3DS SOLIDWORKS

3DEXPERIENCE®

WHAT'S NEW IN SOLIDWORKS® 2022—SIMULATION

SOLIDWORKS Simulation
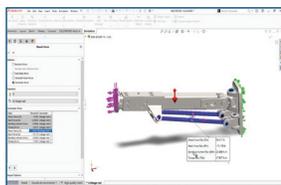
1 **New Linkage Rod Connector**

- Easily create this new Linkage Rod connector by selecting cylindrical faces, circular edges, and vertices without the need for geometry alterations.
- Use a variety of joints, cross-sections, and materials.

Benefits

Use powerful connectors for easier setup and faster simulation.
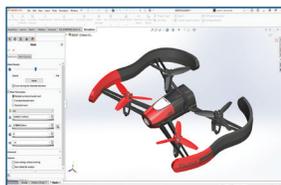

2 **Blended Curvature-Based Mesh Is Now the Default**

- Successfully mesh bodies which didn't mesh before with the enhanced Blended Curvature-Based Mesh.
- Specify mesh controls on bodies outside the global range to reduce mesh size and expedite solution time.

Benefits

Save time with a more robust and efficient mesh.
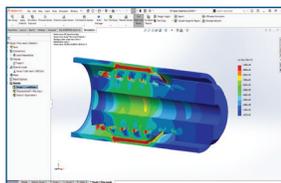
3 **Enhanced Bonding and Contact**

- Reduce the number of constraints to boost performance and accuracy for bonding and contact.
- Validate models significantly faster with the iterative solver.

Benefits

Solve models with bonding and contact considerably faster.
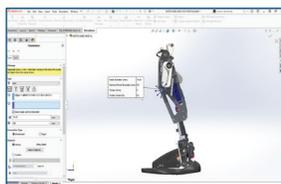
4 **Parallel Processing Extended to Most Features**

- Expedite solution time with function-based stiffness data communication replacing file-based processing.
- Take advantage of extending parallel processing speedup with the iterative solver to all connectors and most features.

Benefits

Solve models much faster with parallel processing improvements.
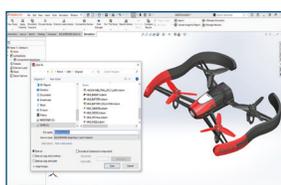
5 **Faster Save**

- Reduce the time required to save SOLIDWORKS models when they have simulation studies.
- Observe considerably faster saving time if at least one simulation study has not been modified.

Benefits

Save simulation studies significantly faster.

3DS DASSAULT SYSTEMES
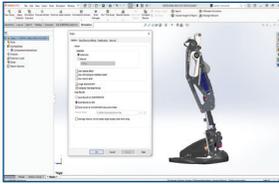
6 Automatic Equation Solver Selection Extended to Nonlinear, Frequency, and Buckling Analysis

- Improve solution speed and memory usage considerably with the more accurate auto-selection of equation solver.
- Select the best solver automatically, based on the number of equations, mesh type, geometric features, contact, connectors, available memory, and more.

Benefits

Reduce solution time with built-in intelligence for solver selection.

SOLIDWORKS Plastics
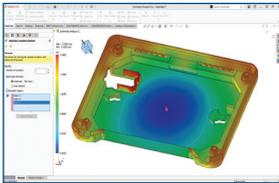
7 Injection Location Adviser

- Obtain recommendations for up to four suitable injection locations as well as a preview of how the part will fill.

Benefits

Get optimal simulation results with the first simulation.
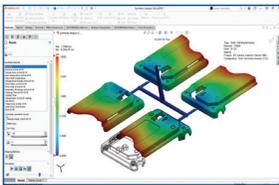
8 Cyclic and Symmetric Cavity and Runner Layouts

- Create dedicated boundary conditions for cyclic and symmetric cavity and runner layouts.
- Preview the cavity and runner layouts during the modeling stage to confirm their design specifications.
- Simulate complex mold layouts by using reduced model size.

Benefits

Save time when computing complex mold layouts.

SOLIDWORKS Flow Simulation
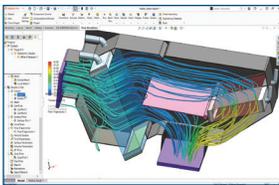
9 Scene Plot

- Store all your displayed plots, model orientation, zoom, and part visibility within the scene plot.
- Switch between scenes to display the plots saved in the scene and set the corresponding model display, zoom, and orientation.

Benefits

Save time when reloading results with improved post-results workflow.
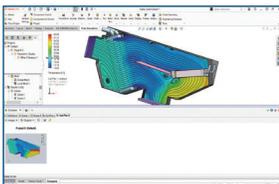
10 Compare Merged Plots

- Merge compared plots from different projects into a single image to see critical results at a glance.
- Merge contour plots made for different design cases or power modes.
- Clearly see the difference between cases graphically displayed in the plot for improved post-results comparison.

Benefits

Locate critical results faster and more easily.

Our 3DEXPERIENCE® platform powers our brand applications, serving 11 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3D**EXPERIENCE Company, is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating 'virtual experience twins' of the real world with our **3D**EXPERIENCE platform and applications, our customers push the boundaries of innovation, learning and production.

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3DEXPERIENCE®

Americas
Dassault Systèmes
175 Wyman Street
Waltham, Massachusetts
02451-1223
USA

Europe/Middle East/Africa
Dassault Systèmes
10, rue Marcel Dassault
CS 40501
78946 Vélizy-Villacoublay Cedex
France

Asia-Pacific
Dassault Systèmes K.K.
ThinkPark Tower
2-1-1 Osaki, Shinagawa-ku,
Tokyo 141-6020
Japan

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