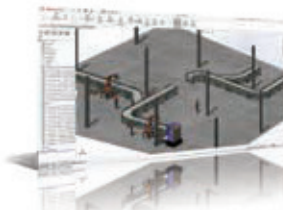# WHAT'S NEW IN SOLIDWORKS 2017

1 SOLIDWORKS 3D INTERCONNECT

- Open proprietary 3D CAD data directly into SOLIDWORKS including Creo®, CATIA® V5, SolidEdge®, NX™, and Inventor® and retain associativity to the original file

Benefits

Work seamlessly with anyone, 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 multi-body part and maintain downstream references; Replace missing references all at once

Benefits

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

3 MORE POWERFUL MODELING TOOLS

- New Advanced Hole Wizard creates/reuses customized holes
- Wrap Feature now for any surface; Offset 3D Curve on surface with multiple faces
- Sheet Metal support for three-bend corners

Benefits

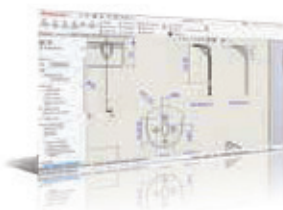Faster, easier modeling with fewer picks and clicks.

4 RENDERINGS AND ANIMATIONS GET A BOOST FROM VISUALIZE

- New "Visualize Boost": Network rendering made simple for blazing fast render speeds
- Import animations and motion studies
- Map SOLIDWORKS camera navigation and hot keys
- Support for HTC® Vive™, Oculus, Google® Cardboard, Samsung®

Benefits

Dramatic improvement in rendering speed and improved workflow between modeling, rendering, and viewing.
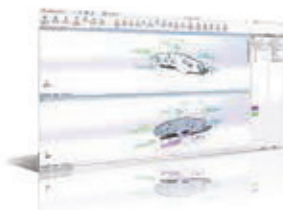
5 FASTER 2D DRAWING CREATION

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

Benefits

Simplified, faster drawing creation.

6 EXPANDED CAPABILITIES FOR MODEL BASED DEFINITION

- Compare geometry and 3D PMI between two revisions
- Define DimXpert 3D PMI more easily for drafted parts
- Export STEP 242 with 3D PMI to automate CAM and CMM
- Attach multiple files to 3D PDF to build Technical Data Packages (TDP)

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: 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 model; 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: Parametric Study now allows multi-parameter optimization

Benefits

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

9 INTEGRATING DESIGN AND MANUFACTURING

- 3D Printing: Import/Export 3MF. Import mesh data
- Inspection: Manual and selective ballooning
- Costing: Instant estimates from manufacturers via My.SolidWorks Manufacturing Network

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 the Android™; 3D Views and annotation views for assemblies; Component descriptions; Weld beads; Undo/redo

Benefits

Collaborate at more levels and manage data more efficiently.