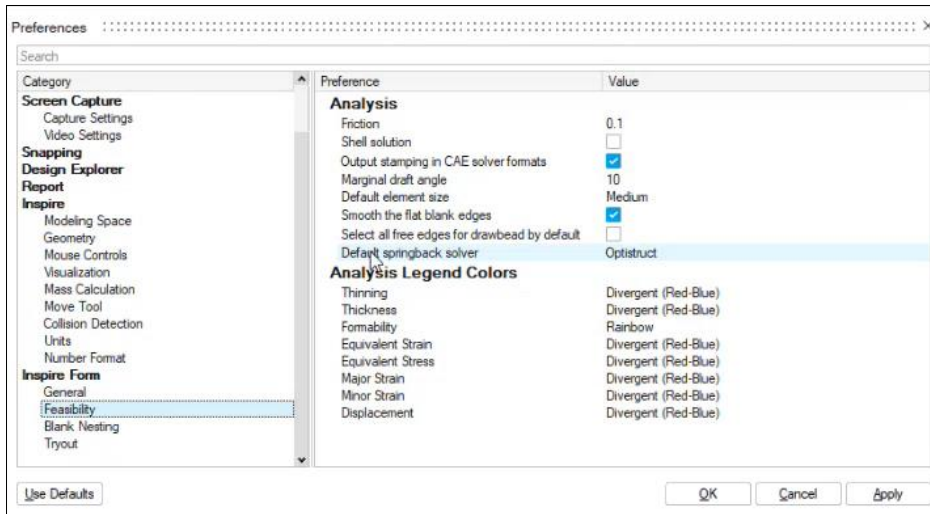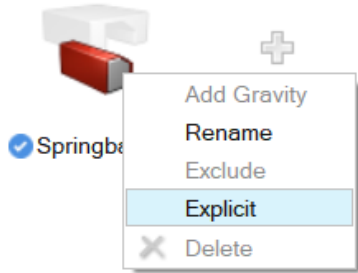

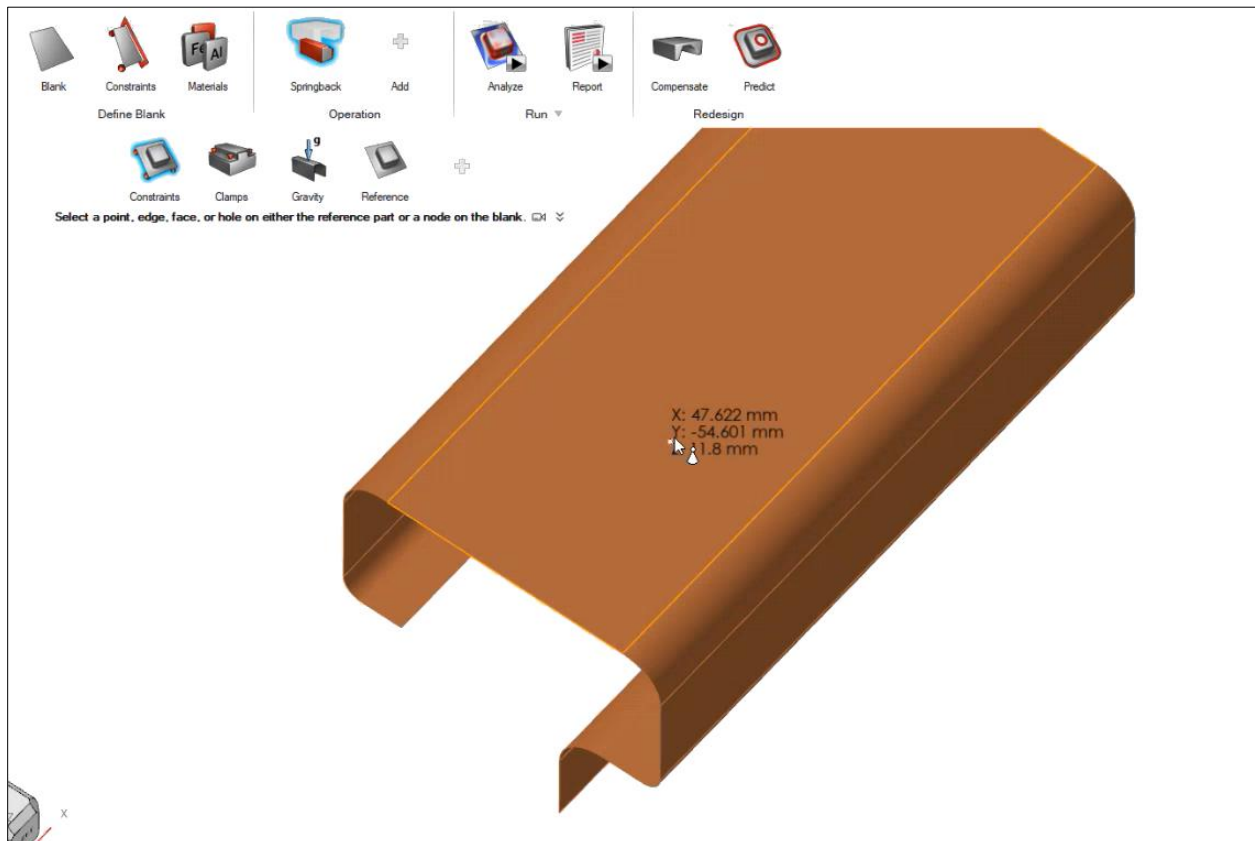- Form now supports Overlap for transfer die nesting.
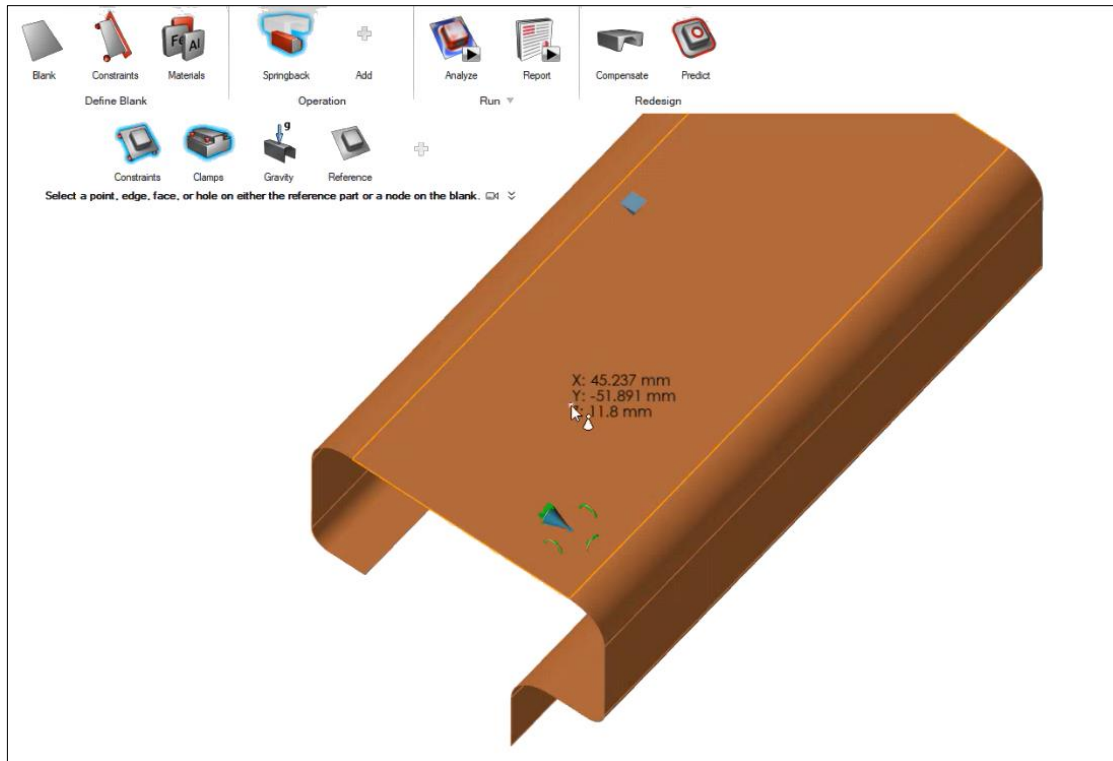
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Tryout

- You can now switch between an Implicit and Explicit approach for Springback analysis in the Analysis context menu.
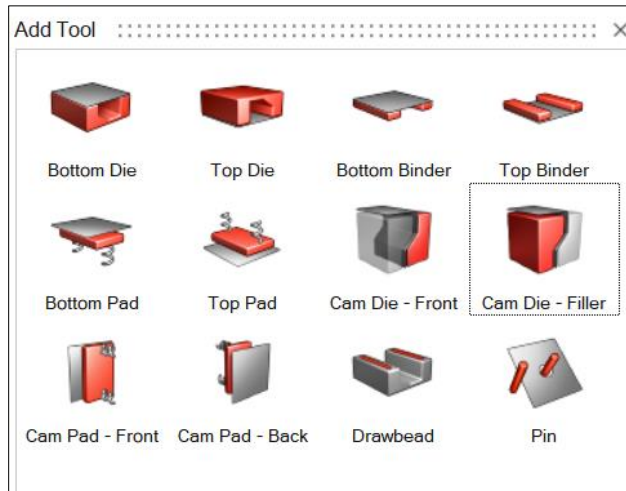

- Constraints in Springback can now be defined explicitly at X,Y, and Z coordinates.

