

# SOLIDWORKS FEATURE MATRIX



STANDARD

PRO

PREMIUM

		STANDARD	PRO	PREMIUM
<b>SOLIDWORKS 3D CAD</b>	Create sophisticated part and assembly designs quickly and efficiently.	✓	✓	✓
<b>Part and Assembly Modeling</b>	Handle all aspects of your part and assembly modeling.	✓	✓	✓
<b>2D Drawings</b>	Create production-ready 2D drawings that are always current and clearly communicate how your design should be manufactured and assembled.	✓	✓	✓
<b>Design Reuse and Automation</b>	A range of tools to help reuse existing 3D CAD models and 2D drawings.	✓	✓	✓
<b>Collaborate and Share CAD Data</b>	Product collaboration tools to aid teamwork amongst project stakeholders, safely share data beyond the organization, manage project data, and control design revisions.	✓	✓	✓
<b>Interference Check</b>	Verify that your parts and assemblies will fit, assemble, and operate correctly before starting production.	✓	✓	✓
<b>First-Pass Analysis Tools</b>	Perform basic stress analysis on individual parts.	✓	✓	✓
<b>CAM Programming (SOLIDWORKS CAM)</b>	Powered by CAMWorks®, an integrated 2.5-axis milling and 2-axis lathe programming solution. Included with active SOLIDWORKS subscription.	✓	✓	✓
<b>Design for Manufacturing (DFM)</b>	Tools for reviewing your design for manufacturability early in the development process.	✓	✓	✓
<b>Productivity Tools</b>	Tools for productivity, including design analysis, comparison, checking, and reporting.	✓	✓	✓
<b>Advanced CAD File Import/Export and Interconnect</b>	3D Interconnect opens most major CAD formats natively without conversion. Also includes 30+ CAD translators for import/export.	✓	✓	✓
<b>CAD Libraries (SOLIDWORKS Toolbox)</b>	Easily locate, download, save, and share prebuilt 3D CAD models and commonly reused CAD data.		✓	✓
<b>Design for Cost (SOLIDWORKS Costing)</b>	Easily monitor manufacturing costs as you design and automate the quoting process with this fully-integrated tool.		✓	✓
<b>ECAD/MCAD Collaboration (CircuitWorks)</b>	Share, compare, update, and track electrical design data to quickly resolve electrical-mechanical integration and collaboration problems with this CircuitWorks™ tool.		✓	✓
<b>CAD Standards Checking (Design Checker)</b>	Establish design standards and check drawings (or models) to create consistent and complete designs and documentation.		✓	✓
<b>Collaboration with eDrawings Professional</b>	Quickly and accurately view, measure, and mark-up 3D models and 2D drawings in an email-ready format to improve communication between designers, manufacturers, and customers.		✓	✓
<b>Automated Tolerance Stack-Up Analysis (TolAnalyst)</b>	Automatically check the effects of tolerances on parts and assemblies to ensure consistent fit of components and to verify tolerancing schemes before a product goes into production.		✓	✓
<b>Advanced Photorealistic Rendering (SOLIDWORKS Visualize)</b>	Create compelling, photo-quality visual content of your 3D designs with ease and flexibility for early feedback, marketing, and other purposes.		✓	✓
<b>SOLIDWORKS File Management</b>	SOLIDWORKS PDM Standard provides CAD file management that enables individual users and small workgroups to manage project data, control design revisions, and control access to files.		✓	✓
<b>Reverse Engineering (ScanTo3D)</b>	Import, edit, evaluate, and create solid geometry from scanned point cloud and mesh data.		✓	✓
<b>Time-based Motion Analysis</b>	Visualize and evaluate how your product will perform and move throughout its operational cycle.			✓
<b>Linear Static Analysis for Parts and Assemblies</b>	Linear stress analysis (FEA) to calculate the stresses and deformations of your designs early, before any prototypes are made.			✓
<b>Pipe and Tube Routing</b>	Simplify the design and documentation of piping and tubing for a wide range of systems and applications.			✓
<b>Electrical Cable and Wiring Harness Routing</b>	Build a path of pipes, tubes, or electrical cables for assemblies in a special routing subassembly.			✓
<b>Advanced Surface Flattening</b>	Advanced surface flattening functionality provides control and flexibility for flattening complex surfaces such as sheet metal stock.			✓
<b>Rectangular and Other Section Routing</b>	Route rectangular and round sections that include ducting, cable trays, conveyors, material handling chutes, and other systems.			✓