WHAT’S NEW IN SOLIDWORKS 2019—DESIGN TO MANUFACTURE

1 MESH MODELING IMPROVEMENTS SPEED REVERSE ENGINEERING, TOPOLOGY OPTIMIZATION AND 3D PRINTING

- Easily create complex textures by converting 2D appearances into real 3D geometry
- Use mesh files like they are solids using the new Segment Mesh
- Automatically create 2D sketches at intersections of geometry and a plane with the slicing command

Benefits
Increased capabilities for mesh geometry, streamlining reverse engineering and topology optimization.

2 SMARTER MACHINING WITH SOLIDWORKS CAM/MACHINIST

- Corner Slow Down and Arc Feedrate allow slowdown when approaching sharp corners and arcs
- Create machine-specific machining strategies
- Tooling improved with support for tapered shanks and more parameters

Benefits
Enhanced user control and automation for each operation and machining strategy.

3 INCREASED PRODUCTIVITY AND FLEXIBILITY WITH SOLIDWORKS INSPECTION

- Improved Bill of Characteristics with new grid layout and group/ungroup
- Additional extraction options to include hole tables for use on complex parts
- Integration with SOLIDWORKS® PDM to manage and organize inspection projects and deliverables

Benefits
Increased productivity when creating quality control documentation.

4 IMPROVED WORKFLOWS WITH SOLIDWORKS COMPOSER FOR TECHNICAL DOCUMENTATION

- SOLIDWORKS PDM integration enables access to PDM functionality directly from the ribbon within SOLIDWORKS Composer
- Import Product Manufacturing Information (PMI) data directly from SOLIDWORKS models into SOLIDWORKS Composer
- New icons, new commands and support for five new languages

Benefits
Improved workflow integration with SOLIDWORKS, productivity improvements and enhanced user experience.

5 VISUALIZATION AND RENDERING—MAKING THE DIGITAL WORLD MORE REAL... FASTER

- AI (Artificial Intelligence) Denoiser—Uses AI to decipher and eliminate noise from your renders
- Integrated Physics Engine & Vehicle Driving Simulator for faster scene setup and real-time design review
- Enhanced Decal features and support for Video Decals

Benefits
Set up your projects and instantly render them 10x faster with real-world physics and advanced measured materials.
Our 3DEXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes’ collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 220,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com.

Benefits
Unlock the value of your design data and leverage it with your teams and your customers.

Benefits
Streamline interactions with manufacturers such as quoting and ordering parts.

Benefits
Speed up downstream manufacturing with more intuitive and actionable 3D annotations.

Benefits
Set up and perform complex simulation studies easier and with greater accuracy.

Benefits
Improved capabilities for designing mechatronics products with SOLIDWORKS.