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- Clamps in Springback can now be defined explicitly defined at X,Y, and Z coordinates.

- Cam Die – Filler is a new tool that allows you to fill the bottom die with Cam die. The Cam Die-Filler tool moves the die to a closed position at the start before Top die or Cam die start to move.
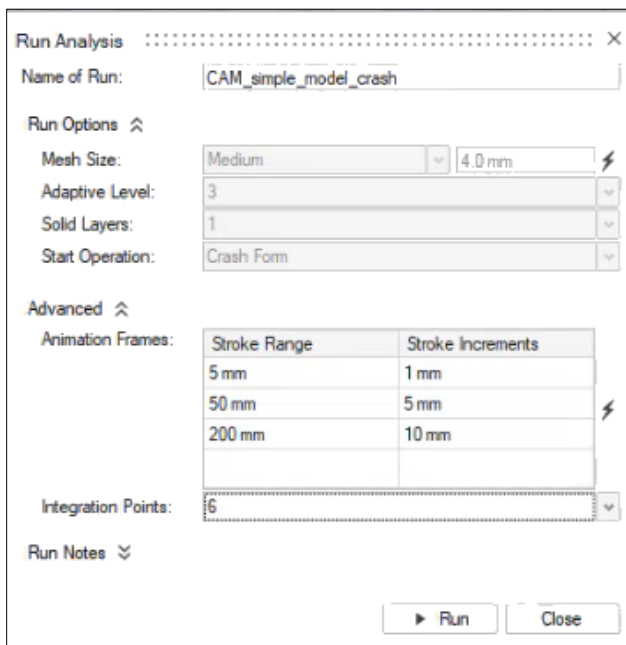

- Pins can now be attached to any forming tool.

- Pins can now be added to sheet hydroforming processes.
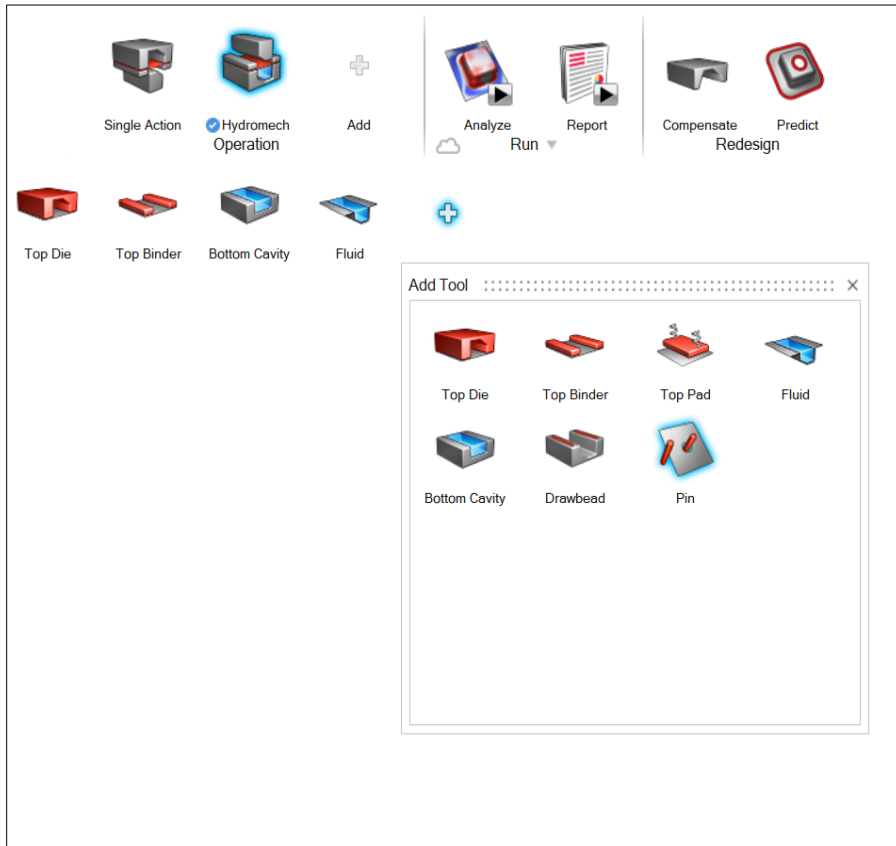
- You can now define the number of Integration points through thickness for shell elements in the Run dialog.

