



WHAT'S NEW IN SOLIDWORKS® 2024-3D CAD



Previous Release Compatibility

- Leverage your SOLIDWORKS subscription to collaborate with suppliers who use older versions of SOLIDWORKS by saving your SOLIDWORKS designs as older versions.
- Save parts, assemblies, and drawings as SOLIDWORKS versions that are up to two years prior to the latest release.

Benefits

Collaborate with other users, even if they are using an older version of SOLIDWORKS.



Assemblies

- Simplify your large assemblies faster by applying rules when you defeature your model using the Silhouette option.
- Represent post-assembly machining operations in SOLIDWORKS with Insert Assembly into Part.
- Simplify assembly STEP file import with the ability to filter out unwanted components on the fly.

Benefits

Employ new assembly modeling workflows to speed up large assembly design, documentation, and collaboration.



Parts and Features

- Speed up sketching with a new option to preview and edit a dimension as soon as you select one or more entities.
- Create bidirectional, symmetric patterns with the Symmetric option for Linear Pattern.
- Display the unit of measurement as a custom property in notes and tables.

Benefits

Speed up sketching, and more easily capture and communicate design intent while reducing design effort.

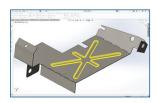


Drawings and Detailing

- Clean up dangling dimensions more efficiently by reattaching them to the proper reference points.
- Detail drawings faster with improved chain dimensioning alignment and adherence to drawing standards.
- Exclude hidden sketches from $\mathsf{DXF}^{\mathsf{TM}}$ Flat-Pattern with a new option.

Benefits

Create drawings that communicate designs more clearly with standardized chain dimensions layout, efficient dimension reattachment, and reduced DXF export post-processing.



Sheet Metal

- Adhere to manufacturing practices by providing a Normal Cut option for slots when tabs are created at an angle.
- Automatically propagate slots to all instances of a tab that intersects a specific part.
- Eliminate the need for form tool creation with the option to create a stamp/form feature on the fly using just Sketch.

Benefits

Reduce sheet metal manufacturing bottlenecks by adhering to sheet metal manufacturing standards.



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Structure System

- Speed up the editing and management of corner treatments with the ability to group similar corners and apply treatments automatically or manually.
- Automatically create an open corner for the addition of a connection block with a new Corner Treatment option.

Benefits

Build and modify complex structures more easily.



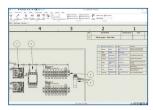
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Routing

- Improve performance using a new option to update only the current 3D electrical route.
- Improve 3D performance with the ability to exclude selected parts from 3D, while including all parts in the BOM and Reports.
- Add electrical routes as either single segments or as groups of discrete wires in electrical bundles.

Benefits

Handle more complex electrical routing scenarios with new options for flattening, reorienting, and displaying wires and connectors.



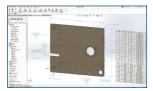
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Electrical Design

- Autoballoon components in 2D control panel (cabinet) drawings similar to SOLIDWORKS drawings.
- Show consecutive component marks as a range in reports (e.g., X1-X7 instead of listing all 7).
- Configure wire properties using Excel automation with the new Autoconnection feature.

Benefits

Create more informative electrical documentation faster while reducing errors.





MBD

- Export Hole Tables to 3D PDF.
- Edit the dangling dimensions to reattach them to a feature in the model.
- Display dual dimensions while creating geometric tolerance symbols.

Benefits

Communicate your design more clearly in 3D with the ability to display dual dimensions, and export Hole Tables and custom properties.



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SOLIDWORKS Visualize

- Select appearance types and optimize their parameters more easily with a simplified interface.
- Adjust textures and texture maps for parameters, with greater control and fidelity.
- Combine normal and displacement maps and apply vector displacement.

Benefits

Experience easier optimization and more advanced real-life rendering capabilities.

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