WHAT’S NEW IN SOLIDWORKS 2015 SOLUTIONS

1. **NEW PRODUCT DEVELOPMENT WORKFLOWS**
   - SOLIDWORKS® Model Based Definition (MBD) enables drawingless product detailing with 3D PMI annotations; output to eDrawings® or 3D PDF
   - SOLIDWORKS Treehouse provides visual assembly structure planning, creation, editing, and viewing
   - Prepare models automatically for export to popular AEC applications

   **Benefits**
   - Reduce time to market and comply with new industry standards.

2. **INTEGRATED CAPABILITIES CONNECT DESIGN AND MANUFACTURING**
   - SOLIDWORKS Inspection automates inspection drawings and reports
   - SOLIDWORKS Costing supports sensors and costing of weldments, plastic/cast parts, machined castings, and 3D printed parts
   - Print directly to 3D printers in AMF and 3MF formats
   - Use advanced techniques to flatten surfaces

   **Benefits**
   - Speed up downstream manufacturing and bridge the gap between design and manufacturing.

3. **SOLIDWORKS PERFORMANCE**
   - File size reduced by ~50%
   - Faster component patterning, and hide/show of assemblies
   - SOLIDWORKS Simulation supports Intel® Solver and multi-core for contact detection
   - Define specific graphic regions to render in PhotoView 360
   - SOLIDWORKS Enterprise PDM manages large data sets more efficiently

   **Benefits**
   - Faster modeling, analysis, and rendering capabilities leaves more time to improve designs.

4. **PART AND SURFACE MODELING**
   - Sketch: Line from mid-point; rectangle with horizontal/vertical construction lines
   - Splines: Improved Spline on Surface; convert Style Spline to Spline Points
   - Patterns: Improved Fill, Linear, and Variable Pattern
   - Advanced geometry: Asymmetric Fillets, split surfaces; sketch plane normal to view

   **Benefits**
   - Create sketches, complex patterns, and advanced geometry faster and with less effort.

5. **ASSEMBLIES**
   - Mates: Center components on faces; select geometry to limit Width Mate
   - Routing for rectangular sections, e.g., HVAC ducts, cable trays and chutes
   - Simulate roller/energy chains using patterns along open or closed loops
   - Exploded View: Radially and along axis; space components on drag

   **Benefits**
   - Faster and easier assembly of components.
DRAWING IMPROVEMENTS
- Track view locations with automated drawing sheet zone annotations
- Enhanced formatting control of drawing and table notes
- Omit layers from printing; use splines as leaders
- Improved angle dimensioning and command of decimal rounding

Benefits
- Find drawing views faster, and experience more automation and control.

DESIGN SIMULATION
- Predict product durability under dynamic loading and manage a combination of load conditions in SOLIDWORKS Simulation
- View nonlinear results during the solve in SOLIDWORKS Simulation to ensure convergence
- Rotating mesh regions in SOLIDWORKS Flow Simulation deliver enhanced simulation of rotating machinery
- SOLIDWORKS Plastics improves plastic part design with up-front Venting Analysis

Benefits
- Simulate real-life scenarios to predict product performance prior to manufacturing.

ELECTRICAL DESIGN
- Dynamic Connector tools simplify the design and use of connectors
- Advanced access to user-based controls for key tools
- In-line 3D routing diagnostics identifies and resolves routing issues
- Advanced Formula Manager provides access to system and mathematical variables in complex formulas

Benefits
- Accelerate the development, creation, and integrity of electrical systems designs.

USER EXPERIENCE
- Dynamic Reference Visualization shows a graphical view of relationships between features
- Selection Sets let you select multiple entities and save for reuse
- Isolate components while editing in context within an assembly
- Temporarily preview hidden bodies or components from FeatureManager

Benefits
- Work more efficiently and better understand/visualize design intent of your models.

EXPANDED COMMUNICATION AND COLLABORATION
- SOLIDWORKS Enterprise PDM Web2 client connects browser-ready devices to a vault
- eDrawings now has a UI adapted for touchscreen, and supports SOLIDWORKS Plastics result plots
- MySolidWorks offers enhanced online learning and certification, ability to share/view designs online and research a global manufacturing network
- Collaborative Sharing uses community-based social innovation to provide greater connectivity to SOLIDWORKS, eDrawings, and DraftSight®

Benefits
- Expand the reach of design tools with faster, easier connections and better social collaboration - anytime, anywhere.

See the full range of SOLIDWORKS software for design, simulation, technical communication, and data management at www.solidworks.com/products2015.