Enhancements

- Plot pressure history is now available in the Analysis Explorer context for sheet hydroforming processes (CFM-2678).
- Tool position status is now available next to the operation Name in a legend near the display window (CFM-2764).
- Tools are now always returned to closed position when the operation is not active (CFM-2679).

Resolved Issues

- Trimming operation analysis speed improved (CFM-2868, CFM-2545).
- Tool auto-positioning works when using manual stroke input (CFM-2827, CFM-2602, CFM-2555).
- Drawbeads can be created correctly in any draw direction (CFM-2753).
- Springback displacement is contoured correctly along the x, y, and z axes (CFM-2598, CFM-2544).
- The symmetry plane can now be hidden while creating images for the report (CFM-2572).
- The correct stroke length values for tools are now published in the report (CFM-2570).
- Triangular elements can now be visualized by enabling a thickening switch (CFM-2571).

Known Issues

- Export blank in the Analysis Explorer context won't export the part boundary for adaptive mesh results. Also, edge strain and edge displacement are not properly contoured for adaptive mesh. (CFM-2845).
- Unable to snap onto meshed object nodes and edges (CFM-2874).
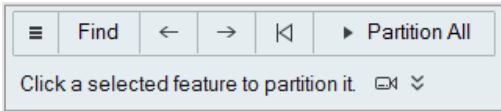- Auto-callouts guide bar is hidden (CFM-2880).
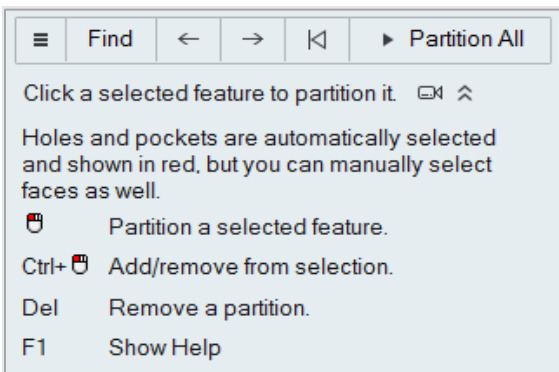
Learn More About Inspire Form

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

In-Application User Assistance

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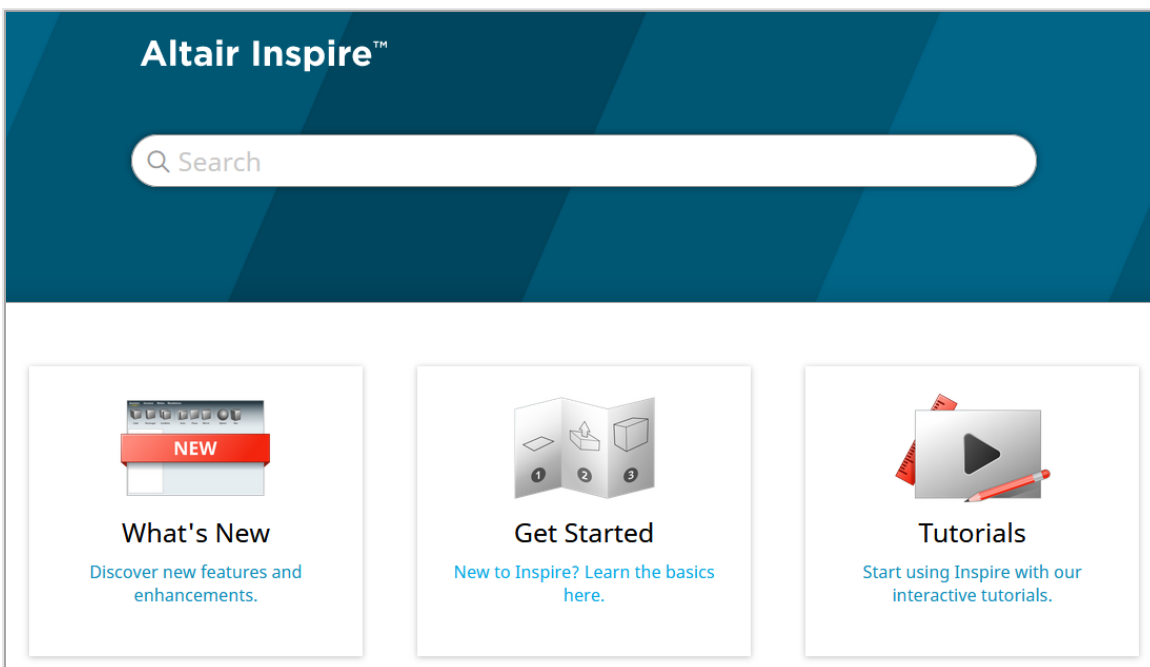

Click ⌄ to view additional tips and shortcuts. Some tools also include a video ⌁.

Online and Offline Help

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

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