

WHAT'S NEW IN SOLIDWORKS SIMULATION 2018:

TOP TEN ENHANCEMENTS



TOPOLOGY STUDY (SIMULATION PROFESSIONAL)

- · Optimize the shape of your design based upon a target mass goals.
- Incorporate manufacturing and stiffness constraints to deliver manufacturable components.

Benefits

Find new and innovative minimum mass solutions to your design and simulation challenges.



FREE SURFACE FLOW (FLOW SIMULATION)

• Solve flow problems where the liquid and gas touch for example, channel, sea and river flow, tank filling, and emptying.

Benefits

Easilu solve complex flow problems to ensure product performance.



EASY ASSEMBLY SIMULATION SETUP (SIMULATION ALL)

- Simulation setup from parts can be imported into an assembly analysis.
- · Re-use complex mesh and material quickly and easily.

Benefits

Accelerate assembly analysis.

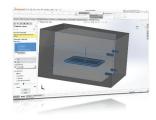


CONNECT THREE OR MORE SURFACES WITH THE ENHANCED PIN CONNECTOR (SIMULATION)

• Create and analyze multi-surface pin connections easily and with greater accuracy.

Benefits

Simplify the analysis of a common critical assembly process.



SIMPLIFIED AND AUTOMATED MESHING **WORKFLOW (PLASTICS)**

· Re-designed meshing process: it is more intuitive for you to create a mesh with automatic tools with mesh

Benefits

Easy meshing tools for fast accurate results.,

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SIMPLIFY ANALYSIS DOMAIN WITH SECTOR PERIODICY (FLOW SIMULATION)

 Simplify the analysis and accelerate problem solutions for geometries that have rotational periodicy without sacrificing accuracy.

Benefits

Accelerate and simplify flow analysis without compromising accuracy.



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UPDATED ADAMS SOLVER (MOTION)

 The updated motion solver adds speed, reliability, and enhanced quality.

Benefits

Enhanced quality for motion simulation.



B

ENHANCED STRESS SINGULARITY DETECTION

 Locate and investigate stress singularities (or hot spots) at contacts areas and non re-entrant corners.

Benefits

Detecting and investigating stress singularities accelerates the analysis process and speeds the design process.



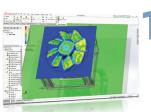
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NEW RESULTS PLOT (PLASTICS)

- Use the Density at End of Pack simulation result as a guideline to evaluate the effectiveness of your packing stage.
- The Warp measure tool is enhanced to display the shrinkage amount (the distance between two reference nodes) both in terms of the absolute value (dR) and percentage value (dR[%]).

Benefits

Easily understandable results predict the components 'as molded' shape.



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NOISE PREDICTION (FLOW)

 Flow simulation can now analyze time-dependent pressure data to predict noise values.

Benefits

Calculate and mitigate operational noise.

See the full range of SOLIDWORKS software for design, simulation, technical communication, and data management at www.solidworks.com/products2018.

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