



# WHAT'S NEW IN SOLIDWORKS® 2022— DESIGN TO MANUFACTURING



# Assembly Performance and Workflow

- Save time when opening, closing, and saving assemblies with improved performance for these functions.
- Open subassemblies faster using Large Design Review mode.
  From your assembly in Large Design Review mode, open subassemblies in Large Design Review mode or resolved mode.

#### **Benefits**

Work faster with large assemblies through expanded workflows and improved performance.



# Expanded Use of Detailing Mode

- Access Detailing mode for all drawings, regardless of the SOLIDWORKS version you saved them in or whether you saved them in Detailing mode.
- Open a drawing in Detailing mode directly from an assembly in Large Design Review mode.

#### **Benefits**

Save time when opening and detailing a SOLIDWORKS drawing.



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# More Efficient Geometric Dimensioning and Tolerancing

- Work directly in the graphics area guided by the user interface in building feature control frames cell by cell.
- Create tolerance frames per ISO 1101:2017 and the associated standards of ISO 2692, ISO 5458, ISO 5459, and ISO 8015

#### **Benefits**

Work faster and more intuitively when tolerancing your designs.



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# eDrawings Viewer Enhancements in SOLIDWORKS PDM

- Access all eDrawings® features from within Microsoft® File Explorer.
- Switch from a bitmap image to an eDrawings 3D model using a new Load Preview button.
- Use the markup icon that indicates if annotations are available for this file.

#### **Benefits**

Save significant time when previewing your SOLIDWORKS files.



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#### 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.



#### Streamlined Plastics Simulation Workflows

- · Obtain recommendations for up to four suitable injection locations as well as a preview of how the part will fill.
- · Streamline your plastics simulation workflow with the new Plastics Manager and Plastics Material data updates.

#### **Benefits**

Get optimal simulation results with your first simulation and save time with streamlined workflows.



#### Improved DWG-based Design and Communication

- Create customizable blocks to represent multiple configurations of one block to simplify communications.
- Convert and edit AutoCAD® Dynamic Blocks to reuse legacy DWG files.

#### **Benefits**

Ease the transition from AutoCAD to DraftSight® and improve user productivity.



# Improved Electrical Design and Documentation

- Create more detailed and visual reports and more accurate electrical harness documentation for faster manufacturing.
- Speed up the creation of schematic, 2D and 3D designs for large projects.
- · Accelerate the routing of 3D wires, cables, and harnesses.

#### **Benefits**

Save time when working with documentation, large projects, and routing.



# **Streamlined Quality Control Processes**

- Fully automate the creation of inspection documents with the new APIs.
- Bring existing SOLIDWORKS drawings, parts, and assemblies directly into SOLIDWORKS Inspection.
- Securely manage and collaborate on your inspection projects on the **3D**EXPERIENCE® platform.

#### **Benefits**

Boost product quality through automation, access to SOLIDWORKS data, and improved collaboration.



### Improved Collaboration and Data Sharing

- · Accelerate innovation and decision-making by connecting SOLIDWORKS 3D CAD to the cloud-based **3D**EXPERIENCE platform, where you can easily manage and share all your data and collaborate with others.
- Using 3DEXPERIENCE SOLIDWORKS, access your favorite **3D**EXPERIENCE commands from multiple places within SOLIDWORKS, including the File menu, Command Manager, and Context menu, with support for all **3D**EXPERIENCE operations.

#### **Benefits**

Increase your competitive advantage by tapping into the power and breadth of the 3DEXPERIENCE Works portfolio.

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

Dassault Systèmes, the 3DEXPERIENCE 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 **3DEXPERIENCE** platform and applications, our customers push the boundaries of innovation, learning and production.



Dassault Systèmes' 20,000 employees are bringing value to more than 270,000 customers of all sizes, in all industries, in more than 140 countries. For more information, visit www.3ds.com.

**3D**EXPERIENCE

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