

WHAT'S NEW IN SOLIDWORKS® 2025—SIMULATION

SOLIDWORKS Simulation



1 General Spring Connector

- Easily create custom spring connectors between surfaces by defining axial only, isotropic, or orthotropic springs.
- Improve simulation performance and accuracy by adding custom compliance.

Benefits

Achieve easier, more realistic simulation setups with the new spring connector capabilities.



2 Enhanced Pin Connector

- Improve the solution performance of all studies when using the distributed Connection Type for pin connectors.

Benefits

Increase the accuracy of simulation studies using the improved pin connector.

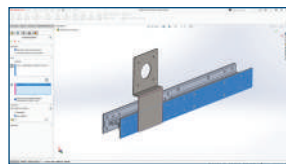


3 Enhanced Handling of Large Models

- Accelerate study setup times with the new UI option to exclude everything except selected bodies.
- Concentrate on what is important by removing parts or bodies excluded from the simulation study.

Benefits

Easily set up large models and select boundary conditions with a clean display.



4 Enhanced Node-to-Surface Bonded Interactions With Offset

- Avoid gaps between surfaces in Mid Surface mesh studies.
- Experience enhanced offset bonded interaction to improve contact results accuracy for linear static, linear dynamic, frequency, buckling, fatigue, design scenario, and pressure vessel studies.

Benefits

Perform more accurate simulation studies and solve faster.

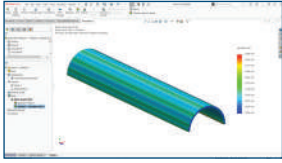


5 Enhanced Surface-to-Surface Bonded Interactions

- Improve the accuracy and performance of cylindrical, spherical, and conical surfaces for all linear studies with enhanced surface-to-surface bonding.

Benefits

Enjoy improved usability without sacrificing accuracy.



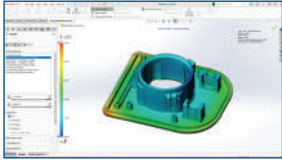
6 Mesh Performance Improvements

- Enjoy enhanced meshing performance in studies with numerous identical parts featuring curved surfaces, using a high-quality mesh.

Benefits

Speed up the meshing of large assemblies that contain repeated parts.

SOLIDWORKS Plastics

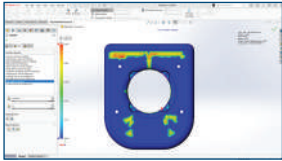


7 Isolate Cause of Plastic Parts Warpage

- Assist users in their plastic parts warpage results evaluation by breaking down the overall displacement into its three source terms: unbalanced cooling, orientation, and non-uniform shrinkage.

Benefits

Easily identify the cause of warpage to guide the design and the injection process.



8 Enhanced Sink Mark Prediction

- Replace the current sink mark solver with the new solver to improve accuracy.

Benefits

Gain higher sink mark accuracy with the improved solver.

SOLIDWORKS Flow Simulation

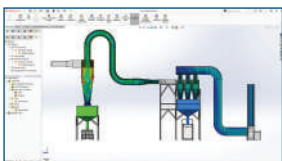


9 Flow Simulation GUI Improvements

- Experience improved GUI responsiveness and speed for models with many parts.

Benefits

Save time when using large models.



10 Flow Simulation Performance Improvements

- Speed up meshing for faceted/tessellated geometries including imported STL files.

Benefits

Save time when using imported geometries as STL files.

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