

NEW FEATURES IN SOLIDWORKS 2017 FOR SOLIDWORKS 2016 USERS



1 SOLIDWORKS 3D INTERCONNECT

- Open proprietary 3D CAD data in SOLIDWORKS and retain associativity to the original file
- Insert proprietary CAD data directly into a SOLIDWORKS assembly without having to convert it to a SOLIDWORKS file
- All downstream operations and features created in SOLIDWORKS update if the referenced file is updated
- Supported formats include Creo®, CATIA® V5, Solid Edge®, NX, and Autodesk Inventor®

Benefits

Work seamlessly with anyone, even those that do not use SOLIDWORKS, and incorporate design changes dramatically faster.



2 IMPROVED LARGE ASSEMBLY PERFORMANCE

- New Asset Publisher, Ground Mates and Magnetic Mates speed equipment layouts
- Replace sub-assembly with a multi-body part and maintain downstream references; Replace missing references all at once
- New options for Concentric Mate to mate to holes, even if they are misaligned

Benefits

Speed the design of large assemblies and layouts of machinery and equipment.



3 MORE POWERFUL MODELING TOOLS

- New Advanced Hole Wizard tool allows you to create and reuse customized holes
- Wrap Feature now works with any surface; Offset a 3D Curve on a surface with multiple faces
- Fillet/chamfer conversion; Use face, curve or edge as Sweep Profile
- Sheet Metal support for 3 bend corners

Benefits

Faster, easier modeling with less pick and clicks.

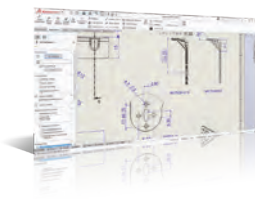


4 RENDERINGS AND ANIMATIONS GET A BOOST FROM VISUALIZE

- New "Visualize Boost" - network rendering made simple for blazing fast render speeds
- Visualize now imports animations and motion studies from SOLIDWORKS CAD
- Easily map SOLIDWORKS CAD camera navigation and hot keys to Visualize
- Support for HTC Vive, Oculus, Google Cardboard, Samsung

Benefits

Dramatic improvement in rendering speed and improved workflow between modeling, rendering and viewing.

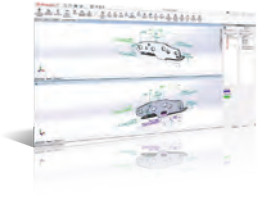


5 FASTER 2D DRAWING CREATION

- Reference and link to BOM table cell elements in annotations
- Parametrically mirror drawing views without need to mirror the model
- Pre-defined layers

Benefits

Simplified, faster drawing creation.



6 EXPANDED CAPABILITIES FOR MODEL BASED DEFINITION

- Compare geometry and 3D PMI between 2 revisions
- Use DimXpert to create dimensions to reference geometry
- Define DimXpert 3D PMI more easily for drafted parts – castings, forgings and molded parts
- Export STEP 242 with 3D PMI to automate downstream intelligent manufacturing applications such as CAM and CMM

Benefits

Ease the transition from 2D drawings to MBD and enable model based enterprises (MBE).

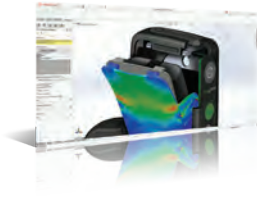


7 ELECTRIFYING ELECTRICAL/ELECTRONIC DESIGN

- Electrical: Automatic creation of schematic from a spreadsheet
- Electrical: Compound parts – accessories
- PCB: Stress free ECAD-MCAD integration and collaboration
- PCB: Unified design environment between schematic editing, board layout and 3D layout

Benefits

Expanded capabilities mean improved productivity for electrical design.



8 SIMPLIFYING DESIGN VALIDATION

- Simulation: Display simulation results in SOLIDWORKS Graphics Area to more clearly guide design
- Simulation: Easily solve complex contact scenarios with Arc Length Control for Nonlinear Contact
- Plastics: Part Mass can be used in addition to gate temperature for gate freeze and pressure holding time determination
- Flow: Multi parameter optimization is added to the Parametric Study. You can now conduct optimization study for more than one input variable

Benefits

Simulation expanded to handle more use cases – extended capabilities to tackle more design scenarios.



9 INTEGRATING DESIGN AND MANUFACTURING

- 3D Printing: Import and export of 3MF; Import mesh data in SOLIDWORKS Standard
- Inspection: Manual and selective ballooning
- Costing: Get instant cost estimates from real manufacturers via the My.SolidWorks Manufacturing Network; Rules for sheet metal; Easier template creation

Benefits

Extending SOLIDWORKS capabilities for the manufacturing ecosystem.



10 IMPROVED DATA MANAGEMENT AND COLLABORATION

- SOLIDWORKS PDM - Version overwrite; Rollback with references; Improved viewing
- SOLIDWORKS PDM Professional - Vault Database Replication
- eDrawings®: Augmented Reality (AR) for Android™; 3D Views and annotation views for assemblies; Component descriptions; Weld beads; Undo/redo

Benefits

Collaborate at more levels and manage data more efficiently.

See the full range of SOLIDWORKS software for design, simulation, technical communication, and data management at www.solidworks.com/products2016.

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